

Associated Press

THE WASHINGTON POST



Havana, 1959: Santo Trafficante's arrest.

He had agreed to work with Castro and that the falling was designed to provide cover. But officially, he got out of Cuba thanks to the services of his resourceful lawyer, Rafael Garcia Bango. Bango is himself another good example of that era's ambiguities — not least because his brother Jorge was and is one of Castro's closest friends and advisers. He is Castro's regular baseball partner and is the manager of sports, a prestigious post in Cuba.

After getting Trafficante out of Cuba, Bango stayed on for the turbulent first seven years of the revolutionary government. Then, in 1966, he left for Miami, where he came to the attention of a federal anti-crime strike force which had Trafficante under surveillance. According to one strike force official, the two men had what amounted to a "father-son relationship." Eight months later Bango was arrested and jailed in Spain for passing counterfeit American money.

Significantly, Bango is now back in Cuba. That an important mob attorney, whatever his family connections, should find life palatable in the new Cuba is at least curious. But there seem to be nothing but contradictions in the lifestyles of Trafficante and his friends.

Mysterious Gratitude

FOR THE NEXT PART of Trafficante's history, we must turn to Jose Aleman, an exile in Miami who became involved with Trafficante in 1952 through his cousin, Garcia Bango. Aleman had been a rich young speculator in Havana, one of the leaders of the almost successful 1957 attack on Batista's presidential palace. His then considerable wealth had enabled him to establish a base in Florida where he owned the Tradewinds Motel and much other Miami real estate, including the Miami Stadium. The Tradewinds figured prominently in the revolution, for by 1957 most of the leading revolutionaries in Havana had fled into exile, including many of Castro's followers, and most ended up by staying there at Aleman's expense.

After the revolution, Aleman returned to Cuba and stayed a year before he was forced into exile again — this time as a counter-revolutionary. On arriving in the United States, he was met by George Davis of the FBI with a subpoena to appear as a witness against a Maltese named Norman Rothman at a trial in Chicago.

Aleman had had frequent dealings with the Mafia when he was buying guns for the revolution. He had met Rothman in 1956 when the latter was trying to save his Cuban investments by ingratiating himself with the anti-Batista forces. Rothman offered to flood Cuba with fake

The Mafia, The CIA And Castro

currency in order to bankrupt the economy and bring down the government. In return he wanted to be able to maintain his gambling operations. Aleman had rejected his offer. He tried to avoid testifying, but the FBI reminded him that, if he did not cooperate, he might be subject to prosecution for illegal gun running.

Aleman's relationship with the FBI had initially been hostile. The Tradewinds "was an armed barracks," explained George Davis, who was assigned to monitor the exile activities, and the FBI had tried to close it down. But by late 1958 the Bureau had come to change its mind. Aleman had visited the State Department to warn that Fidel Castro was a Communist, and he persuaded one of the Communist revolutionaries staying at the Tradewinds to brief the FBI on the nature of the party in Cuba.

All of this stood Aleman in good stead with the Miami FBI office, particularly after Castro revealed his political affiliations. And after his testimony in the Rothman trial, Aleman's relationship with the Bureau grew very close. The FBI men came to rely on him, not only as a useful source of information, but as a guide to understanding the customs and thinking of the exiles. "Jose's a real nice fellow," the now retired Davis remarked. "He's a reliable individual."

After his appearance at Rothman's trial, Aleman continued to meet regularly with his contacts at the FBI to report on exiles he suspected of being Castro agents. He also told them of an extraordinary series of meetings with Trafficante.

Trafficante's Indiscretion

WHEN ALEMAN'S FATHER died, his stepmother inherited most of the fortune and the inheritance taxes were so high that Jose Jr. who had already lost his land holdings in Cuba to the revolution, was forced to sell the Miami Stadium and the Tradewinds Motel. By 1962 he was in debt, with his only asset the three-story Scott Bryan Motel, on Collins Avenue and 33d St., in Miami Beach.

Some time in September of 1962 an old revolutionary colleague who rented an apartment at the motel told Aleman that Trafficante wanted to see him. The colleague explained that Trafficante felt indebted to Aleman's cousin, Garcia Bango, and wanted to express his gratitude by helping Aleman out of his financial difficulties. He was prepared to arrange a \$50,000 loan from the Teamsters Union. Aleman's friend assured him that the loan was perfectly legal and that it had already been cleared by Jimmy Hoffa himself.

Aleman was understandably wary — particularly

MACHINES

since he had so recently testified against a Mafia leader. But sure enough, the Tampa godfather did not. Aleman at the Scott Bryan bar offered him the loan — \$13 million to replace the ramshackle motel with a 12-story glass wonder, complete with a penthouse apartment for Aleman.

Aleman says that Trafficante spent most of the evening philosophizing. "He spoke almost poetically about democracy and civil liberties." But then he turned to the Kennedys: they were not honest, they took graft and they did not keep a bargain. He complained about their attacks on his friends, saying, "Have you seen how his brother is hitting Hoffa, a man who is a worker, who is not a millionaire, a friend of the blue collar? He doesn't know that this kind of encounter is very delicate. Mark my words, this man Kennedy is in trouble, and he will see what is coming to him." Aleman says that he argued that Kennedy would get reelected, and Trafficante replied, "No, Joe, he is going to be hit."

Aleman says that he reported this conversation to his FBI contacts, who expressed interest only in Trafficante's business proposals. Aleman assumed that they dismissed the Kennedy warnings as gangster braggadocio.

For the next year, Trafficante used the Scott Bryan as his business headquarters, renting an apartment whenever he came to town. Aleman met with him frequently to discuss the Teasdale loan and Trafficante soon began to lead Aleman into other kinds of conversations and to introduce him to other Mafia figures like Angelo Bruno of Philadelphia. Aleman, like his FBI contacts, could not quite figure out what Trafficante was doing. But he played along, hoping the loan would come through. Also the FBI considered his information valuable and he was picked to be of service.

Starting in late 1961 and continuing through the summer of 1963, Aleman says that three Cubans he had known in Havana and at the Tradewinds, who had gone to work for Castro after the revolution, appeared in Miami and then left for Texas. He suspected them of being Cuban agents and he told this to the FBI. "I advised the FBI in long conversations that I thought something was going to happen... I was telling them to be careful." By this time Aleman says he was meeting quite frequently with his FBI contacts. They listened to what he said but rarely seemed interested in his speculations.

About the end of October, 1963, the same exile who had introduced Aleman to Trafficante asked Aleman to sign a petition bitterly critical of President Kennedy. Aleman was no great admirer of the Kennedy. He signed the petition but immediately had second thoughts, especially when it was reproduced in several Cuban newspapers in Miami.

On the day of the Kennedy assassination, Aleman arrived home to find that the FBI had telephoned. "I was worried that, because of the petition, they might suspect me." But what they were interested in was Trafficante's previous statement that Kennedy was going to be "hit."

"Two agents [Aleman is quite certain one of them was Paul Scraton] came out to see me. They wanted to know more and more. I finally had to tell them he didn't say he was going to do it. He just said Kennedy was going to get hit." The agents stayed until they had explored every possible angle and then told Aleman to keep the conversation confidential.

The only source for all of this is Aleman, who claims that he personally repeated everything to various officials of the FBI, especially George Davis and Paul Scraton in 1962 and 1963. Both agents acknowledge their frequent contact with Aleman but both declined to comment on Aleman's conversations with Trafficante. Scraton explained he would have to have clearance: "I wouldn't want to do anything to embarrass the Bureau."

The Enemy of My Enemy

IN SEEKING to destroy both the Castro regime and the Mafia empire, the Kennedys had aroused two desperate enemies, each with a tradition of violence and covert action. No proof that either was connected with the assassination of President Kennedy has ever been produced. But their traditions and their predilection at the moment when Kennedy was cut down make either eligible suspects. And when the two-front war that the Kennedys were waging is viewed through the experience of Santo Trafficante, it becomes at least interesting to speculate on the possibility of these two powers operating in concert.

The possibility becomes even more intriguing if one chooses to take seriously a memorandum to the director of the CIA recently declassified from the Warren Commission files. It reports the conversation of a British journalist, John Wilson (also known as Wilson-Hudson) at the American Embassy in London just four days after Kennedy was killed. Wilson said that in jail in Cuba after the revolution in 1959 he had met an American "gang-



The late Sam Giancana, in 1966.

ter-gambler named Santos who could not return to the U.S.A. because there were several indictments outstanding against him. Santos opted therefore to remain in prison for a period of time paying Castro in dollars for his rather luxurious and definitely non-prisonlike accommodations. While Santos was in prison, Wilson says, "Santos was visited by an American gangster type named Ruby."

It is tempting to make much of such a document but more needs to be known about the English journalist, about the memo and about Jack Ruby's travels before any conclusions can be made. Probably the only witness who could help answer the questions raised here are the CIA's old Mafia associates. The Church committee only managed to interview one of them, John Roselli. Sam Giancana, due to give his testimony, was executed the day before. Santo Trafficante was never called as a witness. The committee staff claimed he could not be found.

None of the extraordinary possibilities that have surfaced here offer a documentable refutation of the sole assassin theory. As in all such explorations focusing on the Kennedy assassination, the trail goes cold as it approaches Dallas. But that does not mean that there was not a conspiracy. There is simply no assurance that conspirators, when they exist, must inevitably come to light. Many secrets prove not all that hard to keep.

Just consider the numbers of people who knew about the CIA's secret war against Cuba in the early 1960s — about the Agency's mammoth station in Miami with its 400 case officers, its 2,000 Cuban agents, its navy and small air force, its arsenal, safe houses, and its paramilitary operations against Cuba. Certainly thousands of people had a rather general knowledge of that massive campaign. And yet it was not until last year that the American public even learned that President Kennedy had gone on to wage a covert Cuban war after the Bay of Pigs. Similarly, nine years ago, Drew Pearson and Jack Anderson reported the CIA's assassination plotting with the Mafia. But no one paid any attention.

It is a well known psychological phenomenon that you can't see what your imagination is not prepared to accept. In a recent interview, Sen. Howard Baker (R-Tenn.) reflected on his experience over the past few years in exploring Watergate and the world of U.S. intelligence: "The great fear that I have is that I'll wake-up 30 years from now, and it will all suddenly fall into place, and I'll realize what a damn fool I was."

© 1976, George Carlin Inc.

Mr. CORNWELL. It is an article written by Mr. Crile.

Mr. ALEMAN. Correct.

Mr. CORNWELL. Do you know Mr. Crile?

Mr. ALEMAN. Yes.

Mr. CORNWELL. I would like to direct your attention to the paragraph on the second page of the article, about halfway or three-quarters of the way down the middle column on the page, beginning, "Aleman says that Trafficante spent most of the evening philosophizing," and then it goes on. I would ask if you would read that paragraph to yourself, just read it to yourself.

Mr. ALEMAN. I can't read it to me because I can't find it very well.

Mr. CORNWELL. You can't find that paragraph?

Mr. ALEMAN. No, no, I can see it.

Mr. CORNWELL. It is the second column from the left, about two-thirds of the way down.

Mr. ALEMAN. Yes.

Mr. CORNWELL. Just read it to yourself.

Let me ask you——

Mr. ALEMAN. The letters are too small. Will you please read it to me?

Mr. CORNWELL. Have you seen that article before?

Mr. ALEMAN. I seen the article but the letters are very small.

Mr. CORNWELL. Let me ask you, you said you know Mr. Crile. Did he interview you on the same subjects that we have asked you about here today?

Mr. ALEMAN. Yes.

Mr. CORNWELL. Over what period of time?

Mr. ALEMAN. Many days. Many days.

Mr. CORNWELL. Prior to publishing the article, did he call you and advise you that he was going to do so, to print the matters that you had provided to him?

Mr. ALEMAN. Yes; he said he was going to publish under Washington Post an article.

Mr. CORNWELL. Now, would you have had any reason to make a statement to Mr. Crile which was not accurate? Would you have had any motive or reason for making such a statement?

Mr. ALEMAN. One of the things that I couldn't answer was the visit of Santos Trafficante.

Mr. CORNWELL. Excuse me, what was the answer to that question, if you wouldn't mind?

Mr. ALEMAN. I couldn't answer why Mr. Santos Trafficante came to me to go to Dominican Republic, while at that time we had a conversation with some American businessmen that had properties in Cuba, and those American businessmen said they were going to try and they wanted me to do something against the Government of Castro, and then later on, these people said that they were going to give me a loan on a condominium project that they wanted to give me the loan and at the same time, this loan was going to be financed by, and that is why, the only reason why I went to talk to Trafficante because later on the thing about the Dominican Republic.

Mr. CORNWELL. Yes; those type of things, of course, are set forth in Mr. Crile's article, as you recall?

Mr. ALEMAN. Yes; we discussed many things on Crile's article. I can tell you one thing. Trying to remember after 15 years all these things that occur is very difficult. There is no doubt about that.

Mr. CORNWELL. I understand.

But, let me ask you if I might, to go back to the earlier question, would there have been any reason for you to make any statements to Mr. Crile which were not accurate? Would you have had any reason for doing that?

Mr. ALEMAN. Well, the context of a newspaper changes. You are talking to a newspaperman and he is asking questions and he will ask questions in such a way that when I saw the article, many things, you know, I was trying to recall.

Mr. CORNWELL. OK.

Mr. ALEMAN. I was trying to recall a few things, I was trying to recall one time that he said, how many times have you talked to the FBI about these meetings between Santos Trafficante and the Dominican Republic, and I said, well, I told the FBI the following things.

Mr. CORNWELL. So you are suggesting that perhaps the material in the article may not be exactly correct, that it might be somewhat taken out of context, or is that the suggestion?

Mr. ALEMAN. It is not a matter of taken out of context, sir, it is a matter that when you are trying to recall. He said, we want to sit down and recall everything that happened, and I was trying to recall the many opportunities that I went to the FBI, to inform, about many things that were happening during those meetings.

Mr. CORNWELL. What I really want to find out is what the best memory you have on the subject is. OK, so let's start with the article.

Is the article an accurate reflection of what you stated to Mr. Crile?

Mr. ALEMAN. Some of the things I say are out of context.

Mr. CORNWELL. They are out of context?

Mr. ALEMAN. In some way, I mean.

Mr. CORNWELL. OK. You know Mr. Crile, correct?

Mr. ALEMAN. Yes.

Mr. CORNWELL. Is it your basic impression that he printed or at least attempted to print the material accurately based on what you said to him?

Mr. ALEMAN. He might have, but they didn't come—then when I start thinking, and trying to remember, and trying to remember everything, it wasn't in context.

Mr. CORNWELL. OK. Let me then show you what has been marked for identification as JFK exhibit F-601. May we have this exhibit admitted into evidence, Mr. Chairman?

Mr. FITHIAN. Without objection, so ordered.

[The above-referred to JFK exhibit F-601 follows:]

ASSASSINATION

Excerpts of Interview ofJOSE ALEMAN, Jr.

By HSCA Staff Investigator Gaeton Fonzi

March 12, 1977

...Aleman said in more than one way that Trafficante did specifically tell him that Kennedy is "going to get hit". He also specifically confirmed the quote that Crile printed in the Washington Post and this point: "Aleman says that he argued that Kennedy would get reelected, and Trafficante replied, 'No, Jose, he is going to be hit'".

Aleman said that Trafficante told him this as part of a long conversation that lasted from sometime during the day until late at night in a room at the Scott Bryan Hotel. He was vague as to the actual date of the conversation, but Crile puts it close to his meeting of Trafficante in September, 1962. Aleman says Trafficante was rambling on in a philosophical way about democracy and socialism and communism. He also said that Trafficante brought up Jimmy Hoffa's name and said that Hoffa would never forgive the Kennedys for what they did to him. Aleman said he got the impression that Trafficante was hinting that Hoffa was going to make the hit, not him, and that Kennedy would never make it to the election because of Hoffa. This, says Aleman, was the one aspect of the conversation with Trafficante that Crile did not properly put into perspective in his piece, otherwise the piece was very accurate.

Since the conversation with Trafficante took place over such a long part of the day, Aleman says there were many people in and out of the room during the course of it. However, he believes that at the time that Trafficante was talking of Kennedy, there were two others present besides himself and Trafficante: George Nobregas and "Macho" Gener, the latter being Trafficante's top man in his and the Mafia's relationship with Cubans...

JFK EXHIBIT F-601

Mr. CORNWELL. Mr. Aleman, that is an excerpt from a report of an investigator of ours, Gaeton Fonzi, dated March 12, 1977, and I would like to specifically direct your attention to the first paragraph which reads as follows:

"Aleman said in more than one way that Trafficante did specifically tell him that Kennedy is "going to get hit." He also specifically confirmed the quote that Crile printed in the Washington Post on this point:

"Aleman says that he argued that Kennedy would get reelected and Trafficante replied, 'no, Jose he is going to be hit'."

Let me ask you, did you meet with Mr. Fonzi on that occasion?

Mr. ALEMAN. I met with Mr. Fonzi on that occasion. Now, after the first article, when I talked all those things about trying to

remember, I had the doubt that Mr. Trafficante was in some way trying to get Cubela from Cuba, he was trying to get other people, and during that time, when that happened, Mr. Cubela, after I talked to him many times to do something against the regime of Castro, he didn't do anything, and in some way he was trying to bring this man, and that is why I brought to the point that these things were happening and it was very important to pay attention of the possibility of Castro being mixed with Santos Trafficante because in Miami everybody talks that the Bolita is being paid, used to be repaid to the G-2 agents by Santos Trafficante and G-2 agents in Cuba used to be, I mean in Miami used to be paid that way, and I wanted for them to pay attention to this. That is the main reason I brought all these.

Mr. CORNWELL. What we would like to attempt to do first is to determine, to the best of your memory, what the words were that Trafficante used in this conversation, and the interview report which we have just placed into evidence indicates that you did specifically confirmed that, to the best of your memory, those were the exact words, when you were interviewed in March 1977. Is that report accurate?

Mr. ALEMAN. The report, I, again, will tell you, that I was trying to recollect things from a long period of time and I was talking about Castro maybe being involved with Cubela, with Papina Ronjo, in a lot of things.

Mr. CORNWELL. I understand that part. Specifically with respect to the first paragraph where it states that you specifically confirmed that with respect to Kennedy, Trafficante stated, "No, Jose, he is going to be hit," is that an accurate—

Mr. ALEMAN. Because if this man was in Cuba, arrested, Santos Trafficante, then Garcia Banjo, Cubela and all these people tried to get him out of jail and he had connections with the Castro government, there is no doubt that you have to pay attention to all this. That's the main reason why I am bringing this to the committee because no doubt that at that very moment, Santos Trafficante, I believe, has a lot of connections with the regime of Fidel Castro. There's no doubt about that in my mind.

Mr. FITHIAN. If the Chair could interrupt—

Mr. ALEMAN. Even after some time I heard the opinion of a Communist talking that he didn't have nothing whatsoever.

Mr. FITHIAN. Will the witness suspend for just 1 minute?

Mr. ALEMAN. Yes.

Mr. FITHIAN. The Chair is informed, Mr. Aleman, that there is an important vote on the floor and all members wanted to hear what you had to say. So I am going to ask for a 10-minute recess. Prior to that, however, the security service, the marshals, have asked that all members of the audience and the press remain seated and in place at this time until the witness is escorted from the room. We would ask then that the witness and the marshals do that at this time and then we will declare the recess.

[Mr. Aleman left the room with the marshals.]

Mr. FITHIAN. The committee will recess for 10 minutes.

[A brief recess was taken.]

Mr. PREYER [presiding]. The committee will come to order.

Let me remind everyone in the hearing room that the U.S. marshal service has asked that all of you remain seated when the witness is brought into the hearing room and when he leaves the hearing room. We will ask that the witness be brought in at this time, and we will ask everyone in the hearing room to remain seated.

I understand that it may take about a minute for the witness to be brought in.

[Mr. Aleman was escorted into the hearing room.]

Mr. PREYER. Would you have your seat, Mr. Aleman. Mr. Cornwell is recognized.

Mr. CORNWELL. Thank you, Mr. Chairman. Mr. Aleman.

Mr. ALEMAN. Yes.

Mr. CORNWELL. Returning to the subject matter that we were discussing with you before the break.

Mr. ALEMAN. I beg your pardon?

Mr. CORNWELL. I say, returning to the same subject matter.

Mr. ALEMAN. Yes.

Mr. CORNWELL. Do you have any reason to believe that the interview report of Mr. Fonzi is inaccurate?

Mr. ALEMAN. When you try to recollect for 15 years something, I am trying to—it is impossible to—the wording is impossible to reconstruct.

Mr. CORNWELL. I meant to ask you though, do you have any reason to believe that Mr. Fonzi did not accurately reflect in his report what you said to him? Did he accurately write it down?

Mr. ALEMAN. It wasn't Mr. Fonzi, the one that wrote the article; it was Mr. Crile.

Mr. CORNWELL. Yes, sir, but the last exhibit was prepared by our investigator Mr. Fonzi.

Mr. ALEMAN. OK.

Mr. CORNWELL. Did Mr. Fonzi accurately write that—

Mr. ALEMAN. I have to read it again in order to—

Mr. CORNWELL. May we show him the exhibit one more time. This is JFK exhibit F-601.

Mr. ALEMAN. This is taken out of the article of the Washington Post.

Mr. CORNWELL. Yes, sir, in effect, it asks you if the article is accurate, if you did say the things that are reported in the article.

Mr. ALEMAN. Yes, that's the reason why I asked for protection for coming over here because at the time I was, later on after all things had happened in the United States, very much worried. I bring this to the attention of this committee that I had a puzzle and I couldn't understand what was it. That's the main reason I brought this to the committee.

Mr. CORNWELL. Simply for the record, Mr. Chairman, let me ask that JFK exhibit F-603 be entered into the record.

Mr. PREYER. Without objection, JFK exhibit F-603 is admitted into the record at this point.

MEMORANDUM

000936

To: Bob Tanenbaum

From: Andy Purdy

Date: March 14, 1977

Re: Synopsis of 3/10/77 trip (with Cliff Fenton) to Miami

Santos Trafficante

Summary: Subpoena personally served on subject by Cliff Fenton in presence of Sgt. Powers (Miami Dept. of Public Safety, Organized Crime Bureau) and myself. After mutual identification S.T. asked us to place the subpoenas on a little bench just outside the front door. He said he was accepting the subpoena. We walked to the street and observed S.T. come out the front door and pick up the materials and return with them to his house.

Aleman

Summary: Aleman confirms reports that S.T. personally told him that President Kennedy was "...going to be hit." Aleman indicates that S.T. made clear to him (implicitly) that he was not guessing about the killing; rather he was giving the impression that he knew Kennedy was going to be killed. Aleman did not believe S.T. was personally involved in whatever plan he seemed to know about.

Aleman is ready and willing to testify before the Select Committee at any time. He requests that we do not tell S.T. or his associates about his cooperation with our investigation.

Santos Trafficante - information in police file

(DELETED)

ASSASSINATION

Aleman - 3/12/77 interview synopsis

Gaeton Fonzi took detailed notes of the conversation between Aleman, Cliff Fenton, Gaeton, and myself. This is simply a synopsis of what occurred. Gaeton is preparing a detailed report.

Aleman was asked initially about a statement he reportedly heard made by S.T. to the effect that Kennedy was going to be assassinated. Aleman explicitly confirmed the version of the conversation as reported by George Crile in the Washington Post in May of 1976. He said the relevant conversation occurred during one of a number of extended conversations he had with S.T. He is not sure when the reported conversation occurred but he is certain that it did. He said that he believes others were present, including: S.T., himself, Nobregas, and Marco Antony Hirigoyen (the addresses of the latter two he is trying to obtain for us). His recollection of the conversation was as follows:

COPIES

S.T. (trying to make Aleman realize that he was not saying Kennedy would be defeated in the 1964 election, rather that he would not make it to the election): "... you don't understand me. Kennedy's not going to make it to the election. He is going to get hit."

Earlier in his first attempt to describe the circumstances leading up to, and the substance of the comment, Aleman said that S.T. talked of the many problems in the country and of Kennedy's role in causing problems generally and in specifically causing problems for certain individuals. S.T. reportedly said that alot of people weren't going to forget the problems Kennedy had caused them, including Hoffa. Gaeton, Cliff, and I are in agreement that Aleman made no attempt to even infer that the Hoffa reference was in any way connected to the statement that Kennedy was going to be hit.

However, when asked to restate the substance of the conversation and indicate the link if any to Hoffa, Aleman said he was given the distinct impression that Hoffa was to be principally involved in the elimination of Kennedy. Aleman says he never talked to S.T. or Hoffa subsequent to this conversation or subsequent to the assassination on this subject. Aleman says he had a bet with Nobregas: concerning whether or not Kennedy would be assassinated (Nobregas: betting "yes") but never collected his winnings or even discussed the bet with Nobregas since then.

(DELETED)

The relevant conversation came about when Nobregas introduced Aleman to S.T. reportedly because Banco (a distant cousin of Aleman) had helped get someone out of a Cuban jail. S.T. said he wanted to help Aleman get out of his financial difficulties in return. He offered to arrange a loan from the Teamsters.

ASSASSINATION

S.T. wanted to arrange an introduction with Orlando Bosch. Aleman made this proposed introduction appear unrelated to S.T.'s offer of help in arranging a Teamsters loan. At first he gave us the impression that he took some action in arranging the introduction which was accomplished by Niles. After persistent questioning Aleman finally said that he did nothing to arrange the introduction. He explained the situation this way: Nobregas was trying to help out Aleman viz a viz S.T. by letting S.T. believe Aleman helped arrange the introduction. The interesting thing is, according to Aleman, (and contradicting the Post account) he never received a dime from the Teamsters or anyone else.

Aleman attempted to explain why Nobregas and S.T. would have contact with him, much less offer him assistance, in view of the fact that Aleman had testified for the State in the Rothman trial in Chicago. Aleman said he explicitly told S.T. of the fact of his adverse testimony. He said S.T. laughed out loud and said not to worry about it, that it didn't matter at all.

(DELETED)

ARCHIVES

Mr. CORNWELL. And may we show a copy of it to the witness, please?

Mr. Aleman, on the front page of the exhibit there is a paragraph which is titled "Summary" and reads as follows:

Aleman confirms reports that Santos Trafficante personally told him that President Kennedy was going to be hit. Aleman indicates that Santos Trafficante made clear to him implicitly that he was not guessing about the killing. Rather, he was giving the impression that he knew Kennedy was going to be killed.

Mr. ALEMAN. No way. No way, whatsoever. You can be reassured, that I always in my life fought for democracy.

Mr. CORNWELL. I don't think you understood the paragraph

Mr. ALEMAN. Yes, but——

Mr. CORNWELL. We understand——

Mr. ALEMAN. Rather than he was giving the impression that he knew Kennedy was going to be killed.

Mr. CORNWELL. That's what Santos Trafficante——

Mr. ALEMAN. That he was not guessing about the killing.

Mr. CORNWELL. That Trafficante was——

Mr. ALEMAN. Aleman confirms the report that Santos personally told him that President Kennedy was going to be hit.

Mr. CORNWELL. Yes, sir. In other words, that's a recitation of what Trafficante——

Mr. ALEMAN. Aleman indicates that Santos Trafficante made clear to him implicitly that he was not guessing about the killing.

Mr. CORNWELL. He, meaning Trafficante, was not guessing, and the second part again is not a reference to you, it is a reference that you stated that he, meaning Trafficante, was giving the impression——

Mr. ALEMAN. Let me tell to this committee the following thing: By no way possible you can think that after all the suffering in Cuba and all the struggle to put a democratic country, and after all the struggle we've been fighting against Castro and after all the problems that I can see that has come to our country, I, if, in any way, I would have thought that the context at that time was that something was going to happen in that respect, I would have immediately advised the proper authorities about it.

Mr. CORNWELL. And didn't you do so?

Mr. ALEMAN. I talked in some way to members of the FBI about what was going on in the conversation, and I told them that something wrong was in some way, the wording that Hoffa and these—I went to the FBI and I informed something about that type of conversation. Like I previously had been informing the FBI about the meetings with Santos Trafficante.

Mr. CORNWELL. And when Trafficante and——

Mr. ALEMAN. Because when all these things were happening, I was informing the FBI about that.

Mr. CORNWELL. And I believe you previously told me that, is this accurate, that you did specifically tell the FBI about the comments of Trafficante on this occasion?

Mr. ALEMAN. We talked in some way, and whatever is about this thing in the FBI files must be the exact thing because now I am trying to recollect things that happened 15 years ago. You must understand that.

Mr. CORNWELL. What we want to do is——

Mr. ALEMAN. So after so many years, trying to recollect what went on, and that I had in some way a worry, I said what happened here, what transpired here, this is why I was bringing this.

Mr. CORNWELL. The comments that were made to you by Trafficante worried you, is that correct?

Mr. ALEMAN. After all the years that have passed by after seeing all the things, it worried me.

Mr. CORNWELL. In fact, immediately after the assassination, the FBI came to you and asked you again about the previous comments you had overheard, didn't they?

Mr. ALEMAN. Whatever transpired during that period of time, I informed the FBI about it.

Mr. CORNWELL. They came to you after the assassination and asked you again to tell in more detail the nature of the comments; is that correct?

Mr. ALEMAN. They asked something in that concern.

Mr. CORNWELL. In the previous reports of your recollections of this event, as in your testimony today, the phrase has occurred that "Kennedy will be hit." Today you offered, for the first time, an explanation that that might have been a reference to the fact he will be hit—

Mr. ALEMAN. No, no, no, no, because when that happened, I had informed the FBI about it. So later on they told me, Jose, he was a loner, you must not be concerned about anything, no problem whatsoever.

Mr. CORNWELL. The FBI said, don't worry about these comments, Lee Harvey Oswald was a loner.

Mr. ALEMAN. Yes; after the Warren Committee.

Mr. CORNWELL. You offered the explanation, though, earlier in your testimony today that the phrase, "he's going to be hit," might have been understood by you to mean hit with a number of votes?

Mr. ALEMAN. Yes.

Mr. CORNWELL. That explanation appears in no prior report of your statements that we have been able to find, and I would like to, in that vein, direct your attention to yesterday.

Mr. ALEMAN. Yes.

Mr. CORNWELL. You arrived at the airport from Miami, is that correct?

Mr. ALEMAN. Yes.

Mr. CORNWELL. My staff has reported that when they picked you up, took you to the hotel—

Mr. ALEMAN. Yes.

Mr. CORNWELL. You expressed alarm or concern that there was no protection provided for you.

Mr. ALEMAN. Surely. I mean this article have been for a long period of time. Undoubtedly, Santos Trafficante have seen it. I think he came to the committee some time. Didn't he come to the committee? I am asking you that question.

Mr. CORNWELL. They won't let me answer that question. I'm sorry. But at any rate, go ahead. I didn't mean to interrupt.

Mr. ALEMAN. In reference to this. So all this time, I have been very much worried, I am very much concerned about my safety. After I brought this Washington Post, and that was about 2 years and 3 months ago, and I have been worried. I sold my business, I

ARCHIVES

been in my home because I mean Santos Trafficante can try to do anything at any moment. The DGI in Cuba tried to do something to me and when I was called to come over here, I was subpoenaed to come over here, I was very much worried that I didn't have the protection, and I still believe that the DGI and Santos Trafficante could try to do something to me. There's no doubt about that.

The article was there. I wanted a reaction. Let's see what the reaction has been.

Mr. CORNWELL. I have no further questions. Thank you.

Mr. ALEMAN. The reaction, you can see in the letter of Fidel Castro, in the tapes that he brought to this committee, in the days of suffering of Fidel Castro that he has been a few days very much concerned and talking all the time about that he hasn't done anything whatsoever against the President of the United States. And I don't believe it. There is some connection between Santos Trafficante and the Cuban Government. There's no doubt about that. I came very brave here to this committee to talk that I had been concerned about this and you should pay attention, as patiently I have been with you people, and react.

Mr. CORNWELL. Thank you. I have no further questions.

Mr. ALEMAN. Thank you.

Mr. PREYER. The Chair recognizes Mr. Edgar for such time as he may consume.

Mr. EDGAR. Thank you, Mr. Chairman. Mr. Aleman, I noticed this morning you are accompanied by marshals.

Mr. ALEMAN. Yes.

Mr. EDGAR. Would you indicate to the committee at whose request the marshal service has been provided?

Mr. ALEMAN. My request.

Mr. EDGAR. Mr. Chairman, I had a number of questions that I wanted to pose to this particular witness, and I have gone over many of them last evening and have several pages of questions that I would like to pursue with the witness, by in light of the drastic change in his testimony which has been at least somewhat apparent this morning and somewhat related to his feelings of fear, I think that there would be little good served to ask those specific questions at this time. And so I will yield back the balance of my time and ask those questions at a later date.

Mr. PREYER. Are there any further questions from members of the panel? Mr. Cornwell, any further questions from you?

Mr. CORNWELL. No, Mr. Chairman.

Mr. PREYER. Mr. Aleman, under the committee rules, every witness is entitled to take 5 minutes at the end of his testimony and the questioning to make any statement that he may care to make by way of clarifying his testimony or explaining it further or just making any statement that you care to make. If there is anything further you wish to say about this matter at this time, the Chair will recognize you for 5 minutes.

Mr. ALEMAN. Thank you, sir. I don't want to make no statement. That's all.

Mr. PREYER. Thank you, Mr. Aleman.

At this time, the committee will excuse Mr. Aleman. Let me again caution everyone in the hearing room to remain seated as Mr. Aleman is escorted from the hearing room.

Mr. Aleman, I would like to say to you, from the committee's knowledge of your background and despite anything you may have said here today, the committee has respect for your background and the bravery, the bravery you have shown in the past. We appreciate you being here with us today.

Mr. ALEMAN. Thank you.

Mr. PREYER. If there is no—the Chair recognizes Mr. Blakey.

Mr. BLAKEY. Mr. Chairman, it would be appropriate at this time to indicate for the record that the Cuban Government made available to the committee a list of American gambling figures that were held for possible deportation by the Cuban Government at about the time that Mr. McWillie indicated that they were. And I would ask that that be incorporated in the record as JFK F-410.

Mr. PREYER. Without objection, it is entered into the record at this point.

[JFK exhibit F-410 was received in the record and follows:]

ARCHIVES

JFK EXHIBIT F-410

STATEMENT OF THE CUBAN GOVERNMENT

Jake Lansky was in Cuba from May 22, 1956.

Dino Vicente Cellini lived in Cuba from 1947. He was detained at Tresconia Camp in 1959. According to data obtained in those years he has or had a sister working as a typist in the White House who solicited the aid of Senator George Smathers of Florida to get Cellini out of Cuba.

From public sources we learned that George Smathers informed the Cellini family that he had spoken to Narcotics Commissioner Anslinger who told him that his office had no derogatory information on Cellini.

In June 1959, according to our files, the Cuban Government received a letter from the North American Consulate in Havana which expressed that there were arrest warrants for Jake Lansky and Dino Cellini in the U.S. Both were freed. Both left Cuba subsequently but the exact departure date is not known.

Santo Trafficante left Tresconia in August 1959. We know he left Cuba a few days after that. Unfortunately, we have found no documents with his exact date of departure.

Lucien Rievard was devoted to drug trafficking. The Cuban government does not know when he entered or departed Cuba.

Guiseppe di Georgio — The Cuban Government knows that he appeared in Havana in June 1958 using a passport with the name Pierre Canavese. We do not know what date he left Cuba.

Charles Tourine, Jr., was known as Charles del Monico and Charles White. He was closely associated to his father, Charles Tourine, aka Charles White and Charles (the Blade). He entered Cuba on February 20, 1958. The Cuban Government does not know when he left Cuba. He was

ASSASSINATION

involved in gambling and drug trafficking.

In the cases of Charles Tourine, Jr., and Lucien Rievard, both were thrown out of Cuba in 1959. The Cuban Government could not determine the exact dates of departure.

Joseph Merola — The Cuban government does not know when he entered or left Cuba. During Batista's dictatorship he was closely associated to Roberto Fernandez Miranda (who was the brother-in-law of Batista) in a machine installation business throughout Cuba.

Henry Saavedra entered Cuba on February 10, 1957. He was freed the same day as Santo Trafficante. The Cuban Government does not know when he left Cuba.

Babe Baron — The Cuban Government has no records on this individual. Further investigation is in progress.

Charles del Monico is Charles Tourine, Jr. In our files we have no record that Charles Tourine, Sr., was ever in Cuba.

Mr. BLAKEY. I would also note, Mr. Chairman, as you are fully aware of, when the committee was in Havana on August 26, 1978, the Cuban Government made available to the committee, ironically in the Hotel Rivera, an individual who was involved in setting up and operating the Trescornia camp. His testimony was taken at that time by the committee staff and yourself. It would be appropriate to enter that in the record at this time as well.

Mr. PREYER. Without objection, his statement will be admitted into the record.

Mr. BLAKEY. JFK F-311.

Mr. PREYER. JFK F-311. It is ordered admitted into the record. [JFK exhibit F-311 was admitted into the record and follows:]

ARCHIVES

JFK EXHIBIT F-311

KENNEDY

SELECT COMMITTEE ON ASSASSINATIONS

Name Jose Verdacia Date Aug. 26, 1978 Time 3:15 p
Address Hotel Rivera Place Hotel
Havana, Cuba

Interview:

Blakey: Let me indicate for the record that it is August 26th and it is 3:30 p.m. and the place is the Hotel Rivera in Havana, Cuba. The people present from the American delegation are: Congressman Richard Preyer, G. Robert Blakey, and Edwin Lopez. Would you identify for the record those from the Cuban delegation?

Cortez: Senen Buergo from the Minister of Foreign Affairs, Felipe Villa, official from the Minister of Interior, Ricardo Escartin from Foreign Service Juanita Vera, Interpreter, Aramis Gutierrez, official on the Minister of Interior.

Blakey: We have then your permission to record this conversation?

Verdacia: Yes you do.

Blakey: Would you state for the record your full name?

Verdacia: Jose Verdacia Verdecia

Interviewer Signature _____

Typed Signature G. Robert Blakey, Edwin Lopez

Date transcribed Sept. 27, 1978

By: CS Form #4-r

ASSASSINATION

Interview: Jose Verdacia

Page 2

Blakey: Would you state your date and place of birth.

Verdacia: I was born in Mancinilla Oriental Province on July 20, 1914.

Blakey: Are you presently employed?

Verdacia: Yes I am.

Blakey: Where?

Verdacia: In the Customs - Havana.

Blakey: Let me direct your attention to 1959. Were you employed then?

Verdacia: Yes I did.

Blakey: Where?

Verdacia: In the Immigration Camp at Trescornia.

Blakey: What was your position there?

Verdacia: I was a Captain of the Police, the Chief of the Camp.

Blakey: Would you describe for us what Trescornia looked like?

Verdacia: Trescornia Camp is located in Casa Blanca, a neighborhood in Havana facing the bay--Havana Bay. The camp is constituted by pavillions. There the passangers, for one reason or the other stayed here and their boats left, they would be taken to that camp. Those passangers would go to that camp until the Navy companies would demand them or would book them in another boat.

Blakey: How large was the camp physically?

ARCHIVES

Verdacia: About one and one-half square kilometers.

Blakey: How many sections did it have in it?

Verdacia: The camp was divided into eight large pavillions, each devoted to the crew members. Four smaller pavillions--out of this the first one was devoted to the passengers who for any reason -- any problem with a visa, for instance or maybe because they had come without the due documentation-while the problem was solved they were taken to the camp and stayed there. One or two days, that depending on the solution of the problem that had taken them there.

Blakey: How many people would have been in each section?

Verdacia: At that time we had approximately 40 crew members because at that time we had twenty-one crew members of the Peruvian boat which had some problems in the Cuban waters and it was drawn to the Bay so that-- and the crew was there at the camp waiting for the boats problem to be solved. The rest of the crew members were occasional people that remained after their boat had left - because they just leave the boat and then the boat leaves without them but they stayed there for a shorter period of time. The passengers were also occasional. Sometimes a month would go by without having even one passenger. This happened mainly with European passengers

ASSASSINATION

who needed all other requirements in order to be able to enter the country. Because I remember that there was a treaty with France that the French did not need a visa to come into the country. That's why the passengers were very few. Now in the midst of 1959 we had quite an amount of people who were taken to the camp. Those people we did have knowledge that they were leaving Cuba temporarily and that they were people who were in charge of the casinos, gambling casinos. Those people I don't remember exactly the amount of them that we had nor the names of them. It is very likely that I wouldn't recognize their face any longer, it was such a long time ago that you can imagine. I do remember some by their names because they have been quite--their names have been quite known later.

Blakey: How many would there have been, fifteen, twenty?

Verdacia: I don't think there was that many.

Blakey: If I were to give you some names do you think that you might be able to recall whether this--that individual was in Trescornia?

Verdacia: Well, I would be very grateful because that way I could remember.

Blakey: Would you recall a man named Jake Lanskey?

Verdacia: Yes I do.

ARCHIVES

Interview: Jose Verdacia

Page 5

Blakey: Was he in the prison?

Verdacia: Not in that prison because it was not a prison.

Blakey: In that camp, I'm sorry.

Verdacia: The camp was under the Minister of State of Cuba. There no prisoners were taken. There the people that were under those circumstances, I said before would be taken. Crew members whose boat would have left or passengers that would not be fitting the requirements in due time so they would spend there some days til their problems were solved. And these people were taken there I think, that in order to have their problems solved too before they left. There were no prisoners there and we were not the kind of police that takes care of public order, but just we were policemen that took care of the order inside the camp.

Blakey: Do you recall a man named Charles Tourine?

Verdacia: Yes I do.

Blakey: Do you recall a man named Lucien Ricuard?

Verdacia: It sounds familiar to me too.

Blakey: Do you recall a man named Dina Cellini?

Verdacia: No.

Blakey: Do you recall a man named Henry Civela?

Verdaica: No.

ASSASSINATION

Blakey: Do you recall a man named Loran Hall?

Verdacia: No I don't

Lopez: Eugene Hall?

Verdacia: No.

Blakey: Let me show you a book that's called Photo Identification book and direct your attention to a photograph on the first three pages and see if you can recall any of those.

Verdacia: I tell you honestly that it was such a long time ago that I wouldn't be able to identify him and like that.

Blakey: I understand but I have to ask the questions any way. Let me direct your attention to photograph No. 6. Does that individual look familiar?

Verdacia: No it doesn't. I don't remember having anyone there with those -- I don't remember the name.

Lopez: Sideburns.

Verdacia: Sideburns?

Blakey: Let me ask you-- this next individual, I do not have his first name but his last name would be Merola.

Lopez: Joe.

Blakey: Joe Merola.

Verdacia: I don't remember. I don't remember having seen anyone like that there.

ARCHIVES

Interview: Jose Verdacia

Page 7

Blakey: Do you recall -- and then again I don't have the first name.-- Civello.

Verdacia: No.

Blakey: Do you recall a Giuseppe di Giorgio?

Verdacia: No.

Blakey: Do you recall a man named Charles Delmonico?

Verdacia: Yes I do, I do remember him.

Blakey: Do you recall a man named Wilson Hudson?
John Wilson Hudson?

Verdacia: No, I don't.

Blakey: He would have been an English journalist.

Verdacia: I remember an English journalist who stayed there for some days. He had been deported from Argentina. I remember that he used to tell me stories of his staying in Argentina. That he had problems there with Peron because he used to make funny stories about Rita Peron, Peron's wife because there was soap by the name of Rita. And he told me stories also about one of his cronics which was issued in one of his British papers that was around Queen Elizabeth. He said that he had written that Queen Elizabeth could handle 2,000 men. I remember the stories that he used to tell me. I don't have any idea of him . . . I don't have any recollection of him being linked to these other people. I don't remember whether he stayed there coincided with

ASSASSINATION

the stay of these other people. I don't know his name but I do remember the man.

Blakey: Were these other individuals all in the same area or sections?

Verdacia: Yes they were.

Blakey: Could Mr. Hudson have been in an adjoining section?

Verdacia: No. All of them were taken to the same pavillion. The first one facing the office. There was where the passengers were taken and on that occasion these men were there.

Blakey: What areas would have adjoined the ones where these other individuals would be that the British journalist could have been in? My problem is that I don't have a mental picture of what the camp looks like so I don't understand how the individuals were housed.

Verdacia: Let's assume that this is the camp. The entrance to the camp would be this way.

Blakey: Perhaps I could ask you to draw a map.

Verdacia: Yes I can.

Tape turned off.

Interpreter: It's on.

Verdacia: This is the entrance to Casa Blanca street. It's the same highway which comes around here. It is a bridge and that was the entrance into the camp.

ARCHIVES

There we had a policeman at the entrance.

Blakey: Was the bridge over water?

Verdacia: No. Another highway went under it.

Blakey: Would you put an arrow on the map indicating which direction was north?

Thank you. Would you explain to us how the various individuals were housed in the various villas?

Verdacia: This is the pavillion which was devoted to passengers. This pavillion had individual rooms-- where the hall and then into their rooms on both sides. The bathrooms were in this part. All these pavillions had a cellar and then here in the cellar they had a cafeteria. These are the stair case to go up the pavillions and down on the cellars where the cafeteria is. There the passengers were taken and on that occasion these gentlemen that you mentioned were taken to this place.

Blakey: All of the individuals, Cellini and the others were taken to the pavillion for passengers?

Verdacia: Yes they were.

Blakey: Do you recall the individual from Argentina?

Verdacia: Yes.

Blakey: Which pavillion was he found in?

ASSASSINATION

Interview: Jose Verdacia

Page 10

Verdacia: In that same pavillion.

Blakey: But you cannot remember whether he was there at the same time? or before or after?

Verdacia: I don't remember. I don't remember whether he was there before or after them.

Blakey: Would you sign you name and date on the lower left hand side of this map?

Interpreter: Do you want his name or his signature?

Blakey: It's doesn't matter. Thank you.
There was one additional name I wanted to give you. Do you recall if Santo Trafficante was in this pavillion?

Verdacia: Yes he was.

Blakey: Let me show you a copy of a photograph provided to us today by your government and ask you if you if this is the individual who you knew as Santo Trafficante.

Verdacia: Honestly, I can't tell you that I remember his face. The name I remember perfectly well, but the face I can't place it.

Blakey: Let me show you a copy of Life magazine dated Sept. 1, 1967, page 21 and show you the photograph by Life "Trafficante Florida" and ask you if that refreshes your recollection.

Verdacia: No I cannot identify the face. I cannot tell you with certainty. I can tell you that the name is perfectly clear. I am absolutely sure that he was

ARCHIVES

there, but the face I can't recognize.

Blakey: Can you recall the circumstances under which Mr. Trafficante and the other individuals whose names you remember came to be housed in the pavillion for passengers?

Verdacia: Yes I do remember that. On that occasion many people were taken there. People that I was told they were the operators of the gambling casinos. But all things I cannot tell you with certainty because I did not have participation in them. I can just tell you that I was the head of police there responsible for the order within the camp. Those people were taken there in the same conditions as any other were taken there and we had to take care of them - Keeping them there til the immigration law determined that they could leave. I cannot tell you exactly either the dates that they spent there, whether it was a month or over a month, but it was along that time. But I knew that this people were individuals in charge of gambling - of gambling house and casinos here.

Blakey: Were they free to come and go in the camp?

Verdacia: No not to enter and go out. The time they spent there they had to stay in the camp until they were given permission to leave.

ASSASSINATION

Interview: Jose Verdacia

Page 12

Blakey: Could they receive mail?

Verdacia: Yes they did receive correspondence, visits.

Blakey: Did they have access to a telephone?

Verdacia: Yes they did. Yes, the crew members and the passengers, all of them had the access to the telephone.

Blakey: How were they fed?

Verdacia: Their food was taken from the hotels to the camp.

Blakey: Did any of the individuals there have a private chef?

Verdacia: No they did not. The food was taken to them from hotels in a car. I knew the food came from the hotels, I cannot tell you from what hotel.

Blakey: Was the food brought to them by virtue of your activity or did they order their own food?

Verdacia: The camp had a standing room for those who wanted to go and have lunch and dinner there. Yes. ~~h~~ This means that those who wanted to have dinner or lunch of the place of the dining room of the camp they could but those who received the food from the hotels it was either because they had sent for

ARCHIVES

it before--previous arrangement with the hotel or something like that, but not because they can't have arrangements.

Blakey: The camp did not supply food to the people being held there, is that correct?

Verdacia: Yes. The camp supplied the food for them but in the dining room there. They had a dining room.

Blakey: Were the people in the camp permitted to have personal belongings?

Verdacia: Yes they were.

Blakey: Did they have their watches with them?

Verdacia: Yes they had.

Blakey: Rings?

Verdacia: No these kind of people like them--like the ones you mentioned and the passengers-- by the crew people they were searched for a kind of knives or things like that that could be used as weapons.

Blakey: During the period that Mr. Trafficante was there, did he ever seek his release in connection with his daughter's marriage?

Verdacia: I don't know that because I didn't have any authority upon that.

Blakey: Are you familiar with the circumstances that led to Mr. Trafficante's release?

Verdacia: No I don't they were not of my competence.

ASSASSINATION

Interview: Jose Verdacia

Page 14

Blakey: Do you recall about when he was released?

Verdacia: I cannot tell you with accuracy about the date. It could have been in August but I cannot tell you the date exactly.

Blakey: You indicated that the passengers and the gambling detainees were permitted to have visitors?

Verdacia: Yes.

Blakey: Is the name Lewis McWillie familiar to you?

Verdacia: No.

Blakey: Is the name Jack Rubinstein familiar? Or Jack Ruby?

Verdacia: No.

Blakey: Let me direct your attention photograph No. 60 in the Photograph Indent. book.

Verdacia: I can't tell you. I cannot take that face back to that time.

Blakey: Do you recall whether Santo Trafficante had visitors?

Verdacia: If I tell you who received visits there I would be lying. The visitors came. They talked with one, two, three -- any one of them. Sometimes they talked together, sometimes they talked just separately. But as they could receive visits we had no reason to interfere with that.

ARCHIVES

Interview: Jose Verdacia

Page 15

Blakey: Was there a visitors log book kept?

Verdacia: No we did not. Only those who came out to the camp like the crew members, for instance, were searched for weapons, nothing else.

Blakey: Were all of the gambling detainees released at about the same time?

Verdacia: Yes they were.

Blakey: Did you learn what lead to their release?

Verdacia: No I did not.

Blakey: I have no further questions, do you?

Preyer: I wasn't clear, how long was the gambling detainees there approximately?

Verdacia: Approximately a month.

Preyer: Did Trafficante cause any difficulty or make requests that were unusual or do anything that particularly called your attention to him?

Verdacia: No he did not.

Preyer: One other question-- On the British journalist who visited Argentina, you indicated that you didn't think he had met with the gambling detainees and I wasn't clear whether that was because he was not there at the same time or because he was in a different section of the building.

Verdacia: I meant that I cannot tell you with accuracy that he stayed at the same time that the other people were there--that the ones you mentioned. I don't

ASSASSINATION

even know what was the reason for this man being taken into the camp. If it was because of this paper or something like that, I don't know. The direction and administration of immigration was in charge of this problem. I had nothing to do with that.

Preyer: You told us that this was not a prison,

Verdacia: Of course not.

Preyer: Was there any kind of security?

Verdacia: We had no security personnel but rather policeman.

We had three post, one at the entrance at the gate, another one at another place and one behind the pavillion in which the crew members were located because the crew members were the ones that would try mostly to leave the camp unseen -- and then there was a sergeant in charge of these post. There was a boulevard there and they could walk along the gardens and the boulevard in the days and talk and do anything.

Preyer: Was there a fence around the entire...

Verdacia: Yes there was a fence.

Preyer: I have no further questions.

Blakey: I have no other questions at this time and for the record let me indicate that it 4:15. Would you object if I took your photograph to perserve it for our records in connection with your testimony?

Verdacia: I have no objections.

ARCHIVES

Interpreter: He doesn't want his picture taken.

Blakey: Let me thank him for coming and speaking with us and sharing with us your memory. I am sure it has been very difficult to go back that far but we appreciate your--the helpful way in which you have clarified what the camp looked like and who was held there and the very circumstances surrounding these matters.

Mr. BLAKEY. Thank you, Mr. Chairman.

Mr. PREYER. The committee will adjourn until 2 o'clock this afternoon.

[Whereupon, at 12:25 p.m. the Select Committee on Assassinations recessed, to reconvene at 2 p.m. the same day.]

AFTERNOON SESSION

Mr. PREYER [now presiding]. The committee will come to order.

I regret that the chairman of the committee has been called before the House/Senate Foreign Operations Conference Committee at 2 o'clock today. The chairman was to do the questioning of the next witness. He anticipates that this conference, his appearance there will not take longer than an hour, so that at this time, the committee will stand in recess until 3:30 this afternoon when I hope he will be here and we will be able to resume.

The committee stands in recess until 3:30 this afternoon.

[A recess was taken until 3:30 p.m.]

Mr. PREYER [3:44 p.m.]. We are getting word, which we think we will get momentarily, as to Mr. Stokes availability and we will let you know as soon as we learn something.

Mr. PREYER [4:30 p.m.]. The chairman has finished his activities with the conference committee so that as soon as this pending vote on the floor is dealt with, we will resume. I think that will be in about 10 or 15 minutes. We will go into session then.

Mr. PREYER [5:10 p.m.]. The committee will come to order.

The Chair recognizes Chairman Stokes.

Chairman STOKES. Thank you, Mr. Chairman.

Mr. Chairman, I think it appropriate in light of the fact that at the time we adjourned this morning, the chair announced that the committee would again meet at 2 p.m. this afternoon. In addition to duties and responsibilities I have on this committee, I happen to be a member of the Appropriations Committee of the House, and a House/Senate conference started at 2 p.m. this afternoon and at the request of the President, relating to an item he was particularly concerned about in that appropriations bill, I was asked to be

there to be present in order to contribute to that House/Senate conference.

I was in that House/Senate conference from 2 this afternoon until 5 p.m. this afternoon at which time I immediately came back to this hearing room. We were then ready to recommence the hearings and we have just been advised that the witness, who has a physical condition, has advised the committee that he would prefer not to be called this evening, because he has waited all day to be called as a witness, and because of the physical condition, does not feel that he can at this time come before the committee and has requested that we have the hearing first thing tomorrow morning, and he be called at that time.

Accordingly, the committee feels this request should be granted and, Mr. Chairman, it would be appropriate for you to adjourn this meeting then until the time set for tomorrow morning.

Mr. PREYER. The committee will stand adjourned until 8:30 tomorrow morning.

[Whereupon, at 5:13 p.m., the committee was adjourned, to reconvene at 8:30 a.m. on Thursday, September 28, 1978.]

ARCHIVES

INVESTIGATION OF THE ASSASSINATION OF PRESIDENT JOHN F. KENNEDY

THURSDAY, SEPTEMBER 28, 1978

HOUSE OF REPRESENTATIVES,
SELECT COMMITTEE ON ASSASSINATIONS,
Washington, D.C.

The committee met at 8:45 a.m., pursuant to recess, in room 345, Cannon House Office Building, Hon. Richardson Preyer, presiding.

Present: Representatives Preyer, Stokes, Dodd, Fithian, Ford, Edgar, Devine, McKinney, and Sawyer.

Also present: G. Robert Blakey, chief counsel; G. Cornwell, deputy chief counsel; Elizabeth Berning, chief clerk; and I. Charles Mathews, special counsel.

Mr. PREYER. The committee will come to order. The Chair recognizes Mr. Blakey.

Mr. BLAKEY. Thank you, Mr. Chairman.

What the committee witnessed here yesterday is more typical of organized crime investigations than we had thought perhaps the testimony would be. Skillful interrogation has, in fact, elicited only meager amounts of information, and we have seen manifested in a witness that fear that is all too often characteristic of people called to testify in matters touching on organized crime. A fear that, frankly must be recognized as justified. Indeed, I would note that in the organized crime and racketeering section in the U.S. Department of Justice between 1961 and 1965, in which I served, more than 25 informants were lost in organized crime cases, killed by those who would prevent their testimony from being made public.

But it is necessary, nevertheless, to continue the exploration and illustration of the committee's work. In that context, it would be appropriate at this time to call Santos Trafficante.

Mr. Chairman, I understand Mr. Trafficante has requested that there be no radio, TV, photographs, or recordings made of him at any time during his testimony. Consequently, it would be appropriate consistent with the rules of this committee and the House to enter an order to that effect.

Mr. PREYER. The witness, having requested that he not be subjected to radio, television, or photographic coverage, the committee directs that all lenses be covered and that all microphones used for coverage be turned off at this time.

The committee calls Santos Trafficante.

Mr. Trafficante, will you stand and be sworn.

Do you solemnly swear the testimony you will give this committee will be the truth, the whole truth, and nothing but the truth, so help you God.

Trafficante, Santos

P. 346

Mr. TRAFFICANTE. I do.

TESTIMONY OF SANTOS TRAFFICANTE

Mr. PREYER. Thank you.

Mr. GONZALEZ. Mr. Chairman, I am Henry Gonzalez. I don't know if the committee has been advised, we are exercising our rights under rule No. 6 of the House Rules.

Mr. PREYER. Yes, Mr. Gonzalez. The Chair will recognize Mr. Stokes for questioning, and I believe the matters you mentioned will be brought out in due course.

Chairman STOKES. For the record, will the witness please state his full name.

Mr. TRAFFICANTE. Santos Trafficante.

Chairman STOKES. Mr. Trafficante, where are you currently living?

Mr. TRAFFICANTE. 740 Northeast, 155th Street, North Miami.

Chairman STOKES. Will you tell us when and where you were born?

Mr. TRAFFICANTE. At this time, I want to exercise my privilege and my constitutional right to take the Fifth amendment.

Chairman STOKES. Mr. Chairman, I request that you have the clerk show the witness JFK exhibit No. F-411, an order of Judge Gasch conferring immunity upon the witness and compelling his testimony.

Mr. PREYER. Yes; Mr. Trafficante, the committee has determined earlier that it desires to immunize your testimony, and the clerk is directed at this time to show the witness a certified copy of the immunity order of Judge Gasch, and it is ordered inserted into the record at this point, JFK F-411.

[The Immunity Order, JFK F-411 follows:]

ARCHIVES

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

FILED

SEP 20 1978

JAMES F. DAVEY, Clk

In the Matter of the Application of
UNITED STATES HOUSE OF REPRESENTATIVES
SELECT COMMITTEE ON ASSASSINATIONS

Misc. No. 78-

287

ORDER
CONFERRING IMMUNITY UPON AND
COMPELLING TESTIMONY FROM SANTO TRAFFICANTE

The United States House of Representatives Select Committee on Assassinations having made written application, pursuant to Title 18, United States Code, Sections 6002 and 6005, for an order conferring immunity upon Santo Trafficante and compelling him to testify and provide other information before the Select Committee on Assassinations, and the court finding that all procedures specified by §6005 have been duly followed, it is hereby, this 20th day of September 1978,

ORDERED, that Santo Trafficante in accordance with the provisions of Title 18, United States Code, Sections 6002 and 6005, shall not be excused from testifying or providing other information before the Select Committee on Assassinations on the grounds that the testimony or other information sought may tend to incriminate him.

ORDERED FURTHER, that Santo Trafficante appear when subpoenaed by said Committee and testify and provide such other information that is sought with respect to matters under inquiry by said Committee.

ASSASSINATION

AND IT IS FURTHER ORDERED that no testimony or other information compelled under this order (or any information directly or indirectly derived from such testimony or other information) may be used against Santo Trafficante in any criminal case, except a prosecution for perjury, giving a false statement or otherwise failing to comply with this ORDER.

Wm. E. Land
United States District Judge

Dated:

Sept 20 1978

A TRUE COPY

JAMES F. DAVEY, Clerk

By

LeCompt & Patterson
Deputy Clerk

Mr. PREYER. I believe, Mr. Trafficante, and Mr. Gonzalez, that you have seen a copy of this order at an earlier date.

Mr. GONZALEZ. That's correct, Mr. Chairman.

Mr. PREYER. In light of the immunity order, the committee directs you to answer the question, Mr. Trafficante.

Mr. GONZALEZ. Mr. Chairman, prior to answering any of the questions propounded, we would like to have the declaration made by counsel for the committee on behalf of the committee whether or not any of the questions that will be propounded to Mr. Trafficante are derived from either legal or illegal monitoring of Mr. Trafficante at any time in the past, and we would exercise that right and make that request under title 18, section 3504.

Mr. PREYER. The Chair will state, Mr. Gonzalez, that no question you will be asked in this hearing today is based on any electronic surveillance, as to which you have standing to object.

Mr. GONZALEZ. Furthermore, Mr. Chairman, I would like, prior to commencement of questioning, I believe it was either yesterday or the day before I submitted a document from a doctor which I would most respectfully ask that it be incorporated as part of the record and each of the committee members take consideration and do take consideration of the contents therein in the conducting of the hearing at this time.

Mr. PREYER. Mr. Gonzalez, each member of the committee has received a copy of this letter and has read it and, without objection, a copy of the letter will be made a part of the record at this point.

[The referred to document furnished for the record follows:]

ARCHIVES

November 23, 1977

TO WHOM IT MAY CONCERN:

In re: Mr. Santo Trafficante
Watson Clinic #179243

The above-mentioned patient has been under my care since 1969. He has had chronic hypertensive vascular disease. His first evidence of organic heart disease was in August, 1974, when he had the onset in another country of pulmonary edema. The electrocardiogram changed and showed evidence of anterior wall ischemia. It was felt that he had had a myocardial infarction at that time. He has had chronically elevated cholesterol and triglycerides, as well as temporary elevations of uric acid which have been controlled by medication. He has also had a polyp removed from his colon which was benign but required abdominal surgery in 1971. He had a retinal detachment in 1974 and has rather severe and disabling osteoarthritis of the lumbosacral spine.

Currently, he is suffering from angina pectoris on either exposure to tension or to exertion. He was evaluated in the clinic by Dr. Alan Brenner, Cardiologist, who agreed with his management program which consists of Aldomet 500 mg. b.i.d., Inderal 40 mg. q.i.d., Col-Benemid - one tablet twice daily, potassium supplements, Hydro-Diuril 50 mg. daily, and Apresoline 10 mg. t.i.d. He recommended the addition of Isordil and he now receives 5 mg. sublingually q.i.d. For his arthritis, he has been given Tolectin, two tablets t.i.d.

In essence, Mr. Trafficante is an ill man and has significant cardiovascular disease, making him at great risk for a recurrence of myocardial infarction. His angina is brought on by stressful events, either physical or emotional.

It would seem unwise for him to be exposed to prolonged emotional or physical stress. For this reason, it would be better if his current legal difficulties could be handled by deposition rather than having to undergo the more stressful personal appearances.

John V. Verner, Jr., M.D.

sr(w30)73

JFK-412

ACCREDITED AMERICAN GROUP PRACTICE

JFK EXHIBIT F-412

ASSASSINATION

Mr. DEVINE. Reserving the right to object, does the Chair make the reference to the letter from a clinic dated September 1977?

Mr. GONZALEZ. No, sir, it is November 23, 1977.

Mr. DEVINE. 1977. That is the one. I withdraw my reservation, Mr. Chairman.

Mr. GONZALEZ. Mr. Chairman, pursuant to the subpoena that Mr. Trafficante is here responding to of this committee, pursuant to the order of the Federal district judge here in this area and we at this time are prepared to continue the questioning.

Mr. PREYER. Thank you, Mr. Gonzalez. Before we continue with the questioning, the Chair would like to read to the witness a statement of the scope of the hearing which appears as the mandate of this committee in H. Res. 222.

The select committee or a subcommittee thereof is authorized and directed to conduct a full and complete investigation and study of the circumstances surrounding the assassination and death of President John F. Kennedy and the assassination and death of Martin Luther King, and of any other persons the select committee shall determine might be related to either death in order to ascertain (1) whether the existing laws of the United States, including but not limited to laws relating to the safety and protection of the President of the United States, assassinations of the President of the United States, deprivation of civil rights and conspiracies related thereto, as well as the investigatory jurisdiction and capability of agencies and departments of the U.S. Government are adequate either in their provisions or in the manner of their enforcement and, (2) whether there was full disclosure and sharing of information and evidence among agencies and departments of the U.S. Government during the course of all prior investigations into those deaths, and whether any evidence or information which was not in the possession of any agency or department of the U.S. Government investigating either death would have been of assistance to that agency or department, and why such information was not provided to or collected by the appropriate agency or department and shall make recommendations to the House, if the select committee deems it appropriate for the amendment of existing legislation or the enactment of new legislation.

The Chair recognizes Mr. Stokes to begin the questioning. Proceed with the questioning at this time.

Chairman STOKES. Thank you Mr. Chairman.

Mr. Trafficante, I believe at the point you interjected your motion, I had asked you to tell us when and where you were born.

Mr. TRAFFICANTE. Tampa, Fla., November 15, 1914.

Chairman STOKES. What is your current occupation?

Mr. TRAFFICANTE. I am retired.

Chairman STOKES. During the period 1957 and 1958, where were you living?

Mr. TRAFFICANTE. In Havana, Cuba.

Chairman STOKES. Could you tell us when you moved to Cuba?

Mr. TRAFFICANTE. Around 1953 or 1954, in the latter part of 1953 or 1954.

Chairman STOKES. Now, during 1959, did you travel between the United States and Cuba?

Mr. TRAFFICANTE. I don't think I did. Maybe. In the latter part of 1959, I might have.

Chairman STOKES. Can you tell us what business or employment you had while you were in Cuba?

Mr. TRAFFICANTE. I was in the gambling business and nightclub casino business, which was legal at that time in Cuba.

Chairman STOKES. Being in the business, did you own several pieces of casinos in Cuba?

Mr. TRAFFICANTE. I had some interests in some casinos.

ARCHIVES

Chairman STOKES. Can you tell us how many?

Mr. TRAFFICANTE. Well, maybe three or four.

Chairman STOKES. Did you have an interest in the Sans Souci?

Mr. TRAFFICANTE. Yes.

Chairman STOKES. How about the Tropicana?

Mr. TRAFFICANTE. No.

Chairman STOKES. Capri?

Mr. TRAFFICANTE. No.

Chairman STOKES. Which were the others you had an interest in?

Mr. TRAFFICANTE. Deauville, the Commodore.

Chairman STOKES. In order to operate your casinos in 1957-58, did you have to pay money to Cuban officials to maintain the operation of your casinos?

Mr. TRAFFICANTE. We had to pay a license of \$25,000 a year and we had to give 50 percent of the take of the slot machines.

Chairman STOKES. Mr. Trafficante, do you know a Rafael Gener while you were in Cuba?

Mr. TRAFFICANTE. I didn't get the name.

Chairman STOKES. Gener, Rafael Gener.

Mr. TRAFFICANTE. How do you spell it?

Chairman STOKES. I believe is it spelled G-e-n-e-r, but pronounced Gener.

Mr. TRAFFICANTE. P-e-, you said.

Chairman STOKES. G, as in George. G-e-n-e-r, but is pronounced Gener.

Mr. TRAFFICANTE. Gener, Macho Gener; yes, I knew a Gener by that name.

Chairman STOKES. Did you meet him while in Cuba?

Mr. TRAFFICANTE. I met him after the event of Fidel Castro. He had been in exile before.

Chairman STOKES. This would be after the revolution?

Mr. TRAFFICANTE. Right.

Chairman STOKES. Mr. Trafficante, did you know a Mr. Joseph Stassi?

Mr. TRAFFICANTE. Yes.

Chairman STOKES. How did you come to know him?

Mr. TRAFFICANTE. He was connected with me for a while in the Sans Souci.

Chairman STOKES. What was his relationship to you?

Mr. TRAFFICANTE. He was a partner in the Sans Souci.

Chairman STOKES. Can you tell us in late 1958, what was the result of the activities of Castro? How did it affect the tourist and gambling business there in Havana?

Mr. TRAFFICANTE. You are talking about 1958 before Castro came in?

Chairman STOKES. Before he came in, yes.

Mr. TRAFFICANTE. It wasn't too good. Every other day they had bombs and stuff like that. It was nothing.

Chairman STOKES. What effect did it have on the gambling business? How did it affect your business?

Mr. TRAFFICANTE. Very bad.

Chairman STOKES. In what respect?

Mr. TRAFFICANTE. Because every day there were bombs put in different spots and the first thing you know, even if there were a

couple bombs, before the night was over, there were 200, supposedly, rumors, stuff flying around and people would stay home.

Chairman STOKES. I suppose that this then caused the casino operators a great deal of concern, did it not?

Mr. TRAFFICANTE. I suppose so.

Chairman STOKES. And was there fear on the part of the operators that if Castro came to power that he would confiscate the businesses?

Mr. TRAFFICANTE. No.

Chairman STOKES. Was there anticipated at all that he might come to power at that time?

Mr. TRAFFICANTE. Nobody ever dreamt that he would come to power at that time.

Chairman STOKES. Did you or any of the other casino operators take any steps to protect your businesses in the event that he would come to power?

Mr. TRAFFICANTE. No. There was no question about him taking to power. They used to—in the papers when you would read about him, you would read like he was some kind of a bandit.

Chairman STOKES. Did you meet Fidel or Raoul Castro prior to January 1, 1959?

Mr. TRAFFICANTE. No.

Chairman STOKES. When Fidel Castro took over, how soon did he order the casinos to be closed?

Mr. TRAFFICANTE. Well, even before he reached Havana, because he didn't come down from the mountain until after Batista had left, and he had a walkathon, you would call it, from the mountains to Havana, and they kept interviewing him and he kept saying the casinos would close, statements to that effect, the casinos close without even being notified officially to close. Everything was in a turmoil. There was people all over the streets, breaking into homes, there was complete enmity and the only thing at that time was to try and stay alive.

Chairman STOKES. What was his attitude toward casino owners and operators?

Mr. TRAFFICANTE. Well, he did a lot of talking in those days. I doubt if he knew what the hell he was talking about, but he used to do a lot of talking against the Marines, the United States and this and that. So nobody knew where you stood with him.

Chairman STOKES. About that time, did you have any reason to contact Mr. Gener, whom we have referred to earlier, the gentleman we referred to earlier?

Mr. TRAFFICANTE. I think Mr. Gener contacted me, if my recollection is right. In fact, I think it was looking to take over the apartment that I used to live, because he thought it was a matter of time before I would have to leave Cuba.

Chairman STOKES. After—

Mr. TRAFFICANTE. That's how I got to meet him. I met him in my own apartment, that in case, he said, if you leave, I would like to have this apartment. So, I say, OK.

Chairman STOKES. After Castro came to power, did you continue to operate your business as usual?

Mr. TRAFFICANTE. No, everything was closed but after 2, maybe 3 months, or 4 months or 5 months, I don't remember when, he

ARCHIVES

ordered all the casinos to open up again and when I said order, he ordered it. You either had to open up or lose—or go to jail.

Chairman STOKES. And what did you do?

Mr. TRAFFICANTE. Well I stayed away from the Sans Souci, which was a lemon. So I stood around there to see what would happen, mostly to see he closed the door there. What he did was, he made the casinos open and he obligated all the casinos owners to pay the backpay of all these months that these people had not worked, and as soon as they got the backpay, then he will find a reason to close them, some of them, the ones he considered that were in the middle district of the city or the poor district of the city.

Chairman STOKES. This would have meant then that anyone who reopened would have to pay those employees about 3 months wages; is that right?

Mr. TRAFFICANTE. About 3 or 4 months wages, yeah.

Chairman STOKES. Did a time come when you were detained or imprisoned there in Cuba?

Mr. TRAFFICANTE. Yes.

Chairman STOKES. And can you tell us when that was?

Mr. TRAFFICANTE. I cannot tell you the exact date, but the thing was that I was detained, I was being—how would you call it [conferred with counsel]—I got news that Cuban officials were looking for me to put me in jail because one of the things was that I was a Batista collaborator. They raided my apartment, they were looking for money, they tore up all the furniture, they used to come and get me at nighttime, take me out in the woods, trying to tell where I had my money, this and that, until I finally went into hiding. And they kept on and nobody knew what was going on.

I mean, these were a bunch of, most of them were 15, 16, 17, years old. They had weapons, it was a bad time to be around there.

Chairman STOKES. Now, do the dates June 8 to August 18, 1959, sound about the time that you were imprisoned?

Mr. TRAFFICANTE. Well, no, I was imprisoned on June the 21st. I was there because one of my daughters got married on that day, and I had been in jail before. I had been in jail, I would say, at least a month or two. They let me out that day to go to the wedding because the thing was that these people thought—when they finally arrested me, they thought that I was being, that I was wanted in the United States for all kinds of charges—narcotics, there were this and that and when they check it out, they found out nobody wanted me in the States. So then they had me in Trescornia which was immigration center, and they didn't know there for a while what to do with me. And I think that the reason they later did not deport me was because the United States wanted for them to deport me. So they figure, well, they said, this guy cannot be because at that time everybody to them was a spy, was this, was that.

Chairman STOKES. So it wasn't actually like a prison, was it?

Mr. TRAFFICANTE. No; it was not. We had it pretty good.

Mr. PREYER. You had it pretty good?

Mr. TRAFFICANTE. We had it pretty good. We had our own food coming in and everything. It was like a big camp, like a big concentration camp. We had our own room. It wasn't too bad.

Chairman STOKES. And can you give us some idea about how many persons were being detained there at that time?

Mr. TRAFFICANTE. Well, they had two sides to this thing. They had, most of this thing, a lot of these people entered Cuba with no papers, especially sailors and people with no means of support. They would put them on one side and people that they thought had means of support that were not public charges, they would put them on the other side.

I think at one time in our compound, you would call it, I think, we got to be about seven or eight.

Chairman STOKES. Were those other seven or eight also casino owners and operators?

Mr. TRAFFICANTE. Most of them were workers or casino owners.

Chairman STOKES. Did you know most of them?

Mr. TRAFFICANTE. Yes.

Chairman STOKES. Can you tell us who they were?

Mr. TRAFFICANTE. Well, for a time there, I would say for a day or two there was Mr. Dino Cellini, Mr. Jake Lansky, and myself, a fellow by the name of Chuck White, Guisepppe DiGeorge, and that is about it.

Chairman STOKES. Now, had you known all of these people before you went to the compound with them?

Mr. TRAFFICANTE. Yes sir. I found most of them there. Then in a few days Mr. Lansky and Mr. Cellini, they were taken out and they were freed, in other words, they weren't deported or nothing.

Chairman STOKES. Mr. Trafficante, did you contact anyone to assist you in getting out of the detention center?

Mr. TRAFFICANTE. I had a lot of people come and see me trying to help me to get out, and the attorney that I had was a fellow by the name of Mr. Bango, and I think Mr. Gener was interested in getting me out and a lot of other people that were in the casino business, native people, like Mr. Fox and Mr. Petere and Mr. Alfredo Gonzalez and Mr. Raoul Gonzalez. We had a good relationship and they all tried their best to get me out.

Chairman STOKES. At the time you were released, were any of the other casino operators or owners released with you?

Mr. TRAFFICANTE. Most of them had been released except this fellow Guisepppe DiGeorge, who was deported to Italy. He was held there for deportation to Italy because he was an Italian citizen.

Chairman STOKES. In order to effect your release, did you have to pay any money?

Mr. TRAFFICANTE. No sir.

Chairman STOKES. Did Raoul Castro have anything to do with your release?

Mr. TRAFFICANTE. I think he helped in my release.

Chairman STOKES. At least you have heard that he did?

Mr. TRAFFICANTE. Well, no, I had a friend of mine by the name of Raoul Gonzalez, who used to run the Hilton Hotel, where Raoul Castro used to go very frequently, and he talked to him one day about me, and the fellow says, well, I understand he is in the drug business, and this fellow told him, if he is in the drug business then you get me and shoot me against the wall because I can vouch for him.

He says, well, you wait a while, I see what I can do about it. And eventually, after a month or two, I was released.

Chairman STOKES. And after you were released, Mr. Trafficante, how long did you remain in Havana?

Mr. TRAFFICANTE. I remained in Havana until, I am not sure now, I had a case, I had a trial coming up in Jacksonville, Fla., on a tax matter, so I came in for that trial, I believe it was the latter part of 1959, the month of October or November, I don't remember when. It lasted about 8 weeks. I was acquitted. Then I spent the holidays, I think in Florida, then I went back to Havana.

Chairman STOKES. When you returned to Havana what was your feeling about the climate there in terms of the economy and your investment in the casino operations?

Mr. TRAFFICANTE. Very bad. I knew sooner or later I would have to get out of there.

Chairman STOKES. After your release from prison, did you ever meet Raoul or Fidel Castro?

Mr. TRAFFICANTE. I met Raoul Castro one time at the Hilton Hotel. I happened to be there, in fact, and the same Raoul Gonzalez, he has told me if you want to thank him, he is upstairs, in some kind of a place, some kind of a room there, like a public bar or something, and so I went up there and he was going down the stairs, so this fellow called to him and made him stop, and I went there and I thanked him, and he said well, just behave and don't give nothing to nobody, don't let nobody shake you down or nothing like that, and just behave and you will be all right here, you don't have to leave, you don't have to go no place.

Chairman STOKES. This was Raoul you are talking about?

Mr. TRAFFICANTE. Raoul.

Fidel Castro, I used to see him practically every night in front of the Hilton where he used to come in about 2 or 3 o'clock in the morning, and the first thing you know there were—he liked to talk to the people in the streets. First thing you know there were 400 or 500 people at 3 or 4 o'clock in the morning and he would be talking all night long and I used to watch him, too, with the rest of the people. I never did talk to him, though.

Chairman STOKES. You never did talk with him?

Mr. TRAFFICANTE. No. And the only one that talked to him was, while I was in jail, was my wife, who wanted to get permission for me to go and see my daughter, if he would let me out of jail to give my daughter away. She was supposed to be married.

Chairman STOKES. And he granted that request?

Mr. TRAFFICANTE. And he did. He granted the request with a lot of protection and a lot of bodyguards, thinking I would run away, or something, I don't know.

Chairman STOKES. After you got out of Trescornia, did you reopen your casino business?

Mr. TRAFFICANTE. No, I didn't reopen. I stayed away from the Sans Souci completely. The only thing that the Commodore was still open and I had an interest in the Commodore and the Deauville, he kept it open until all the workers were paid and then he closed that, so anyhow, the thing was that the dollar started getting stronger and the Cuban peso started getting weaker, and it was cheap to live there and I knew people there and I felt comfort-

able there, as long as I didn't see nothing out of the way, but t further, the more time passed, I could see that I had to leave the there was nothing there for me, there was going to be trouble there.

Everybody was getting arrested and nobody was safe, so around the middle of 1960 I made out I was coming to the States for just visit and I never went back.

Chairman STOKES. Well, you had quite a bit of money invested in your operations there, didn't you?

Mr. TRAFFICANTE. No; I wouldn't say I had too much money invested.

Chairman STOKES. Did you do anything in terms of getting your money out and getting it back to the States?

Mr. TRAFFICANTE. No, because at that time most of the money that I had there was Cuban money and at the time that I left it was worth about 10 to 1.

Chairman STOKES. That is 10——

Mr. TRAFFICANTE. Ten pesos to \$1.

Chairman STOKES. To \$1. So you were suffering quite a loss then?

Mr. TRAFFICANTE. I wouldn't say I did. I was young, I had a good time, and that was it. I chucked it off to experience.

Chairman STOKES. Are you familiar with what the other casino operators did in terms of trying to get their investments out?

Mr. TRAFFICANTE. No, I am not.

Chairman STOKES. Now, after you returned to the States the last time you referred to, when you left in the middle of 1960?

Mr. TRAFFICANTE. Yes, I think around the middle of 1960.

Chairman STOKES. Then, of course, you never went back?

Mr. TRAFFICANTE. No sir.

Chairman STOKES. Now, you just said that in terms of your investment you didn't feel that it was too much. Can you give us some idea what you feel your loss was?

Mr. TRAFFICANTE. No, I can't give you no idea.

Chairman STOKES. Was it a little bit of money or a lot of money?

Mr. TRAFFICANTE. No, it wasn't no little bit and it wasn't too much either.

Chairman STOKES. Well, are we talking about thousands of dollars or millions of dollars?

Mr. TRAFFICANTE. You are talking about thousands.

Chairman STOKES. Well, when you consider all four of the places in which you had an interest, would you say that collectively your investment could have been over a million dollars?

Mr. TRAFFICANTE. No.

Chairman STOKES. If I told you, Mr. Trafficante, that Mr. Ricardo Escartene, who is the current Cuban Consul and First Secretary in Washington, told the committee that their records indicate, for example, that the net profit of the Riviera Hotel was \$25 million in 1958, would you say that was a true statement?

Mr. TRAFFICANTE. I couldn't tell you because I didn't have nothing to do with the Riviera Hotel.

Chairman STOKES. When you left Cuba, where did you next live?

Mr. TRAFFICANTE. I lived in Miami.

Chairman STOKES. Mr. Trafficante, when was the first time you were ever approached by any individual who was affiliated with or working for the Central Intelligence Agency?

Mr. TRAFFICANTE. It was around either the latter part of 1960, or first part of 1961.

Chairman STOKES. And can you tell us who was the person who first contacted you?

Mr. TRAFFICANTE. Mr. John Roselli.

Chairman STOKES. And where did he approach you?

Mr. TRAFFICANTE. I think we were in the Fontainebleau Hotel.

Chairman STOKES. And can you give us the date?

Mr. TRAFFICANTE. No.

Chairman STOKES. Can you approximate the time?

Mr. TRAFFICANTE. I told you it was either the latter part of 1960 or first part of 1961.

Chairman STOKES. Did you know Mr. Roselli before that date?

Mr. TRAFFICANTE. Yes, I had met him.

Chairman STOKES. Can you tell us how you knew him?

Mr. TRAFFICANTE. Well, at this moment I don't remember how I met him but I knew him.

Chairman STOKES. And how long had you known him?

Mr. TRAFFICANTE. I would say about 15 years, 15-16 years.

Chairman STOKES. Now, had Mr. Roselli ever had any business interests in Cuba?

Mr. TRAFFICANTE. No.

Chairman STOKES. Over the period of time that you had known him, how often had you and he come into contact?

Mr. TRAFFICANTE. Very few.

Chairman STOKES. Now, did he tell you how he came to be affiliated with the CIA?

Mr. TRAFFICANTE. No.

Chairman STOKES. This first meeting was just between the two of you?

Mr. TRAFFICANTE. Yes, the first time, yes.

Chairman STOKES. Can you tell us the substance of the conversation you had with him?

Mr. TRAFFICANTE. Well, he told me that CIA and the United States Government was involved in eliminating Castro. And if I would happen, and if Mr. Gener, if Mr. Macho Gener, if I knew about him, knew what kind of man he was. I told him I think he was a good man, he was against Castro anyhow, and that is about it.

Then he introduced me to Mr. Maheu, and then Mr. Giancana came into the picture.

Chairman STOKES. Mr. who?

Mr. TRAFFICANTE. Giancana. Mr. Roselli wanted me to be more or less an interpreter in the situation because he couldn't speak Spanish and I can speak Spanish fluently.

Chairman STOKES. How long after the first meeting you had with Roselli did the second meeting occur with Maheu and then Giancana?

Mr. TRAFFICANTE. They were all staying at the Fontainebleau Hotel. It was a matter of days.

ASSASSINATION

Chairman STOKES. What was your reaction to killing President Castro?

Mr. TRAFFICANTE. Well, at that time I think that it was a good thing because he had established a communistic base 90 miles from the United States and being that the Government of the United States wanted it done, I go along with it, the same thing as a war, I figure it was like a war.

Chairman STOKES. Now, obviously Mr. Roselli, in order to approach you and discuss this with you, trusted you, right?

Mr. TRAFFICANTE. Yes.

Chairman STOKES. All in all, can you give us some idea about how many meetings took place between the group?

Mr. TRAFFICANTE. Not too many, because just like I tell you, they used me to be an interpreter and then we met Mr. Gener, then I took him to a place where they met some Cubans who were very active, supposedly leaders of the American-backed factions who were in charge of trying to eliminate Castro through revolution or any other way that they could, and I think I assisted a couple of times and that is the only thing I can say about that.

Chairman STOKES. Well, since you were going to be the interpreter it would be necessary for you to be present at all of the meetings in order to interpret the conversations, right?

Mr. TRAFFICANTE. Yes, but after a couple of meetings they found out that they could get along without me, I guess, and they told me they didn't need my services anymore, and that was the last that I, when they told me that I backed off, I wasn't going to—

Chairman STOKES. Now, what was the total time span that you were involved in the discussions about killing Castro?

Mr. TRAFFICANTE. I can, I cannot, I couldn't be truthful with you. I couldn't, I would say it would be a matter of about a month or month and a half or two months. We are going back a long time now. I used to see Maheu, I used to see Mr. Roselli, I used to see Giancana at the Fontainebleau, but there was no discussion. I might meet him at a bar or the lounge and have a drink or something like that, but there would be no more discussions about the Castro thing.

Chairman STOKES. When you would have these meetings about assassinating Castro, would you have discussions about other things, too?

Mr. TRAFFICANTE. Not that I remember.

Chairman STOKES. Was Sam Giancana in the Miami area all the time that these meetings were taking place?

Mr. TRAFFICANTE. Yes, he was, he was there.

Chairman STOKES. And what was—

Mr. TRAFFICANTE. He might leave, I guess, and come back, or something, but I think he was there most of the time.

Chairman STOKES. What was your connection with Sam Giancana?

Mr. TRAFFICANTE. I happened to know Mr. Giancana. There was no connection at all.

Chairman STOKES. How long had you known him?

Mr. TRAFFICANTE. Oh, I would say about 10 or 15 years, too.

Chairman STOKES. Was he fully aware of the plot to assassinate Castro?

Mr. TRAFFICANTE. Yes.

Chairman STOKES. And exactly how did he become aware of it?

Mr. TRAFFICANTE. I don't know. I don't know how he became aware, unless—I think it was through Mr. Roselli that brought him in.

Chairman STOKES. And do you know what his role was supposed to be in the assassination?

Mr. TRAFFICANTE. No, I don't.

Chairman STOKES. Do you know if Giancana had directed Roselli to contact you in regard to this operation?

Mr. TRAFFICANTE. I don't know. Maybe he did. It could be possible.

Chairman STOKES. Can you tell us why Roselli approached you?

Mr. TRAFFICANTE. Well, I guess he knew I had been in Cuba, he figured I had, I knew people there, he thought I could be of help, I spoke the language, he didn't, he had to deal with Cuban people. I thought he figured he could trust me.

Chairman STOKES. When he came to you and talked about the CIA, what did he say to you?

Mr. TRAFFICANTE. Well, I can't tell the exact words what he said to me but more or less he was working for him and Mr. Maheu were with the CIA and that they were working for the CIA and that the United States Government wanted this thing done. That is what he said to me.

Chairman STOKES. Did he say what his role or capacity was with the CIA?

Mr. TRAFFICANTE. He made me understand he was an agent of the CIA.

Chairman STOKES. Now, what was your total involvement to be in the assassination plot?

Mr. TRAFFICANTE. My total involvement was to be the interpreter between Mr. Roselli, Mr. Maheu, and these Cuban people that I took them to. Mr. Gener suggested that we see, and that I remember driving them there maybe a couple of times.

Chairman STOKES. Driving them where?

Mr. TRAFFICANTE. To the home of this Cuban leader that was supposed to be backed by the American Government in the attempt to get rid of Castro.

Chairman STOKES. And what was Mr. Gener's role to be?

Mr. TRAFFICANTE. Well, he made the introduction to everybody with this gentleman.

Chairman STOKES. Who brought Gener into the operation?

Mr. TRAFFICANTE. How was that?

Chairman STOKES. Who brought Gener into the operation?

Mr. TRAFFICANTE. Roselli asked me about him and evidently he had heard about Gener. I couldn't tell you who brought him in but I told him he was all right, I thought he was all right anyhow.

Chairman STOKES. Well, in light of the fact that you knew Gener in Cuba, where you had business operations, and you have told us that Roselli had no business operations in Cuba—

Mr. TRAFFICANTE. That is right.

Chairman STOKES. How would Roselli come to know Gener?

Mr. TRAFFICANTE. Well, the only reason, the only way I can figure out is that Gener was very active in the campaign against

Castro and Roselli was looking for people that were active in the campaign against Castro, and some kind of way he heard about them or they got together some kind of way.

Chairman STOKES. But the person who would have more knowledge about Gener and others who were involved would be you, isn't that true?

Mr. TRAFFICANTE. I don't see why I should have been the only one. He asked me about him before he talked to him, I think.

Chairman STOKES. OK.

Mr. TRAFFICANTE. And CIA probably knew about Gener and had some connection with Gener and asked me something. I am telling you the truth of what I know about it and how he came about and how it came about, I don't know how, but it came about.

Chairman STOKES. At any rate, you told him Gener was okay?

Mr. TRAFFICANTE. That is right.

Chairman STOKES. Now, I want to make reference to a person whom we will refer to in conversation as "Y". You know whom I am talking about, don't you?

Mr. TRAFFICANTE. Right.

Chairman STOKES. The reason we are using this is because this person's name has not been declassified.

Mr. TRAFFICANTE. Right.

Chairman STOKES. You understand that.

Mr. TRAFFICANTE. Right.

Chairman STOKES. Prior to any questions on this point, I want to state this: the Church Committee in their report, page 80, described this particular person as quote "A leading figure in the Cuban exile movement."

Now, when did you first meet "Y", Mr. Trafficante?

Mr. TRAFFICANTE. I met him through Mr. Gener when I took Maheu and Mr. Roselli. I drove the car.

Chairman STOKES. You had not met him previously?

Mr. TRAFFICANTE. I had not met him previously. Maybe I had seen him in Cuba but I had never met him or talked to him.

Chairman STOKES. Who brought Mr. "Y" into the plot?

Mr. TRAFFICANTE. Gener.

Chairman STOKES. What was Mr. "Y's" role to be?

Mr. TRAFFICANTE. He was one of the leaders of the American backed faction of the movement against Castro in the United States. He was one of the top leaders.

Chairman STOKES. Did Mr. "Y" speak both Spanish and English?

Mr. TRAFFICANTE. I doubt it, no. He spoke Spanish because I was there, I interpreted for him, especially the first time.

Chairman STOKES. He was one of the persons for whom you interpreted?

Mr. TRAFFICANTE. Right. He was the only person who I interpreted.

Chairman STOKES. Now, did Mr. "Y" ever ask you for assistance in financing anti-Castro activities?

Mr. TRAFFICANTE. No. I haven't seen Mr. "Y" since a couple of times, I think it was. I don't think it was more than two times, could have been three, but I doubt it. I haven't seen him since then.

ARCHIVES

Chairman STOKES. Did you ever ask Mr. "Y" if he would be interested in participating in this?

Mr. TRAFFICANTE. How was that?

Chairman STOKES. Did you ever ask Mr. "Y" if he would be willing to participate in this plot?

Mr. TRAFFICANTE. No, sir. No, sir.

Chairman STOKES. Did you ever tell Mr. "Y" that you knew people who would pay money to do away with Castro?

Mr. TRAFFICANTE. No, sir.

Chairman STOKES. Did you ever offer Mr. "Y" assistance of any type in conjunction with any anti-Castro activities that he was engaged in?

Mr. TRAFFICANTE. No, sir.

Chairman STOKES. Did you ever discuss with Mr. "Y" who would run the gambling businesses in Cuba in the event that Castro was overturned?

Mr. TRAFFICANTE. No.

Chairman STOKES. Now, it is your statement that at all times your sole function was to interpret for this group?

Mr. TRAFFICANTE. Yes, sir.

Chairman STOKES. Is that correct?

Mr. TRAFFICANTE. Yes, sir.

Chairman STOKES. Mr. Trafficante, I want to read a portion of a declassified CIA Inspector General's report—1967. I am reading at pages 29 and 31 of that document:

* * * Roselli told [support chief] that Trafficante knew of a man high up in the Cuban exile movement who might do the job. He identified him as [Mr. "Y"].

The report then goes on to say this:

Comment: Reports from the FBI suggest how Trafficante may have known of ["Y"]. On 21 December 1960, Bureau forwarded to the Agency a memorandum reporting that efforts were being made by U.S. racketeers to finance anti-Castro activities in hopes of securing gambling, prostitution, and dope monopolies in Cuba in the event Castro was overthrown.

A report of January 18, 1961, also associated "Y" with these schemes.

The 1967 Inspector General's report continues:

Trafficante approached ["Y"] and told him that he had clients who wanted to do away with Castro and that they would pay big money for the job. "Y" is reported to have been very receptive since it would mean that he would be able to buy his own ships, arms and communications equipment.

Mr. Trafficante, having heard what the Inspector General of the CIA had to say about your involvement, is your answer still the same?

Mr. TRAFFICANTE. Absolutely the same.

Chairman STOKES. When you were asked to interpret for these persons who were plotting, what method was discussed of how they were going to eliminate Castro?

Mr. TRAFFICANTE. Any way, where they took a cannon, pills, tanks, airplanes, anything.

Chairman STOKES. Was there discussion about poison pills?

Mr. TRAFFICANTE. There was discussion of pills; yes, sir. I am telling you any kind of way that was possible to get rid of him. There was not only one way, of the pills, any kind of way, pills included.

ASSASSINATION

Chairman STOKES. Let me confine my question at this point to the pills. Who proposed the pills?

Mr. TRAFFICANTE. I know I didn't.

Chairman STOKES. My question was who did?

Mr. TRAFFICANTE. I don't know if it was Maheu or Roselli.

Chairman STOKES. And were the pills ever given to anyone?

Mr. TRAFFICANTE. I think they were but I don't recall me being present when they were.

Chairman STOKES. Can you tell us when and where the pills were given to someone?

Mr. TRAFFICANTE. I don't recall me being present when the pills were given.

Chairman STOKES. Can you tell us who was to administer the pills to Castro?

Mr. TRAFFICANTE. The pills to Castro was supposed to be administered by Mr. "X".

Chairman STOKES. Was any money discussed in conjunction with this?

Mr. TRAFFICANTE. There was never no money discussed for nor of these activities in no way, shape or form in my presence.

Chairman STOKES. You mentioned all the different ways that would be utilized to get rid of Castro. Did anyone ever supply any of the arms or ammunition or the tanks or the airplanes to them for that purpose?

Mr. TRAFFICANTE. I think I heard later, after this Bay of Pigs they still kept on sending arms and boats and explosives and stuff like that, but I am not sure, I just heard that from Mr. Roselli. Later on, years later.

Chairman STOKES. Now, I want to make reference to Mr. "X" for reasons that his name is also not declassified. You know whom I am talking about?

Mr. TRAFFICANTE. Right.

Chairman STOKES. Now, I want to also make reference to the fact, before I pose any questions, that the Church Committee in their interim report at page 80, described this person as a Cuban "official close to Castro, who may have received kickbacks from the gambling interests."

Now, you do know Mr. "X"?

Mr. TRAFFICANTE. I think I have spoke to Mr. "X", met him one time in Havana.

Chairman STOKES. And what was your relationship to him?

Mr. TRAFFICANTE. I never did give him any money.

Chairman STOKES. Well, what relationship did you have after you met him?

Mr. TRAFFICANTE. I didn't have no relationship with him. The relationship was through Mr. Gener.

Chairman STOKES. What was Mr. "X's" involvement in these plots?

Mr. TRAFFICANTE. Well, I think he was going to take care of the pills.

Chairman STOKES. To take care of the pills?

Mr. TRAFFICANTE. Yes.

Chairman STOKES. Do you know if Mr. "X" spoke both Spanish and English?

ARCHIVES

Mr. TRAFFICANTE. No, I don't. I know he is a professor so it is possible that he spoke but Mr. "X" in this particular time was still in Cuba though, he wasn't in the United States.

Chairman STOKES. OK. You knew Mr. "X" from the time you spent in Cuba, is that right?

Mr. TRAFFICANTE. I met him one time.

Chairman STOKES. I see.

Mr. TRAFFICANTE. I didn't give him no money either.

Chairman STOKES. Mr. Trafficante, did you ever handle or carry poison pills to be used in the assassination of Castro?

Mr. TRAFFICANTE. No, sir, absolutely not.

Chairman STOKES. Did Roselli ever give you the poison pills?

Mr. TRAFFICANTE. No, sir.

Chairman STOKES. Again, I want to read to you from the CIA Inspector General's report of 1967, pages 24 and 25:

(Comment: The gangsters may have had some influence on the choice of a means of assassination. [Support Chief] says that in his very early discussions with the gangsters or more precisely Maheu's discussions with them, consideration was given to possible ways of accomplishing the mission. Apparently the Agency had first thought in terms of a typical gangland-style killing in which Castro would be gunned down. Giancana was flatly opposed to the use of firearms. He said that no one could be recruited to do the job because the chance of survival and escape would be negligible. Giancana stated a preference for a lethal pill that could be put into Castro's food or drink. Trafficante "Joe, the courier," was in touch with a disaffected Cuba official with access to Castro and presumably of a sort that would enable him to surreptitiously poison Castro * * * The gangsters said ["X"] had once been in a position to receive kickbacks from the gambling interests, has since lost that source of income and needed the money.)

Having heard what the Inspector General has said about this operation, would you in any way change your testimony?

Mr. TRAFFICANTE. No, sir.

Chairman STOKES. Reading further from the same report, Mr. Trafficante, at page 27, late February-March 1961, "Roselli passed the pills to Trafficante. Roselli reported to [Support Chief] that the pills had been delivered [to 'X'] in Cuba. ['X'] is understood to have kept the pills for a couple of weeks before returning them. According to the gangsters, ['X'] got cold feet."

Having heard this portion of the Inspector General's report, would you at this point change your testimony?

Mr. TRAFFICANTE. I did not give any pills to "X". I did not give any money to "X", I didn't see "X" any more since after I seen him in Cuba that one time, and I didn't receive no pills from Roselli, and I don't know what else to say about that.

Chairman STOKES. Mr. Trafficante, did you at any time receive any money for your participation in this situation?

Mr. TRAFFICANTE. How was that, sir?

Chairman STOKES. Did you at any time receive any money from anyone for your participation in the assassination—

Mr. TRAFFICANTE. Not a penny, no way, shape or form.

Chairman STOKES. Tell us what your reason was for agreeing to act as interpreter in this situation.

Mr. TRAFFICANTE. Well, I thought I was helping the U.S. Government. That's what my reason was. And as far as the gambling and monopolies of this and that and all that trash about dope and prostitution, that's not true. If things were straightened out in Cuba, I would liked to have gone back there. If I could gamble, I

would gamble; if I couldn't gamble, I wouldn't gamble. But the reason was that I thought that it was not right for the Communists to have a base 90 miles from the United States. The same reason when the First and the Second World War, they call you to go to the draft board and sign up, I went and signed up. That's the reason. And we all like to make money.

Chairman STOKES. I don't quite understand.

Mr. TRAFFICANTE. I mean, we all like to make money in case there was a thing I was doing it for money, for this and for that, about going back to Cuba and gamble and have casinos or cabarets, stuff like that.

Chairman STOKES. In 1967, 1971, 1976, and 1977, those 4 years, columnist Jack Anderson wrote about the CIA-Mafia plots and the possibility that Castro decided to kill President Kennedy in retaliation. Mr. Anderson even contends in those articles that the same persons involved in the CIA-Mafia attempts on Castro's life were recruited by Castro to kill President Kennedy.

The September 7, 1976 issue of the Washington Post contains one of Mr. Anderson's articles entitled, "Behind John F. Kennedy's Murder," which fully explains Mr. Anderson's position. I ask, Mr. Chairman, that at this point this article be marked as JFK exhibit F-409 and that it be entered into the record at this point.

Mr. PREYER. Without objection, the exhibit marked F-409 is ordered into the record at this point.

[JFK F-409 was marked and entered into the record and follows:]

ARCHIVES

September 7, 1976

Friday, September 7, 1976 C19

THE WASHINGTON POST

Jack Anderson and Les Whitten

Behind John F. Kennedy's Murder

Mafia member John Roselli may have taken the secret of the John F. Kennedy assassination with him to his death. He was brutally murdered a few weeks ago, his backped up body stuffed into an oil drum and dumped into Miami's Biscayne Bay.

Before he died, Roselli hinted to associates that he knew who had arranged President Kennedy's murder. It was the same conspirators, he suggested, whom he had recruited earlier to kill Cuban Premier Fidel Castro.

By Roselli's cryptic account, Castro learned the identity of the underworld contacts in Havana who had been trying to knock him off. He believed, not altogether without basis, that President Kennedy was behind the plot.

The Cuban leader, as the supreme irony, decided to turn the tables and use the same crowd to assassinate Kennedy's assassin. According to Roselli's account, to save their skins, the plotters lined up Lee Harvey Oswald to pull the trigger.

Roselli could never be planned down on names or details. It was also difficult to assess whether he knew what he was talking about or whether he merely described what he thought might have happened. Certainly there is no real evidence to support Roselli's story. But there are enough curious circumstances to justify telling it. Here are the fascinating highlights.

The ruggedly handsome Roselli, a flamboyant mobster with underworld contacts in Havana, was recruited by the Central Intelligence Agency in 1950 to assassinate Castro. He had no authority, however, over the underworld elements in Havana.

They were under the loose control of Florida's Mafia chieftain, Santos Trafficante. His gambling enterprises in Havana had been closed down by Castro after the 1959 revolution. In fact, Trafficante had been lodged for a period in a Cuban jail, an indignity that didn't endear Castro to him.

After Trafficante made it back to his Florida haunts, he left part of his organization behind in Havana. Some of his lieutenants even managed to develop contacts in Castro's inner circle. These were the people Roselli wanted to use to knock off Castro.

But Roselli didn't have the stature inside the Mafia to make the necessary arrangements with Trafficante. So Roselli called in his patron, the Chicago godfather Sam Monico Giannina, to deal with Trafficante.

As Roselli's associates tell it, he persuaded Giannina that it would be to their advantage to win the good will of the CIA. Consequently, Giannina flew down to Florida to make the preliminary arrangements.

Once Giannina and Trafficante set it up, Roselli used the Havana underworld to plot Castro's demise. At first, they tried to place poison pills, supplied by the CIA, in Castro's food. The pills would have made it appear that he died of natural causes. When this failed, snipers were dispatched to a Havana rooftop. They were caught.

The word reached Roselli that some of the plotters had been tortured and that Castro had learned about the whole operation.

The CIA called off the Roselli operation in March, 1963, but recruited a Castro associate, Rolando Cubela, to murder Castro.

In an impromptu, three-hour interview with Associated Press reporter David Walker, Castro indicated that he knew about the attempt on his life and warned that U.S. efforts also might not be safe. That was Sept. 7, 1963.

According to Roselli, Castro enlisted the same underworld elements whom he had caught plotting against him. They, supposedly, were Cubans from the old Trafficante organization. Working with Cuban intelligence, they allegedly lined up an ex-Marine sharpshooter, Lee Harvey Oswald, who had been active in the pro-Castro movement.

According to Roselli's version, Oswald may have shot Kennedy or may have acted as a decoy while others ambushed him from closer range. When Oswald was picked up, Roselli suggested, the underworld conspirators feared he would crack and disclose information that might lead to them. This almost certainly would have brought a massive U.S. crackdown on the Mafia.

So Jack Ruby was ordered to eliminate Oswald, making it appear as an act of reprisal against the President's killer. At least this is how Roselli explained the tragedy in Dallas.

Several key CIA officials believed that Castro was behind the Kennedy assassination.

It has also been established that Jack Ruby, indeed, had been in Cuba and had connections in the Havana underworld. One CIA cable, dated Nov. 28, 1963, reported that "an American Castro associate, Rolando Cubela, had used Trafficante in his Cuban prison."

JFK EXHIBIT F-409

Chairman STOKES. Mr. Trafficante, I want to read to you just two portions of the article I have just referred to, after which I will ask for your comment.

According to Mr. Anderson and Mr. Whitten in this article, it says:

Before he died, Roselli hinted to associates that he knew who had arranged President Kennedy's murder. It was the same conspirators, he suggested, whom he had recruited earlier to kill Cuban Premier Fidel Castro.

By Roselli's cryptic account, Castro learned the identity of the underworld contacts in Havana who had been trying to knock him off. He believed, not altogether without basis, that President Kennedy was behind the plot.

Then over in another section, it says:

According to Roselli, Castro enlisted the same underworld elements whom he had caught plotting against him. They supposedly were Cubans from the old Trafficante organization. Working with Cuban intelligence, they allegedly lined up an ex-Marine sharpshooter, Lee Harvey Oswald, who had been active in the pro-Castro movement.

According to Roselli's version, Oswald may have shot Kennedy or may have acted as a decoy while others ambushed him from closer range. When Oswald was picked

up, Roselli suggested the underworld conspirators feared he would crack and disclose information that might lead to them. This almost certainly would have brought a massive U.S. crackdown on the Mafia.

So Jack Ruby was ordered to eliminate Oswald, making it appear as an act of reprisal against the President's killer. At least this is how Roselli explained the tragedy in Dallas.

Mr. Trafficante, do you have any knowledge of that?

Mr. TRAFFICANTE. No knowledge whatsoever.

Chairman STOKES. Do you have any information concerning any retaliatory action by Mr. Castro?

Mr. TRAFFICANTE. No, sir.

Chairman STOKES. Do you have any knowledge concerning how this information could have been given to this columnist, Mr. Anderson?

Mr. TRAFFICANTE. No, sir.

Chairman STOKES. Did you and Mr. Roselli ever discuss any retaliatory action by Castro?

Mr. TRAFFICANTE. No, sir.

Chairman STOKES. Can you tell us when was the last time you had seen Mr. Roselli prior to his death?

Mr. TRAFFICANTE. I would say 2, 3 weeks before his death.

Chairman STOKES. And where was that?

Mr. TRAFFICANTE. In Fort Lauderdale.

Chairman STOKES. Was anyone else present?

Mr. TRAFFICANTE. His sister and my wife.

Chairman STOKES. Can you tell us what you discussed?

Mr. TRAFFICANTE. Nothing. We met for and—that's it. I don't remember what we discussed. We didn't discuss nothing about Castro, that's for sure.

Chairman STOKES. I believe you told us that you had known Sam Giancana for a long period of time.

Mr. TRAFFICANTE. I would say 10, 15 years. I had never had nothing to do with Sam Giancana; no business relation or either with Mr. Roselli. I never had no business relation with them either.

Chairman STOKES. Mr. Giancana, prior to his death, when was the last time you had seen him?

Mr. TRAFFICANTE. I would say 12, 13 years, I didn't see him for 12 or 13 years. I hadn't seen Mr. Roselli, I think, I seen him once from 1961 till the time that he moved to Florida with his sister, which was about 2 years before he got killed. I just seen him one time during that time.

Chairman STOKES. Mr. Trafficante, you have told us here today that your motivation for participating in the assassination of President Castro was your patriotism, your love for this country and your concerns about communism being 90 miles from our shores, is that correct?

Mr. TRAFFICANTE. Right.

Chairman STOKES. Were you at all motivated by the events which had taken place in Havana which caused you to lose your business interests?

Mr. TRAFFICANTE. No. I have been a gambler all my life, and I'm used to taking chances, and it is a matter of time, it is not a matter of—it was forgotten. I doubt very much if it would have been the same again after Batista was gone.

ARCHIVES

Chairman STOKES. Did you ever inform any other people of the plot against Castro besides those who were involved in the actual plot?

Mr. TRAFFICANTE. Not that I remember. I don't think I did.

Chairman STOKES. What is your knowledge as to whether Castro learned about the plot?

Mr. TRAFFICANTE. My knowledge about Castro learned about the plot?

Chairman STOKES. Yes, whether he learned about it.

Mr. TRAFFICANTE. I can't answer you that. I would be guessing. I don't know.

Chairman STOKES. Now, at any other times, were you either directly or indirectly involved in assisting any anti-Castro groups in their activities against Castro?

Mr. TRAFFICANTE. No, I wasn't.

Chairman STOKES. Now, you have told us that you do know Mr. Bango, he was your attorney?

Mr. TRAFFICANTE. Right?

Chairman STOKES. And how long a period of time was he your attorney?

Mr. TRAFFICANTE. Well, he was for short period of time. While I was in jail, while I was in Trescornia in Havana. His brother, his brother is still—I don't know if Mr. Bango is still alive, by the way, but his brother is Minister of Sports in Cuba under Castro today and that's a very important job under the Communist system. You know, he is in charge of the sports and the youth and the whole bit.

Chairman STOKES. Did Mr. Bango ever represent you at any other time?

Mr. TRAFFICANTE. No, sir.

Chairman STOKES. Do you have any knowledge of Mr. Bango traveling to Madrid, Spain, during the 1960's?

Mr. TRAFFICANTE. Right, I went to visit him in Spain during the 1960's.

Chairman STOKES. Can you tell us about when in the sixties it was?

Mr. TRAFFICANTE. What part?

Chairman STOKES. What part of the 1960's?

Mr. TRAFFICANTE. Around 1966 or 1967.

Chairman STOKES. Was this in Madrid?

Mr. TRAFFICANTE. Madrid, yeah.

Chairman STOKES. And what was your purpose of going there?

Mr. TRAFFICANTE. Well, he had a purpose of—he had a fighter, some kind of a fighter that he was interested in promoting. And then I felt like going to Madrid, and I just went over there.

Chairman STOKES. How long did you stay there?

Mr. TRAFFICANTE. I stayed there 10 days. When I got there, I got met by the—I left from Miami—when I got there I got met by the Spanish Secret Service or some kind of a service, and they had 12 people a day under surveillance. I was constantly under surveillance from the minute I got there until the minute I left. They would park even in front of my door in the hotel. So there was the trip to Spain.

Chairman STOKES. I see.

Mr. Trafficante, do you know the person AMLASH, a Cuban official involved in the CIA operation also called AMLASH which was designed to kill Castro?

Mr. TRAFFICANTE. Yes.

Chairman STOKES. We refer to this individual also as AMLASH. During what years did you know AMLASH?

Mr. TRAFFICANTE. Well, I actually met him after the revolution in Cuba because he was, he had killed somebody there, some big official of the Batista government so he went to the mountains. And I met him after the revolution. When he come in, he was made a commandante or general, whatever you want to call it.

Chairman STOKES. And after you met him, was a relationship established between the two of you?

Mr. TRAFFICANTE. No, just a hello and goodbye, and that's it.

Chairman STOKES. Did he ever represent your interests or assist you in any manner?

Mr. TRAFFICANTE. No, sir.

Chairman STOKES. Do you know whether Castro was aware of the AMLASH plot prior to President Kennedy's death?

Mr. TRAFFICANTE. No, sir.

Chairman STOKES. Do you know if AMLASH knew Mr. Bango?

Mr. TRAFFICANTE. I'm sure he did.

Chairman STOKES. And do you know the nature of their relationship?

Mr. TRAFFICANTE. No, sir.

Chairman STOKES. Can you tell us whether or not you know whether AMLASH traveled to Madrid, Spain in either 1964, 1965, or 1966?

Mr. TRAFFICANTE. Well, what I'm going to tell you now is what I read and, you know, its been coming out, so I don't know that he traveled there or nothing. I found out later he had.

Chairman STOKES. Do you know for what purpose he went there?

Mr. TRAFFICANTE. What's that?

Chairman STOKES. Do you know for what purpose he went there to Madrid?

Mr. TRAFFICANTE. He was some kind of a diplomat. He was of stature enough to be able to travel to Madrid and Paris and all those places. In my opinion, he was not a Communist. I never believed that he was a Communist. I always believed sooner or later he would react against Castro. But as far as me having any knowledge or contact with him or my personal knowledge knowing he used to travel back and forth, maybe Bango must have mentioned it to me or something like that, but I never did see him in Paris, in Madrid or anyplace.

Chairman STOKES. Mr. Trafficante, after January 1, 1962, and prior to November 22, 1963, did you have contacts with any Cuban official concerning any business dealings?

Mr. TRAFFICANTE. 1962 to 1963?

Chairman STOKES. Yes, sir, from January 1962 to November of 1963.

Mr. TRAFFICANTE. Not that I remember. Cuban officials in Cuba, you mean?

Chairman STOKES. Right, with Cuban officials in Cuba.

Mr. TRAFFICANTE. No, sir.

ARCHIVES

Chairman STOKES. The answer is no, sir; right?

Mr. Trafficante, Mr. Aleman stated that you paid Castro's G-2 agents in the Miami area. Have you ever given any aid or assistance to individuals you know or suspected were working for Fidel Castro after January 1, 1962, and prior to November 22, 1963?

Mr. TRAFFICANTE. Absolutely not; never.

Chairman STOKES. Mr. Aleman also stated to this committee that he has "no doubt" that there is affiliation between the Castro government and yourself.

Mr. TRAFFICANTE. There's no affiliation whatsoever between Castro government and myself. There never has been.

Chairman STOKES. Now, let us return for a moment to your detention in Trescornia. I understand you to say your wife has visited you there. Did any other persons visit you there?

Mr. TRAFFICANTE. Well, a lot of people visited me there, people that I knew in Cuba.

Chairman STOKES. These would be friends of yours in Cuba who visited with you during that time?

Mr. TRAFFICANTE. Yes.

Chairman STOKES. Were most of them people that had some involvement with you in the gambling operations?

Mr. TRAFFICANTE. Right.

Chairman STOKES. When people visited with you, can you tell us about that visiting room, would there be other people in that same room, other visitors visiting detainees?

Mr. TRAFFICANTE. Let me tell you, Mr. Stokes, this was like a camp. There was no—it was a minimum security place. They would let anybody come in. They would let anybody stay with us until 12 o'clock at night. We would cook, we would have food brought in, we would eat, we would drink and there would be, sometimes, the guards would come and sit down with us and eat. Some meals it was like one big happy family.

Chairman STOKES. It sounds like a resort area.

Mr. TRAFFICANTE. It was. I really had a rest then, if you want to know the truth. I enjoyed it. It was the highest point in the whole Havana area. You could see the whole city. It was cool, too, in the evening.

Chairman Stokes. Do you know a Mr. Meyer Panitz?

Mr. TRAFFICANTE. Who?

Chairman STOKES. Meyer Panitz, P-a-n-i-t-z.

Mr. GONZALEZ. Is that P-a-n, Mr. Chairman?

Chairman STOKES. Yes, Mr. Gonzalez, P-a-n-i-t-z. First name, Meyer, M-e-y-e-r.

Mr. TRAFFICANTE. No, sir, it don't ring a bell.

Chairman STOKES. You did know Pedro and Martin Fox?

Mr. TRAFFICANTE. Pedro Fox, yes, sir.

Chairman STOKES. Do you know whether the Fox brothers or any of the other operators tried to get their money out of Cuba during this period of time?

Mr. TRAFFICANTE. All I know is that Mr. Martin Fox, who was the owner of the Tropicana and one of the richest men in Cuba, he died in the United States in the 1960's, I think, and he died completely broke. And Pedro Fox was working as a waiter and maitre d' in all the restaurants and hotels around Miami.

Chairman STOKES. If, during this period of time, any of these operators were able to get their money out of Cuba, are you aware of how they did it?

Mr. TRAFFICANTE. No, sir. You see—can I explain something?

Chairman STOKES. Certainly, go ahead.

Mr. TRAFFICANTE. You see, everybody that was in business in Cuba Castro started with the very, very rich and he knocked them out of the box so everybody would say, well, maybe he won't touch me. Then he started with the next in line. Meanwhile they still trying to do business and eventually he did it in a real way, then he would invite all the tourist agents and he was going to make a big tourists campaign to bring the people from all over the world to Cuba. He was going to do this, he was going to do that. The next time—meanwhile, the employees of these places would be taking over that business and they would run the business. And if you had a little money in the cage, you couldn't even go near the cage to get the money because they would report you right away.

So everybody got fooled to a certain point. Because if you remember, he didn't declare he was a Communist until about 1962, 1963, some time like that—1961 or 1962. So there wasn't too many people that got the money out, unless they had it out.

Chairman STOKES. I see. Thank you.

Mr. Trafficante, did you know, while you were in Trescornia, a Britisher named John Wilson Hutson, who was detained along with you?

Mr. TRAFFICANTE. Let me tell you what used to happen. I vaguely remember some guy there that was kind of a little bit of a screwball. I don't know if it's him or not. Because there used to be all kinds of people they would bring into there; people that would have difficulty with the traveling papers. In other words, they would get at the airport, then they didn't have a ticket to leave the country. So they would get them and bring them over there until they got the problems straightened out and continuously we would have different people coming in and out and staying for a few days and then leaving; coming, staying. So it could be possible that he was there, but if I was to see him now, I wouldn't remember none of these people.

Chairman STOKES. Then if I understand you properly, you don't remember this precise individual, but it is possible—

Mr. TRAFFICANTE. Right; it's possible that he was there.

Chairman STOKES. Do you know a Lewis McWillie?

Mr. TRAFFICANTE. Yes, sir, I seen him around Havana a lot.

Chairman STOKES. Can you recall when you first met him?

Mr. TRAFFICANTE. He was working at the Tropicana for Martin Fox.

Chairman STOKES. Did you have any personal business dealings with Lewis McWillie?

Mr. TRAFFICANTE. Never had no personal business dealings.

Chairman STOKES. Have you ever had occasion to talk with him?

Mr. TRAFFICANTE. Ever since Cuba, I think I seen him one time in Vegas at his home. Somebody took me there, say I want to meet somebody from Havana that you know just for a few minutes.

Chairman STOKES. During the period that you were detained at Trescornia, do you recall seeing Lewis McWillie visiting out there?

ARCHIVES

Mr. TRAFFICANTE. I don't recall it, but he might have come. He might have.

Chairman STOKES. So if he was there visiting someone, you don't recall it?

Mr. TRAFFICANTE. That's right, I don't recall it. It is possible that he did, but I don't recall it.

Chairman STOKES. Mr. Trafficante, did you ever know a Jack Ruby?

Mr. TRAFFICANTE. No, sir, I never remember meeting Jack Ruby.

Chairman STOKES. Never remember meeting him?

Mr. TRAFFICANTE. No.

Chairman STOKES. Are you aware it has been alleged that Jack Ruby visited with you while you were at Trescornia; have you heard that?

Mr. TRAFFICANTE. I've heard that but I don't remember him visiting me either. There was no reason for this man to visit me. I have never seen this man before. I have never been to Dallas; I never had no contact with him. I don't see why he was going to come and visit me.

Chairman STOKES. Were you aware of any of the activities of a Jack Ruby?

Mr. TRAFFICANTE. No, sir.

Chairman STOKES. When you first met McWillie, can you tell us where that was?

Mr. TRAFFICANTE. I met him around Cuba someplace.

Chairman STOKES. I am sorry.

Mr. TRAFFICANTE. I met him around Cuba in a casino someplace.

Chairman STOKES. Did he ever visit you in your home, or did you ever visit him in his home?

Mr. TRAFFICANTE. No, sir, the only time I think was one time in Vegas, like I told you I was there for a day or two in the 1960's. He was already working over there. And——

Chairman STOKES. In Vegas?

Mr. TRAFFICANTE. Yeah, in Vegas. A fellow said he had already married a Cuban girl, or something like that. I seen him there just for a few minutes. That was the only time that I remember seeing him since the Cuban days.

Chairman STOKES. Mr. Trafficante, I want to ask you a question that is very important to this committee, and that is, did you have any foreknowledge of the assassination of President Kennedy?

Mr. TRAFFICANTE. Absolutely not; no way.

Chairman STOKES. Had you ever known or had you ever heard the name Lee Harvey Oswald prior to the day President Kennedy was assassinated?

Mr. TRAFFICANTE. Never had in my life.

Chairman STOKES. Mr. Trafficante, I want to move into another area now of questioning. So that we put it in its proper context, I want to refer to an article in Parade magazine dated January 21, 1962, called The untold story: our Government's crackdown on organized crime, written by Jack Anderson and I just want to read two portions of the first page of what is a three-page article. The first paragraph starts out saying, "Organized crime is under attack. For the first time, the full forces of the Federal Government have been thrown into the battle against it." And then it goes on to make

further reference to organized crime and at page 2, it has the top 10 and in 10th position is Santos Trafficante.

Now, Mr. Trafficante, were you acquainted with the Justice Department's program during the 1960's of physical surveillance against particular individuals?

Mr. TRAFFICANTE. I was so acquainted with it that they lived with me for about 15 years.

Chairman STOKES. That they lived with you for about 15 years?

Mr. TRAFFICANTE. Right.

Chairman STOKES. I suppose when you say that, you mean the term literally; is that right?

Mr. TRAFFICANTE. Right. Night and day.

Chairman STOKES. What type of surveillance were you under, do you know?

Mr. TRAFFICANTE. All kinds, from the neighbors, from the hilltop, from the trees, from the cars, everything, any kind you could think of.

Chairman STOKES. Mr. Trafficante, do you know Carlos Marcello?

Mr. TRAFFICANTE. Yes, sir.

Chairman STOKES. Tell us how you know him.

Mr. TRAFFICANTE. I know Carlos Marcello about 30 years. I met him in New Orleans. My father had an operation there, and I met him through my father, at the clinic, used to be the barracks in those days.

Chairman STOKES. So over that period of time that you knew him, what was your personal relationship with him?

Mr. TRAFFICANTE. Just friendship. No business, never had no business dealings with him; no way, shape or form. I see him once in a while when I go to New Orleans. He's come to Miami, I think, once to appear before a grand jury. I seen him there.

Chairman STOKES. Did you ever have occasion to discuss with Mr. Marcello the physical surveillance situation?

Mr. TRAFFICANTE. I probably have.

Chairman STOKES. Now, when I use the term "intense physical surveillance," you know what I mean by that?

Mr. TRAFFICANTE. I know exactly what you mean.

Chairman STOKES. That's the situation you described where they lived with you day and night?

Mr. TRAFFICANTE. Right.

Chairman STOKES. Now, can you tell us why they had you under surveillance?

Mr. TRAFFICANTE. I don't know, I guess they hoped to find out this empire I am supposed to have, all these businesses that I am supposed to have; all that big thing I am supposed to be.

Chairman STOKES. That is your understanding, that's your full understanding?

Mr. TRAFFICANTE. That's my understanding of it, yeah.

Chairman STOKES. Did you ever have any discussion with anyone on how this surveillance could be stopped?

Mr. TRAFFICANTE. No. I don't think I did. I'm sure that it couldn't be stopped, and I doubt it could be stopped.

Chairman STOKES. I'm sorry, was that your full answer?

Mr. TRAFFICANTE. What was that?

Chairman STOKES. Was that your full answer?

ARCHIVES

Mr. TRAFFICANTE. Yeah, I don't think it can be stopped.

Chairman STOKES. Did you ever have any discussions with Mr. Marcello regarding President Kennedy or Attorney General Robert Kennedy?

Mr. TRAFFICANTE. I probably had it with him about Robert Kennedy.

Chairman STOKES. Can you tell us what that conversation was?

Mr. TRAFFICANTE. The conversation was that Bobby Kennedy had him deported illegally, put him on a plane with some marshals and dumped him in Guatemala. That was the conversation.

Chairman STOKES. And by him, you are referring to Mr. Marcello?

Mr. TRAFFICANTE. Mr. Marcello, right.

Chairman STOKES. Obviously then from what he said to you, he was pretty upset about that?

Mr. TRAFFICANTE. Well, I would be too, what happened to him would happen to me.

Chairman STOKES. And is this what you said to him when the two of you talked about it?

Mr. TRAFFICANTE. Right.

Chairman STOKES. And you felt that Robert Kennedy had mistreated him?

Mr. TRAFFICANTE. I think so, I still think he mistreated him.

Chairman STOKES. Are you aware of any threats that Mr. Marcello made against President Kennedy or Attorney General Kennedy?

Mr. TRAFFICANTE. How was that, Mr. Stokes?

Chairman STOKES. As a result of these conversations you had with Mr. Marcello, the fact that he was upset.

Mr. TRAFFICANTE. Right.

Chairman STOKES. You were upset about it. Are you aware of any threats made by Mr. Marcello against either President Kennedy or Attorney General Kennedy?

Mr. TRAFFICANTE. No, sir; no, no chance, no way.

Chairman STOKES. Mr. Trafficante, do you know a man by the name of Jose Aleman?

Mr. TRAFFICANTE. Well, I met Mr. Aleman, I think it was two or three times, perhaps.

Chairman STOKES. Can you tell us when you first met him?

Mr. TRAFFICANTE. Well, I met him. I don't remember what year it was. It was in the early sixties.

Chairman STOKES. Can you tell us where you first met him?

Mr. TRAFFICANTE. I met him at his—I think he had an apartment house or condominium or hotel or something.

Chairman STOKES. And how did you happen to be at his home?

Mr. TRAFFICANTE. I met him through Macho Gener.

Chairman STOKES. Mr. Gener took you there?

Mr. TRAFFICANTE. Yes.

Chairman STOKES. And can you tell us the purpose of his taking you there?

Mr. TRAFFICANTE. This fellow was in a financial bind. Mr. Aleman was having trouble financially. He wanted to raise some money because he was having trouble with his stepmother or some-

ASSASSINATION

thing. So Macho liked Mr. Aleman. That's the reason that he took me there.

Chairman STOKES. Can you tell us how much money Mr. Aleman needed?

Mr. TRAFFICANTE. Well, we never got to the point because when I got there, I found out—I don't even think he owned the property. I think the property belonged to his stepmother. It was like a clouded title in a property.

Chairman STOKES. Well, was it Mr. Aleman wanted you to arrange a loan for him?

Mr. TRAFFICANTE. He thought maybe I could arrange a loan for him, yeah.

Chairman STOKES. From whom were you going to arrange the loan?

Mr. TRAFFICANTE. Well, at that particular time I was, my attorney, Mr. Frank Gargano, was an attorney for Jimmy Hoffa, and I thought maybe I could talk to him. I thought I could talk to my attorney to see if he could help Mr. Aleman.

Chairman STOKES. And this would be a loan then from the Teamsters?

Mr. TRAFFICANTE. Right.

Chairman STOKES. And had you ever arranged loans for other people through the Teamsters?

Mr. TRAFFICANTE. No, sir.

Chairman STOKES. You don't recall—is this your testimony—you don't recall the amount that Aleman asked for?

Mr. TRAFFICANTE. No, I don't.

Chairman STOKES. How many meetings took place between you and Mr. Aleman regarding this loan?

Mr. TRAFFICANTE. I would say the question of the loan was decided the first time I met him, but then I went there, I think I met him another couple of times. I don't remember meeting him in any restaurant like he testified yesterday. Maybe it could be, though, I am not saying. It could be but I don't—

Chairman STOKES. Is it your best recollection then that you probably met with him about three times?

Mr. TRAFFICANTE. Two or three times.

Chairman STOKES. And Mr. Gener was present for the first meeting. Would he have been present for the other two meetings?

Mr. TRAFFICANTE. Mr. Gener was present at all the times that I spoke with Mr. Aleman. To the best of my recollection he was present.

Chairman STOKES. And was anyone else present on those occasions?

Mr. TRAFFICANTE. There was another gentleman present, I can't—

Chairman STOKES. Do you know his name?

Mr. TRAFFICANTE. No. Well, I will tell you, his nickname was "Coco." That is how—this was a friend of Mr. Bango, this Coco. No, no, Darci, I read in the paper was supposed to be.

Chairman STOKES. How about George Nobregas, was he present?

Mr. TRAFFICANTE. George?

Chairman STOKES. N-o-b-r-e-g-a-s? Nobregas?

Mr. TRAFFICANTE. Maybe that is him. Maybe that is the same guy. It was a dark complexioned guy.

Chairman STOKES. How about Angelo Bruno, was he ever present?

Mr. TRAFFICANTE. He was present one time, yes.

Chairman STOKES. So that the record is clear, would you name everybody that you can recall being present?

Mr. TRAFFICANTE. That is about it. I don't think there was anybody else.

Chairman STOKES. OK. Just for the record, you name each of the persons you say were present.

Mr. TRAFFICANTE. Macho Gener, this fellow Coco, I think, Nobregas, whatever it is, Aleman, and Angelo Bruno, I think, was present one time.

Chairman STOKES. And on each occasion was the purpose of the meeting to discuss Aleman's loan?

Mr. TRAFFICANTE. No, sir.

Chairman STOKES. What was the purpose?

Mr. TRAFFICANTE. The next time, one of the purposes I seen him after the loan, because like I told you, I think the matter of the loan, I think it was decided the first time I met him. Then he mentioned something about having some political influence in the Dominican Republic. So Mr. Bruno had talked to me that he was interested in getting some milk from the Dominican Republic, so I took him over there to meet Mr. Aleman so maybe they could get together. Mr. Aleman could facilitate this thing of the milk, to get an export license to export milk from the Dominican Republic.

Chairman STOKES. Wasn't Aleman already in trouble financially?

Mr. TRAFFICANTE. Yes, but that has nothing to do with it. He could have made maybe some money with Mr. Bruno if he could get him the export license. To the best of my recollection now that is the way I think it was.

Chairman STOKES. Was this the export deal that had something to do with milk?

Mr. TRAFFICANTE. Milk.

Chairman STOKES. Was there anything else you discussed at that time?

Mr. TRAFFICANTE. As far as the Kennedy situation, I want to tell you something now, Mr. Stokes. I am sure as I am sitting here that all the discussion I had with Mr. Aleman, that I never made the statement that Kennedy was going to get hit, because all the discussion I made with Mr. Aleman, as sure as I am sitting here, I spoke to him in Spanish. No reason for me to talk to him in English because I can speak Spanish fluently and he speaks Spanish, that is his language. There was no reason for me to tell him in English that Kennedy is going to get hit. I deny that I made that statement.

Chairman STOKES. When did you first become aware that he had made the statement?

Mr. TRAFFICANTE. When it was first published in some newspaper, the Post or the Times, 2 or 3 years ago.

Chairman STOKES. Were you aware of the fact that he had also told the FBI about it much earlier than that?

PROPERTY OF
ASSASSINATION

Mr. TRAFFICANTE. I read it in the same article, I think, that he was an FBI informant at that time.

Chairman STOKES. Are you aware of the fact that he said that he had had a very involved discussion with you about politics? Did you ever discuss politics?

Mr. TRAFFICANTE. I don't remember having that discussion with him by himself, like he claims, like I read it in the paper.

Chairman STOKES. When we take the statement that he attributes to you, when he says that you said he is not going to be reelected, and then when he says you said, "No, Jose, he is going to be hit." How could he in any way misstate a statement like that from anything else you have said to him?

Mr. TRAFFICANTE. Because, first of all, like I told you, I was speaking to him in Spanish, and in Spanish there was no way I could say Kennedy is going to get hit. I didn't say that. I might have told him he wasn't going to get reelected.

Chairman STOKES. What were you basing that on?

Mr. TRAFFICANTE. I could have told him that he was not going to get reelected, not that Kennedy was going to get hit.

Chairman STOKES. How did you know Kennedy was not going to get reelected?

Mr. TRAFFICANTE. I thought he wouldn't.

Chairman STOKES. What had he done at that time that would cause him not to be reelected?

Mr. TRAFFICANTE. At this particular time, first of all, there was the Cuban question where they had the trouble with the Bay of Pigs and all that, and they established the Cuban bases, and, if you recall, there was a lot people criticizing it.

Chairman STOKES. Well, then——

Mr. TRAFFICANTE. That is the best way that I can say it, if I even told him that.

Chairman STOKES. From what you have said here today, then, in all probability you did say to him no, Jose, he is not going to be reelected. Did you say that?

Mr. TRAFFICANTE. I might have told him that but I didn't tell him that Kennedy was going to get hit. See, I still tell you that I spoke to Aleman in Spanish. There was no reason for me to speak to him in English because I doubt if 15 years ago he could speak better English than he does today. There was no reason for me——

Chairman STOKES. We can't hear you.

Mr. TRAFFICANTE. There was no reason for me to speak to him in English with his broken English, when I can speak fluent Spanish, and he can speak fluent Spanish, and Gener, who was there all the time, couldn't understand English. The other guy, I doubt if he could understand English, too, Nobregas, whatever his name was, at that particular time.

Chairman STOKES. Do you recall ever talking to Mr. Aleman about the problem Jimmy Hoffa was having with Attorney General Robert Kennedy?

Mr. TRAFFICANTE. I don't remember nothing about the discussion. I couldn't swear to nothing that I talked about him, about Jimmy Hoffa. One thing I know for definite is I didn't tell him Kennedy was going to get hit, or that he interpreted it that way. That is not right and that is not the truth. That is all I can say.

ARCHIVES

Chairman STOKES. When you first learned that he had said this about you, did you contact anybody about it?

Mr. TRAFFICANTE. No, sir. I didn't pay no importance to it at that particular time. I never thought I would be here answering that question today or be here for the assassination of Kennedy, as far as that goes.

Chairman STOKES. I am sorry, I didn't hear.

Mr. TRAFFICANTE. I never thought at that time that I would be here today being questioned about the assassination of Kennedy.

Chairman STOKES. Then, so I can summarize your testimony at this point, you did know Mr. Aleman, you did have meetings with Mr. Aleman, you probably discussed President Kennedy and his reelection or his inability to be reelected, but you did not make the statement he will be hit?

Mr. TRAFFICANTE. Right. I am sure I didn't. I am positive I didn't. There was no reason for me to say that.

Chairman STOKES. Thank you, Mr. Chairman. I have no further questions.

Mr. PREYER. If you will pardon us for a moment, I would like to confer with the members here.

There are no further questions from the panel. Under the House rules, Mr. Trafficante, a witness at the conclusion of the questioning is entitled to make a statement for 5 minutes to explain his testimony or to clarify it or to make any sort of statement he may choose to make. At this time, do you care to say anything further to the committee?

Mr. TRAFFICANTE. No, sir, your Honor, nothing.

Mr. PREYER. Very well, the committee will excuse the witness at this time.

Let me caution everyone in the hearing room to remain seated until the witness leaves the hearing room.

You are excused, Mr. Trafficante.

Mr. TRAFFICANTE. Thank you.

Mr. PREYER. Thank you for being here.

Mr. GONZALEZ. Thank you, Mr. Chairman.

Mr. Chairman, the exhibit.

[Document handed to the clerk by Mr. Gonzalez.]

Mr. GONZALEZ. This is the certified copy of the order.

Mr. PREYER. We will have that immunity order which has previously been inserted in the record.

The committee will take a brief 3-minute in-place recess at this time. We will resume very quickly. The committee stands in recess.

[A short recess was taken.]

Chairman STOKES [now presiding]. The committee will come to order.

The Chair recognizes Professor Blakey.

Mr. BLAKEY. Mr. Chairman, the testimony of Santos Trafficante concludes that part of the presentation by the staff to the committee of the basic outlines of the committee's investigation into the possibility of organized crime connection to the assassination of President Kennedy. As all can see from the testimony introduced, the question remains, was organized crime involved in a plot to assassinate President Kennedy? Did it have the motive, opportunity, and means to do so?

Obviously, the possibility cannot be dismissed, although it can hardly be said to have been established. At this point, it is, in your words, Mr. Chairman, perhaps only a little more than a "suspicion suspected," not a "fact found."

The committee decided early in its investigation, as soon as it realized that a Mafia plot to assassinate the President warranted serious consideration, to assemble the most reliable information available on organized crime in the United States. The details of this phase of the committee's investigation will, of course, appear, hopefully in full, in its final report, a report that will consider the background of organized crime in America, the structure of the Mafia in the early 1960's, the effort by the Kennedy administration to suppress the mob, and the evidence that the assassination might have been undertaken in retaliation for those efforts.

To scrutinize the possible role of organized crime in the assassination, the committee early brought on one of the country's leading experts on the subject. He is Ralph Salerno, whose career as an organized crime investigator with the New York City Police Department goes back to 1946. Mr. Salerno has since retired from the New York City Police Department and I would note that on the day of his retirement, the New York Times was moved to comment that he perhaps knew more about the Mafia than any nonmember in the United States.

It would be appropriate at this time, Mr. Chairman, to call Ralph Salerno.

Chairman STOKES. The committee calls Mr. Salerno.

Please stand and raise your right hand. Do you solemnly swear the testimony you will give before this committee is the truth, the whole truth, and nothing but the truth, so help you God?

TESTIMONY OF RALPH SALERNO

Mr. SALERNO. I do.

Chairman STOKES. You may be seated.

The Chair recognizes counsel for the committee, Mr. Gary Cornwell.

Mr. CORNWELL. Thank you, Mr. Chairman.

Mr. Salerno, when did you first become a consultant on organized crime to this committee?

Mr. SALERNO. I began in late October or early November of last year.

Mr. CORNWELL. Prior to that time, what experience or training had you had with respect to organized crime?

Mr. SALERNO. I entered the New York City Police Department in mid-September of 1946. A planned 3-month program of training in the police academy was interrupted in November of 1946 when I became one of a small group of men who were interviewed and selected to be used in an undercover operation involving an organized crime assault which resulted in murder in New York City.

From that time throughout the remaining 20 years that I spent with the New York City Police Department, my entire career I was engaged in investigations relating to organized crime.

Mr. CORNWELL. At the time of your retirement, what was your position?

ARCHIVES

Mr. SALERNO. I retired as a supervisor of detectives in the Central Investigation Bureau, which is the organized crime investigation unit of the New York City Police Department.

Mr. CORNWELL. During your tenure with the New York City Police Department, did you ever have an occasion to discuss organized crime with any underworld members?

Mr. SALERNO. Yes. That was something that during those years was a common occurrence. We would bring in people so involved into our office for conversations, discussions, interviews, if you will. We would interview them in the hallways of the courthouses, when there was a court appearance that we had caused to occur. We would talk to them in the street. We would talk to them in their neighborhoods, we would talk to them in their homes. So that I can say that literally I have had hundreds of such conversations.

Mr. CORNWELL. During that period did you have a chance to review conversations of such persons that may have been obtained by electronic surveillance?

Mr. SALERNO. Yes. The State of New York has had legal authority for the issuance of ex parte orders for electronic surveillance since 1939. That was a very useful technique which was widely used in the New York City Police Department during the 20 years that I have served.

Mr. CORNWELL. After the 20 years of experience investigating organized crime with the New York City Police Department, you retired in 1966. After that point, did you continue to be in any way involved with the subject matter of organized crime?

Mr. SALERNO. Yes; all of my professional work in the intervening 12 years has been with this subject. I worked largely as a consultant to various bodies. I did return to a more active role in 1973 and 1974. In those 2 years I became the chief racket investigator in the district attorney's office of New York County, one of the five in New York City, and I served in that capacity for 2 years.

My remaining time has been as a consultant. Part of that time is given largely to the training of other law enforcement officers on all levels of government, through some 35 States of the United States and in four Canadian provinces, and in the Commonwealth of Puerto Rico.

In addition to that, I have served as a consultant for government and nongovernment bodies addressing the subject of organized crime.

Mr. CORNWELL. Please give us a brief résumé of the committees or commissions that you have served as a consultant at any time since 1966?

Mr. SALERNO. Yes, sir. I served as consultant to the President's Commission on Violence. My work there was a paper on the use of violence and fear in organized crime activities and matters.

I was a consultant to the President's Commission on Campus Unrest. My work there dealt largely with police intelligence procedures and how they were utilized.

I worked for the National Council on Crime and Delinquency from 1967 through 1969. In 1970 I spent a year consulting with the Hudson Institute in Westchester County, N.Y., which is a policy research center. My work there was as part of a study on the problem of narcotics in the State of New York.

I spent 1976 as a consultant to the Citizens Campaign Against Bootlegged Cigarettes. My work there was in describing the problem caused by the almost total establishment of an illegal distribution system for smuggled or stolen, certainly untaxed, cigarettes and the invasion of the legitimate distribution network in that industry all along the eastern seaboard.

Mr. CORNWELL. In addition to your experiences as a consultant, have you ever qualified as an expert on organized crime in the courts?

Mr. SALERNO. Yes; I have been qualified as an expert for testimony in Federal courts, in the courts of some five States, and these have been in matters of criminal cases and in civil litigation.

I have been accepted as an expert for testimony concerning organized crime in two Canadian provinces, the Province of Alberta and I have testified in the Province of Quebec.

Mr. CORNWELL. You also served at one time on the President's Crime Commission, is that correct?

Mr. SALERNO. Yes; I served on the Organized Crime Task Force of the President's Crime Commission while still a member of the New York City Police Department. That was in 1966.

Mr. CORNWELL. And in addition to testifying as an expert on organized crime in the various Federal and State courts you mentioned, have you ever testified on that subject before any legislative bodies?

Mr. SALERNO. Yes; more than one-half dozen times before legislative committees of the Congress of the United States, in both Houses. I have testified before legislative bodies of some 10 States.

Mr. CORNWELL. Would you simply name some of those?

Mr. SALERNO. Beg pardon?

Mr. CORNWELL. Would you simply identify some of those legislative bodies for us?

Mr. SALERNO. Yes, sir. While still with the New York City Police Department, three detectives and myself were assigned with the Senate Permanent Subcommittee on Investigations, chaired by Senator John McClellan. Over a period of months we prepared for it a presentation on organized crime.

The specific assignment that I had from the New York City Police Department was to look into all matters that would be revealed by Joseph Valachi in his testimony before that Senate committee. We were to independently investigate in an attempt to prove or disprove anything that he might have said that we could gather evidence concerning.

I have also appeared before a committee chaired by Senator Smathers, which was looking into the problem of loansharking.

I have appeared twice before House committees chaired by Mr. Dante Fascell.

I appeared before the Crime Committee that was looking into organized crime, chaired by Mr. Pepper.

I have appeared in legislative bodies in the States of Massachusetts, New York, New Jersey, California, Indiana, and Ohio.

Mr. CORNWELL. Have you ever written any books or articles on this subject?

Mr. SALERNO. Yes; I wrote a book which was entitled, "The Crime Confederation," published by Doubleday in 1969. The subtitle of that

ARCHIVES

book is "La Cosa Nostra and Other Allied Operations in Organized Crime."

I have done a number of magazine articles for public press as well as for professional journals.

Mr. CORNWELL. Mr. Salerno, this committee has received evidence from and concerning Carlos Marcello and Santos Trafficante. Are you familiar with those individuals?

Mr. SALERNO. Yes; I am familiar with them and I have been for some 21 years.

Mr. CORNWELL. The committee, in part, has received testimony of Mr. Trafficante. For example, among his testimony, he stated that he did not know Jack Ruby or Lee Harvey Oswald, and his testimony, although not directly but at least indirectly, perhaps, bore on the question of whether or not he or his associates may have had the motive or opportunity or means to assassinate the President.

Would you tell us whether or not you have any information which might shed light upon the questions that we just noted?

Mr. SALERNO. Yes. I think I have a considerable amount of evidence for this committee to consider in trying to evaluate both method, means, all three—methods, means or certainly motive on the part of Mr. Trafficante or people known to be associated with him.

Mr. CORNWELL. Tell us what you know about those two individuals which might shed some light upon that subject.

Mr. SALERNO. Well, I indicated that I became aware of Mr. Trafficante some 21 years ago. That particular occurrence was one that took place in the State of New York on November 14, 1957, which I note is the eve of Mr. Trafficante's birthday. He gave it as November 15. At that time, the New York State Police discovered a meeting of a large number of people, some 63 were actually identified at that time. The people involved knew that they had not completely identified all of the people present. If I may, I would like to make use of an exhibit at this time to be able to discuss the Apalachin meeting with you.

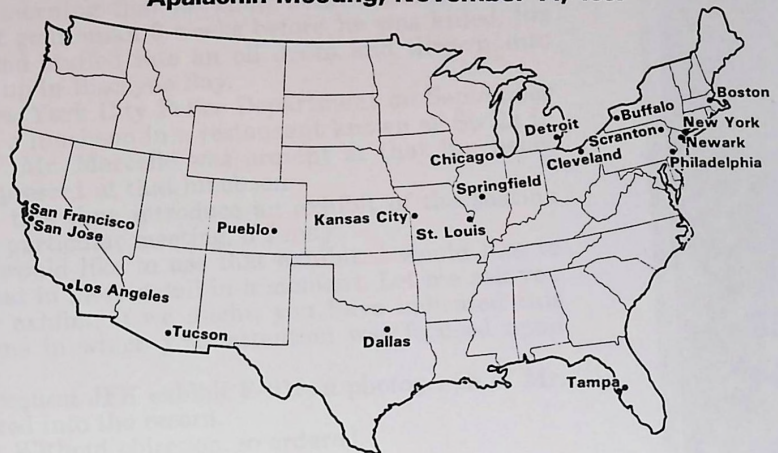
Mr. CORNWELL. May we have JFK exhibit F-547A displayed?

Mr. Chairman, may we have JFK F-547A admitted into the record at this time?

Chairman STOKES. Without objection, it may be entered into the record.

[JFK exhibit F-547A follows:]

Apalachin Meeting, November 14, 1957



JFK EXHIBIT F-547A

Mr. SALERNO. That is a map of the United States, Mr. Cornwell, which indicates the areas from which people who were known to have attended came from—northern California, southern California, State of Arizona, the Rocky Mountain State of Colorado, Missouri, Dallas, Tex., Tampa, Fla., the Middle West, the New England States, the Middle Atlantic States, so that quite candidly it can be labeled a national meeting.

At that time, a great deal of attention was given to it, in an analysis of what was there in an attempt to try to discover why they might have been there. Many of the people who were there fit the phrase "known to the police." They had criminal arrest records, they had criminal conviction records. That record since that time, 21 years ago, has become even more extensive, and I think it is a fair characterization today to say that there is very little doubt that that was a national underworld meeting.

One of the people identified at the location in Apalachin, N.Y., had given the name of Louie Santos and he gave an address of a hotel in Havana. In trying to pursue exactly who this person was, two of the officers of the New York State Police made an identification of Mr. Santos Trafficante from photographs of him as being the person who had given the name of Louie Santos. So that we can then see that he has associated with all of the people who were there. People such as Vito Genovese, a man who died in a Federal prison in the 9th year of a 15-year term for dealing in heroin. Mr. Carmine Galante was at that meeting. He was sentenced to 15 years for dealing in heroin.

Mr. John Ormento, who was at that meeting, is still serving a 40-year sentence for dealing in heroin. Mr. Trafficante, in his testimony today, indicated that he was a partner of Joseph Stassi in a casino in Havana. Mr. Stassi has been sentenced to Federal prison for dealing in heroin. Mr. Trafficante here, in his testimony, acknowledges a long-time friendship over a period of years, one in which the people involved could have great confidence in them-

ARCHIVES

selves with Sam Giancana. Mr. Sam Giancana has been the victim of a homicide and has been killed. Mr. Trafficante indicated in his testimony here this morning that he knew John Roselli, that he had dinner with that gentleman 3 weeks before he was killed, his body dismembered and stuffed into an oil drum and thrown into the sea only to come up in Biscayne Bay.

My unit in the New York City Police Department on September 22, 1966, interrupted a luncheon in a restaurant known as Stella in Queens County, N.Y. Mr. Marcello was present at that luncheon. Mr. Trafficante was present at that luncheon.

I would like to at this time introduce an exhibit of the seating arrangement of that particular meeting, if I may.

Mr. CORNWELL. I would like to use that exhibit. I would like to have you describe that in more detail in a moment. Let me ask you before we go to the exhibit, if we might, you have indicated this was the point in time in which your attention was focused upon Mr. Trafficante.

Mr. Chairman, I request JFK exhibit F-619, a photograph of Mr. Trafficante, be entered into the record.

Chairman STOKES. Without objection, so ordered.

[JFK exhibit F-619 follows:]

Phot. of Santos
Trafficante

P. 384



ARCHIVES

JFK EXHIBIT F-619

Mr. CORNWELL. What subsequently did you determine to be the nature of Mr. Trafficante's relationships with these kinds of people that you have just named?

Mr. SALERNO. Certainly his presence with them classifies him as an associate of such persons. He goes into business with them in a gambling casino. He will be in New York quite some distance from his home with an interesting assemblage of people that we know a great deal about. He is at an underworld meeting, a national underworld meeting in New York so that we came, in the New York City Police Department, to certainly agree with diverse other law enforcement agencies that Mr. Trafficante was an organized crime leader, the leader of a criminal organization in the State of Florida.

Mr. CORNWELL. You state that he is the leader of an organized crime organization in Florida. Before we go further, would you tell us what that term means in the context that you have used it? What is organized crime?

Mr. SALERNO. Organized crime sometimes has many different meanings to different people. There have been some successful attempts in some legal definitions of the phrase "organized crime." The Congress of the United States, in the Organized Crime Control Act of 1970, very clearly defined what would be considered Federal violations of law in terms of organized crime gambling. In that instance, the Congress set forth the standard of five or more people being involved, the volume of the gambling reaching or exceeding \$2,000 per day and requiring that evidence show that the particular gambling operation was in existence for 30 days or more. That is organized crime gambling in its legal definition. In one professional conference that I have attended, organized crime was described as a self-perpetuating, continuing criminal conspiracy for profit and for power using fear and corruption and seeking immunity from law.

I think one of the best ways to describe organized crime or to have it understood is in a way that was described by scholars at Cornell Law School, in an institute where prosecutors from around the United States are trained. In that instance, they set forth three ways in which organized crime can manifest itself and be recognized. The descriptions given are: Organized crime as a venture; organized crime as an enterprise; organized crime as a syndicate. And the different ways in which the manifestation comes are these: An organized crime enterprise is a day-to-day, ongoing business that is illegal in its nature because it is supplying some illegal service or some illegal product.

Two examples of that would be a sizable gambling operation that would meet the Federal definition as legally defined on a day-to-day basis. Offering the illegal service of accepting wagers, a group of criminals who would conspire to do so on an ongoing basis, supply narcotics to procure it, to cut it down to a street level quantity and then enter it into a distribution system. That would be an organized crime enterprise.

Organized crime can also involve itself as a syndicate, a criminal syndicate. As a syndicate, organized crime will exercise various forms of control which are not unlike those of Government. They will set standards. The payoff price on the numbers shall be this and it shall not be higher and it shall not be lower and they impose that standard on their own group and on others in an area where they exercise a sphere of influence. They will collect taxes, if you will, although the legal definition of that collection of taxes would be extortion, but they are playing a quasi-government role.

You can also have an organized crime venture, a single occurrence which, per se, is not organized crime. Bank robbery. Not every bank robbery can be described as organized crime; but where the members of an organized crime syndicate will either inspire, will set the plans for and then participate in the profits from that bank robbery, that particular bank robbery would be an organized crime venture. I think, Mr. Cornwell, I have an even better example for you of an organized crime venture. When Mr. Trafficante joined with Mr. Giancana and joined with Mr. Roselli and joined with representatives in the CIA in a plot to kill Premier Castro, that was an organized crime venture, a single occurrence.

Mr. CORNWELL. Which of the types of organized crime that you just described is it that Santos Trafficante and Carlos Marcello are associated with?

Mr. SALERNO. They are leaders of an organized crime syndicate, each of them, in their home areas. I have some evidence that I would like to offer you now. This is a conversation that was overheard in which Mr. Santos Trafficante was involved and upon which no questions to him have been based. This was found in the FBI file which now is labeled, La Cosa Nostra file. The conversation took place in a restaurant in Florida in 1963 and the quote of Mr. Trafficante reads thus:

Let me tell you this. This is what happens to me. Now, I don't give a (obscene) about the S. & G. I know when I'm beat, you understand?

I got a numbers office in Orlando. They grab everybody, forty or fifty people. Forty or Fifty thousand in bond. They have no evidence, but when they get through, it costs thousands.

I got another office in St. Cloud, Fla. You can't even find St. Cloud on the (obscene) map, but the (obscene) "G" found it.

Kennedy's right-hand man, he goes through the (obscene) nigger town. Must have been 2,000 niggers, and makes a (obscene) big raid over there.

Just a start, any (obscene) place that they found a phone connection in there from Tampa. * * *

Mr. Trafficante in that conversation is describing his interest in an organized crime enterprise.

Mr. CORNWELL. What, if any, real evidence is there that the syndicate that you say Marcello and Trafficante run in their respective areas, exists much less that they are members of it.

Mr. SALERNO. I think at this date the evidence is overwhelming. It is certainly more than sufficient to convince the prudent man that we speak of in legal and court terminology. I think in order to give you an understanding of that, I just have to dip back for a moment, briefly, into history. The particular criminal syndicates that Mr. Marcello and Mr. Trafficante belong to are syndicates which have set a requirement that membership shall be limited to people who are of Italian extraction on both sides of their lineage. In sociological studies that have been made, we do note that the overwhelming majority of population, immigrants who have come to the United States from Italy, came from the southern part of that nation. That's the agricultural part of the nation, the more economically deprived. So that's where we got most of our Italian population. I think there is a very long and a very clear record that many of those people made great contributions to their new country, the United States.

Unfortunately, in mass migration of that type, some people will come in who have a criminal background. We know historically from scholarly studies, that in the southern part of Italy, three secret criminal societies exist in the area around Naples, it had the name of Camora, in what is the heel and the toe of the Italian boot, if you look at a map of Italy. That is the region of Calabria. They had a similar criminal organization very closely akin to the Camora. It had the name of the Honored Society, although the Italian police today will refer to that organization back there in Italy as the Calabrian Mafia today. The word Mafia itself was the name given to criminal societies on the island of Sicily. Some of these people connected with those societies came into the United

ARCHIVES

States. They began to continue their criminal career. It is almost natural that their first victims were their own fellow Italian immigrants. There's an apocryphal story of the son of one such being accused of that fact, that his father had victimized his own fellow Italian immigrants.

His response is said to have been, "Well, of course it had to have been that way. My father didn't know how to say stick em up in English. Who else could he rob?"

One of the things that played a role, one of the things that played an important role, I believe was the national prohibition era. It called for the expansion in the number of people who would be required to either help import, to manufacture, to distribute and sell so that those Italian immigrants were widely accepted by like criminals who had come from other backgrounds, whether they were Jewish gangs or the Irish gangs that we have established existed back in that time period.

In his testimony in 1963, Joseph Valachi told us that at the end of the prohibition era, in the years 1930 and 1931, among the diverse Italian groups, there were differences that resulted in gang wars, but certainly by 1932, they had all joined together in a single Italian segment for organized crime. Therefore, it's technically, perhaps, incorrect to use the word Mafia. Some people hold that that can only be applied to Sicilians. The group has others than Sicilians in it and that is the organization that the FBI has documented is now called La Cosa Nostra. I would like to point out, I have a copy of an affidavit that was sworn to by an FBI man in the courts of Ohio just last year in December of 1977. This affidavit by special agent Michael Kehoe was one of a number that were filed in court proceedings which resulted in convictions for homicide. The sworn document indicates very clearly that that particular organized crime syndicate as still being extant in the area surrounding Cleveland, I am sorry to say, Mr. Stokes. There are a series of killings there in a gang war, and he indicates terminology and facts, indicating that what I have been describing to you is still something that is current. I suggest perhaps, Mr. Cornwell, I can make that part of the record.

Mr. CORNWELL. We have a copy of that marked for identification as JFK exhibit F-553, Mr. Chairman. May we have that entered into the record at this time?

Chairman STOKES. Without objection, it may be entered into the record at this time.

[JFK exhibit F-553 was marked for identification and entered into the record.]

A F F I D A V I T

I, E. MICHAEL KAROE, Special Agent, Federal Bureau of Investigation, hereinafter referred to as the FBI, being duly sworn, deposes and states as follows:

(1) The Affiant is employed as a Special Agent of the FBI and has been so employed for the past seven and one-half years. As a result of personal participation in this investigation, and as a result of reports made to me by other Special Agents of the FBI, I am thoroughly familiar with all aspects of the investigation.

(2) This affidavit, it is submitted, sets forth probable cause to believe that JAMES T. LICAVOLI, also known as JACK WHITE; JAMES T. FRATIANO^N, also known as "Weasel"; JOHN P. CALANDRA; ANGELO LONARDO; RONALD CARABIA; PASQUALE J. CISTERNINO, also known as "Butchie"; THOMAS JAMES SINIIO; RAYMOND W. FERRITTO; ALFRED S. CALABRESE, also known as "ALLIE", and others as yet unknown, are associated in fact in an enterprise as defined in Title 18, United States Code, Section 1961 (4), the activities of which affect interstate commerce, to wit: a group associated in fact to control loan sharking and other criminal activities in Northern Ohio and to commit various criminal acts, including murder, threats involving murder, and conspiracy to murder, and participating directly and indirectly in the conduct of the enterprise's affairs through a pattern of racketeering activity, including threats involving aggravated murder and felonious assault, felonies punishable by imprisonment for more than one year under the Ohio Revised Code, Sections 2903.1 and 2903.11, and Mail Fraud, in violation of Title 18, United States Code, Section 1961 and are conspiring to do so in violation of Sections 1962 (c) and (d) of Title 18, United States Code.

ARCHIVES

Delivered to HSCA 6/22/77 JLB

SEARCHED	INDEXED
SERIALIZED	FILED
JUN 27 1977	

(3) The Affiant has learned through numerous conversations with other Agents of the FBI and through a comprehensive review of confidential information furnished by reliable informants to Agents of the FBI in Cleveland, Ohio, and elsewhere, that there exists within the United States an organized crime conspiracy which is controlled nationally by a membership which is exclusively Italian. Geographical areas of the United States are apportioned to the members of this conspiracy for the conduct of illegal activities. Within this organized criminal conspiracy there are "families" in charge of certain criminal activity in each geographical area. Each "family" is headed by a "capo" or boss; the second in command is the "sotto-capo" or underboss. A "consiglieri" or counselor is typically an elder member who serves as an adviser. Various members of the "family" are controlled by an individual referred to as a "caporegima" or captain, who is responsible to the capo. The said criminal organization in the United States is controlled by a policy group known as the "commission". The "commission" members are actually the various bosses of the "families". This criminal organization is engaged in the conduct of gambling, loan sharking, extortion, murder, labor racketeering, and other violations of federal and state law.

(4) The Affiant knows through information received from numerous FBI Agents, who received said information from confidential sources, that this organized crime organization, referred to herein, is sometimes known as "The Outfit", "La Cosa Nostra" (LCN), or "our thing".

(5) The descriptive information of the following individuals, whose names appear herein, has been obtained by the Affiant through a review of reports of the FBI. Contained within these reports are confirmations regarding

the addresses and other descriptive information of the individuals mentioned herein. This information was obtained through checks with the Identification Division of the FBI, with direct contact with officers of the Cleveland, Ohio, Police Department and other law enforcement agencies, and through contact with the Ohio Bell Telephone Company and the Cleveland Electric Illuminating Company.

(6) The following individuals are referred to herein:

ALFRED CALABRESE, also known as ALLIE, age 34, was last known to reside at 107 Evangeline Road, Cleveland, Ohio. ALFRED CALABRESE's arrest record shows convictions for Breaking and Entering (three convictions) and Armed Bank Robbery.

RONALD DAVID CARABBIA, born April 8, 1929, at Struthers, Ohio, 5'11", 180 pounds, brown hair, Social Security Number 301-22-3250, residence: 2277 Knollwood, Poland, Ohio, business: Crown Vending, 2719 Midlothian Boulevard, Struthers, Ohio.

PASQUALE CISTERNINO, also known as "Butchie", age 38, resides at 924 London Road, Cleveland, Ohio. PASQUALE CISTERNINO's arrest record shows three convictions on Burglary charges.

TONY DELSANTER, also known as "Dope", deceased, resided at 373 Central Parkway, Warren, Ohio. TONY DELSANTER's arrest record has convictions for Burglary and Larceny and Robbery.

JAMES T. FRATI~~AN~~^{IO}, born ALADENA T. FRATIANO, also known as "Weasel", on November 13, 1913, at Ripalimosani Campobassi, Italy, residence: 400 California Avenue, Moss Beach, California.

JAMES LICAVOLI, also known as JACK WHITE, age 73, resides at 12301 Fairview Court, Cleveland, Ohio, with PAUL CIRICILLO, also known as PAUL LISH. JAMES LICAVOLI's arrest record shows a conviction for Blackmail.

ANGELO LONARDO, age 66, resides at 3121 Bremerton Road, Pepper Pike, Ohio. ANGELO LONARDO is married to a sister of JOHN T. SCALISH. ANGELO LONARDO has been convicted of Blackmail.

THOMAS JAMES SINITO, born September 18, 1938, at Cleveland, Ohio; 5'7", 175 pounds, black hair, brown eyes, Social Security Number 273-32-8371, residence: Garfield Heights, Ohio, arrested for Assault, Felonious Assault, Resisting Arrest.

(7) Confidential Source #1, named herein, has been a reliable source of the FBI in excess of ten years and has provide accurate and reliable information to Special Agents of the FBI concerning illegal activities of known criminals in the Cleveland Ohio, area, and elsewhere, on at least two hundred occasions. This information has proven to be accurate and reliable in that it has been substantiated by independent investigation of the FBI and through information furnished by other confidential sources of the FBI.

(8) Confidential Source #1 became aware of the activit of JAMES LICAVOLI, also known as JACK WHITE, and others, through his personal association with, and hearing statements made by, JAMES LICAVOLI, also known as JACK WHITE, LEO MOCERI, TONY DELSANTER, and ANTHONY MILANO.

(9) Confidential Source #1, who has admitted being a member of La Cosa Nostra, advised Special Agents of the FBI in July of 1967, he had learned through direct statements made by other members of La Cosa Nostra that JOHN T. SCALISH was the boss of the Cleveland organized crime family, and JAMES LICAVOLI, also known as JACK WHITE, LEO MOCERI, ANTHONY MILANO, and TONY DELSANT were members.

(10) As early as December of 1967, Confidential Source identified ANTHONY MILANO as the underboss of the Cleveland organized crime family.

(11) In March of 1971, Confidential Source #1 learned through statements made by LEO MOCERI in March of 1971 that LEO MOCERI, TONY DELSANTER and JAMES LICAVOLI, also known as JACK WHITE, were all involved in loan sharking activities in Ohio, and are in partnership with "BUTCHIE" CISTERNINO and EUGENE CIASULLO. LEO MOCERI expressed concern to Confidential Source #1 that Cleveland boss JOHN SCALISH had refused LEO MOCERI's request to approve assassination of potential witnesses against LEO MOCERI.

(12) In August of 1973, Confidential Source #1 advised he learned through statements made by LEO MOCERI in August of 1973 that ANTHONY MILANO, Cleveland underboss, was anxious to get his son, PETER JOHN MILANO, to return to Cleveland from Los Angeles and work with ANTHONY MILANO's nephew, Cleveland La Cosa Nostra member JOHN NARDI. According to LEO MOCERI, JOHN NARDI had five criminal associates who were killing people by putting bombs in their cars. JOHN NARDI appeared to be making a play for leadership in the Cleveland organized crime family.

(13) In December of 1973, Confidential Source #1 advised that during the course of a discussion with LEO MOCERI, he learned that LEO MOCERI had \$100,000 on the street in loan shark loans.

(14) In October of 1976, Confidential Source #1 advised that in October of 1976, he learned through statements made by JAMES LICAVOLI, also known as JACK WHITE, that TONY DELSANTER was avoiding as many people as possible. Confidential Source #1 advised that during the course of a conversation with JAMES LICAVOLI, also known as JACK WHITE, he learned that four Cleveland family members, who were not further identified, had aligned themselves with the "Irish mob" headed by DANNY GREENE. JAMES LICAVOLI, also known as JACK WHITE, described DANNY GREENE

ARCHIVES

and his associates as a tightly-knit group who were utilizing explosives and other sophisticated weapons to attempt to gain control of criminal activities in Cleveland. JAMES LICAVOLI, also known as JACK WHITE, further stated that he and TONY DELSANTER are now convinced that they have to kill DANNY GREENE if they hope to remain in power.

(15) Confidential Source #2 has been a reliable source of the Cleveland Division of the FBI for more than ten years and has provided accurate and reliable information concerning illegal activities of known criminals in the Cleveland, Ohio, area, and elsewhere, on at least one hundred occasions. The information has proven to be accurate and reliable in that it was substantiated and corroborated by other confidential source information and by independent investigation by Special Agents of the FBI.

(16) Confidential Source #2, who resides in Northern Ohio, became aware of the illegal activities of JAMES LICAVOLI, also known as JACK WHITE, and others through personal association with, and through hearing statements made by, JOHN NARDI, ANTHONY PANZARELLA, DANIEL GREENE, and others. Information furnished by Confidential Source #2 has resulted in more than ten federal and local felony convictions.

(17) On September 15, 1976, Confidential Source #2 advised a Special Agent of the FBI, who in turn advised the Affiant, that during conversations with JOHN NARDI as recently as the week ending September 15, 1976, source determined that during the late evening of September 10, 1976, JOHN NARDI, while exiting the Italian American Brotherhood Club on Mayfield Road, Cleveland, Ohio, was shot at from two cars; each car containing two individuals. Confidential Source #2 advised that at least five shots had been fired at JOHN NARDI; however, he (NARDI) was not hurt.

PROPERTY OF

(18) Affiant knows from personal investigation conducted by Special Agents of the FBI on May 17, 1977, results of which were made known to the Affiant, that on May 17, 1977, JOHN NARDI was killed at approximately 3:00 PM when a bomb contained in a vehicle parked next to JOHN NARDI's vehicle exploded as JOHN NARDI was attempting to enter his vehicle.

(19) The affidavit of Special Agent ROBERT S. FRIEDRICK of the FBI, executed November 7, 1977, in support of a complaint for the arrest of RAYMOND W. FERRITTO for a violation of Title 18, United States Code, Section 844 (h) (i), and the affidavit of FBI Special Agent ROBERT S. FRIEDRICK, executed October 28, 1977, in support of a search warrant of 3316 Greengarden Boulevard, Erie, Pennsylvania, and other locations, are hereby incorporated by reference herein as if set forth fully in this affidavit.

(20) On November 11, 1977, RAYMOND W. FERRITTO surrendered in Pittsburgh, Pennsylvania, to the offense charged in the complaint referred to above.

(21) On December 3, 1977, and December 4, 1977, RAYMOND WILLIAM FERRITTO advised Special Agents of the FBI, who in turn have advised the Affiant of the following:

(22) RAYMOND WILLIAM FERRITTO advised that he is a long-time associate of JAMES "THE WEASEL" FRATIANO^N from California, who, according to FERRITTO, is an LCN member. FERRITTO met with FRATIANO in a downtown Cleveland, Ohio, hotel in the late summer of 1976. During dinner, FRATIANO^N discussed in detail with FERRITTO the problems the Cleveland family of the LCN was having in controlling the town and the fight that the Cleveland LCN family and JAMES LICAVOLI, also known as JACK WHITE, was having with the JOHN NARDI-DANIEL GREENE group. FERRITTO was told by FRATIANO^N that LCN MEMBER ANTHONY "THE DOPE" DELSANTER had a "job" for FERRITTO. FRATIANO told

FERRITTO that he was leaving town in the morning, but that he would be coming back through Cleveland on his way to the West Coast in a short time and that he would arrange a meeting between FERRITTO and TONY "THE DOPE" DELSANTER.

(23) Approximately two weeks later (late summer of 1976), FERRITTO was telephonically contacted at his residence in Erie, Pennsylvania, by FRATIANO^N and told to drive to Warren, Ohio. That evening, FRATIANO^N, FERRITTO, and ANTHONY DELSANTER met at Cherry's Restaurant and Lounge in Warren, Ohio, to discuss the "job" that DELSANTER had for FERRITTO. FRATIANO^N left the company of FERRITTO and DELSANTER after stating, "You two got business to take care of. I'll see you later." DELSANTER told FERRITTO that the NARDI-GREENE faction was attempting to take over, that the "family" was being hurt both physically and in reputation by the violence in Cleveland, and that NARDI and GREENE must be killed. DELSANTER told FERRITTO that the "contract" would have to be okayed by the boss, JACK WHITE, but that FRATIANO^N had vouched for FERRITTO with DELSANTER. DELSANTER told FERRITTO at this meeting that he would be back in touch with him.

(24) Approximately one month later, believed to be September of 1976, FERRITTO was called to Warren, Ohio, by his close associate, RONALD CARABIA, also known as R.C., of Youngstown, Ohio. A meeting was again held at Cherry's Restaurant and Lounge. Attending this meeting were ANTHONY DELSANTER, JAMES LICAVOLI, also known as JACK WHITE, RAYMOND FERRITTO, PASQUALE CISTERNINO, also known as "BUTCHIE", and RONALD CARABIA. At this meeting, the "contract" for the "hit" on JOHN NARDI and DANIEL GREEN was given by JAMES LICAVOLI, also known as JACK WHITE, to RAYMOND FERRITTO. No specific fee was discussed except that LICAVOLI told FERRITTO, "You'd have all the money you need for a lifetime."

PROPERTY OF

(25) Following this meeting with DELSANTER, LICAVOLI, CISTERNINO, and CARABBIA, FERRITTO spent the next several months attempting to find the right opportunity to kill both JOHN NARDI and DANIEL GREENE. During these attempts, FERRITTO found that both NARDI and GREENE were extremely cautious because of other attempts made on their lives. FERRITTO learned that at least three attempts on NARDI's life, two by gunfire and one attempt to bomb the car at the Cleveland Airport, were unsuccessful. These attempts, however, had made both NARDI and GREENE wary of any stranger. FERRITTO also learned that they were both now carrying guns. FERRITTO advised that he had learned of these attempts on the lives of NARDI and GREENE through conversation with PASQUALE J. CISTERNINO.

(26) FERRITTO demanded a "sit-down" to discuss his situation and "his contract" on NARDI and GREENE. In the spring, believed to be April 1977, FERRITTO met with the top LICAVOLI lieutenant, JOHN CALANDRA, RONALD CARABBIA, and PASQUALE CISTERNINO in Warren, Ohio. At this meeting, JOHN CALANDRA stated that he was speaking for LICAVOLI and told FERRITTO that they wanted NARDI and GREENE killed more than ever, and that FERRITTO still had the "contract" but that so did others and whoever got them first would be paid. FERRITTO was told that he would receive \$20,000 for either hit or that he would be taken to Detroit by WHITE and made a member of "our thing", and given a 25 per cent cut of racket proceeds (including barbut, gambling and loan sharking) in the Warren-Youngstown-Cleveland area.

(27) FERRITTO advised that he had learned that JOHN NARDI had been killed in a bomb blast in May of 1977 and asked RONALD CARABBIA if the job had been done by "BUTCHIE" CISTERNINO, and CARABBIA told him that "Naw, 'BUTCHIE' belonged to 'the gang that couldn't shoot straight'."

(28) FERRITTO continued through the summer of 1977 to attempt to locate the perfect opportunity to kill DANIEL GREENE, but that due to circumstances, the perfect opportunity did not present itself. In August 1977, FERRITTO attended the funeral of ANTHONY "THE DOPE" DELSANTER and sought out the opportunity to discuss the situation with JACK WHITE. JACK WHITE reaffirmed the contract on GREENE and told FERRITTO that JOHN CALANDRA had been speaking for him and the offer to join "our thing" by being sponsored by WHITE was bona fide. FERRITTO complained of the lack of cooperation and assistance that he was receiving in his search for GREENE and was told by WHITE that he should contact JOHN CALANDRA whenever he needed anything as CALANDRA was WHITE's right-hand man.

(29) Over the course of the summer of 1977, FERRITTO met between 20 and 25 times with JOHN CALANDRA, and CALANDRA provided the following help per instructions of JACK WHITE. CALANDRA had the telephone at the DANIEL J. GREENE residence taped for lead purposes. FERRITTO often complained that the tapes were too old to help him as it took two or three days for the tapes to get in FERRITTO's hands. When FERRITTO complained to CALANDRA or to "BUTCHIE" CISTERNINO, both of whom provided the tapes to him, he was told that the tapes came through ANGELO LONARDO, also known as "BIG ANGE", from THOMAS SINITO.

(30) During May of 1977, PASQUALE CISTERNINO and ALFRED CALABRESE provided an automobile to FERRITTO, which was a 1973 blue Plymouth. This car was given to FERRITTO with the explanation that he could have it because it had been seen in the Cleveland area on several occasions while CISTERNINO was going after NARDI or GREENE.

(31) In June of 1977, FERRITTO complained to JOHN CALANDRA about his out-of-pocket expenses and insisted that he needed some expense money. Two days after this conversation with CALANDRA, RONALD CARABIA gave FERRITTO \$5,000 in cash and told him, "Here is the money CALANDRA gave me to give to you."

32. In ^{Sept} August of 1977, FERRITTO and CISTERNINO placed a "bomb box" in the bushes in front of DANIEL GREENE's apartment building. This box was made out of approximately 3/8 inch metal. The purpose of the box, according to FERRITTO, was that if they spotted GREENE coming or going from the apartment, that a bomb package could be placed in this metal container which was to serve as a blast director, as FERRITTO was told by CISTERNINO that dynamite blasts must be directed toward the victim.

33. On December 4, 1977, affiant was advised by Lieutenant EDWARD KOVACIC, Cleveland Police Department, that during the week of November 21, 1977, officers of the Cleveland Police Department found in the bushes outside the front door of the apartment building at 15500 Lake Shore Boulevard, Cleveland, Ohio, a box made of approximately 3/8 inch metal, closed on five sides, which had legs composed of 6 inch spikes, welded to the box. A plastic container containing nuts and bolts was found inside this box. Lieutenant KOVACIC indicated that such a box could be utilized to direct the force of explosives. *no liquor*

Affiant was advised by another Special Agent of the FBI on December 4, 1977, that, the Special Agent of the FBI knows through statements made by DANIEL GREENE and personal observation that for approximately two years prior to his death, DANIEL GREENE resided at 15500 Lake Shore Boulevard, Cleveland, Ohio.

34. RAYMOND WILLIAM FERRITTO continued to advise that on Monday or Tuesday, the first week in October, 1977, FERRITTO received a telephone call from RONALD CARABIA insisting that he come to Struthers, Ohio, to CARABIA's vending company, as something very important was up. FERRITTO drove to Struthers, Ohio, and was taken by CARABIA to a lake, believed to be Mosquito Lake, near Warren, Ohio. FERRITTO stated that this was an exclusive area and that you needed a plastic card to get through the gate and had boats and yachts along dockside. FERRITTO was taken to a boat believed to belong to a doctor where he met with JAMES LICAVOLI, aka

Jack White, JOHN CALANDRA, RONALD CARABIA, aka., R.C., PASQUALE CISTERNINO, aka., Butchie, and ANGELO LONARDO, aka., Big Ange.

35. FERRITTO advised that although the name of ANGELO LONARDO was familiar to him, this was the first time he had met LONARDO. On the boat, which was not taken out into the lake, a full discussion about the need to kill DANIEL GREENE took place with all those on the boat actively participating. Further, FERRITTO stated that he advised all those in attendance that he was dissatisfied with the lack of support he was receiving and that he did not wish to continue in his attempts to locate and kill DANIEL GREENE. In response to this, all those in attendance including ANGELO LONARDO advised him to continue his efforts and attempt to satisfy the contract. A tape recording taken from the GREENE wiretap was played, and it was noted that GREENE was to have a dental appointment with a dentist on Thursday, October 6, 1977. FERRITTO agreed to attempt to kill GREENE if he kept his dental appointment.

36. On October 6, 1977, Special Agents of the FBI were advised by Doctor ALFONSO A. ROSSI, 29001 Cedar Road, Lyndhurst, Ohio, that DANIEL GREENE kept a dentist appointment with Doctor Rossi at 2:00 PM on October 6, 1977.

37. FERRITTO further advised that on Wednesday, October 5, 1977 FERRITTO drove the 1973 blue Plymouth previously furnished him by PASQUALE CISTERNINO and ALFRED CALABRESE to Cleveland, Ohio, where he was met by CISTERNINO and taken to an apartment located near the Bishop Road exit off Interstate 90. This apartment building was described by FERRITTO as a high-rise with a fountain in the entrance way and the apartment number was 333. This apartment building was near a Cold Circle Department Store.

38. On December 1, 1977, Affiant was advised by Special Agent TED BAKER, FBI, that on December 1, 1977, he proceeded to Winchester Hills Apartments, 27400 Chardon Road, Willoughby Hills, Ohio, which is located near the Bishop Road exit off I-90. Located at this address is a 12-story apartment building with a fountain in the lobby. Personal observation by Special Agent BAKER revealed that apartment number 333 in that building is listed to Z. KALMAN.

PROPERTY OF

Special Agent BAKER further advised that a Gold Circle Department Store is located less than a half mile from the location of the apartment.

A review of records of the FBI, Cleveland Division, revealed that on September 17, 1975, PASQUALE J. CISTERNINO also known as "Butchie", and ZOLTON KALMAN, aka., Zolt, were both convicted in Federal District Court, Northern District of Ohio,

INFORMATION
ARCHIVES

before Federal District Court Judge THOMAS LAMEROS in connection with the operation of a gambling business located at the Library Club, Murray Hill Road, Cleveland, Ohio.

39. FERRITTO further advised that PASQUALE CISTERNINO left FERRITTO in this apartment over the night of October 5, 1977. CISTERNINO returned to this apartment on Thursday, October 6, 1977, with dynamite, switches, and other electronic equipment. CISTERNINO assembled a bomb in the presence of FERRITTO and explained in a step-by-step procedure how the "package" would be detonated by a remote control switch. FERRITTO and CISTERNINO left the apartment and CISTERNINO showed FERRITTO a Chevrolet Nova which had the door altered by someone who had welded a thick metal box in the door. CISTERNINO explained that this would work as a blast director similar to the box previously placed in front of the GREENE apartment building. The bomb package was carried in a shopping bag, and CISTERNINO drove the Nova and led FERRITTO and the Plymouth to the parking area of the office building which housed GREENE's dentist.

40. The Chevrolet Nova was parked nearby, and CISTERNINO and FERRITTO watched for GREENE to enter the parking area. GREENE was not seen driving into the parking area, but was observed exiting an automobile and walking into the building where the dentist's office was located. FERRITTO drove the Nova and parked it in an adjacent spot to the automobile GREENE had been observed exiting. CISTERNINO and FERRITTO loaded the bomb package into the welded box in the door of the Nova and armed the bomb by switching a switch to the on position.

41. FERRITTO then drove the 1973 blue Plymouth adjacent to a telephone booth where CISTERNINO pretended to be using the telephone. From that vantage point, FERRITTO and CISTERNINO observed the parking area waiting for GREENE to exit the building. When GREENE was observed approaching his car, CISTERNINO entered the back seat of the 1973 Plymouth and FERRITTO slowly pulled out into traffic. As GREENE entered his automobile, CISTERNINO detonated the bomb contained in the door of the Nova by activating

the area and returned to the apartment where CISTERNINO was "dropped off" and FERRITTO returned to Erie, Pennsylvania.

42. On Saturday, October 8, 1977, FERRITTO met with JACK WHITE in Warren, Ohio, where WHITE's promise of making FERRITTO a "member" was reiterated and WHITE said, "Now things maybe will settle down and we can make a buck."

43. During July, August, September and early October, 1977, on four or five separate occasions FERRITTO met with THOMAS SINITO at the Denny's Restaurant located on Euclid Avenue, adjacent to Interstate 90. On these occasions, according to FERRITTO, he and SINITO discussed the tape recordings being furnished to him by JOHN CALANDRA and PASQUALE CISTERNINO. FERRITTO advised that he complained to SINITO that the tape recordings made from DANIEL GREENE's telephone were ineffective since they were coming to him (FERRITTO) late, and he was unable to utilize them in his efforts to locate and kill DANIEL GREENE. In response SINITO advised FERRITTO that the tapes were under the control of ANGELO LONARDO and it was only after LONARDO listened to them that they were released for FERRITTO's use. According to FERRITTO he told THOMAS SINITO on an occasion shortly before the GREENE bombing that he did not want to do the job since he was getting no support, and he was unable to formulate a suitable plan to locate and murder GREENE. On this occasion, SINITO insisted that FERRITTO continue his efforts since, according to SINITO, DANIEL GREENE was attempting to locate and kill SINITO.

44. RAYMOND WILLIAM FERRITTO further advised that in early August, 1977, he attended the funeral of ANTHONY DELSANTER in Warren, Ohio. There he met and conversed with JIMMY FRATIANO, who was also in attendance. FRATIANO asked FERRITTO how he was progressing in helping to solve Cleveland's problem. FERRITTO advised FRATIANO that things were not going well. Specifically, he told FRATIANO that he (FERRITTO) was not receiving the support from the Cleveland family that he had been told would be given.

no tapes in July

According to tapes

ASSASSINATION
INVESTIGATION
ARCHIVES

45. FERRITTO further advised that on August 24, 1977, he came to Cleveland, Ohio, and met with JIMMY FRATIANO, THOMAS RICCIARDI, MICHAEL RIZZITELLI, also known as Mike Rizzo, MILTON HOLT, and ARCHIE ANDRIANO at a motel which he believes to be the Ramada Inn on Brookpark Road near Cleveland Hopkins International Airport. . . FERRITTO advised that this was primarily a social meeting; however, there was some discussion of JACK WHITE's "problem."

PROPERTY OF

45a. On December 4, 1977, RAYMOND FERRITTO advised a Special Agent of the FBI, who in turn advised the affiant, that in order to listen to the cassette tape recordings furnished to him by JOHN CALANDRA and BUTCHIE CISTERNINO, he purchased a cassette tape recorder sometime subsequent to the early part of August, 1977. FERRITTO advised that he purchased this tape recorder, manufacturer unknown, at what he believed to be the Uncle Bill's discount store on Lake Shore Boulevard, approximately seven or eight blocks east of the residence of a girl friend of DANNY GREENE. FERRITTO advised that he paid between \$23 and \$33 for this unit and recalled that it was black and measured approximately 6"x8"x2". He further advised that this unit could be operated on both standard AC current and batteries. FERRITTO further advised that after receiving several of the tape recordings he was unable to determine what was being said on these recordings through this machine as the speed of the recording was not compatible with the playback on his machine. FERRITTO stated that he discussed this problem with BUTCHIE CISTERNINO who subsequently advised him that he would discuss the problem with ~~GEORGE~~ MARCONI to "see what the problem is."

FERRITTO advised that sometime later he met BUTCHIE CISTERNINO at the residence of RONALD CARABBI^A in Struthers, Ohio, at which time CISTERNINO gave him another tape recorder similar in size, but he recalled that this one was manufactured by Sony. FERRITTO further stated that he utilized this tape recorder through the AC current at his hotel rooms which he utilized at the Ramada Inn, the Sheraton Inn, and the Holiday Inn, all in the vicinity of Euclid Avenue and Interstate 90 on the eastern outskirts of Cleveland, Ohio.

ASSASSINATION
INFORMATION
ARCHIVES

45(b) FERRITTO further advised that he was told by JOHN CALANDRA that JACK WHITE would review some of the tapes at his (JACK WHITE's) brother's house at Warren, Ohio. *JD*
Investigation conducted by other special agents of the FBI, who in turn have advised the affiant, that JACK WHITE's brother, JOHN LICAVOLI, lives at 1365 Westwood Avenue, Warren, Ohio. .
Special Agents of the FBI have seen JACK WHITE at his brother's residence as recently as October 13, 1977.

46. On December 4, 1977, affiant was advised by other Special Agents of the FBI that on August 10, 1977, United States District Court Judge ROBERT SCHNACKE, Northern District of California, entered an order authorizing the interception of wire communications over telephone number (415) 441-9580 for a thirty day period.

47. Pursuant to that Order, agents of the San Francisco, California Division of the Federal Bureau of Investigation monitored telephone calls to and from telephone number (415) 441-9580.

On August 23, 1977, at 5:48 PM, Pacific Daylight Time, the following telephone conversation was monitored. The individual referred to as FRANK in the following transcription has been identified by Special Agents of the FBI, San Francisco Division, as FRANK VELOTTA and the individual referred to as JIMMY in the following transcription has been identified by Special Agents of the San Francisco Division as JIMMY FRATIANO.

FRANK Nothing. We're just talking. Where am I at--
 I'm in Cleveland, where do you think I'm at?
 RON (unintelligible) how's the weather?
 FRANK How's the weather, it's always nice over here.
 RON How's business?
 FRANK Huh?
 RON How's business?
 FRANK How's business? Bad.
 RON (unintelligible)
 FRANK Huh? All right, why?
 RON (unintelligible)
 FRANK Jesus Christ, my my, hey that guy's coming in, uh, wait a second.
 JIMMY How's it going?
 RON All right.
 JIMMY (laughs) How's everything going?
 RON All right
 JIMMY Huh?
 RON All right.
 JIMMY Yeah.

ASSASSINATION
 ARCHIVES

RON Yeah.

JIMMY Listen, I'm going to be in tomorrow night at 5:10.

RON Up above.

JIMMY Tell Archie to pick me up.

RON Does he know where?

JIMMY Well, he knows where, yeah, you know that, that airport over there.

RON Yeah.

JIMMY The big one.

RON Oh, yeah.

JIMMY At 5:10. Tell him I'm coming in United.

RON United, 5:10, tomorrow afternoon.

JIMMY Yeah.

RON Okay

JIMMY All right

RON Yeah, that's fine.

JIMMY Get a hold of that friend, you know.

RON (unintelligible) yeah, well, he'll be there.

JIMMY The dark guy.

RON Huh?

JIMMY The dark guy.

RON Yeah.

JIMMY Will he be there?

RON Yeah.

JIMMY All right. He'll be there and we'll go right to his place.

RON (unintelligible)

JIMMY To his house, you understand?

RON Right

JIMMY Oh, okay. I'm going to have somebody with me.

RON (unintelligible)

JIMMY All right?

RON Yeah.

JIMMY Okay. Where is our friend from Erie?

RON He'll be with me tomorrow.

JIMMY Will he?

RON Yeah.

JIMMY Okay, then, uh...

RON (unintelligible) ARCHIE'll let you know, you know?

JIMMY Okay, then, we'll get a hold of you sometime tomorrow night.

RON He'll know where we're at.

JIMMY Well, why don't, why don't he come in town?

RON He is.

JIMMY Huh?

RON He is.

JIMMY Tomorrow?

RON Yeah

JIMMY Okay, then, I'll be over there then.

RON Okay.

JIMMY All right, buddy.

RON All right.

JIMMY Bye.

48. The above telephone call was outgoing from (415) 441-9580.

The individual on the receiving end of the call referred to in the transcript as RON, is believed to be RONALD CARABIA. The telephone number called, according to a mechanical device which was installed pursuant to an order of Judge SCHNACKE on August 10, 1977, the purpose of which was to identify the telephone numbers called from the monitored telephone, was (216) 755-9585. Records of the Ohio Bell telephone Company and independent investigation by the Federal Bureau of Investigation indicate that (216) 755-9585 is a non-published listing to RONALD CARABIA, 2277 Knollwood Drive, Struthers, Ohio, formerly 124 Knollwood Drive, Struthers, Ohio.

49. On August 24, 1977, a physical surveillance conducted by Special Agents of the FBI, the results of which were made known to the affiant, revealed that JAMES FRATIANO arrived at Cleveland, Ohio, from San Francisco, California via United

ASSASSINATION
ARCHIVES

Airlines flight number 72. FRATIANO was accompanied by other individuals and was met by ARCHIE ANDREANO.

50. Affiant states that from August 24, 1977, until October 10, 1977, a twenty-four hour surveillance was conducted in the vicinity of 12301 Fairview Court, Cleveland, Ohio, by Special Agents of the Federal Bureau of Investigation, the results of which were made known to affiant which revealed the following: September 2, 1977

10:58 p.m. - JAMES LICAVOLI, aka., Jack White, arrives at 12301 Fairview Court, Cleveland, Ohio, on foot from the direction of Murray Hill Avenue and enters the side door of that residence.

11:47 p.m. - A white male, balding, driving a white vinyl over light blue General Motors product, bearing current Ohio license DZ 653, parks in the driveway of 12301 Fairview Court. The driver exits the vehicle and enters the residence.

September 3, 1977

12:10 a.m. - White male driver of DZ 653 exits the residence, enters DZ 653 and exits the area.

September 4, 1977

12:22 p.m., - A white over blue Cadillac, current Ohio license DZ 653, parks in the driveway of 12301 Fairview Court. A white male, white hair, balding with a red shirt, believed from previous observation of photographs to be identical to JOHN CALANDRA, exits DZ 653 and enters the residence.

12:31 p.m. - JAMES LICAVOLI, aka., Jack White, exits 12301 Fairview Court, Cleveland, Ohio, and enters the passenger side of DZ 653 at the same time the individual believed to be JOHN CALANDRA exits the residence and enters the driver's side of DZ 653. CALANDRA and LICAVOLI are observed exiting the area. A check of the Law Enforcement Automated Data System by Special Agent GEORGE E. GROTZ on September 4, 1977, revealed that current Ohio license DZ 653 is listed to the Royal Machine Tool Company, 700 East 163rd Street, Cleveland, Ohio, on a 1976 Cadillac, four-door sedan. Investigation conducted by

FBI CLEVELAND
RECEIVED
SEP 11 1977

other Special Agents in the FBI, who in turn have advised Special Agent GROTZ, who has advised affiant, revealed that the President of Royal Machine and Tool Company is JOHN PHILLIP CALANDRA who, according to the most recent published records, resides at 700 Quilliams, Cleveland Heights, Ohio. Further, Special Agent GROTZ advised affiant that a spot check of the residence at 700 Quilliams conducted by other Special Agents of the FBI, who in turn advised Special Agent GROTZ, revealed that between the hours of 4:20 p.m. and 5:30 p.m., on September 4, 1977, the white over blue Cadillac, bearing current Ohio license DZ 653, was observed parked in the driveway of the residence at 700 Quilliams, Cleveland Heights, Ohio.

October 7, 1977

12:50 p.m. - JACK WHITE is observed to enter the residence of
12301 Fairview Court, Cleveland, Ohio.

1:36 p.m. - JOHN CALANDRA arrives at 12301 Fairview Court on foot.

4:45 p.m. - CALANDRA exits 12301 Fairview Court.

October 8, 1977

10:53 p.m. - JACK WHITE is observed to enter the residence of
12301 Fairview Court.

11:45 a.m. - JOHN CALANDRA is observed to enter the residence.

2:28 p.m. - CALANDRA is observed to leave the residence.

October 9, 1977

10:41 a.m. - JACK WHITE is observed to enter the residence of 12301
Fairview Court.

11:29 a.m. - JOHN CALANDRA is observed to enter the residence.

3:53 p.m. - JOHN CALANDRA is observed to exit the residence.

31. On August 26, 1977, Chief Judge FRANK J. BATTISTI, United States District Court, Northern District of Ohio, entered an order authorizing interception of oral communications occurring in the premises located at 12301 Fairview Court, Cleveland, Ohio, for a thirty-day period.

52. At 1:35 p.m., September 24, 1977, JAMES T. LICAVOLI, also known as Jack White, was observed in front of the residence at 12301 Fairview Court, Cleveland, Ohio, exiting a yellow Cadillac automobile bearing current Ohio license plates NK 860. He was then immediately observed entering the residence of 12301 Fairview Court, Cleveland, Ohio, by the side entrance. On September 24, 1977, according to other Special Agents of the Federal Bureau of Investigation, who in turn advised the affiant, at 7:17 p.m., a white male entered the residence of 12301 Fairview Court, Cleveland, Ohio. This individual was described as being approximately 55 years old, 5'8" to 5' 9", 150 pounds, thin, gray hair. At 7:19 p.m., a white male, identified by the surveilling Agents as STEVE CALA, departed the residence of 12301 Fairview Court, Cleveland, Ohio. At 7:38 p.m., PAUL A. CIRICILLO, also known as Paul Lish, departed the residence of 12301 Fairview Court, Cleveland, Ohio, and entered a white Ford LD, current Ohio license AD 7047, which at the time was parked in the driveway of the residence. LISH was observed exiting the area in this vehicle.

53. On September 24, 1977, between the hours of 7:31 p.m. and 8:17 p.m., the following conversation between two individuals was intercepted at 12301 Fairview Court, Cleveland, Ohio. Special Agent GEORGE E. GROTZ states that he has reviewed this conversation in excess of 25 times and advises the affiant that the following is the truest account of that conversation:

"JOHNNY NARDI...that cocksucker...if the guy...is good, you know we'll send a letter to the police department telling them what do you want...best forget about it. You know, the only mistake I made is when I left my man out at the Innerbelt...I should never have told JOHNNY about it...I shoulda gone ahead and done it myself and...who the hell is gonna hassle a cop? Nobody. Kids. That's the way...you wanna be honest and ah...how the hell did this guy ever come in the picture...you can't get near him...they got permits to carry guns...you know the Irish. If he says I'll be there at

ARCHIVES
INFORMATION

three o'clock...who gives a shit. You wait, you wait and wait and you get tired of waiting. He don't keep no time...he goes down... in the wintertime he goes to...Oh, he's gotta make a mistake. He gotta go sometime. I hope he goes back to Texas so they can kill him. Where? Texas...cocksuckers on the West Side, they all go with him. You know them...MC TAGGART and all. That guy who used to work for you at the barbut game.. He don't go with 'em. You know that guy... that you're the one who give the job. No he was working with us. I mean you're the one who give the job out...what's his name...yeah... he used to work for FRANK...he used to work for the barbut game... JOHN NARDI's the one who opened the barbut game. He said, boy, the Irishman wanted to give me a piece...I don't want nothing. You get the idea the lie they was...you know when he was talking to you...NARDI...he would never look at you. He was a phoney motherfucker...He got to smirking. He never did try to get in touch with them little what's his name, TONY...tells me you want anything done, you get a hold of JACK. TONY DELSANTER...before he used to play golf he was a phoney mother-fucker...yeah, it all comes back to you...what are you gonna do with any kind of guy...he coulda, he was going to get in, too. He had something on his mind...I don't know what he had on his mind. He had something on his fuckin mind. Maybe it was not the bombing...shook everybody down...killed a lot of people..."

54. On September 29, 1977, Special Agent THOMAS J.

WILSON observed a photograph of JOHN PHILLIP CALANDRA and advised that the individual identified as JOHN PHILLIP CALANDRA in the photograph, to the best of his knowledge, appears to be identical to the individual who entered the residence of 12301 Fairview Court, Cleveland, Ohio, at 7:17 p.m., on September 24, 1977.

55. Affiant further states that he has reviewed the surveillance log containing the above information and, based upon a review of that log, states that JAMES T. LICAVOLI, also known as Jack White, and the individual identified as JOHN PHILLIP CALANDRA were the only individuals in the residence at the time the above-described conversations took place.

PROPERTY OF

56. Special Agent GEORGE E. GROTZ advised the affiant that based upon personal investigation and investigation conducted by other Special Agents of the Federal Bureau of Investigation, who have in turn advised Special Agent GROTZ, that the following statements summarize the above conversation set out in paragraph 53.

JAMES T. LICAVOLI, also known as Jack White, and the individual identified as JOHN PHILLIP CALANDRA are initially discussing JOHN NARDI, both of them speaking in derogatory terms of NARDI. There is reason to believe they are discussing their involvement in the bombing of JOHN NARDI on May 17, 1977, when the conversation, "You know the only mistake I made is when I left my man out at the Innerbelt. I should never have told JOHNNY about it...I shoulda gone ahead and done it myself and...who the hell is gonna hassle a cop?" is overheard. Both JAMES T. LICAVOLI, also known as Jack White, and the individual identified as JOHN PHILLIP CALANDRA then discuss "the Irishman" and that they believe that "the Irish" have permits to carry guns. It is also clear to the affiant that JAMES T. LICAVOLI, also known as Jack White, and the individual identified as JOHN PHILLIP CALANDRA are discussing the possibility that "the Irishman" will "make a mistake" and "he gotta go sometime." These statements are believed by the affiant to be a reference to an anticipated trip by "the Irishman" to Texas, and the phrase, "I hope he goes back to Texas so they can kill him" is heard and is believed to refer to associates of JAMES T. LICAVOLI.

The preceding paragraphs, it is submitted, sets forth probable cause to believe that JAMES T. LICAVOLI, also known as Jack White; JAMES T. FRATIAND, also known as "Weasel;" JOHN P. CALANDRA; ANGELO LONARDO; RONALD CHABOZZA; PAULIALE J. CISTERINO, also known as "Butchie;" THOMAS JAMES SINITO; RAYMOND W. FERRITTO, and ALFRED S. CALABRESE, also known as "Allie" and others as yet unknown, are associated in fact in an enterprise as defined in Title 18, United States Code, Section 1961 (4), the activities of which affect

ASSASSINATION
ARCHIVES

Mr. CORNWELL. Much of what you told us, Mr. Salerno, relates to the prohibition era, which, of course, we may be familiar with from television, Al Capone, Elliot Ness, that sort of thing. You also mentioned the FBI just last year filed an affidavit indicating the existence then of the same phenomenon. However, we are most interested in the 1960's, the early 1960's. What evidence is there during that period that the La Cosa Nostra was a viable entity?

Mr. SALERNO. Well, the Apalachin meeting that I mentioned certainly raised some 1,000 questions in the minds of the public, the press, in the minds of the police and in the minds of other Government officials. I think in the 20 years since that occurrence we have answered many of those questions. One of the reactions that took place in Government as a result of the Apalachin meeting was a reaction within the FBI. At the suggestion of Mr. Clyde Tolson, Director Hoover commissioned their research unit to prepare two monographs, one on the Mafia in Sicily; the second on the Mafia within the United States.

Mr. Hoover also caused to be created within the FBI something that came to be known as the top hoodlum program. The first targets were the people at the Apalachin meeting, but it was not restricted to them; it was expanded to include many of their criminal associates. That was an ongoing program in which the various field offices of the FBI throughout the United States were required to assign personnel to keep abreast of these criminals, their activities, of course, with a point of view of possible prosecution, but certainly with an intelligence gathering operation to find out more about them, what they were doing and what could be done about it.

Mr. CORNWELL. By 1963, had the FBI reached any conclusions as to the scope of La Cosa Nostra on a national level?

Mr. SALERNO. Yes; very definitely. The top hoodlum program in 1961 with the advent of the Kennedy administration under the leadership of Robert Kennedy as the Attorney General, somewhat escalated programs throughout the Department of Justice and in other Federal agencies.

In the files of the FBI, you will note that it is at that time period where the top hoodlum program becomes something else, it is then labeled the criminal intelligence program. There is in the file under the date of June 21, 1961, a directive from Mr. Hoover to 10 field offices of the FBI to create special squads where the total assignments of the agents will be to the development of informants, people who can tell them about this particular criminal organization.

The FBI had, under its top hoodlum program in 1959, begun the installation of some electronic surveillances. The files of the FBI reflect that on such an electronic surveillance where the target was Sam Giancana in Chicago that he is making some reference back to this Apalachin meeting. He indicates that there is in existence a small control group that establishes policy and makes decisions. The electronic surveillance indicates that he, himself, is a member of that group. He uses the term "the commission," to describe that group. He names a number of other people who have membership in the commission. That caused the opening of a file in the FBI which was initially labeled "The Commission, et al." That is the same file that I have made reference to under its current title La

PROPERTY OF

Cosa Nostra file. That file was begun in 1959. So we have some 20 years of evidence gathering, a great deal of escalation, more electronic surveillances in 1961 than there may have been prior to that. Certainly the application of greater resources of manpower are manifest in the files of the FBI.

Confidential sources of information in FBI files are labeled by numbers, CH-T-1. CH designates the field office of Chicago. T-1 would be an important and principal source of information in that file in the Chicago area. You can see a great expansion of the T numbers, the number of sources that the FBI is getting information from in that file expands greatly in 1961. So that by 1963, the FBI has a very complete and a very accurate picture of who is doing what and where they are doing it. I would suggest to you, and for the consideration of this committee, that the picture that the FBI had and could have in 1963 is greater than that which we probably have today.

Mr. CORNWELL. You have caused an exhibit to be made so that you can illustrate the conclusions that the FBI had reached by 1963; is that correct?

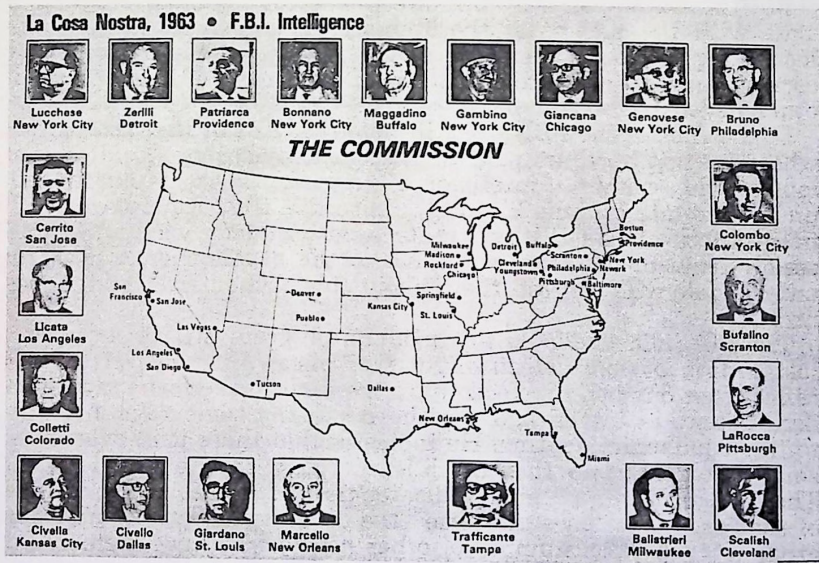
Mr. SALERNO. Yes; I do.

Mr. CORNWELL. We have marked that as JFK exhibit F-547B for identification. May we have that displayed and admitted into the record at this time, Mr. Chairman?

Chairman STOKES. Without objection, it may be entered into the record.

[JFK exhibit F-547B was marked for identification and entered into the record.]

ASSASSINATION
ARCHIVES



JFK EXHIBIT F-547B

Mr. SALERNO. Mr. Cornwell, could we have the other one, the La Stella meeting?

Mr. CORNWELL. May we have JFK exhibit F-550 also admitted into the record at this time?

Chairman STOKES. Without objection, it will be entered into the record at this point.

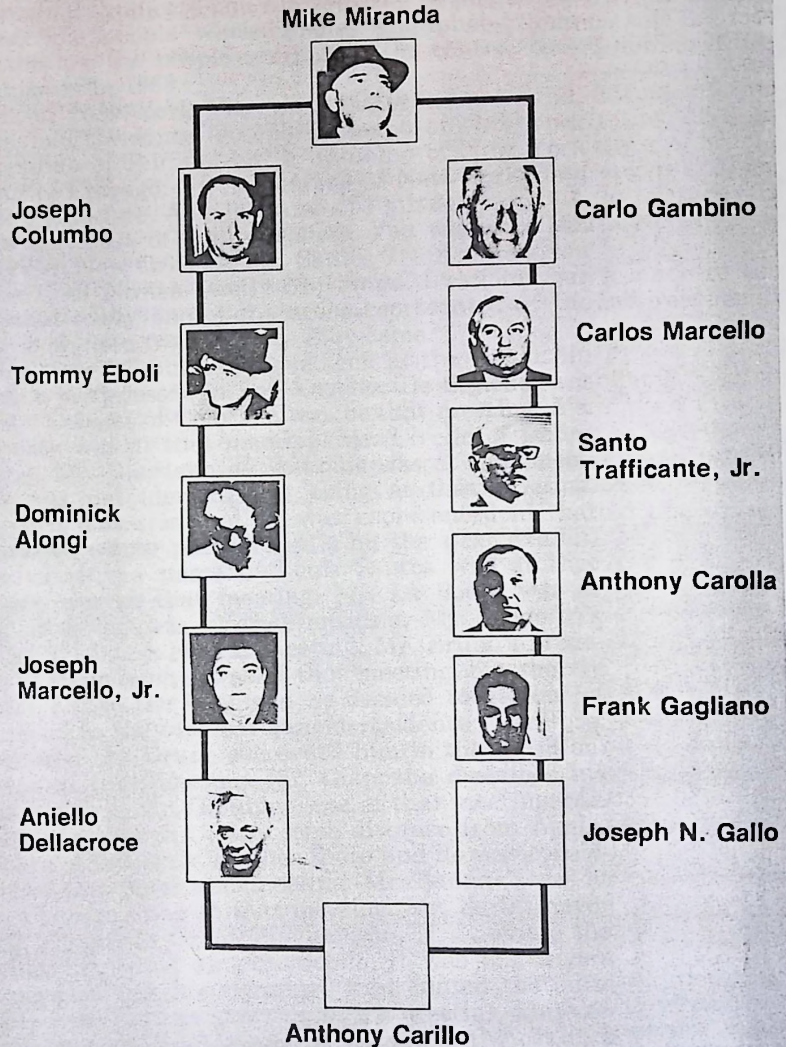
[JFK exhibit F-550 was admitted into the record.]

PROPERTY OF

Seating Arrangement at La Stella

September 22, 1966

ASSASSINATION
ARCHIVES



JFK EXHIBIT F-550

Mr. CORNWELL. Perhaps, Mr. Salerno, if you could, would you explain what conclusions the FBI came to by 1963 based upon the

extensive program of surveillance, physical, and electronic that you just described?

Mr. SALERNO. Yes; this is the map of the United States. The various locations show where the FBI established that organized crime families, which is the term used for the particular subdivisions within this criminal syndicate and representing in themselves criminal syndicates. The people whose names and photographs appear across the top are the people serving on the control body known as the commission in 1963.

Thomas Lucchese in New York City; Joseph Zerilli in Detroit, Raymond Patriarca in Providence; Joseph Bonnano of New York City; Stefano Maggadino of Buffalo; Carlo Gambino of New York City; Sam Giancana of Chicago; Vito Genovese of New York City; and Mr. Trafficante's associate, Angelo Bruno of Philadelphia.

The other photos are those of family leaders. You will note Mr. Carlos Marcello here in New Orleans. Mr. Santos Trafficante given as the leader of La Cosa Nostra family in Tampa. I call to your attention the fact that every one of the areas represented at the Apalachin meeting is an area from whence they came.

Mr. Cerrito of San Jose is known to have been at the Apalachin meeting. Mr. Licata's predecessor in Los Angeles, De Simone, was at that meeting. Mr. Colletti of Colorado was at that meeting. Mr. Civella of Kansas City was at that meeting. Mr. Civello of Dallas was at that meeting. Mr. Giardano of St. Louis was at that meeting. Mr. Marcello was not identified as being at that meeting. Later FBI intelligence indicates that he was represented in that instance by his brother whose photograph is on the next exhibit.

Mr. Trafficante, using the name of Louis Santos was at that meeting. Mr. Scalish was at that meeting. Mr. La Rocca was at that meeting. Mr. Bufalino was at that meeting. Mr. Colombo's predecessor, dead by 1963, was at that meeting. Mr. Bruno's predecessor, Joseph Ida of Philadelphia was at that meeting, but shortly thereafter he couldn't take the heat and he decided to get out of the kitchen and moved to Italy for permanent residence, therefore, making a seat open and Mr. Bruno succeeded him in that position.

Mr. Genovese was at that meeting. Mr. Giancana described his attendance at that meeting; Mr. Gambino was at that meeting; Mr. Maggadino of Buffalo, although that is some distance from Apalachin, N.Y., his sphere of influence reaches there and he was considered to be the host of that particular meeting. Mr. Bonnano was at that meeting. Mr. Patriarca was at that meeting. Mr. Zerilli never got to the meeting. He got as far as Binghamton, N.Y., where the FBI established that he rented an automobile. It was his drivers license that was used, it was his signature that rented the automobile. He probably heard of the aborting of the meeting while en route and did not return to Binghamton but returned the car to a Hertz office in Brooklyn and then went back home. So there is no question that it is this organization that was having a meeting back in 1957, by 1963, that's an established fact that I don't consider debatable. They established that there were families, that this was the ruling body of the commission, that those families that do not have a leader who is on the commission can have their interests represented for them before the commission.

PROPERTY OF

The Milwaukee family, Madison, Rockford are really considered to be satellites to the Chicago organization. So it is the leader from Chicago who would represent their interests. On the far west coast we know that the southern California family would be represented on the commission through Mr. Lucchese; San Francisco and San Jose represented on the commission by Mr. Bonnano.

The FBI's knowledge was very, very complete. Their establishment of the group, hierarchical structure and methodology was complete. I mentioned the La Stella restaurant. I would like to point out for the committee that the seating arrangement here—there were, of course, no seating cards on that luncheon table—yet, the seating arrangement is as formal as it could be if the Chief of Protocol for the State Department had, in fact, put place cards there. Mr. Mike Miranda is at the top—

Mr. CORNWELL. Mr. Salerno, before you tell us about the particular seating arrangement, the committee may not be familiar with the background of that meeting and how it was discovered and the extent it was discovered. Would you just give them a brief background?

Mr. SALERNO. I think that meeting was discovered and how it was discovered is a very fine example of good police intelligence work. Mr. Lucchese one of the leaders of one of the five families located in the city of New York had been stricken and taken ill. We were able to learn that the prognosis was very bad for him, that he had an inoperable brain cancer and could not be expected to live more than 3 to 6 months, which turned out to be the case in fact. The assignment given within my unit was "OK, if what we believe is true and he is, in fact, the leader of a Cosa Nostra family, what should happen next?" We felt that we could determine that some people would have to do different things, the people who ordinarily, the very limited number of people who would meet with and report to the family leader would now have to report to someone else. So one intelligence target was who will that next person be. And we were able to come up with a very well educated guess which, over a period of years, was a sound one.

We established that Mr. Carmine Tramunti would be the leader of that family. I might add Mr. Tramunti is now in Federal prison doing a 15-year term for dealing in heroin.

The second prognosis that was made, the projection from analysis was that if, as the FBI and other law enforcement agencies had determined, that the methodology is that when one family leader passes on or is no longer the family leader, that the person who will be nominated from within his family group must have the advice and consent of this board before that nomination is, in fact, confirmed, that there would have to be a meeting of top leadership people in La Cosa Nostra. What we did in the New York City Police Department was target several people who would most likely attend such a meeting.

One of them was the host here, Mike Miranda. He was at that time one of the troika who was minding the store for Vito Genovese doing time for heroin. We decided to watch Mike. It was while we were in the process of doing that, that we saw him go to this restaurant. We saw Mr. Carlo Gambino arrive with an associate, Joseph Gallo. Fortunately, one of the young officers assigned to

ASSASSINATION
INVESTIGATION
ARCHIVES

that had seen Mr. Trafficante on one occasion and knew him by sight. When he saw an out of town leader he immediately did what all good cops do, you call the boss and find out what you should do. We contacted the prosecutor who indicated that he had a current matter before a grand jury where these people could very well offer some evidence or advice to the deliberations of that grand jury.

He instructed us to bring them all in so that they could be made material witnesses, and that was done.

I recall that the court fixed the sum of \$100,000 bail for each of the 13, and a bail bondsman came in in very short order and posted \$1.3 million bail. He was asked to inform the court for the record what collateral, if any, he had obtained and he said that he was out on the limb for \$1.3 million on the basis of their promise to pay.

Mr. CORNWELL. So after feeling there must have been a meeting coming, you went to the restaurant and you found the individuals inside seated in a pattern that is demonstrated by the exhibit?

Mr. SALERNO. Exactly as it is shown here, he is an acting family leader and was the host, so he sits at the top of the table. Those people on his immediate right and left, Carlos Marcello, Santos Trafficante, Tommy Eboli, Joseph Columbo, Carlo Gambino are family leaders. It would appear those on the next level of hierarchy sit at the other end of the table. This is Anthony Carolla.

In all likelihood he is the person who would pick up the check. The bosses never pay when these people get together. It is always the henchmen. This man is the underboss to Carlo Gambino. This man is the counselor to Carlo Gambino. Those peers are sitting together here.

This is Anthony Carolla and a complaint that he might have had with Mr. Marcello is one of the best educated guesses as to the reason for the meeting. This gentleman is from New Orleans and this is Mr. Marcello's brother. Dominick Alongi usually drives Tommy Eboli. He is probably here because he is Frank Gagliano's cousin and this is an opportunity for him to reunite.

Mr. CORNWELL. You told us what the conclusions were of the FBI by 1963 as to the national configuration of the Cosa Nostra, and you told us that the conclusions appear to you to be very reliable, having been based on physical and electronic surveillance. Would you tell us in more detail what the nature of that electronic surveillance was?

Mr. SALERNO. Yes, sir. In the staff work that was done for the committee we know that the electronic surveillance was national in scope. We know that there were electronic surveillances in the State of California. We know that there were electronic surveillances in the Middle West. We know that there were electronic surveillances in New England and a great many in the New York and New Jersey areas, as well as the one that I read to you, which shows coverage of some kind in the State of Florida.

The electronic surveillance was national in scope.

There is a development of live informants, that program became known as the TE informants—top echelon informants. I have been able to determine from my analysis of the records in which it is indicated that a top echelon informant would be considered to be a person who was in fact himself a member of the organization. So

that the FBI was able in a relatively short period of time to "turn around" people, was the professional expression used, and their information was coming from directly within the organization by people who were themselves members.

In addition to that, I think we would add that the FBI maintained liaison with other Federal agencies that had interests in these individuals and the many local police departments, so that there was an accumulation of a great deal of data upon which they could establish their findings.

Mr. CORNWELL. With respect to the electronic surveillances, are you aware of any official statement that the Department of Justice or the FBI had made concerning the scope and use of an electronic surveillance during that period?

Mr. SALERNO. Yes, sir. I have an excerpt from a submission that was made by the Department of Justice in a legal matter. The case was *Black v. The United States*, which was being heard by the Supreme Court. At that time, it was indicated in a memorandum filed by the Department of Justice, I am quoting now:

Under departmental practice in effect for a period of years prior to 1963, and continuing into 1965, the Director of the Federal Bureau of Investigation was given authority to approve the installation of devices such as that in question for intelligence and not evidentiary purposes, when required in the interests of internal security, including organized crime, kidnappings and matters wherein human life might be at stake.

Mr. CORNWELL. You told us about the extent of the surveillance and the conclusions of the FBI, but more specifically, is there direct evidence which was obtained from the surveillance which would specifically confirm the existence of La Cosa Nostra during the time period?

Mr. SALERNO. Yes; I think what was then a unique occurrence that took place in 1963, enabled us in our research work to see that very clearly.

In April of 1963, there was a member of the Carlo Gambino La Cosa Nostra family named Carmine Lombardozzi. His father had passed away, and as was not unusual in those days, law enforcement people were going to cover the wake and the funeral to see what kind of intelligence they might gather from who came, who opened the car door for whom, who jumped up and gave his seat to the other guy, and that type of thing.

As the funeral cortege was entering the church for appropriate services, one FBI man, who was present on the scene, with an attaché case, that was in fact a camera, was assaulted by two young men, or three young men, who broke from the funeral cortege. The FBI man was assaulted while he lay on the ground with both fists and feet. His weapon was taken from him and the youths joined the group of people walking into the church.

There were some negotiations with the pastor of that church, and he asked for 10 minutes to look into the matter and he came out with the FBI man's pistol, which was returned to proper authority.

That occurrence was rather unique. It seems to be a break in well-established, understood, though never spoken or written rules. The rule seemed to be between law enforcement and people in organized crime that we were all total professionals and that no

ASSASSINATION
ARCHIVES

feelings were to be personalized. Therefore, law enforcement involved in that field would consider it an abrogation of the rules if some personal animosity were directed at themselves, members of their family, and organized crime expected the same thing. They expected their wives and their children not to be bothered in any way by law enforcement unless they were engaged in criminal activity. That was a détente. It was an understanding which seemed to have been broken.

That was a matter of some concern to people in the FBI and other law enforcement people, that were aware of the thing.

What followed I think we can get right from the lips of people involved in organized crime.

I have three electronic surveillances which will indicate what resulted therefrom, and more important, it will show you a communications network around the United States. That single occurrence and what followed is going to be described to you now from three electronic surveillances, one in Brooklyn, one in the city of Philadelphia, and one as far away as Buffalo.

I think this is a good time to put into the record the caveat that in looking at electronic surveillances one must deal with them professionally. You just have to understand that it is human beings talking. Some human beings brag, some human beings will escalate a story in the retelling. You will see that happening here in one instance.

So I think there has to be a great deal of care, caution, and responsibility exhibited in reviewing electronic surveillances of this type. The first was from an electronic surveillance pursuant to a court order which was executed by the members of the New York City Police Department in May 1963. The occurrence had taken place in the third week of April. This is within a matter of weeks. The people involved, Peter Ferrara, who was a Capo, and the Carlo Gambino LCN family, and Michael Scandifia, who at that time is an acting Capo.

MIKE. He was told specifically * * *

PETE. To come and see me?

MIKE. You're a captain. No, they don't want to come to you. They don't want to come to you to embarrass you with your daughter.

PETE. Who did they tell that to?

MIKE. They told that to Freddy.

PETE. Yeah.

MIKE. They don't want to embarrass you. Three of them called. To him. They said, "We don't want to go to Petey Pumps, we don't want to embarrass him with his daughter."

PETE. They already did.

MIKE. They already went to you * * * er * * * this week * * * this is the bullshit.

PETE. Yeah.

MIKE. They don't want to give you no * * * in other words, they are telling you they don't want to embarrass you. In other words, they won't go to the convent. Well, I would say, right now, they are giving you the zing. You want us to go to the convent? You want us to embarrass you? Well, then, see that the right thing is done.

PETE. Yeah.

MIKE. Actually, what it boils down to, they're looking to use a stick. "But now we'll go on midnight raids. We'll do this, we'll do that, we'll do the other thing. You're a Captain. You belong to Carl's Family".

PETE. Well, previous to that he hands me Carlo's picture. "You know him?" I said, "Sure I know him". "How long you know him?" "I know him twenty, thirty years".

MIKE. They didn't expect you to say nothing.

PETE. "Can you tell us anything about him?" "The only thing I could tell you about him is that he is a business man, been in business all his life. Brought up four kids. They had a good education. They're all in business. They all went to college and married a profession. I said, what else could you ask for? He's got a nice family".

See what they do * * * they want to get a message through. I mean get a message through someplace. There's no question about it.

MIKE. They want to put the heat on you, me.

PETE. Yeah.

MIKE. Because here's the proof of it. They've gone to every Captain.

PETE. Yeah.

MIKE. And they call them "Captains". One guy said, "Foreman". And the other guy said "Capo Regina". I mean they're going right to each head. To the head of everybody they're going to. But for them to say this, when he told me this, I said "Jimmy, I think he already saw them".

PETE. Yeah.

MIKE. "I think he already saw them", I said. Now to put the heat on him to go to his daughter, I said, this don't make sense to me. I said, "Where the (obscene) does this come into the picture?" Now they don't want to embarrass you.

PETE. What are they going to embarrass me for? What can they do? Go up there?

MIKE. Well, God forbid! They can't * * * they can't throw her out.

PETE. No.

MIKE. They couldn't throw Albert's brother out. How are they going to throw her out?

PETE. Nah. They can't throw her out.

MIKE. Embarrassment, that your daughter is a nun. I mean, Jesus Christ! it's supposed to be an honor.

PETE. They can't do nothing. They won't do nothing.

MIKE. Dirty (obscene)! Now that they bring out everything Pete, the Cosa Nostra is a wide open thing.

PETE. Yeah.

MIKE. It's an open book.

PETE. It's an open book.

MIKE. Pete, you know as well as I do, familiarity with anything whatsoever breeds contempt. We've had nothing but familiarity with our Cosa Nostra * * * if it brings up sides what the hell are we supposed to do? I only know one thing Pete. The Cosa Nostra is the Cosa Nostra. You just do what the (obscene) bosses tell you!

May 20, 1963, and the target of the electronic surveillance by FBI is Angelo Bruno in Philadelphia. He is attending a meeting with Joseph Magliocco, who is at that time trying to take over a family after the death of his brother-in-law, as well as with Sal Profaci, Peter Maggio, and Salvatore Maggio. The two Maggios are related to Angelo Bruno.

Bruno describes FBI tactics used on Carlo Gambino, indicates that they named all of his, Gambino's, Capos for him. They named Joe Biondo as the underboss, Joseph Riccobono as family counselor, and they said:

These are your amici nostri, you are the Representante, you are the boss.

The F.B.I. asked, "Did you change the laws in your Family, that you could hit F.B.I. men, punch and kick them? Well, this is the test, that if you change the laws, and now you are going to hit F.B.I. men, every time we pick up one of your people we are going to break their heads for them".

And really they picked up one guy, they almost killed him, the F.B.I. They don't do that, you know. But they picked up one of his fellows and they crippled him.

They said, "This is an example. Now, the next time anybody lays a hand on an F.B.I. man, that's just a warning. There is nothing else we have got to tell you. And they went away.

On June 3, 1963, in Buffalo, N.Y., Stefano Maggadino is speaking on an FBI electronic surveillance. Present are Stefano Maggadino and several top ranking members of his La Cosa Nostra family. Mr. Maggadino is speaking:

ASSASSINATION
ARCHIVES

They know everybody's name. They know who's Boss. They know who is on the Commission. They know Amici Nostro [the Password, Our Friend].

The FBI said, "What was your caporegime doing here?" "What did he come to tell you?"

11, 12, 13, were massaged [beaten up].

To Carlo Gambino they said "This is your underboss, this is your caporegime, this is your consigliere.

And one of the other persons present says: "They talk as if they belonged."

There is an escalation from one person—a Carlo Gambino adherent beaten to 11, 12, and 13. I don't think that is explainable by the passage of time. It was only one I have on somewhat reliable authority.

We also have other types of conversations. Frank Nicoletti speaking to Angelo Bruno, December 22, 1962: "It is a wonderful thing, La Cosa Nostra."

To give you an inside view of organized crime and its totality and its size. Meyer Lansky and his wife, on May 27, 1962, were watching a TV show in which one of the panelists referred to organized crime as second only in size to the U.S. Government, and Meyer Lansky turns to his wife and says, "It is bigger than United States Steel."

I think the best evaluation of the FBI's electronic surveillance program is in a memorandum which was written by Mr. Courtney Evans. At that time Mr. Courtney Evans was in charge of the Special Investigation Division of the FBI which concerned itself directly with organized crime, and Mr. Evans on August 21, 1964, wrote a memorandum to Al Belmont, who was the Associate Director of the FBI, his superior in rank, and who covered in his authority the entire General Investigative Division of the FBI. It reads thus:

Milwaukee, Madison, Springfield, Rockford, Kansas City, and St. Louis, are strictly answerable to the leadership of the Chicago family in any major policy decisions or significant problems. Frank Balistreri of Milwaukee did a favor for Joe Bonnano and this angered Sam Giancana when he learns of it because of the commission's disfavor with Bonnano.

We are probably in the unique position of better understanding Giancana's reaction than was Balistreri.

That is actually a fact. Mr. Bonnano at this time was in some difficulty with his peers on the commission. Mr. Balistreri, though a family leader in Milwaukee, was not aware of everything being discussed and considered by the commission at that time, but the FBI was. So they were actually in a position to literally be able to say they knew more about what was happening within La Cosa Nostra than a family leader in Milwaukee.

Mr. Evans goes on to say, "Our recent expansion in the development of intelligence on the existence and activity of La Cosa Nostra in Wisconsin tends to confirm that there is no adequate substitute for," and then the description of an electronic surveillance is deleted—"for the development of accurate information on this underworld phenomenon."

We have further descriptions of how La Cosa Nostra works and how the authority within a family discipline is demonstrated in this conversation. Anthony Zerilli, a Capo in Detroit, is speaking to Nick Ditta on December 4, 1963:

You are a friend of ours and you belong to my Regime. If I tell you to jump off a 20-story building, you jump off and you jump off any time I tell you to.

We have a conversation which describes the hierarchical structure. Again, Anthony Zerilli speaking in Detroit on December 4, 1963. He states that it is the obligation of a friend of ours to go to the caporegime and tell him the reason for this is. The Capo Regima is the confessor and he must be told whether he wants to know or not, because he is the one who decided whether a person should tell or should not tell.

According to Zerilli, one of the main requirements of a friend of ours is that he cannot tell a lie to another friend of ours. The informant stated Zerilli had indicated that one of the first things you are taught is that you cannot lie to a friend of ours.

September 3, 1964, Stephano Maggadino, family leader in Buffalo, states:

But these are secondary things. The commission has nothing to do with it. When the commission takes up a matter the whole of America is involved because we enjoy their full confidence, they have faith in us that we will do things honestly and justly.

Mr. CORNWELL. It appears quite evident from what you have just recited that by 1963 the FBI knew, as you put it, perhaps more about the scope and nature of organized crime in this country, through their surveillance program, than many of its members did. They knew the terminology, the positions, who held the positions.

When you were retained as a consultant for this committee you were specifically asked to review various portions of that surveillance, and I would like for you to describe how you went about that task.

Mr. SALERNO. When I began to work for the committee I sat down with the chief counsel and we designed an approach to the problem. We thought that the time period which should be of concern to us should be from January 1, 1963, through the entire year of 1963 and ending at June 30, 1964. That was an 18-month period. It would be a period for approximately 11 months before the death of the President and for some 8 months following his death.

We did expand that briefly in looking at the La Cosa Nostra file for a similar period surrounding the assassination of Dr. King just to see if that was a matter of any interest, concern, or commentary by anyone in organized crime.

From the examination of the La Cosa Nostra files and the study of the organization as a whole there were natural leads that took us to the next steps in progression.

We obtained for the committee and its staff individual files on principals who came within the scope of the investigation. We looked not only at individual files but for these people that were important to us. We asked the FBI if they had electronic surveillances and they made those available to us.

There came a time when in order to meet deadlines and complete the assigned tasks, two persons, Miss Leslie Wizelman, and Mr. Mark Flanagan, were brought into a conference with Professor Blakey and I and we directed and instructed and trained them in what our approach was, what we were looking for and how we were looking for it, and they participated in this with me.

ASSASSINATION
ARCHIVES

In all, we covered more than 300 volumes of electronic surveillances that the FBI made available to us, more than 36 volumes of La Cosa Nostra for the period 1962 to 1964, and another figure which brought it beyond 50 for the period surrounding the death of Dr. King.

Mr. CORNWELL. I think it would be helpful, in order for the committee again to get the greatest insight into the possibility of whether men like Trafficante and Marcello would have had the motive or means to assassinate the President, for you to tell us, from the surveillance what the nature of the Cosa Nostra was during the early 1960's, what its objectives were and how it ran its business affairs.

Mr. SALERNO. Yes; I put together methodologies employed by organized crime, goals, purposes, methods of achieving them, and this is entirely based upon the material that we obtained from the FBI in its intelligence program.

There is a national conspiratorial criminal organization within the United States whose members refer to as La Cosa Nostra. The organization is made up of groups known to the members as families. The families are headed by a leader who is referred to as a boss or the Italian word capo is used. The families have a second in command, executive officer to the leader, who is referred to as the underboss, and they use the Italian word sottocapo.

The families have a position known as counselor, or they use the Italian word consigliere, who is considered to be an adviser and who is available to all of the members of the family.

The family has within it subunits, known originally as Decina. That was the name used when the numbers of the subunit was limited to 10 in number. When that no longer became a fixed limit the title was changed to regime.

The subunits are headed by a person with a title of caporegime, or the head of the regime. This position is often referred to in the anglicized word captain. The individual members of the family are referred to as members, soldiers, or as a made man or as a button man.

The families are governed in matters of import of policy and in matters arising between families by the national commission whose numbers can vary, which is made up of the leaders of the major families. Those families whose leaders do not serve on the commission may have their interests represented by a commission member.

Other terms for the organization or its individual families, often used by outsiders, are the Mafia, the organization, the clique, the boys, the office, the arm.

There are rules which are known to members, though not written anywhere. They use relatives and friends as couriers. They use relatives and friends as mail drops. They use friends and relatives as message centers. They have elaborate systems of prearranged times and telephone numbers in order to communicate with each other and to thus avoid electronic surveillance.

They engage in political activity to an inordinate degree. They make direct political contributions. They engage in fundraising in obtaining contributions from others for political purposes.

PROPERTY OF

They will support controlled or friendly candidates. They will help control appointment of positions in government. They will hold elective and appointive positions at all levels of government. They will help relatives achieve elected and/or appointed positions at all levels of government. They will try to influence the outcome of government decisions. They will lobby in favor of legislation they consider in their best interests. They will lobby against legislation they consider not in their best interests.

They will engage in dispensing political patronage. They will campaign against candidates considered to be inimical to their best interests. They will assassinate other family leaders in order to replace them. They will employ public relations efforts, such as protesting Italian defamation, when the term Mafia or La Cosa Nostra are ever used.

They will make illegal deals with high and lower level labor leaders. They will get finders fees for arranging union loans. They will get percentages for helping someone obtain Government loans.

They will operate an intelligence-gathering capability. They will operate a counterintelligence capability. They will analyze the extent of law enforcement knowledge concerning themselves and their activities. They will intimidate or kill informants and witnesses. They will fake illnesses, and once even a kidnapping, in order to avoid legal process. They will utilize bribery as a tactic. They will utilize other forms of corruption. They will engage in blackmail. They will try to influence media stories.

They will avoid taking a position within the family if the demands of such will compromise their usefulness to the family and the organization in the underworld.

Two examples, John Montana gave up the family leadership in Buffalo to Stephano Maggadino in order to run for political office and he was in fact elected to the city council in that city.

Joe Caminici, the Milwaukee underboss, will not run the family if leader Frank Balistrieri goes to jail, so as to not jeopardize his position with the International Brotherhood of Teamsters.

Mr. CORNWELL. Part of the information that you have just described as being derived from the surveillance indicates a hierarchical type of organization, discipline, rules, and regulations. The committee has received evidence that Jack Ruby may have had some contact with people who have been associated with organized crime. Of course, the committee explored one such example in the form of taking testimony from Lewis McWillie.

We also, as we noted earlier, heard Santos Trafficante testify that he did not know Jack Ruby or Lee Harvey Oswald. In order to allow the committee to assess with greater precision the relevancy or impact of that kind of evidence, I wonder if you could explain to us in more detail, the nature of the hierarchical design of organized crime. I understand you do have a chart which you can use for that purpose; is that correct?

Mr. SALERNO. Yes; I do, sir.

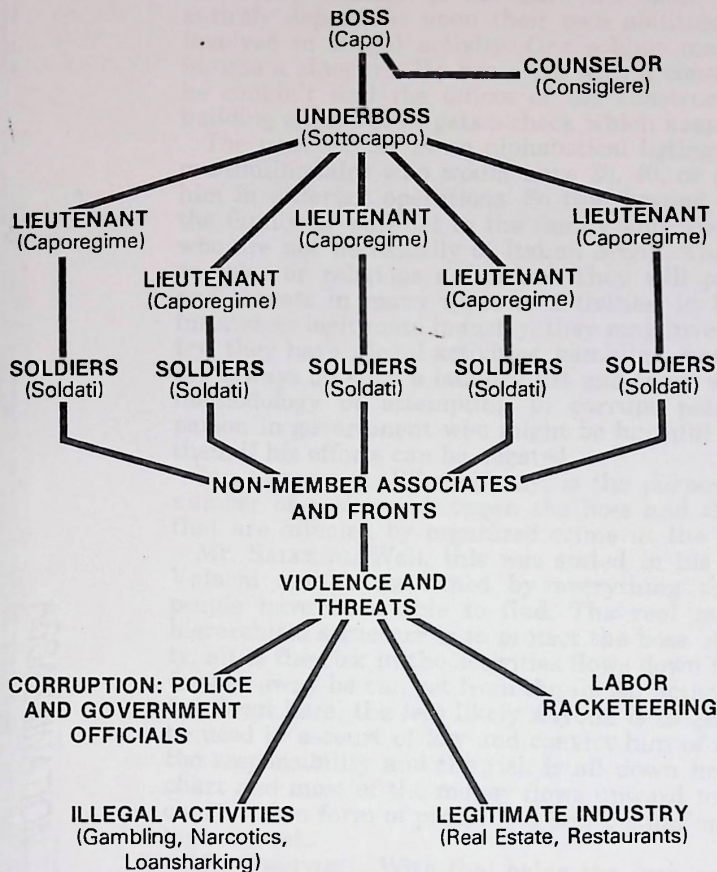
Mr. CORNWELL. May we have JFK exhibit F-548 admitted into evidence at this time, Mr. Chairman?

Chairman STOKES. Without objection, it may be entered into the record at this point.

[JFK exhibit F-548 was admitted into evidence.]

ASSASSINATION
ARCHIVES

An Organized Crime Family



JFK EXHIBIT F-548

Mr. SALERNO. This is an example representative of an organized crime family. The positions that I have named for you are shown. The boss at the very top. The second in command is the underboss or sottocapito. The counselor is not in the direct chain of command. He is an adviser. He is usually an older member. To a large extent, he is an historian. He will base his advice on things that happened in the past, whether they worked out well or not. While he is supposed to advise and be available to any member of the family, the fact of the matter de facto comes out that he is usually a very close friend of the boss and most of the advice he gives is to the boss's advantage rather than anyone else.

The next level of command are the lieutenants, captains, and the anglicized word taken from caporegime. Then you have the individual units of soldiers who are governed by a capo. The interesting thing here is that all of the soldiers are not of equal importance,

all of the soldiers do not have the same kind of income. It is entirely dependent upon their own abilities to create and to get involved in illegal activity. One soldier may simply have as his income a sinecure. He has a job with a construction company and he couldn't find the offices of the construction company or any building sites, but he gets a check which keeps him.

The next soldier in an alphabetical listing might very well be a multimillionaire who would have 20, 40, or 50 people working for him in different operations. So that beyond soldier, it goes out of the family or parallel to the family and they can have associates who are not necessarily of Italian origin. They can be of any race or color or religious affiliation. They will participate in violence and threats in many types of activities, in labor racketeering, to intimidate legitimate industry, they may invest in legitimate industry, they have illegal activities, gambling, narcotics, loan sharking, are always on such a laundry list and there will also be a constant methodology of attempting to corrupt police, prosecutors, any person in government who might be harmful to them or helpful to them if his efforts can be negated.

Mr. CORNWELL. What, if any, is the purpose for the layering or number of positions between the boss and the ultimate activities that are affected by organized crime at the bottom of the chart?

Mr. SALERNO. Well, this was stated in his testimony by Joseph Valachi and is confirmed by everything that law enforcement people have been able to find. The real main purpose for this hierarchical structure is to protect the boss. All of the responsibility, all of the risk in the activities flows down from the boss and the farther away he can get from the illegal activities that are committed down here, the less likely anyone is to get evidence which can be used in a court of law and convict him of a violation of law. So the responsibility and the risk is all down here at this end of the chart and most of the money flows upward toward that end of the chart. It is a form of protection, and insulation of the people on the higher level.

Mr. CORNWELL. With that being the case, what would you assess as the significance of the testimony then from Santos Trafficante that he did not know Jack Ruby if the committee wishes to explore the issue of whether there could be any connection between Ruby's activities and Trafficante?

Mr. SALERNO. That could be a truthful statement without it having any particular significance. It is quite possible for a leader of a family, such as Mr. Trafficante is, to have people engaging way down here in some illegal activity, the two never having met, the two not even being aware of the other's existence or names.

Mr. CORNWELL. Similarly, let me ask you what, if any, significance might be derived from the evidence, if it is to be believed, that the contact between a person such as McWillie and Trafficante was not close or intimate?

Mr. SALERNO. I think I would give the same answer that it is not necessary for someone up at this end of the chart to be personally acquainted with a nonmember associate in order to have that person discharging the wishes of the man at the top of the chart. That can be handled through intermediaries.

ASSASSINATION
ARCHIVES

Mr. CORNWELL. What, if any, fact would you expect with respect to the knowledge of a person, such as McWillie, or anyone else that might be similarly situated, with respect to Trafficante? How much knowledge would you expect that type of individual to have?

Mr. SALERNO. I would say in view of the testimony that I have heard, that Mr. McWillie was engaged in the casino gambling industry in Havana as a manager and that Mr. Trafficante was an entrepreneur in three or four such establishments, they are in the same field, I am certain that they would know each other.

Mr. CORNWELL. With La Cosa Nostra, would you expect that all of the positions in that chart would be occupied by Italians?

Mr. SALERNO. The positions within the family; yes. But in an enterprise or in a venture, they would not be restricted to working with other Italians who are members of that family. They might be working with anyone from any kind of national background or religious affiliation.

Mr. CORNWELL. The bottom portion of the chart reflects that the organization crime family you have been describing will use violence and threats. Will you tell us in more detail what in your experience, the nature of such violence and threats consist of?

Mr. SALERNO. Yes; there is such a thing as a typical or representative gangland homicide. I would like to point out that killing someone is an ultimate weapon that is used by organized crime. If it is possible to achieve that which they seek to achieve with a warning, with a threat, with a slap in the face, with some lesser violence, they will utilize that. Violence is restricted. Peter Ferraro, that was mentioned earlier in my testimony, one time on electronic surveillance, felt that America should take note of the fact that if it wasn't for us, these are his words, "If it weren't for us, there could have been 20 Chicagos." He is talking about, apparently, the St. Valentine's Day homicide—seven people killed all at one time. The fact of the matter is, and I put this in my paper for the President's Commission on Violence, that as crime got better organized, gang wars certainly diminished. I would think that homicides in toto probably were less following the prohibition era than they were during the prohibition era.

However, the definition of the President's Commission on Violence also included fear, and I think that the fear of organized crime has been on a constant increase in the United States for the last 50 years, and you can see that fear, as against the actual violence of homicide, working against each other. If the fear is sufficient to achieve their goals, you don't find that many homicides. It is when the fear will not work that the homicide will be engaged in.

Now, with regard to organized crime murders, I am sure, one logical question is, how do you know so much about organized crime murders? How does the FBI know so much about organized crime murders?

Well, we know a great deal about them in many, many ways. For example, one way in which we have learned about organized crime killings are from the killers themselves, people who have confessed their participation and are even going beyond that and willing to testify against others who were involved. Abe Relis, in "Murder, Inc.," described a number of murders committed in and around the

city of New York and at least one in the city of Los Angeles. Joseph Valachi, in his long recitation before a congressional committee, included the details of a number of murders. Joseph Luferelli in New York City confessed the details of his own participation in the murder of Joey Gallo. We have the court testimony of Joseph Barboza regarding homicides that he committed and the evidence was given against Raymond Patriarca and others in New England. The FBI affidavit that I mentioned in a Cleveland case was substantiated in great part by the confession of one Raymond Ferito of Erie, Pa., who was brought into Cleveland to participate in a bombing, and he implicated others, including James Fratianno who himself is now in the care, custody, and control of the Federal Government while he is divulging a great deal of his knowledge about organized crime, including a number of homicides.

We had a man named Harold Koenigsberg who told the FBI about a great number of murders that he had been involved in and even drove with them to a chicken farm in New Jersey where he buried the bodies. And several bodies were disinterred and identified. We have a case in Kansas City where four young men were hired to do a contract hit and they confessed their guilt and implicated the others who were involved. So we have a great deal of knowledge about killings and right from the lips of the killer.

We also, through electronic surveillance, have been able to hear the confessions, if you will.

It seems that people who might be planning at this moment to do a homicide, while they are waiting for their opportunity, will engage in reminiscences of the past in which they discuss other homicides. The FBI got one exactly like that in the city of Miami from an electronic surveillance put in on Jackie Cerone, David Yaris, and other Chicago hit men who were planning a murder down there but began to discuss a homicide that they had committed back in the city of Chicago. Exactly the same type of thing has happened on an electronic surveillance in New Jersey on Angelo "Gyp" DeCarlo which was put into a court record and is now in the public domain. Peter Ferraro, once again, was planning one homicide and while discussing that went into a recital of past jobs they had done. There are many examples of that.

Mr. CORNWELL. From such sources of information, would you simply tell us the basic characteristics of organized crime's use of violence and very briefly illustrate that with a few examples.

Mr. SALERNO. Well, an organized crime hit is used for a number of reasons. It may be used to maintain internal discipline and loyalty to the leadership within the group. It may be used to limit evidence gathering possibilities through the intimidation of informers, witnesses, and victims of their crimes. It may be used to influence the outcome of a criminal justice matter, if they can induce fear in a witness, in the jurors, in court officers, in the police, or prosecutors. Homicides will be used in guaranteeing the success of some illegal operations.

Gambling; gambling is an illegal business engaged in by organized crime where a great deal of credit is extended. That business could not exist unless debtors knew that they were expected to pay. Loan sharking is based entirely upon "your body is the collateral,"

ASSASSINATION
ARCHIVES

as one loan shark put it. Extortion, labor racketeering are also conditioned upon fear.

These are the characteristics that will be found in a representative gangland homicide. No. 1, it must have approval and authorization of people of some rank. Now, such a person is faced with something of a dilemma. I think he enjoys the power that is thus vested in him, the power of life and death, if you will, but he does appreciate that in legal terms he will be just as guilty as the actual killers, and thus, when he approves of the issuance of what is known as a contract to kill, he will very probably be seeking to limit the vulnerability that he might feel and, therefore, he will most likely limit his role to giving that authorization to one close trusted person. We have come to call that person the expediter. He is responsible for seeing to it that the murder is accomplished, and he is given the widest latitudes in how this is done. No. 1, he could do it himself if he elected to. He could recruit others and he could join with the others in accomplishing the desired act. Although the expediter has the option of doing it himself, and that would limit the conspiracy to just two persons, the authorizer and the expediter, this is the least likely possibility that he would follow. He is not entirely impervious to the fact that layers of insulation can be used as a valid form of protection against direct evidence.

The most likely thing is that he will pass the contract on to others. He cannot divest himself of the responsibility for the ultimate success or failure. He may subcontract the matter out to a subexpediter to carry it still further or he may directly recruit the "hit" team himself.

Now, you have the hit men, these are the actual killers. They will be recruited, if possible, from felons who have demonstrated some successful ability in the past. Within the archives of organized crime, doing a successful hit was always considered to be a way of "earning your bones." And that's an expression that means you will be welcomed into membership in the criminal organization or, if you are already involved, you earn a position of trust from a grateful leadership.

Persons who will be doing their first hit will more than likely be part of the team where there are some more experienced members. The method that is employed may vary although the most popular is murder by gunshot fire from handguns. In recent years, it has been noted by people who professionally deal with organized crime, that a new type of handgun seems to have come into popular and frequent use and that is a .22-caliber pistol with a silencer. There has been some speculation that maybe a single hit team that likes .22-caliber pistols was being widely employed throughout the country. My own opinion is that gangland killers have simply learned what other assassins have known for a long time. And that is, that if you get close enough, a .22-caliber pistol will kill just as effectively as a shotgun and a magnum and it is much quieter about doing it.

In addition to handguns, there are sometimes variances you will find dependent upon individual tastes, local customs are perhaps dictated by special circumstances. Killers in Chicago have traditionally favored the use of a shotgun. Youngstown, Ohio, in the past, and Cleveland in the mid-1970's, utilized dynamite and other

explosives. Rifles have been employed when conditions made it difficult to get close to the victim. This is often the case during a gang war. Knives, ice picks, strangulation by garroting have also been employed.

Then in addition to the weaponry that is used, you will find that there is usually more than one executioner; most likely two. If they are using handguns, they will decide whether they are going to act simultaneously in their gunshot fire or one may be the covering backup man for the other, and after reviewing hundreds of these cases, the record shows very clearly that the imported, out-of-town killers is overwhelmingly the exception rather than the rule.

Mr. CORNWELL. Mr. Chairman, at this point, I think that we might want to break for lunch and come back and continue at a later point.

Chairman STOKES. The committee at this time will stand in recess until 1:30 this afternoon.

[Whereupon, at 12:25 p.m. the committee recessed, to reconvene at 1:30 p.m.]

AFTERNOON SESSION

Chairman STOKES. The committee will come to order.

Counsel, Mr. Cornwell, may proceed.

Mr. CORNWELL. Thank you, Mr. Chairman.

Mr. Salerno, prior to the lunch break you had described for us what the FBI had learned through their program of physical and electronic surveillance in the early sixties, and the broad outlines of La Cosa Nostra in this country as it existed during that period of time, together with a description of the way it operated, its discipline, its hierarchical structure, and its use of violence, and the means that it used to carry out such violence.

Let me direct your attention at this time to the question of motive. If the organization was such that it could have carried out an assassination, did it, nevertheless, have the motive to do so in 1963?

Mr. SALERNO. Yes sir. We have obtained some data in which we can actually quantify that and I can show it to you with the help of an exhibit I made.

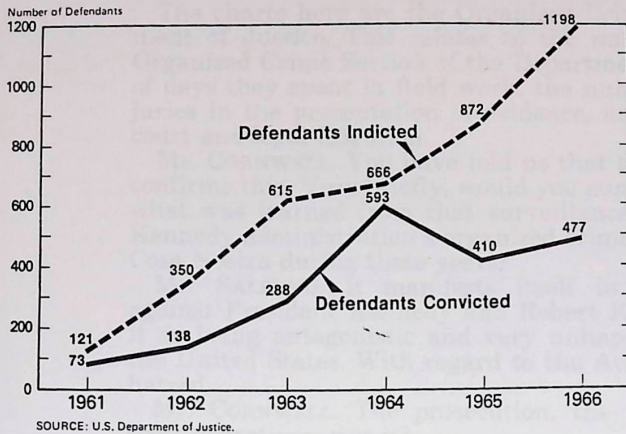
Mr. CORNWELL. At this time, Mr. Chairman, may we have admitted into the record two exhibits which have been marked for identification as JFK F-551 and F-552.

Chairman STOKES. Without objection, they may be entered into the record at this point.

[The above referred to JFK exhibits F-551 and F-552 follow:]

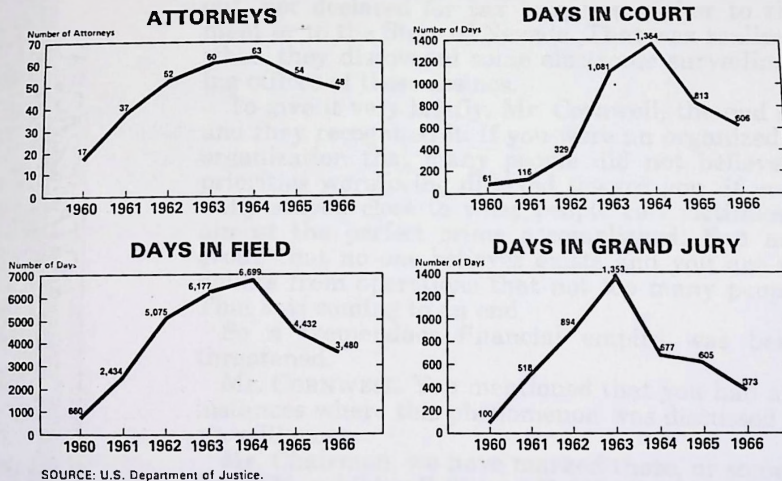
ASSASSINATION
ARCHIVES

Organized Crime Indictments and Convictions



JFK EXHIBIT F-551

Organized Crime Program



JFK EXHIBIT F-552

Mr. SALERNO. In addition, sir, what is shown on these charts, the intelligence gathering confirms their reactions to what is demonstrated here.

You see the chart is just about self-explanatory. The first one indicates organized crime indictments and convictions, and with the advent of the Kennedy administration, there is an almost constant rise up through 1963.

The charts here are the Organized Crime Section of the Department of Justice. This relates to the number of attorneys in the Organized Crime Section of the Department of Justice, the number of days they spent in field work, the number of days before grand juries in the presentation of evidence, and the number of days in court and legal litigation.

Mr. CORNWELL. You have told us that the electronic surveillance confirms this. Very briefly, would you summarize for us, if you can, what was learned from that surveillance about just how bad the Kennedy administration's organized crime program was hurting La Cosa Nostra during these years?

Mr. SALERNO. It manifests itself in the strongest language against President Kennedy and Robert Kennedy. I would describe it as being antagonistic and very unhappy with the President of the United States. With regard to the Attorney General, it is bare hatred.

Mr. CORNWELL. The prosecution, the pressure, was disrupting their operations, was it?

Mr. SALERNO. Yes, to a considerable degree. I will give you just a few examples. Electronic surveillance in casinos in Nevada. Four casinos had been skimming. One casino \$700,000 per year. The others were averaging well beyond \$1 million per year skimmed out, not declared for tax purposes, either to the Federal government or to the State of Nevada. That was realized to be in jeopardy when they discovered some electronic surveillance in the accounting offices of those casinos.

To give it very briefly, Mr. Cornwell, the end of an era had come and they recognized it. If you were an organized crime leader of an organization that many people did not believe existed, very few priorities were being directed toward you, if your activities criminally stayed close to what people call victimless crimes, you had almost the perfect crime accomplished. You are the leader of a group that no one believes exists and you are making millions of dollars from operations that not too many people complain about. That was coming to an end.

So a tremendous financial empire was being very seriously threatened.

Mr. CORNWELL. You mentioned that you had a number of specific instances where this phenomenon was discussed over the electronic surveillances.

Mr. Chairman, we have marked those, or some of those examples for JFK exhibits F-604 to F-618, F-620 to F-622, and F-625 to F-643. May we have those admitted into the record?

Chairman STOKES. Without objection, they may be entered into the record at this point.

[The above referred to JFK exhibits F-604 to F-618, F-620 to F-622, and F-625 to F-643 follow.]

ASSASSINATION
ARCHIVE

JFK EXHIBIT F-604

F.B.I. electronic surveillance of Sam Giancana, in discussion with Gus Alex and Edward D. Vogel, two associates. January 31, 1962.

Conversation indicates that the Chicago syndicate, insofar as its gambling activities are concerned, for all practical purposes has come to an end, primarily from the intense pressure placed upon the organization by the "G", meaning the Federal government.

This fact, coupled with the fact that the state and local police have been forced to move against the syndicate, has brought Giancana et al. to the realization that for the time being "everyone is on his own", meaning that they will no longer receive support from the organization nor can anyone expect influence to be brought to bear on their behalf.

JFK EXHIBIT F-605

La Cosa Nostra File January, 1962

Sam Giancana and John D'Arco, (Sam's political henchman), discuss the fact that Mayor Daley wants to put a former F.B.I. man named Spencer in as a candidate for Sheriff of Cook County on the Democratic ticket against Ogilvie, the Republican candidate.

Giancana: (of Spencer) He's like Kennedy, he'll get what he wants out of you, but you won't get anything out of him.

Tells D'Arco that it may have been a tactical error for him to have let his antipathy toward spencer made known.

D'Arco: I had to Moe, I was desperate. You told me to get the guy out. You gave me a (obscene) order.

Giancana: Well, the Mayor.....

D'Arco: Well, this guy (Daley) is the Almighty. As powerful as you are with us, he's as powerful with them. You say, 'Do this'! What the (obscene), we don't even ask 'Why?' we just do it, right? It's the same thing with him (Daley). When you gave me that order to get him off, I got desperate.

Giancana: Well, it's happened, so there's nothing you can do about it. Well, as far as the city is concerned we're out, and as far as the county is concerned, we're out, so it looks like we'll just have to go into Indiana and run this thing from Hammond. We'll put up whorehouses and everything else.

JFK EXHIBIT F-606

Feb. 27, 1962 Frank Ferraro and Hy Godfrey, two members of the Chicago criminal organization, discuss Special Agent August Kempff and another F.B.I. man who are giving them a hard time in the Top Hood Program and the Criminal Intelligence Program.

Ralph Pierce (a high-ranking member of the Chicago criminal organization) "is closed down and he is going to be closed down from now on".

JFK EXHIBIT F-607

Jan. 15, 1963. Airtel from SAC Chicago to The Director.

Chuck English bemoans the fact that the Federal government is closing in on the organization and apparently nothing can be done about it. Makes various and sundry inflammatory remarks about the Kennedy administration.

JFK EXHIBIT F-608

F.B.I. La Cosa Nostra Summary, January 31, 1963.

Permission is being sought for retaliation against Federal investigators, newsmen and politicians who expose La Cosa Nostra.

ASSASSINATION
ARCHIVES

JFK EXHIBIT F-609

N.Y.C. Police Department Intelligence Bulletin #10
June 7, 1963

An analysis of police intelligence work. A conversation
between 2 Brooklyn hoodlums. They curse the police.

"They know a lot...they know everything. They put
everything together, lots of things. Where we take
it for granted it don't mean nothing.

"These people (the police) have been gathering and
gathering. They go here! They go there! See,
before it was a different story. If you had the
locals, they knew the information, but they kept it
for themselves. Today, they are all working together.
We got a big problem.

"These people are united. Everything they collect,
they concentrate. And now everything goes into
one office. Before, every squad kept the information
for themselves. You take this cop on the corner,
you've been paying him for 20 years, maybe. They get
the information. Someone comes in from New York and
asks if he knows so and so. 'Oh, he's a bookmaker'.
And you've been paying him for 20 years!!! That's
the condition you got today".

JFK EXHIBIT F-610

Buffalo Div. Elsur on Stefano Magaddino June 11, 1963.

He is talking to an underling from Syracuse, Anthony deStefano.

"You see, the Cosa Nostra. The other day they made
me become frightened. They know our business
better than us. They know the heads of the families,
the Capodecina, the F.B.I. does.

"Therefore, that's why, the other day, I say,
'Be careful before you open your mouth'.

"Because sometime somebody could be a spy (law
officer) and you might think he is an amico
nostro (a friend of ours and a member)."

PROPERTY OF

JFK EXHIBIT F-611

Airtel August 7, 1963

Gus Alex, a Giancana henchman in Chicago, states that the F.B.I. has been following Giancana everywhere he went, even on a golf course. Alex stated that no one can contact Giancana because of the F.B.I. surveillance.

JFK EXHIBIT F-612

La Cosa Nostra File August 8, 1963

Joe "Beck" DiPalermo asked Vito Genovese for permission to retaliate against Federal narcotic agents that he claimed were framing members. Vito said something would be done about it.

JFK EXHIBIT F-613

La Cosa Nostra File October 15, 1963

Buddy Jacobson and Pat Marcy, political front men for Sam Giancana.

Jacobson stated that he had never seen conditions so bad as they are in Chicago at this time. Jacobson states that Paul Ricca (former leader of the Chicago criminal organization) advised him that the organization must be patient and wait for the pressure to lift. Jacobson tells Marcy he has never seen a time when they had so little going for them.

ASSASSINATION
ARCHIVES

JFK EXHIBIT F-614

F.B.I. electronic surveillance in the residence of Charles Costello in Florida. Costello is a relative and associate of Angelo Bruno, L.C.N. leader in Philadelphia, Penna. Bruno is a frequent winter visitor to this residence.

Oct. 24, 1963 Madeline (Mrs. Charles) Costello in conversation with Unidentified Male.

Madeline: "I won't talk in this house, that's the way things are, alright? I want to talk, I'll take a walk outside. You know there's got to be something in this house".

Continues, saying the house is vacant so much there is ample time and opportunity for installation of a "mike". She has expressed similar thoughts in the past.

Madeline: "I'll tell you the things they are doing to that man (Angelo Bruno) are awful, just terrible...."

U.M. "They are crucifying him."

JFK EXHIBIT F-615

1963 Elsur on Santo Trafficante in a Miami restaurant.

Trafficante: "Let me tell you this. This is what happens to me. Now, I don't give a (obscene) about the S. & G. I know when I'm beat, you understand?

"I got a numbers office in Orlando. They grab everybody, forty or fifty people. Forty or fifty thousand in bond. They have no evidence, but when they get through it costs thousands.

"I got another office in St. Cloud, Florida. You can't even find St. Cloud on the (obscene) map, but the (obscene) 'G' found it.

"Kennedy's right-hand man, he goes through the (obscene) nigger town. Must have been 2,000 niggers, and makes a (obscene) big raid over there.

"Just a start, any (obscene) place that they found a phone connection in there from Tampa....."

PROPERTY OF

EL SUR-1963, Palmisano
& Petillo.

Bruno & Catena

P. 442

JFK EXHIBIT F-616

Miami, Fla. 1963

F.B.I. electronic surveillance on Johnny "Dee" Palmisano in Florida. He is in conversation with an associate, Ralph Petillo, discussing the F.B.I. and Attorney General's fight against organized crime.

Johnny Dee says that Hoover is not heard of anymore because of the Kennedys.

JFK EXHIBIT F-617

F.B.I. La Cosa Nostra File 1963.

Angelo Bruno expected an I.R.S. indictment and was prepared to leave the country to live in Italy. He also recommended to Gerry Catena (of New Jersey) that he prepare to depart. Gerry said it would be very difficult for him to do so because of his family.

ASSASSINATION
ARCHIVE

ELSUR-2.8.62,
Bruno & Weisburg

P. 443

JFK EXHIBIT F-618

2. On February 8, 1962, Angelo Bruno and Willie Weisburg discussed the Kennedys. Angelo Bruno at that time was the leader of organized crime in the city of Philadelphia. Bruno was also a member of the Commission. Weisburg is a business associate of Bruno's. Weisburg is complaining about the FBI and the Kennedys.

Weisburg: See what Kennedy done. With Kennedy, a guy should take a knife, like one of them other guys, and stab and kill the (obscurity), where he is now. Somebody should kill the (obscurity). I mean it. This is true. Honest to God. It's about time to go. But I tell you something. I hope I get a week's notice. I'll kill. Right in the (obscurity) in the White House. Somebody's got to get rid of this (obscurity).

Bruno responds to Weisburg's statements with the following story:

"Look, Willie, do you see there was a King, do you understand. And he found out that everybody was saying that he was a bad king. This is an old Italian story. So, there was an old wise woman about 140 years old. So, he figured. Let me go talk to the old wise woman. She knows everything. So he went to the old wise woman. So he says to her. I came here because I want your opinion. He says, do you think I'm a bad king. She says, no, I think you are a good king. He says, well how come everybody says I'm a bad king? She says because they are stupid. They don't know. He says, well how come, why do you say I'm a good king. Well, she said, I knew your great grandfather. He was a bad king. I knew your grandfather. He was worse. I knew your father. He was worse than them. You, you are worse than all of them, but your son, if you die, your son is going to be worse than you. So it's better to be with you. (All laugh) So Brownell (former Attorney General) was bad. He was no (obscurity) good. He was this and that.

Weisurg: Do you know what this man is going to do? He ain't going to leave nobody alone.

Bruno: I know he ain't. But you see, everybody in there was bad. The other guy was good because the other guy was worse. Do you understand? Brownell came. He was no good. He was worse than the guy before.

Weisburg: Not like this one.

--continued--

Bruno: Not like this one. This one is worse. Right? If something happens to this guy. (Laughs)

Weisburg: Let me tell you something. The FBI always hated the IR. Always. The IR never checked with the Treasury men. They went separate ways. They wouldn't give each other information. They wanted the credit themselves. He made it with local authorities. He made it ring-around-the rosy, pal.

Bruno: Oh, yeah. This guy is an accountant, see. So, now, he had to do something worse. So what? He started to think, what can I do more than the other guy. The other guy made the anti-racketeering law, gambling laws, he did this and he did that. What can I do. He says, I know what I can do. Anybody that has a record that is police property, when he gets pinched, no bail. (Bruno then compares the Italian process of not allowing bail and incarcerating individuals until proven innocent.)

Weisburg: It's still America, though.

Bruno: So, it's still America. They are trying to pass a Federal law that you can't take the Fifth (amendment). When they grant you immunity you can't take the Fifth.

Weisburg: They are not going to pass that law.

Bruno: But they might.

ASSASSINATION
ARCHIVED

JFK EXHIBIT F-620

4. On February 17, 1962, the following conversation was held between Angelo Bruno, previously identified as a Commission member and leader of the Philadelphia family, and Mario Maggio, and Peter Maggio. The latter two individuals are in-laws and associates of Bruno's.

Maggio: ...Kennedy is going to leave, they are going to make him a special assistant (to the President) out of him. They want him out of the way, he is too much, he is starting to hurt too many people, like unions. He is not only hurting the racket guys, but others, anti-trust...I think that he is going to leave. But the only reason he won't leave, which I heard before, you see he wants Edgar Hoover out of that.

Bruno: Edgar Hoover.

Maggio: He wants Edgar Hoover out of the FBI because he is a fairy, you know he is a fairy, I heard this before...

Bruno: Who?

Maggio: Edgar Hoover is a fairy...

Bruno: Who would ever listen to that bullshit...

Maggio: Listen to this. Edgar Hoover is not married and neither is his assistant, read back in his history...

Bruno: His assistant?

Maggio: I heard a story about Kennedy being a fairy...

Maggio then relates a story about a Boston newspaper talking about Kennedy going to a party dressed as a girl and concludes, "I can't see Kennedy getting out of this job, I told Paul. They are going to make this a family affair and he wants to be President."

JFK EXHIBIT F-621

5. On April 22, 1962 a memorandum from the Director of the FBI to the Attorney General states that Mr. Celano and Ralph Pierce referred to Robert Kennedy as "vicious" for ordering the Illinois Bell Telephone Company to cut off telephone service to Illinois Sport News. Both of these individuals are top echelon associates of Sam Giancana.

JFK EXHIBIT F-622

6. On May 2, 1962 two New York LCN members, Sal Profaci and Michelino Clements, and a third unidentified individual named Bob, had the following conversation:

Clemente: "Bob Kennedy won't stop today until he puts us all in jail all over the country. Until the Commission meets and puts its foot down, things will be at a standstill. When we meet, we all got to shake hands, and sit down and talk, and, if there is any trouble with a particular regime, it's got to be kept secret, and only the heads are to know about it, otherwise some broad finds out, and finally the newspapers."

Later in the conversation, Clemente states that things are not like they were years ago, when the Commission would meet once a month, and there were no cops around to spy on them.

Clemente stated that today, in order to have a meeting, you have to tell each one individually about the meeting, without letting them know who else will be present, or what the meeting is going to be about, so that there will be no chance of any information leaking out.

JFK EXHIBIT F-625

October 23, 1962

Pat Marcy, John D'Arco and Congressman Roland Libonati

Libonati gave them a Cuba-China-India war briefing. Indicates he doesn't even know who is running against him because any opposition is laughable.

"Last time, you guys built me up to 98,000 votes and the other guy got 23,000. Who ran against me last time?" His Republican opponent in the current election will be Joseph D. Day.

Libonati on Robert F. Kennedy:

"I killed six of his bills. That wiretapping bill, the intimidating informers bill...."

Libonati thinks that John Kennedy is a sweetheart, but Robert F. Kennedy is cruel.

Libonati describes how he opposed a Robert Kennedy bill and then got a call from Mayor Daley. Libonati told John F. Kennedy to stop Robert Kennedy from calling Daley on such matters. Bobby said on TV that his brother wants him to stay out of politics because he is the Attorney General. Libonati takes credit for this, saying, "That was me."

ASSASSINATION
ARCHIVE

JFK EXHIBIT F-626

13. On January 17, 1963, Raymond Patriarca, Gennaro Angiulo and Peter Limone had a conversation regarding Robert Kennedy. Patriarca is the Boston LCN leader and a Commission member. The following is a summary of his statement.

Raymond states that things are not too good as long as Attorney General Kennedy is in Washington, D. C. Relates an argument he had with Robert Kennedy when called before a Congressional committee three or four years ago.

JFK EXHIBIT F-627

14. On February 28, 1963 Sam Giancana stated, referring to the outcome of a recent local election:

"That will teach that little (obscenity) Kennedy, who runs Chicago."

JFK EXHIBIT F-628

Chicago Div. FBI Elsur

October 14, 1963

Sam Giancana, Charles "Chuck" English, Tony Accardo and Butch Blasi are present.

They discuss Robert Kennedy not being available for a Columbus Day Parade, but coming to Chicago on October 13th for a B'nai B'rith affair. The Jews downtown were beaming.

Discuss the Bobby Baker scandal. He just resigned his job; they didn't do anything to him. He must have come out with a ton of money.

Discuss Police Superintendent O. W. Wilson's chart (presented before the McClellan Committee at the Valachi Hearings). "On top he had an Italian organization."

Joe Glimco (an associate) appeared on CITY DESK a Sunday media talk show and said that if they checked out Police Superintendent O. W. Wilson as thoroughly as they have checked Glimco, Wilson would be in jail, and Bobby Kennedy too!!

Chuck English speaks of the possibility of the Teamsters Union going back into the AFL. It would hurt Kennedy if they were to take Hoffa back.

They discuss golf. Someone asks if Bobby Kennedy plays golf, they know that John Kennedy does. Suggest putting a bomb in his golf bag. (hey all laugh.)

PROPERTY OF

JFK EXHIBIT F-629

F.B.I. electronic surveillance of Stefano Magaddino
May 23, 1963.

Magaddino: "We are in a bad situation in Cosa Nostra.
When Profaci died, the Borgata broke up"

"They know everything under the sun. They know who's
back of it, they know Amici, they know Capodecina,
they know there is a Commission. We got to watch
right now, this thing, where it goes and stay as
quiet as possible".

Magaddino expresses a bitter hate for Attorney
General Robert Kennedy.

JFK EXHIBIT F-630

F.B.I. Buffalo Division Elsur on Stefano Magaddino.

October 31, 1963. Peter A. Magaddino during a discussion
of President Kennedy states,

"He should drop dead."

Stefano Maggadino adds, "They should kill the whole
family, the mother and father too"! "When he talks
he talks like a mad dog, he says, 'My brother the
Attorney General'. Why he never won a case. He
never tried a case".

This comment is followed by many obscenities by
Stefano Magaddino.

JFK EXHIBIT F-631

May 22, 1963 F.B.I. interoffice memo from Courtney
Evans to Al Belmont discussing the
Saturday Evening Post article on
Joseph Valachi that is being written by Peter Maas.

"The foregoing clearly indicates that the
Department is motivated strictly by political
considerations. While they have apparently
yielded to our view that Valachi should not
be interviewed by the magazine writer, they
are, nevertheless, exploiting this whole
situation for their own benefit.

"Under the circumstances, we should not get
involved, but you will be advised of any
further information we can develop as to
Departmental action."

Handwritten: "I concur. I never saw so much skulduggery,
the sanctity of Department files, including
Bureau reports is a thing of the past."

"H" (for Hoover)

ASSASSINATION
ARCHIVES

JFK EXHIBIT F-632

F.B.I. Elsur on James Lanza, leader of the L.C.N. Family in San Francisco. August 12, 1963. Lanza is in discussion with an associate Vito Bruno.

V.B.:-- Talks about reading of Cosa Nostra in the paper.

Lanza: Yeah, this guy Joe Valachi is the guy who is telling about it.

V.B.:--- Cosa Nostra. Cosa Nostra.

Lanza: This guy is in jail, Vito Genovese is in jail too. This guy gave information to the federales. He attacked a man with a rock and killed him, and the prison officials didn't know why he killed him. Anyway, this guy thought the Mafia, the Cosa Nostra had sent the guy in to kill him.

This thing has come out now in the papers but he has been telling about it for the past year.

V.B. They know everything.

Lanza: Yeah.

JFK EXHIBIT F-633

Buffalo Div. Elsur on Stefano Magaddino Sept. 17, 1963

After a lengthy discussion about Joseph Valachi, Magaddino states, "we passed laws that this guy has got to die".

JFK EXHIBIT F-634

F.B.I. Elsur in the Pittsburg area.

Sept. 27, 1963 Advised that John Sebastian LaRocca's remaining in the Pittsburg area during the months of October and November, 1963 will be contingent on the testimony of Joseph Valachi. If his testimony should "hit closer to home", La Rocca would take a short vacation at his Bel Aire, Florida residence. La Rocca is extremely annoyed about Valachi's testimony and will not allow it to be discussed in his presence. He claims, "Valachi hasn't done a decent thing since he was born, and never did a good thing in his life."

La Rocca departs for Florida on Oct. 10, 1963.

JFK EXHIBIT F-635

N.Y.C. Police Dept. Elsur on John Masiello

(Masiello has since been convicted of defrauding the U.S. government when he was a contractor to deliver the U.S. mail. He later testified against Congressman Frank Brasco when that worthy was convicted of accepting bribes from Masiello).

Sept. 27, 1963. John Masiello and his close associate Anthony "Hickey" DiLorenzo are talking about Joseph Valachi's testimony.

Masiello is upset because Valachi mentioned the secret code.

DiLorenzo believes Valachi is going to scramble up a lot of people because he is speaking so freely. Says that Steve Buffalo, one of the names mentioned, is a friend of theirs.

Masiello: He is going to make it hot for everybody.

DiLorenzo: They (Law enforcement) are going to harass people and are definitely going to try to pass that wire tapping law. If they ever get that law passed, forget about it. They probably have miles of tape that they put together. They'll say well, this is what we got, then they'll start indicting guys.

Masiello: It isn't a free country anymore.

Oct. 4, 1963 Al Chieco asks John Masiello if he is going to be sucked into this Valachi testimony, and if he knew Valachi.

Masiello states he knew Valachi but will not be sucked into anything. Chieco suggests Valachi should have been killed years ago, for having an affair with his sister-in-law

Masiello says it is bad enough he mentions all those names but he should not have mentioned how a guy is made, how a guy is proposed, because those are things you die with.

They both hope that Valachi cracks up because then everything can be charged off to his insanity.

ASSASSINATION
ARCHIVES

JFK EXHIBIT F-636

Buffalo Elsur on Stefano Maggadino

Sept. 28, 1963 Stefano Magaddino, Peter A. Magaddino
and Sam Rangatore.

They are discussing newspaper coverage of Joseph Valachi's testimony. Magaddino is concerned over the fact that some time in the past he had told Valachi about a murder that he, Magaddino, had committed.

The participants in the conversation characterize Valachi's testimony as "fairy tales".

Magaddino says that Vito Genovese should have killed Valachi.

JFK EXHIBIT F-637

Oct. 1, 1963. Listening to Joseph Valachi's testimony on T.V.

F.B.I. Florida Elsur in restaurant operated by
Vincent James Palmisano, alias Jimmy Dee.

Palmisano states facetiously that they should go to the Army-Navy store and buy up all the Italian and American flags they can find and put them around the restaurant to counteract slurs on Italians.

Discuss the present administration, saying it is setting up a Nazi type government, seizing control of television and radio stations. Discuss Sam Giancana's association with Frank Sinatra.

Palmisano: "Robert F. Kennedy will never get ALL the bookmakers. Valachi is living like a king, he has his own army. They are probably furnishing him his own woman".

Oct. 7, 1963 Jimmy Dee says, "There's going to be a lot
of killings as a result of this hearing".

JFK EXHIBIT F-638

F.B.I. La Cosa Nostra File.

October 9, 1963 Sam Giancana (LCN leader in Chicago) is extremely apprehensive of being subpoenaed before the McClellan Committee hearings on organized crime.

October 16, 1963 Sam Giancana has issued instructions to all political associates to discontinue their practice of attending weddings and funerals of hoodlum families.

JFK EXHIBIT F-639

Teletype from Chicago Div. F.B.I. to The Director Oct. 10, 1963.

Giancana and Charles "Chuck" English discuss Joseph Valachi's testimony. They agree that he is unable to hurt the Chicago organization, but feel that he is doing a great deal of harm to New York mobsters. English's biggest fear is that the government will be able to capitalize on this type of situation in the future by obtaining other informants, by showing that they went along with Valachi and did not hold him accountable for his own crimes.

JFK EXHIBIT F-640

La Cosa Nostra File, F.B.I.

October 25, 1963. Joseph Zerilli has ordered all Detroit Italian Syndicate numbers operations closed and as of December 13, they are still closed. This order came as a result of the Valachi Hearings testimony and an I.R.S. raid in Toledo, Ohio.

ASSASSINATION
ARCHIVES

JFK EXHIBIT F-641

Autumn, 1963.

S.F. T-1 (who is a "live" informant of the San Francisco Division of the F.B.I. indicates:

There will be a change in the initiation ceremony of La Cosa Nostra as a result of Valachi's testimony and the publicity concerning it.

JFK EXHIBIT F-642

March 2, 1964

Director John Edgar Hoover speaks on the telephone to Senator John McClellan.

Tells him that the Valachi Hearings, "shook them all up".

Senator McClellan suggests that Mr. Hoover write him a letter to that effect.

March 6, 1964. Letter from Director Hoover to Senator McClellan states in part:-

"In pursuing this purpose your committee has placed on the record information concerning conditions most citizens did not realize existed. There is no doubt that attention across the Nation was focused on Joseph Valachi's testimony regarding La Cosa Nostra as well as on the testimony of other witnesses who appeared at these hearings. Public opinion was moved against the forces of evil."

JFK EXHIBIT F-643

F.B.I. Intelligence Bulletin, March 11, 1964

Charles Locicero (Counselor of a Brooklyn L.C.N. family) tells an F.B.I. informant that money was being gathered to fight Valachi's testimony and the Senate hearings. They are getting in touch with people in the news media and political figures to hold up any legislation which may result.

Mr. CORNWELL. Apart from, I take it, the fear that the organized crime element in this country had that the Kennedy administration was destroying them, as demonstrated by this surveillance, was there any realistic expectation if they had done something so drastic as to kill the President, and there I take it, by doing so remove his brother from the position of Attorney General, and take the two of them out together, would that have in any way helped them? What realistic expectation was there that the pressure to prosecute the Cosa Nostra would have diminished by such an act?

Mr. SALERNO. Two things which we learned toward the answer. No. 1, was their expectation; they from time to time advised that, but I think more to the point is the actual record of what transpired in this effort following the assassinations. We will add some data to the existing charts and you will be able to see exactly what did happen following the assassination of President Kennedy.

All of the lines which you saw in a growing and radical increase up to 1963 go into decline, some of them a radical decline, following the assassination of the President.

Mr. CORNWELL. If then there were facts which could have created a motive, if there were means in the control of organized crime, can you tell us was the electronic surveillance of the FBI, which you received, adequate to give some answers to the question of whether or not La Cosa Nostra as an institution, in other words. La Cosa Nostra at the commission level, at the governing body level, could have considered or sanctioned the assassination of the President or of Lee Harvey Oswald?

Mr. SALERNO. My professional opinion, based on the electronic surveillances and other evidence available, is that it is more than sufficient to give a reasonable answer to that question. The question is that all of that evidence gives no indication at all that the national commission of La Cosa Nostra directed, approved or in any way was concerned with the assassination of President Kennedy.

Mr. CORNWELL. Would it be possible that some member, some leader, may have undertaken such a thing without the Commission's approval?

Mr. SALERNO. Yes; it is very possible and as a matter of fact, at that particular moment, in November of 1963, there was an example of it. At that time the national commission was having a great deal of difficulty with one of its peers, Mr. Joseph Bonnano. He was violating, probably for the first time, the authority of that commission. He had been ordered to appear before it three times to explain his actions. He was refusing to do so.

He had taken action which would have required commission approval without having that commission approval. They were asking him to account for this and he was totally ignoring their authority.

So there was an actual example of one such family leader violating what has been the rule up to that time, and unilaterally taking some serious actions which were of concern to them.

Mr. CORNWELL. Very briefly, if you are able to, will you tell us how it is that in the early 1960's an organization which, according to your testimony, is characterized by discipline, strict control, rules, and regulations, and has at its disposal violence, could have

ASSASSINATION

been in such a condition that one of its members could be uncontrollable or could do things which were not sanctioned by the commission?

Mr. SALERNO. I believe that the conditions that existed in 1963 were reflective of the effectiveness of the Federal drive during 1961, 1962 and for most of 1963. The normal smooth operation, which had existed for more than 30 years, were interrupted. The cracks were beginning to show in many, many ways. There was a gang war for the first time in many years in New York—the Gallo-Profaci war. You had the actions of Joseph Bonnano, which I have mentioned. You had a plan on the part of one leader, Joseph Magliocho, to assassinate two of his fellows, Carlo Gambino and Thomas Lucchese.

So that the smooth functioning machinery of a well-oiled machine that had been in high gear for more than 30 years was beginning to show cracks, sluggishness, interruption of its normal activities.

Mr. CORNWELL. What was the predominant reason that these events occurred in the early 1960's, that there was this sort of crack in the discipline in organization?

Mr. SALERNO. You had the total penetration of the organization, informants from within the ranks that they had become aware of. I indicated that in 1963 bugs were discovered in Las Vegas. This gave rise to their expectation that there probably were many, many more throughout the United States.

You had some other things that were pertinent and relate to that—the gang war which had begun. One highlight, which took place in the congressional halls here in Washington, just 6 weeks before the President's assassination, was the public testimony of Joseph Valachi, something which Attorney General Robert Kennedy characterized as the greatest intelligence breakthrough in the history of organized crime in the United States.

Mr. Valachi's testimony had been preceded by that of the Attorney General. He was asking the Congress to consider more effective laws to be used against organized crime.

As bad as their condition was then, it would appear that it could get worse. He had asked the Congress to authorize an electronic surveillance law, he had asked the Congress to authorize an immunity statute which would compel testimony.

So that in November of 1963 the picture was a very bleak one for them.

Mr. CORNWELL. If then the pressures of Bobby Kennedy and the President during those years had created such conditions within La Cosa Nostra they found themselves unable to control the various families, the question then arises, could a member of that organization, such as Trafficante or Marcello, or perhaps even an associate such as James Hoffa, have been involved with the ELSURS, the electronic surveillances which were conducted, adequate to answer the question of the possible involvement of men like that?

Mr. SALERNO. No. The electronic surveillances would not have been helpful in the cases that you cite, sir. The intelligence program was a laudable one. I would even use the word magnificent. But as in any intelligence program, while the overall effort may be very good, there are some weak spots, and in the three cases that

you mentioned, Mr. Trafficante was never in that time period the direct target of an electronic surveillance for an extended period. He did show up in conversations a few times where someone else was the target.

There was no electronic surveillance on Carlos Marcello. There was no electronic surveillance on James Riddle Hoffa.

Mr. CORNWELL. Thank you. I have no further questions.

Chairman STOKES. Mr. Salerno, you were here this morning and heard Mr. Trafficante testify that his role in the assassination plot upon Fidel Castro was that of being an interpreter. Would you tell us please, whether a man who holds the position that you have described here so eloquently and articulately would perform the role of an interpreter in that type of assassination plot?

Mr. SALERNO. No sir; he would not.

Chairman STOKES. What then would his role be in such a plot?

Mr. SALERNO. Sir, based on my knowledge of the three individuals who were working with the CIA, I believe that the first approach was in fact made to Mr. Roselli. Mr. Roselli could not and would not have entertained agreeing to work for the CIA or taking any action with the CIA without the permission of his superior, who was Sam Giancana. I think Sam Giancana's role was to approve Mr. Roselli proceeding further.

Mr. Roselli would not have been in a position to go to someone of the rank of Mr. Trafficante without the intercession, without the permission of Giancana.

I believe Giancana's real role was, No. 1, to approve Roselli's working with the CIA, No. 2, to approach his peer, Mr. Trafficante, and ask for his cooperation.

Chairman STOKES. Now, also you heard Mr. Trafficante's testimony this morning with reference to what his relationship was with these two men, Roselli and Giancana, over the period of years, did you?

Mr. SALERNO. Yes, I did.

Chairman STOKES. And based upon what you heard, is that the true relationship that he had with those two men?

Mr. SALERNO. No; not at all. I think it would be true that he may not have engaged in any one particular organized crime venture with them, but he was part of the organized crime syndicate that they were a part of.

Chairman STOKES. Would his role have been as he described here today, that he performed these acts out of his patriotism for the country?

Mr. SALERNO. No. I think Mr. Trafficante's testimony here has got to be evaluated in the light of so much other evidence. If you were going to believe Mr. Trafficante, then Mr. Aleman is mistaken or he is a liar. If you are going to believe Mr. Trafficante, then the official from the CIA, who has given a sworn deposition, is either mistaken or a liar.

If you are going to believe Mr. Trafficante, then his associate, John Roselli, and what he has revealed about that particular enterprise, is a liar.

It would be necessary to believe that the Government of Spain will waste 12 men per day and the resources necessary to follow

ASSASSINATION

and keep Mr. Trafficante under surveillance when there is no need to do that.

You would have to believe that various levels of government in the United States have wasted taxpayers' money in trying to follow Mr. Trafficante night and day when there is no need for that.

So, I think that you have to evaluate his testimony in view of all of the other evidence, and I think it would be at least naive to accept it at face value.

Chairman STOKES. Moving over to another area for a moment, when I look at the chart there with reference to organized crime program, where immediately after the President's death there is this sharp decline in terms of the program under Attorney General Robert Kennedy, it just strikes you that this is a very striking type of thing. Can you comment further and tell us to what do you attribute that fact and the program just fell apart?

Mr. SALERNO. I think all of those charts, and my own personal recollections of what happened then, reflect that the success that you see manifested there was not only the work of the individual policemen and the agents but the leadership position that Robert Kennedy took and afforded the entire program.

Following the death of the President, my unit in the New York City Police Department was not reduced. FBI men were not transferred en masse to do something else, but the leadership was not there, the driving force was not there, the commitment in government at a very high level was not there, and I believe that is reflected in those charts more than anything else.

Chairman STOKES. Thank you. My time has expired.

The gentleman from North Carolina, Mr. Preyer.

Mr. PREYER. Thank you, Mr. Chairman.

As I understand it, Mr. Salerno, you have testified that the Cosa Nostra had the means to carry out something like the assassination and you have given us a description of those means and its organization, and you have also indicated that you thought it has the motive to carry it out. You introduced a number of exhibits into evidence which we haven't had the opportunity to go over in detail. But looking through the exhibits that I have here, there is just one which I would like to call attention to, which seems to me related strongly to the motive angle, and I would like to ask you to give us a little description of it.

It is the one that states on February 8, 1962, Angelo Bruno and Willie Weisburg discussed the Kennedys. This is at page 1 under tab ELSURS re Kennedy.

Mr. SALERNO. Yes sir.

Mr. PREYER. At that meeting Weisburg says this:

See what Kennedy done. With Kennedy a guy should take a knife, like one of the other guys, and stab and kill the (———) where he is now. Somebody should kill the (———). I mean it. This is true, honest to God, it is about time to go. But I tell you something, I hope I get a week's notice, I will kill, right in the (———), in the White House. Somebody has got to get rid of this (———).

And then Bruno responds to Weisburg's statement with the following story.

What I would like to ask you is to briefly tell us who Angelo Bruno was at the time, who Weisburg is—incidentally this is JFK exhibit F-618—and then if you would, give us Bruno's response to

Weisburg's statement, that somebody's got to get rid of this (——) and just explain to us what your understanding of his response is.

Mr. SALERNO. Yes, sir, Mr. Bruno at that point in time was, as shown on that chart, the head of the La Cosa Nostra family in Philadelphia.

His response basically is a very philosophical one. He tells an old story. You don't want it verbatim do you?

Mr. PREYER. No; if you could just describe it.

Mr. SALERNO. Yes; he said when things are bad under one king, some people might view him as being a bad king. However, another point of view is that he is a good king because you think things are bad now and when there is a succession things get worse. And when there is a succession things get worse, so the man that you think is a bad king is really a good king, because if anything happens to him, then his son will succeed and things will get still worse.

It is a very philosophical point of view, but as I indicated earlier today, I think you have to read these ELSURS because there is another one in that packet which is 1 year later and Mr. Bruno 1 year later, in early 1963, is not very philosophical at all. He describes himself as being crucified and Mr. Bruno is making very serious plans to follow his predecessor and go to Italy for permanent residence and he is not coming back.

Mr. Bruno expresses that point of view to a colleague in New Jersey, Jerry Catena, in which he said, "It is all over for us; I am going to Italy, and you should go too, Jerry," and Mr. Catena responds that Bruno is probably right but because his family would be unhappy there, that he is unlikely to follow the same lead.

One year later Bruno has stopped being philosophical and he is getting ready to leave the United States.

Mr. PREYER. So that to Weisburg's statement, somebody ought to get rid of Robert Kennedy, Bruno, in effect, answers, we shouldn't get rid of him because whoever succeeds him will be even worse than he was from the mob's point of view.

Mr. SALERNO. That is what the philosophical story reflects.

Mr. PREYER. So his motive was not to get rid of him because something worse might happen. When he later decided to go to Italy and became more disillusioned with Kennedy, he still decided to go to Italy rather than change his mind about his motive; that is, he didn't say in that later exhibit, did he, we should kill him; he said, I will go to Italy?

Mr. SALERNO. No; the indications are that when things got very, very bad that Bruno would have made the choice to leave the country; that would not necessarily be the choice that all his peer group made.

Mr. PREYER. I think I used my 5 minutes.

Chairman STOKES. The time of the gentleman has expired. The gentleman from Indiana, Mr. Fithian.

Mr. FITHIAN. Thank you, Mr. Chairman. Thank you, Mr. Salerno, for an exceptionally fine description and detail. I have several questions I would like to ask. First of all this morning, Mr. Trafficante testified that "they lived with me" in terms of their surveillance. That seems to be at variance with your testimony. Would

ASSASSINATION

you care to elaborate or substantiate or negate Mr. Trafficante or perhaps adjust—

Mr. SALERNO. I think there is always a tendency to slightly exaggerate when people come to feel they are getting some law enforcement attention. However, we do have his associate, Mr. Giancana, who actually went into Federal court and indicated that he was under the same kind of intense surveillance—bumper to bumper tail it's referred to, with one car immediately behind the other. He actually got a Federal judge to order the FBI, that if they were going to follow Mr. Giancana on a golf course, as they did, that the FBI would be required to leave a foursome between their golf playing group and his group. That ruling was overturned on appeal.

Mr. FITHIAN. So it is your testimony then that Mr. Trafficante was not sufficiently, carefully monitored as to tell us one way or the other whether or not he might have been involved in any plot against President Kennedy?

Mr. SALERNO. I would answer that this way, sir: I personally was a little bit disappointed to learn that in that time period, he had not been the subject of an electronic surveillance. I would like to also point out, however, that being able to place someone under electronic surveillance is subject to so many conditions: The type of movements the man engages in, the actual physical circumstances of where he spends his time; this kind of work is not as easily done as nonprofessionals who have not engaged in it sometimes assume.

Mr. FITHIAN. Are you then directing your assessment of either omission or insufficient coverage so as to give us the story, primarily on the lack of electronic surveillance, telephonic monitoring?

Mr. SALERNO. I would say that created a big void in the total coverage that was being given.

Mr. FITHIAN. Can you explain why, if Trafficante is in the place that you put him in organized crime, that such an electronic surveillance activity would be somehow overlooked?

Mr. SALERNO. No; I can't answer that question, sir.

Mr. FITHIAN. You said that, and have apparently, a very high regard for the level of governmental activity in 1963 and you show us charts, and the like, apparently a great deal of pressure was, as we know, put on La Cosa Nostra in those days. I know this is a little outside the purview of this committee, but it is a rare opportunity for a Member of the House to have a chance to ask you a question like this. How would you suggest that we try to recoup the good old days of 1963?

Mr. SALERNO. I think we should take a look at why it was successful and try to duplicate the circumstances as much as we can within our constitutional framework of law. There is no question that the Federal agencies were coordinated. Cooperation between agencies is not enough in this kind of an effort. They have to be coordinated. Recent evidence by Mr. Civiletti of the Department of Justice before a congressional committee indicated that he was somewhat disappointed in the level of willingness of the U.S. Department of Labor to be more aggressive in organized crime in labor matters. That testimony was given in April of this year. I think it is a lot easier for an Attorney General whose brother is

PROPERTY OF

the President to make sure that all of the agencies of the Federal Government that should be playing a role are.

In other words, you have to go beyond the Attorney General. There has to be that kind of commitment in the White House, is really what is necessary.

Mr. FITHIAN. Is it your impression that the statutory changes since 1963 or 1964 with regard to wiretaps and with regard to certain kinds of activities has contributed, or is it just a lack of willingness that has contributed to our present state of pretty much doing nothing, as far as I can see.

Mr. SALERNO. No; I think the statute law is actually better and stronger today that it was in 1963. In those days, that electronic surveillance which took place was for intelligence purposes only. Now under title III of the Organized Crime Bill and Safe Streets Act, not only can you get the authorization from the court, but now you can bring the results into court and use it as evidence, something that was not possible in 1963.

In my home State of New York, for example, the law, as interpreted at that time by the Supreme Court, said, fine, you in New York State have a State wiretap law. You get authority from a judge, fine. The authority is given to the police department of the city of New York, so you, Ralph Salerno, can execute the court order; you can tell your commander about it; he can tell his commander about it; and he can tell the police commissioner about it because you are all part of a single entity known as the police department of the city of New York. But if I took that evidence to Mr. Klein in the prosecutor's office in New York County, and we proceeded to tell a judge and jury about it, the Supreme Court had said that we would be in violation of 605. So I would much prefer the current status of carefully controlled wiretapping but that amount which you can do, you can use as evidence in court, which we could not do.

The confessions of murder that we listened to could not be used for the purposes of evidence. The legislation that Robert Kennedy requested in 1963 was some time in coming, but it has arrived. We have the wiretap law that he recommended; we have the immunity law. So I have no argument with current statutory law. I think it is there. I don't think the commitment is there.

Mr. FITHIAN. Thank you.

Chairman STOKES. The time of the gentleman has expired.

Mr. FITHIAN. I ask unanimous consent to proceed for 3 additional minutes.

Chairman STOKES. Without objection, the gentleman is recognized.

Mr. FITHIAN. I believe a little bit ago you said that Roselli, by the structure of things, had to get permission from Giancana.

Mr. SALERNO. Yes, sir.

Mr. FITHIAN. To proceed. And that Giancana would, I believe you said, ask his peer, Trafficante, about proceeding. Is that because of a regional jurisdictional thing or is it because of a personal relationship that you have perceived between Giancana and Trafficante.

Mr. SALERNO. A combination of both. They were peers but the activity, the initial activity would take place with the Cuban com-

ASSASSINATION
ARCHIVES

munity that was in exile from Cuba. Mr. Trafficante had the best contacts there, and it would be—although Miami is generally referred to as an open city, southern Florida is generally considered to be within Mr. Trafficante's sphere of influence. So it would be a combination of he had the best contacts to the Cubans, plus the fact you would be operating in south Florida where he could be extremely helpful.

Mr. FITHIAN. And Giancana's territory——

Mr. SALERNO. Chicago.

Mr. FITHIAN. In just Chicago, he didn't have any other?

Mr. SALERNO. He had interests elsewhere. He would have had interests in Nevada, that's to a certainty.

Mr. FITHIAN. Is the machine or the commission as smoothly functioning now as it was prior to the RFK pressure 1962 and 1963?

Mr. SALERNO. It is functioning much better than it was in 1963, and I must add, as I indicated in my testimony, I don't believe that our level of knowledge is as good today as it was in 1963 because of the limits that do exist for electronic surveillance. In other words, electronic surveillance—solely for the purpose of intelligence gathering—it is forbidden by the law. You must specify the specific crime, and the law goes further than that. Even if you have not used up your entire time period of authority, if you have made an allegation as to a certain crime, as soon as you have received the evidence of that crime, you are expected to sign off.

I don't know if that implies that criminals 5 minutes later will not commit a second crime, but that is the requirement of the law.

Mr. FITHIAN. Finally, if everything seems to be functioning smoothly, how then do we account for Roselli's violent death and Giancana's death which, in the minds of many, are related rather specifically to what we are doing here?

Mr. SALERNO. I think there is a great deal of speculation as to the actual causes of both Mr. Roselli's and Mr. Giancana's deaths. I don't think anybody, except the people who were responsible for it, know whether it was because of their involvement with the CIA, whether it was because of testimony they had given or were prepared to give, or whether it was a local organized crime matter that we may not even be aware of.

I have my own hypothesis about the method of Mr. Roselli's death. Mr. Roselli was cut up and put into an oil drum and his automobile was found at the International Airport. My hypothesis is that being put in an oil drum and buried at sea, his body was not supposed to be found. So if it had been successful, we would have had the absence, the unexplained absence of Mr. Roselli with the red herring of his automobile being at the airport suggesting the possibility that he was voluntarily a fugitive who had left the country before he would be deported somewhere that he didn't want to go.

Chairman STOKES. The time of the gentleman has again expired. The gentleman from Pennsylvania, Mr. Edgar.

Mr. EDGAR. Thank you, Mr. Chairman.

I apologize for not being here during the full extent of your testimony, but I do have a few questions I would like to put to you. You indicate in the charts the high level of activity of the Justice

PROPERTY OF

Department during the period of 1962, 1963, and 1964 in moving out against organized crime figures; is that not correct?

Mr. SALERNO. Yes, sir.

Mr. EDGAR. And you indicated to Mr. Fithian's question that you felt, as part of where we ought to go from here, is to try to recapture the same skills and tools that we had in those years; is that not correct?

Mr. SALERNO. Not so much the skills and the tools, sir, as the dedication and commitment.

Mr. EDGAR. I wonder if you could explain then why it seems to me, as one member of this committee, that there was a great deal of confusion, mistakes, in terms of the sharing of the surveillance or the secret information between the Secret Service, the FBI, the CIA and whether or not you would go so far as to say that the Justice Department and agencies of this Nation did a good job in coordinating with each other?

Mr. SALERNO. I think that if one were to inspect whatever the official level of sharing and cooperation is, you would get a distorted and mistaken picture as against what actually happened between working agents on different levels of government.

The Federal agencies are just that, Federal agencies. They have to deal with local and State police departments all over the United States. Therefore, the official position of a Federal agency has to be similar to that of a convoy that we used in World War II; 300 ships are going to move together for protection. The maximum speed of the convoy has got to be the speed of the slowest ship otherwise you will leave him behind. Therefore, what Federal agencies are willing to share as a matter of policy has got to be the speed of the slowest ship. How much information will you give to the most corrupt police department or the most suspect police department in the United States.

It has been my experience that de facto, the FBI particularly and other Federal—

Mr. EDGAR. Could the photographers move so I can see the witness.

Mr. SALERNO. The FBI particularly and other Federal agencies very carefully determine different levels of confidence that they can extend and then are very generous in extending cooperation, information and even engaging in coordinated efforts in joint operations together.

Mr. EDGAR. I don't want to pursue this any further, but I do note for the record that 17 FBI agents were reprimanded privately because Oswald didn't make the security index and, yet, information was available to many of those agents to put him on that list. The Secret Service had information about Oswald that was different from the FBI's information, and I would suggest that if we move back to that level that there be some way that there could be coordination and collaboration between agencies so that as we move toward aggressive action, that aggressive action is a coordinated effort.

Let's move to another issue. In terms of your expertise, is there a likelihood that someone of the nature of Jack Ruby would be helped with his labor problems by someone in the underworld, and,

ASSASSINATION

further, is it unreasonable to expect that the underworld might use someone like Jack Ruby to do a job for them?

Mr. SALERNO. Well, I think Jack Ruby turning to someone in the underworld for help in a labor matter is not unrealistic. Many people do that every day. Many businessmen will buy labor peace, they will ignore collective bargaining; they will ignore all the agencies of government; and if they really want something done, they hire the Godfather.

Carlo Gambino, not in the underworld but in the upper world, was a labor consultant, business firms paid him as much as \$40,000 for help in one labor matter. I can tell you that Carlo Gambino doesn't know the difference between Samuel Gompers and Ringo Starr. That is how much he knows about labor but he is a Godfather and he has interjected himself in labor matter where miraculously the strike is headed off, or if it is already ongoing, it has come to an end. So Jack Ruby turning to someone in the underworld for help is not unrealistic at all.

There was a second part to your question.

Mr. EDGAR. If they did that, would they expect anything in return or would it be likely for them to go to someone who, just a few days ago a captain from the Dallas Police Department described as a buffoon and would suggest the underworld would never hire someone like that to do anything for them.

In your experience, would the underworld ever use someone like a Jack Ruby to do an action for them?

Mr. SALERNO. I went through the typical representative gangland slaying and nothing in what I had to say fits the assassination of the President. I didn't have an opportunity to give you three exceptions to that rule. The acid blinding of Victor Riesel in New York City was an organized crime motivated crime. It was an exception to the rule. They didn't keep it with trusted professionals. That was a contract offered for \$2,000, and someone took \$1,000 off that and offered \$1,000 to a second man who offered \$500 of it to a low level burglar in the city of New York who was an addict at that time.

That is anathema in organized crime, to have anything to do, particularly in 1955, with a drug addict. What happened there was, the young man who did the actual blinding of Mr. Riesel, didn't know the organized crime figure that had sponsored it; never met him. He was himself burned with acid. He got his \$500. He went to gambling casinos in Youngstown, Ohio, came back broke, needed more money and then became a potential threat. And the best indication is that he was killed—he was killed—the best indication is he was killed by the middleman who had worked between he and organized crime.

If he becomes a problem back to the organized crime figure, they would be in jeopardy. So he was killed.

We have another example in the shooting of Joseph Columbo before 85,000 people in Columbus Circle in New York. That homicide was committed by a black man named Jerome Johnson who was himself immediately killed probably by a Columbo bodyguard. A number of people jumped on Mr. Johnson. A crowd of bodies went down and shots went off. There is no question in my mind—I was one block away—when I heard that a black man had shot

PROPERTY OF

Joseph Columbo, I said Joseph Gallo did that. We knew that Joseph Gallo had been entering into alliances with black criminals that he had met in prison. But once again, an unhappy ending when there is a violation that goes away from the rule.

We have one in Kansas City, four young black men were hired to kill a witness in a Federal gambling case, and they were told by the low level La Cosa Nostra figure who was going to pay them \$1,000 to do that, that Mr. Landi, the victim, had to be killed because he was a witness in a Federal case. Those four young men were caught. So we have some exceptions where it appears to be a mistake, at least for the people who engaged in the crime because they are either caught or are themselves killed.

The death of President Kennedy does not fit a typical gangland homicide, but there are some dramatic parallels to the exceptions where low level figures, nondependable, nondescript people are used.

Mr. EDGAR. Mr. Chairman, I ask unanimous consent for 3 additional minutes. I have some very brief questions I would like to ask.

Chairman STOKES. Without objection, the gentleman is recognized for an additional 3 minutes.

Mr. EDGAR. Just to clarify that previous question, the question was, would they use someone like Ruby to kill Oswald, and not so much the Oswald personality as it would be to use a person like Jack Ruby, after getting a favor from the underworld to kill——

Mr. SALERNO. It fits the Riesel case, yes.

Mr. EDGAR. Let me ask a couple of questions about Mr. Oswald. In your opinion, is it enough for Oswald to have had an uncle by the name of Charles Moret, who is a bookie, to in any way link Oswald to organized crime?

Mr. SALERNO. I think it is a single fact on which you cannot base any serious premise. If it can be joined with other facts in a preponderance of evidence, then you might be able to come up with a responsible conclusion.

Mr. EDGAR. Well, then, let me raise the second possible connection, and that is with David Ferrie, who worked in the same building that Oswald was in for a time, at least it is alleged that that occurred.

Would that have been enough of a connection?

Mr. SALERNO. By itself no, but again in concert with many, many other facts it might.

Mr. EDGAR. Moving to the question again about Mr. Ruby, it is interesting for us to examine the relationship, if any, between a Mr. Trafficante and a Jack Ruby. Would it have been the custom for somebody like Trafficante, who is at one level, to have any association with somebody like Ruby? Would that be a custom or a norm?

Mr. SALERNO. Without any intermediary who might have known them both and introduced one to the other, it would be very, very unlikely. Jack Ruby cannot be characterized as an organized crime figure in any way in my estimation. Jack Ruby would not have made a pimple on the back of the neck of a real organized crime figure.

ASSASSINATION
ARCHIVE

Mr. EDGAR. One final question then. Mr. Aleman yesterday raised in a final question that there was no doubt in his mind that it would be possible for organized crime to have worked with rather than against, but with Fidel Castro, to turn around and go after someone like the President of the United States.

In your opinion, would it have been the custom, or is it the custom, of organized crime, to at some point work violently against someone, in this case the regime of Fidel Castro, and at other times for expediency work with someone, and in this case Fidel Castro, for their ends?

Mr. SALERNO. Yes; I have seen that done. I have seen that done in a gang war where some people switch sides more than once and totally reversed their loyalties.

Mr. EDGAR. You recall the Aleman testimony from yesterday. What is the likelihood of Mr. Trafficante, in your opinion, ever making that kind of statement to Mr. Aleman?

Mr. SALERNO. I would have to know more about their relationship. If it was as limited as Mr. Trafficante says, I would say no. If it was to the extent that Mr. Aleman described, it would be believable.

Mr. EDGAR. Thank you.

No further questions, Mr. Chairman.

Chairman STOKES. Time of the gentleman has expired.

Mr. Salerno, can you tell us—I believe you said earlier this morning, in response to something that was said on television about organized crime being larger than, as big as United States Steel, something of that sort, the comment was made it is bigger than United States Steel. Was that the comment?

Mr. SALERNO. Yes, sir, it was made by Meyer Lansky to his wife.

Chairman STOKES. Well, is that statement true?

Mr. SALERNO. I don't know the value of United States Steel. I do know this, sir: That if one takes hard data, hard numbers, such as the records that are seized in gambling raids, take the information that we do have, what is the price of heroin, what is the price of cocaine, we know that because undercover men are making such purchases.

If we take those records which have been seized in loan sharking cases, if we take those records where there have been convictions for kickbacks that were paid in obtaining loans from the Teamsters Union, I think if you take hard data and from them make the most conservative national projections, organized crime in the United States is an industry that is grossing billions of dollars per year and I think the net profit is extremely significant. There are some operations where the net profit is comparatively small. In book-making, you are making, $4\frac{1}{2}$ percent of your total gross as your gross profit. In narcotics you are talking on the importation level of the importer making five times his investment.

You are also talking, when you are talking about heroin, you are talking about a product which on the street is selling for between 150 and 200 times the value of gold per ounce even at today's figure for gold. So the numbers that we do know about—we know that it takes 6 tons of heroin to supply every addict in the United States, or something in that range. You start taking it per ounce on the street level and going through the most conservative projec-

tions you are talking about a multibillion dollar industry which has never been adequately studied by economists who can write books about what happens if the prime interest rate goes up 1½ percent, what happens if unemployment goes down 2 percent, and here is a multibillion dollar industry and they have never studied it simply because the data is not easily available, and you cannot get a mountain of empirical data with three graduate students mailing out 2,000 questionnaires and conducting 200 interviews in a summer.

Chairman STOKES. You mentioned Meyer Lansky. Who is Meyer Lansky?

Mr. SALERNO. Meyer Lansky was a young person who came over to the United States at a very young age, he came over at the age of 6 or 9 from Poland, with Jewish parents. He lives on the lower East Side of Manhattan, which at that time was a Jewish ghetto. Mr. Lansky demonstrated with some Jewish criminals what these Italian criminals have demonstrated, what is demonstrated today in what is beginning to be referred to as the Black Mafia what is being witnessed out in California, with a group that names itself the Mexican Mafia; that there are times when immigrant groups, and I mentioned Blacks because some sociologists say they are the most recent immigrants to the urban areas of our country.

Unfortunately in the United States, we give the greatest upward mobility to those immigrants who are willing to go into a life of crime as against what we offer immigrants who will be dutiful citizens and work hard.

In other words, what I am saying, sir, is that the name of the game called organized crime has remained constant. Over the years we changed the names of the players, their skin color or language spoken.

Meyer Lansky became a very wealthy man during the prohibition era when what we were calling 2 years ago, during our Bicentennial year, what we call today, the sacred document, that is the Constitution of the United States was being sneered at, ignored, and made a travesty of by so many American citizens and even a larger number simply ignored all that.

Meyer Lansky was a bright man who learned that if you engage in a life of crime and select your crime carefully and insulate your role you can become a very, very wealthy man. Meyer Lansky had interests in Cuba. You heard Mr. Trafficante mention the name of his brother Jake Lansky.

Meyer Lansky has dealt with heads of government. Mr. Batista in one case, with the governing council in the Bahamas, to where he moved some of his gambling operations. He is a brilliant man in the shrewd sense of the word, who has made an awful lot of money, who has kind of thumbed his nose at the law.

He fled the United States when three indictments were coming down against him. He went to Israel. He used the Jewish Law of Return, which says any person born of Jewish mother can go to Israel and file for citizenship. He did that. It was resisted by the Attorney General in Israel. The case was argued before the Supreme Court of Israel.

There is one exception to the Jewish Law of Return and that is if the person's residence or citizenship in Israel can be considered to

be a threat to the State, he can be denied the application for citizenship, and he can be put out of Israel, as happened to Meyer Lansky.

I think they stretched the law a little bit. If they had let Meyer Lansky stay there and bring all his money there, 20 years from now there would be two statutes in Jerusalem, one would be Moshe Dayan and the other one would be Meyer Lansky, because he might have helped them buy up the Arabs.

Chairman STOKES. You mentioned earlier, the victims of organized crime. Who are the victims of organized crime?

Mr. SALERNO. The victims of organized crime are many. They come from all walks of life. You can be victimized, if you are a prominent businessman, that they might like to move in on, but I think the people from whom they make money and who they victimize in one form or another come from all walks of life.

I am looking for something that I put among my notes and I am very happy for the opportunity to be allowed to look for it, because it was stated much more eloquently than I can by Dr. Martin Luther King.

This is what Dr. Martin Luther King wrote eloquently in an article entitled "Beyond the Los Angeles Riots, Next Stop the North," in the Saturday Review, November 13, 1965:

The most grievous charge against municipal police is not brutality, although it exists. Permissive crime in the ghettos is the nightmare of the slum family. Permissive crime is the name for the organized crime that flourishes in the ghettos, designed, directed, and activated by the white national crime syndicates operating numbers, narcotics, and prostitution rackets freely in protective sanctuaries of the ghettos.

Because no one, including the police, cares particularly about ghetto crime, it pervades every area of life.

I think what Dr. King recognizes in that comment is something that is not easily demonstrated in charts.

The Kennedy administration had an entire program of policies. The fight against organized crime was one. The improvement of the civil rights of all citizens was another. An attempt to help the poor was a third. But those were not three separate and unrelated programs, they were all part of the same drive that the Kennedys were trying to achieve.

Chairman STOKES. I just have one further question.

Lewis McWillie testified in these hearings yesterday, I believe, or the day before, that after he left Cuba and came back to the States he worked at the Cal-Nevada Lodge. Who owns the Cal-Nevada Lodge?

Mr. SALERNO. I don't know who owns it today. In 1963, Frank Sinatra was a 50 percent partner. He also had nine points in the Sands Hotel in 1963. That became a matter of record in the press because in 1963 he got into a little bit of trouble with the Nevada Gambling Commission. Mr. Giancana had been his guest at the Lodge and at his home and the licensing authorities were threatening to suspend the licenses at both institutions if Mr. Sinatra did not promise in writing to break off his friendship with Mr. Giancana.

Mr. Sinatra elected not to break off his friendship, not to jeopardize his partners, and he divested himself of his interests.

Chairman STOKES. My time has expired.

The gentleman from Connecticut, Mr. McKinney.

Mr. McKINNEY. Just one brief area following through on the questioning of my friend from Pennsylvania, Mr. Edgar.

It has sometime been suggested that Premier Castro was only too aware of the attempts, or at least aware of the theory that the Cosa Nostra could be used because of their gambling losses resulting from his takeover of Cuba to dispose of him. It has been suggested that Mr. Castro appealed to reason, and may have said all you have lost is a few gambling casinos, whereas I run Cuba, which is only 90 miles from the most unprotected coastline in the United States and, therefore, is the most logical place from which to supply drugs to this Nation, so don't fight me, join me.

Do you have any information or any feeling as to whether or not the Cuban Government or the Premier of Cuba actually are involved with the Mafia in any way in supplying drugs to this country?

Mr. SALERNO. I have no direct evidence of that; no, sir.

Mr. McKINNEY. Thank you.

Chairman STOKES. The gentleman from Indiana, Mr. Fithian.

Mr. FITHIAN. I just have one more question, Mr. Chairman.

During his testimony yesterday Mr. Aleman suggested that Trafficante, at least I thought he did, suggested Trafficante was perhaps working in cooperation with Castro in the 1960's. From what you know about the Cosa Nostra, how likely is it that a situation like this, that is, Trafficante, a Cosa Nostra leader, who had lost very considerable amounts of money and property, with the rise of Castro to power, would be working with him in any way?

Mr. SALERNO. The entire name of the game in organized crime is to make money. If Mr. Aleman had added to his opinion some indication, some evidence, showing where and how Santos Trafficante might benefit in terms of money, I think his argument would become much more believable.

If we could join a different answer to Mr. McKinney's question, if there were some evidence that Santos Trafficante is using Cuba in fact as a base for narcotics and profiting greatly from that, then he would certainly be able to be considered as being guilty of what Mr. Aleman set forth, but he is not doing it for a reason where he doesn't see some gain.

Mr. FITHIAN. Well, now, would this have been the kind of activity that was sufficiently important that the commission approval would be required?

Mr. SALERNO. What kind of activity specifically, sir?

Mr. FITHIAN. In other words, if Trafficante were going to be working with Castro on any number of things, would that, the fact he is working with another head of state, would that be important enough in and of itself?

Mr. SALERNO. No; people in organized crime have dealt on very high levels with other officials.

Mr. FITHIAN. So it would be the nature of the activity that would determine—

Mr. SALERNO. And only if it put him in conflict with some vested interest that some other leader in organized crime would have. If no conflict, he is free to do that.

Mr. FITHIAN. Then the size and the scope of the project is not really what requires commission approval, it is whether or not that might somehow impinge upon somebody else's turf?

Mr. SALERNO. Yes, sir.

Mr. FITHIAN. Thank you, Mr. Chairman.

Thank you, Mr. Salerno.

Chairman STOKES. Time of the gentleman has expired.

Mr. EDGAR. I just have one clarifying question.

Chairman STOKES. The gentleman from Pennsylvania, Mr. Edgar.

Mr. EDGAR. Earlier we talked about the possibility of whether or not Aleman's recollection was accurate or whether Trafficante's understanding of his statements were accurate, and you indicated that if the meetings were as frequent as Aleman had suggested it might have been a possibility that Trafficante would have divulged statements indicating what Aleman alleges, but it was rare.

We got information yesterday from Aleman that no more than three meetings occurred. You would not describe that as frequent?

Mr. SALERNO. No; I didn't mean to mislead you. I don't think I said it was the frequency of the meetings, it would be the nature of the meetings. If they are in fact going to be business partners, if Mr. Aleman is going to get a sizable loan from the Teamsters Union, for which Mr. Trafficante would have gotten a kickback—if Mr. Aleman is going to be for Mr. Trafficante and his friend Angelo Bruno the medium to an open door into relationships at high levels of the Dominican Government, where they can become involved in business activities which would accrue to their sharing a great deal of wealth between them, now he would be talking to a business partner, somebody with whom he is going to make a great deal of money, then I would expect that he might have made such a statement.

If it was, well, I met the fellow and he asked about a loan, and that was kind of straightened out, and we talked a little bit about possibilities, if you take the impression that Mr. Trafficante wants to put on the nature of their meetings, then I would discount the possibility that it was said. But if they are going to make a great deal of money together, if they are going to be business partners, he might have shared such a thought with him.

Mr. EDGAR. But I think it is accurate to say that Trafficante would have been aware of Aleman's previous testimony, well, his relationship may be in giving testimony in Chicago against some other witnesses, and it seemed to me wouldn't it have been natural for somebody in the Cosa Nostra not to discuss such things with someone who may have been involved?

Mr. SALERNO. No, not at all. If we are going to infer that this man testified against Norman Rothman and Mr. Mannarino, you might think that if that were going to be the consideration, Mr. Trafficante would not even have found himself in the same room with that man. The overriding consideration was "Forget my friend Norman Rothman, forget my colleague Mannarino, if I can make a lot of money with this cat, I will meet him once, twice or a 100 times."

Mr. EDGAR. And your earlier comment was that it was the quality of the content of the meeting and not the quantity of the meetings?

Mr. SALERNO. Yes sir. The fact that they were together, Mr. Trafficante makes admission to that, and we know that that took place even after he had given testimony against some of Mr. Trafficante's friends, I think suggests that money is the overriding consideration.

Mr. EDGAR. Thank you. I appreciate the response.

Chairman STOKES. Time of the gentleman has expired.

Mr. Salerno, as a witness before our committee, at the conclusion of your testimony you are entitled to 5 minutes. During that 5-minute period you may in any way expand upon your testimony or comment upon it, and I would extend to you at this time 5 minutes for that purpose, if you so desire.

Mr. SALERNO. Thank you, Mr. Chairman. I just want to mention two things and it won't take 5 minutes.

No. 1, I would like to, through this committee, thank Attorney General Bell and the people in the FBI with whom I, and my colleagues on the staff dealt, for their grand cooperation, their kindness and their courtesies.

The second thing I would like to say to this committee and for the record is this. That from time to time when the Mafia, the Cosa Nostra, has to be discussed, some Americans are angered by that fact. I would like the record to show that I am one of the Americans who is greatly angered when the necessity arises.

I resent the fact that some criminals have formed an organization where they require that membership be limited to people of Italian background, where they apply Italian words as a name to a criminal organization, where they apply an Italian word for ranks within that organization.

As I sit here looking at the committee, you are members of the Congress, and that together with many other things, I am sure, makes each of you proud of your roots and from whence you came.

I would just like to say that I am equally proud of mine. Thank you, sir.

Chairman STOKES. Mr. Salerno, I would just like to say on behalf of the committee you are obviously an eminently qualified expert in this field. You have given some very articulate and eloquent testimony before the committee and we want to thank you for the services you have rendered to us.

Mr. SALERNO. Thank you, sir.

Chairman STOKES. The Chair would like to take a 3 minute in-place recess before we proceed further.

Chairman STOKES. The committee will come to order.

The Chair recognizes Professor Blakey.

Mr. BLAKEY. Thank you, Mr. Chairman. It could be said that the committee has now come full circle. It began with the question "could organized crime have been involved in the plot to murder President Kennedy?" It has run an exhaustive check of the possible conspiratorial associations of one figure involved in the assassination, Jack Ruby. The committee obviously has more work to do on Ruby's associates as well as Lee Harvey Oswald's, and it will have the opportunity to say more about them in its final report in December.

Nevertheless, it is fair to say the committee's investigation into the possible involvement into organized crime has been more com-

EL SUR-10.24.63,
Costello

P. 441

EL SUR - 1963, Trafficante

p. 441

plete than that of the FBI or the Warren Commission in 1963 and 1964. It is also fair to comment that had this sort of investigation taken place at that time when the evidence was fresh, it is possible, though hardly a sure thing, that a lot more information might have been forthcoming. But the committee must face this fact. The question of organized crime involvement is still and open one. Nothing that has been uncovered excludes it and much that is new points toward it. Yet frustration may be the result of this committee's efforts too.

To address the issues raised by this frank recognition of the possibility of ultimate frustration and comment on the investigation of the Warren Commission and this committee, as well as the future, the committee has invited the Hon. Burt W. Griffin to appear here today. Judge Griffin was an assistant counsel for the Warren Commission. As such, he shared responsibility for the investigation of Jack Ruby and the shooting of Lee Harvey Oswald. Judge Griffin received a B.A. cum laude from Amherst College in 1954 and an LL.B. degree from Yale in 1959. Judge Griffin has served as the Director of the Cleveland Office of Economic Opportunity, Legal Service Program, as well as the Director of the Legal Aid Society.

In January 3, 1975, he was appointed judge of the Court of Common Pleas of Cuyahoga County, Ohio. It would be appropriate at this time, Mr. Chairman, to call Judge Griffin.

Chairman STOKES. Judge, I ask you to stand, please, and be sworn. Do you solemnly swear the testimony you will give before this committee is the truth, the whole truth and nothing but the truth, so help you God?

Judge GRIFFIN. I do.

Chairman STOKES. Thank you, you may be seated.

Judge Griffin, it is a real pleasure to welcome you here. Mr. Blakey, Judge Griffin happens to be not only a long-time close friend, but one of Cleveland's most distinguished jurists. We welcome you here this afternoon, Judge.

TESTIMONY OF JUDGE BURT W. GRIFFIN, FORMER ASSISTANT COUNSEL FOR THE WARREN COMMISSION AND JUDGE OF THE COURT OF COMMON PLEAS, CUYAHOGA COUNTY, OHIO

Judge GRIFFIN. Mr. Chairman, and my good friend, Louis Stokes. Let me say it is a pleasure for me to be here before your committee. I say it with only one reservation, and I think, Mr. McKinney, this may bring back some memories to you because the last time that I had an opportunity to appear before this committee in executive session, I was about an hour late because I found deficiencies in the Metro transportation system. Last night, your committee was very kind and offered to spare me that indignity and sent Mr. Mathews with Mr. Blakey's car to the airport to pick me up.

I regret to say that when we got out to Mr. Blakey's car, it didn't work. And I found myself behind the car trying to push Mr. Mathews to get it started. So I would suggest that if there are any other areas of investigation for this committee to undertake that there might be some in the field of transportation.

Mr. EDGAR. Would the gentleman yield at that point?

Chairman STOKES. The gentleman is recognized.

Mr. EDGAR. As a very strong advocate of public transit, I think the Metro system is getting better, and I would suggest if you are ever in that predicament again, you might try using it. I have been to the gentleman's city of Cleveland and you have a very fine public transit system. I hope we can have those fine systems throughout the Nation.

Judge GRIFFIN. I thank you, Mr. Edgar, for the advice, and I am sure that I will consider it seriously.

Let me say in seriousness, that the purpose of my remarks is to discuss with the committee the question of what is the proper process for investigating political murders that have national implications. That is what I would like to reflect upon in these minutes with the committee.

I propose to begin that inquiry with a brief discussion of what I perceive to have been the goals of the Warren Commission and the Warren Commission's successes and failures. And I would like to end with some suggestions for dealing with future political murders.

It is a sad thing to think about, but I think we cannot escape the honest judgment that we will have in this country, political murders in the future and we will, I am sorry to say, in all probability, have Presidents who are assassinated in the future. So that I think more important than attempting to reach a conclusion as to how President Kennedy happened to be killed and why and who all may have participated in that, as important as that inquiry is, the real questions are not for the past, but the real questions for this committee are for the future.

The Warren Commission was designed primarily to achieve four goals. First, to establish the true facts surrounding the assassination of President Kennedy and the murder of Lee Harvey Oswald. Second, to accomplish that mission in a manner that would satisfy the broadest segment of influential people and the American public in general. Third, to do it in a manner that would not unnecessarily disrupt the stability of the national government and its conduct of international affairs or jeopardize the national security. And, fourth, to conduct this inquiry in a manner that would avoid damaging the reputations or employment of individuals against whom there did not exist convincing evidence of criminal conduct.

Those goals were not in every respect stated by the Commission, but I believe that they indeed were the goals of the Commission, and I think that the first two goals, that is, of finding the truth and, second, of accomplishing that investigation in a manner that would be persuasive, were actually articulated in the official Commission documents.

The third goal, that is the one that related to the stability of the National Government and the problems of national security, was communicated by the President of the United States to Chief Justice Warren.

The fourth goal, that being a civil libertarian goal, although it may not have been articulated in any official documents, was, in fact, the philosophy of Chief Justice Warren, as I had the opportunity to witness his conduct of the Warren Commission.

ASSASSINATION
ARCHIVE

In a rather brief manner, I would like to summarize the reasons for these goals, and I will be brief because I think that the reasons are obvious, but it is perhaps worth mentioning them.

President Kennedy's death was surrounded with suspicions of conspiratorial intrigue that could easily have fed efforts at domestic and international turmoil. If the suspicions were true, there would be a need for serious corrective action, but if the suspicions were unfounded and were not abated, the mere suspicions could provide strong weapons in the hands of individuals who desired to manipulate public opinion and power for unjustified ends.

The Warren Commission began its inquiry on the very heels of one of the most unfortunate eras in American political history. It was what we all look back upon now as the McCarthy era. And the conduct of investigations into matters of internal security during that period cast not only a blot upon the conduct of senatorial committees, but of congressional committees as well, and I think that we—many of us, if not a vast majority of us—look back upon that period with a great deal of embarrassment and sorrow.

There was another period which none of us is old enough to remember where the same kind of political ambitions based upon unfounded suspicions and fears brought the United States into war, and that is the period of the Spanish-American War, which has been well documented and the role that irresponsible newspaper people had to play in the creation of that war is well known to any student of history. So that the fears about the inability to find the truth and to document it in a persuasive manner were not inconsiderable or insubstantial ones, as far as the members of the Warren Commission were concerned.

And it was important that a reliable body be established to investigate and report honestly the facts that surrounded the murder of Lee Harvey Oswald and of President Kennedy in order to minimize the possibility of such disastrous consequences.

At the outset of the Warren Commission's activities, speed seemed to be an important element in the Commission's operations.

Initially, the White House informed the Commission that it should complete its work and make its report prior to the national political conventions that were scheduled for the summer of 1964. The emphasis on speed stemmed from the early perceptions of this problem that I have been alluding to—preventing the unnecessary disruption of public policy and political power.

At the outset, the timetable seemed reasonable, but as the scope of the investigation became apparent, such a deadline became obviously unrealistic. The goal of speed came into conflict with the goal of completeness, for many of the suspicions, which the obvious facts generated, could not be explored fully in the 5 months that were originally projected for the Warren Commission's investigation.

In retrospect, it seems to me that speed was not the political necessity that the White House originally envisioned. The Warren report was itself not issued until late September 1964, and I reflected as I came here today that I believe that today or tomorrow is the 14th anniversary of the issuance of that report. This was, of course, after both the Republican and Democratic national conventions had nominated their candidates for President. And the issue

of the assassination of President Kennedy never became an issue in that Presidential election campaign.

At no time prior to the report's issuance did any Member of Congress attempt to use the uncertainties of the assassination to oppose Johnson administration policies. So long as the Commission was operating, the White House, in fact, achieved its goal of preventing the uncertainties that surrounded the assassination from interfering with its own conduct of public policy. I believe that the initial emphasis on speed reflected the recollections which I have made of McCarthyism which were still vivid to President Johnson and members of the Commission when we began our work in early 1964.

I would like to turn at this point then to discuss the question of how the Commission came to terminate its investigation. Pressure for a quick report was not, in my experience, what induced the Commission to curtail its investigation of areas that are now a public concern and under investigation by this committee. The reasons for stopping the investigation by the Warren Commission were that to anyone with substantial criminal investigatory experience, and you must remember that Chief Justice Warren had been the prosecutor of Alameda County for 20 years before he became Governor of the State of California, to anyone with such investigative experience, the evidence seemed overwhelming that Oswald was the assassin and the conspiracy questions that remained were entirely speculative. They were based upon political or underworld acquaintanceships but devoid of any concrete evidence on any participation in a murder or in the planning of a murder.

As a practical matter, the Commission leadership decided not to pursue further the various speculative theories on conspiracy unless two things could be found. First, unless they could find substantial evidence that a specific suspected conspirator had had personal contact with Lee Oswald or Jack Ruby during the period when that person could have counseled or assisted Oswald or Ruby in the events of November 21-23, 1963.

And second, and the two would have to go together, unless there was some evidence that such suspected conspirator desired to kill President Kennedy or was involved in a common political activity with Lee Harvey Oswald.

Although the criteria that I have mentioned were not applied at the beginning of any line of inquiry so as to stop an exploration of at least a minimal sort at the beginning, they were applied after months of investigation in deciding to close out a particular line of inquiry. It was believed by the Commission's leadership that any further investigation not so founded would require an in-depth probing of the life of any possible conspirator. The mere act of continuing to investigate such individuals, would be a form of accusation that could severely injure innocent people. It seemed unwarranted to conduct such an in-depth investigation merely upon speculation that a conspiratorial link might exist. The cost and length of such investigation seemed immense.

The likelihood of success seemed remote and the possible infringement of civil liberties seemed serious.

Those two criteria, I might point out, also became the standards that the Commission ultimately used for concluding that "no evi-

ASSASSINATION

dence," the famous and much maligned language of the Commission report, that no evidence of any conspiracy had been found. The committee, in my opinion, Mr. Stokes, must seriously consider in reaching its own conclusions whether or not it is proper to depart from the standard of proof that I suggest was followed by the Warren Commission and whether it is proper to apply those standards in making its own judgments as to how far to continue any investigation.

I would like then, with that background, to turn to what I believe to be the successes and failures of the Warren Commission.

The overriding short-term political objective of President Johnson in establishing the Warren Commission was achieved. That is, the determination of public policy was not substantially affected by the uncertainties of the assassination and no member of Congress or political opponent of President Johnson was able to mobilize public sentiment through manipulation of fears that grew out of these uncertainties.

Second, the factfinding goal of the Warren Commission was partially, if not substantially, achieved. The Commission developed an extensive body of information about the assassination and related events. That information not only formed the basis of the Commission's conclusion but has provided, up to this committee's commencement of its investigation, the most solid evidence upon which the Commission's critics have relied. Almost no probative evidence bearing upon the identity of participants in the murders has been uncovered by the legions of Warren Commission critics. No witness, unknown at the time of the original investigation, has come forward with information showing that any specific person assisted or encouraged either Oswald or Ruby in their murders. The most significant newly discovered information has been that evidence in the possession of governmental agencies was deliberately withheld from the Warren Commission. If that evidence had been provided to the Commission, I personally have no doubt that our investigation, that is the investigation of the Warren Commission, would have been extended substantially.

And I would like to point out a major success which Warren Commission critics tend largely to ignore. That is, that the civil liberties of Americans were conscientiously protected by the Commission and the Commission did not become an official witch hunt that destroyed the reputations and lives innocent citizens. That success resulted both from the manner in which the Commission conducted its inquiry and from the standards that it applied in deciding to terminate the inquiry. This is a success, Mr. Chairman, which I believe the select committee should recognize and would do well to applaud, lest that accomplishment be forgot.

However, it must be recognized that a decision to terminate governmental investigation also unleashed a private witch hunt, and the committee must evaluate that byproduct.

Let me turn next to what I believe were the failures of the Warren Commission. It is clear that the Warren Commission failed to prevent the assassination from becoming a long-term political issue.

I distinguish here between an issue that remains of public curiosity, such as one might say would be an issue concerning the assass-

sination of President Lincoln at this stage, and between that kind of issue and an issue that actually affects in a substantial way the time, money, and decisions of public policy and public officials.

A second failure, and a glaring failure, was its inability, the Commission's inability, to gain full cooperation from the investigative agencies.

The committee, I know, has carefully examined the areas in which the CIA, the FBI, and the Dallas Police Department failed to provide candid and, I might say, loyal assistance to the Warren Commission, and I will not attempt to go into those.

The third failure of the Commission relates to this problem of cooperation with investigative agencies. It is the use by the Commission of liaison personnel from other agencies.

In retrospect, Mr. Chairman, I believe that the Commission needed its own staff presence on the premises of the FBI, CIA, and the Dallas Police Department, with unrestricted access to their files, and with freedom to speak privately and without approval to any employee of each agency.

Instead, the FBI and the CIA established their own liaison personnel at the Commission offices. All contacts with the FBI and CIA personnel were cleared, first through agency channels of those agencies, and the agent's reports were reviewed by their supervisors before being forwarded to the Commission.

There was, I think, at least a middle ground that the Commission might have adopted in hindsight. The investigative staffs of those agencies might have been assigned to the Commission and controlled by the Commission and the Commission then might have made the decision as to how it would keep the agencies advised of the Commission's progress, as it, the Commission deemed appropriate.

I think there was also a failure by the Warren Commission of investigative tactics. The style of the Commission's own staff was in retrospect not fully one of criminal investigators. The rules that governed the staff discouraged off the record conversations with witnesses and emphasized almost exclusively transcribed depositions. Transcribed depositions did not lend themselves to candor, if the deponent feared that this candor could injure him.

The Commission itself failed to utilize the instruments of immunity from prosecution or prosecution for perjury with respect to witnesses whose veracity it doubted.

In each case, the failure to have any of its own staff stationed within the agencies, the system of agency-Commission communications, the failure to employ its own staff investigators, and the restraints on Commission interviewing techniques, and the reluctance to use immunity grants and perjury prosecutions, the Commission chose an investigatory course that would cause the least damage to individual citizens and to existing public agencies. I believe that is the reason that the Commission chose that approach.

There was a belief among the Commission leadership that the investigatory approaches which were rejected were likely to produce more resistance than truth from public agencies and that the possibility of success by those rejected methods was outweighed by

ASSASSINATION

the possible unjustified injury to individual citizens and existing governmental operations.

You must remember, Mr. Chairman, that in those days we trusted the various agencies of Government with whom we dealt, much more than we trust them now.

At no time, however, despite these investigatory techniques did those limitations ever prevent a Commission staff member from making an inquiry that he believed was relevant. The consequence, nonetheless, was the Commission was powerless to combat deliberate deceit by an investigative agency.

A fifth difficulty or failure, as I look back upon the Warren Commission, evolved from the difficulties of conducting a conspiracy investigation through a special commission. The investigatory techniques that the Commission utilized were in fact the standard investigatory techniques of the Federal Bureau of Investigation at that time and were reasonably suited to an investigation which depended on testimony from independent witnesses who generally desired to tell the truth.

The primary investigatory approach utilized by the FBI in connection with the murders of President Kennedy and Lee Harvey Oswald was directly and immediately to confront a witness or a suspect with questions. This approach, of course, was important to preserving the memory of an honest witness, but for a possible co-conspirator it largely served to keep any possible conspirators fully appraised of the ongoing investigations.

To my knowledge, in that period, the FBI never established a list of possible conspirators with either Jack Ruby or Lee Oswald, and if it had such a list, it never placed them under surreptitious investigation, or if it did so, the existence and nature of such investigations was certainly never revealed to me, and I had responsibility for investigating Jack Ruby.

Nor was there any indication that the FBI in that period used its own agents in an undercover capacity under any circumstances, or pursued the practice in that period of our history of infiltrating suspect groups, except through paid informants.

Indeed, it was my experience as an Assistant U.S. attorney in the years of 1960, 1961, and 1962, that J. Edgar Hoover strongly opposed using his own employees in an undercover capacity. By contrast, during that same period of time, the U.S. Secret Service did have its own employees trained to investigate counterfeiting by undercover means. I think a comparison of the two agencies during that period of time would reveal that the Secret Service had been much more successful in investigating counterfeiting conspiracies than the FBI had been against organized crime.

The FBI fully used its standard investigatory techniques for approximately 2 months before any member of the Warren Commission was able to initiate his own investigation. That 2-months delay substantially undermined the ability of the Commission to investigate a conspiracy.

First, obviously all tracks were cold and any conspirator had 2 months to flee or hide.

Second, all possible suspects and conspirators had ample time to learn what direction the Government's investigation was taking.

Third, after 2 months the investigatory agents of the FBI were frankly impatient, since they were convinced that they had done a thorough job and that a staff of Commission amateurs could do no better.

Looking backward, under those circumstances, the only way to investigate successfully a possible conspiracy was either to gain the complete cooperation of the original investigators, in a total reexamination of their work, or to employ a new staff of investigators. Even then the timelag would pose serious problems. But once a truly collaborative investigative team was created, it would have been necessary to develop systematically a set of possible conspiracy theories and conspiracy suspects.

The development of sound theories and reasonable suspects required a Commission staff that was knowledgeable about the primary suspect groups, pro- and anti-Castro groups in the United States and Mexico, Cuban counterintelligence and espionage, Soviet counterintelligence and espionage, the possible involvement of organized crime figures with such foreign groups, and the linkages of all those groups to the FBI, CIA, and the Dallas police force.

The Commission itself employed only two persons with any substantial background in any of those areas, and that was only in the area of organized crime.

We did have two individuals who had been members of organized crime staff in the U.S. Department of Justice.

With respect to any conspiracy related to Cuban or Soviet groups, the Commission had no staff members with past expertise and relied entirely on the CIA and FBI for assistance. That lack of in-house expertise, in my view, precluded developing sensible working hypotheses about conspiracies which could be investigated in an economical manner.

If such a staff could have developed workable hypotheses for conspiracies and for specific suspects, a special investigative approach would also have had to have been developed. The approach probably would have had to rely heavily upon clandestine surveillance and infiltration of suspected groups and individuals.

An investigation that involved infiltration and clandestine surveillance could not have been tied to a political timetable and would have taken years, not months to complete.

Certain basic records, such as a telephone call records, hotel registrations, transportation manifests, immigration records, photographs of the murder scene, and audio recordings would have had to have been comprehensively acquired for possible future use and analysis whether or not they had any immediate evidentiary value. This approach would have required a different staff and a different relationship to the President and to the Attorney General.

The staff would have needed a variety of skills besides legal, including knowledge of individuals probably associated with the primary suspect groups.

Time commitments would have been for years rather than for months. To avoid being threatened by existing agencies, the Commission staff would have required close and direct support from the President and from the Attorney General so that impediments

ASSASSINATION

from reluctant investigative agencies could have been resolved with the full support of the President and the Attorney General.

A sixth failure or difficulty that I would like to address arises from the prosecution of Jack Ruby. Any investigation of Jack Ruby by the Warren Commission posed an immediate conflict with both the Dallas County prosecutor and the defense in the trial of Jack Ruby. The most serious conflicts were with the right of the State of Texas to prosecute Ruby to the fullest and with the right of Ruby to a fair trial by a Dallas jury unaffected by the actions of the Warren Commission.

The interests of Ruby in a fair trial precluded the Commission from taking any testimony from witnesses associated with that trial until the trial was over. It also dictated that the Commission itself not draw conclusions on Ruby's motives and not publicly implicate him in a conspiracy to assassinate the President, if he were in fact so implicated, until all legal avenues were exhausted in his trial for the murder of Lee Oswald.

The most important long-range considerations that grows out of the Ruby dilemma was whether or not to seek to obtain immunity for Ruby in his testimony concerning the assassination of President Kennedy once he was convicted of murdering Oswald, in exchange for testimony concerning the assassination.

The Commission did not have the power to grant this immunity, since the prosecution for the murder of President Kennedy was controlled by the State of Texas.

The Commission, moreover, chose not to exercise even its influence to gain such immunity. Nonetheless, there came a time after the Commission was disbanded and after Ruby's judicial appeals for the murder of Oswald were exhausted, when that issue, the question of immunity, could have been reconsidered, but at that point no public official or public agency existed which had an official interest or responsibility to review the question.

Mr. Chairman, I might interrupt my formal remarks at this point, because as I am sitting here speaking I am also looking at my watch, and I understand that you have a plane to catch, and if I were you sitting there, I would be very itchy and wonder how long this friend of yours was going to go on, and if you would like me to stop at this point so that you can intervene, I would be happy to do that.

Chairman STOKES. Judge, I would really like to get the benefit of your full statement, because I would like to put a couple of questions to you and then, of course, with your permission, I would at that time make my concluding remarks.

Judge GRIFFIN. All right.

Chairman STOKES. Thank you.

Judge GRIFFIN. Mr. Chairman, the next problem I would like to raise for the committee's consideration, which I regard as a failure of the Warren Commission, grows out of the problems of publication of the findings of the Warren Commission. I believe that the most serious failures of the Commission were not in the effectiveness with which it investigated the facts surrounding the murders of President Kennedy and Lee Harvey Oswald. I believe even if more aggressive and independent means were utilized for such an investigation, that no different conclusions would have been

reached as to the participants in the crime or as to whether or not there was a conspiracy.

The problems of proof of a conspiracy are probably too great or else the suspicions with which this committee is dealing are in fact not well-founded. The select committee, I would suggest in those regards, should consider the possible reality that under the American system of civil liberties and the requirement of proof beyond a reasonable doubt, that it is virtually impossible to prosecute or uncover a well-conceived and well-executed conspiracy.

The FBI, and I beg to differ with the optimistic projections of Mr. Salerno, certainly up until 1963, and I don't see that much improvement since then, has almost totally failed in its efforts directly to prosecute the organized commission of crime. The few successful prosecutions of effective criminal conspiracies that have occurred in America almost always result from the accidental discovery—accidental discovery of a crucial incriminating fact, such as was the case in the Abel spy case, where a young boy found a radio transmitter, as I recall, in a trash can in New York, and that is how the Federal Bureau of Investigation came upon Mr. Abel.

Or a second and much more common method of solving and prosecuting criminal conspirators, of course, stems from the willingness of a convicted conspirator to testify against his confederates. It is much better if you have the convicted conspirator facing the death penalty than if you have him facing the penalty of perjury.

There was I think, though a reasonable possibility that the American public could have better understood and accepted the integrity of the Commission's work. The select committee may well find deficiencies in the Commission's investigative technique but I would urge the committee to consider seriously if the Commission staff was honest and industrious in its efforts, and if substantial possibilities really existed that any different relevant facts could have been uncovered at that period, especially given the problems of cooperation with the CIA, and perhaps also with the FBI, and especially even with that cooperation but without an individual who was willing to confess. I really doubt that those questions can sincerely be resolved against the Warren Commission.

The Warren Commission report, I submit, was a communications failure that need not have occurred. The report was prepared by persons, unfortunately like myself, who distrusted and did not know how to use any form of communications except the written word. The visual media, television, and videotape, were barred from courtrooms, which is lawyers forum, and had brought disrepute to congressional investigative committees. I might commend this committee at this point for setting an example for this country and in Congress as to how an extensive investigation can be conducted in the full presence of all of the modern media that we now have.

It is true, as we all know today, that the only effective way to communicate with the American people, and all of us who are elected public officials—I like to point out that Bob Blakey always introduces me improperly as an appointed official, and I think the Congressmen recognize the difference.

ASSASSINATION

Any elected public official and others realize the importance of the mass media in communicating to the American people.

All the Warren Commission's essential testimony should have been preserved on videotape. The report itself should have been packaged, both for video presentation to small audiences, and for longer video study by amateur analysts and scholars. Incorporated into the presentation should have been an opportunity for questioning by critics and a video presentation of the evidence that related to the questions that were being posed by those critics.

The eighth failure that I would like to identify for the committee is the failure to have a mechanism after the Warren Commission closed its operation for evaluating new evidence. I think the Warren Commission was shortsighted in writing its report and closing the door on further investigation. This led to claims that new evidence was being ignored or that the significance of old evidence had been overlooked. The public concern about the assassination of any President and of President Kennedy in this case will not end in the lifetime of anyone in this room.

The dedication of a democratic society to an honest search for the truth required an ongoing vehicle for unbiased public inquiry. Such problems might have been minimized if the Attorney General had established within the Justice Department an office which would have continued to receive evidence and analyses from anyone who desired to submit them.

A probable consequence would have been that further private and public investigations would have been funneled into that office rather than into the channels which they had predominately been funneled toward. Instead, the public continued to be bombarded with spurious claims that significant leads or new evidence had been developed, when, in fact, the evidence was not new or the leads were not fruitful.

Congress, as we all know, ultimately became the only national forum in which continuing questions could be reexamined.

The last failure that I wish to identify was the failure of the Warren Commission to have an adequate historical perspective on its task. The Warren Commission partially recognized that its activities did have a long time historical purpose and ultimately one member of the Warren Commission staff was an historian and it was the policy of the Commission to preserve all of its documents for delivery to the archives. I am always interested in those who accuse me of being part of a coverup when they ask me to explain how there can be one document that I prepared that is in the Archives which says one thing and another document that says something slightly different, and I am always amazed that they do not see the existence of both of those documents as a frank evidence of our desire to be candid about how we changed our minds and how things moved along and even the political considerations that affected some of our work.

We are, those of us who are former staff members of the Warren Commission, available to be dissected publicly because we made those documents available in as total a fashion as they existed, to my knowledge, and we will be examined, I am sure, as this committee will be in the future because of that attempt to be candid.

But the fundamental investigation itself, I think, lacked a proper historical perspective. I think that could have been dealt with, in part, by an investigatory approach which did collect basic raw data, such as I identified a few minutes ago—extensive telephone records, tapes, other things of that sort. Those materials would have served as original data against which new witnesses, new leads and accusations of investigative agency memos could later be evaluated.

A second historical perspective would have been to attempt more carefully to anticipate the conspiracy theories of the future critics and to build its investigation in terms of suspect lists and theories.

Mr. Chairman, then let me come to the recommendations that I would like to make for the Commission.

I would like to start by offering one basic conclusion for this committee's consideration. And that is that political murder, whether it be of an elected or a private person, requires an investigatory treatment different from that of ordinary crime. The political implications of such a murder do not vanish with the criminal prosecution, and over a period of time, new political implications may arise from the manner in which the original criminal investigation and prosecution were handled, even if no new evidence is generated that is persuasive enough to change the conclusions of the original criminal investigation.

If a hint of conspiracy exists and possible conspirators are not identified and prosecuted, the case will be retried and reexamined in the public medium.

Ultimately, political pressures or new facts may force all or part of the original investigation to be renewed again by a congressional committee, such as yours, or by another commission, such as the Rockefeller Commission. Any governmental investigation into a political murder must, therefore, address both the short-range purposes of its investigation as well as the long-range needs and pressures.

Political murders, I might point out, can include the President of the United States, a Governor, as with Huey Long, a Senator, as with Robert Kennedy, a Congressman, or even a mayor or a local official, a civil rights or other leader, a newspaper reporter, as apparently has happened recently in Arizona. Because such a murder threatened the stability of our Government and the political freedoms of all Americans, it does require a special treatment.

The murder of a President, moreover, is a crime that requires even more extensive and perhaps even a different investigation than any other political murder. Surely, the reverberations of the murder of the President are louder and longer and the implications reach into questions of foreign policy which may not be touched by any other kind of political murder.

Against those basic reflections, I would like to submit the following recommendations to the committee for its actions.

First of all, and looking at the narrowest question that I wish to address, is simply what do we do about the assassination of President Kennedy and the ongoing problem of its investigation?

I think in the narrowest sense, the select committee should recommend that the John F. Kennedy Library or some other appropriate institution be established as a repository for all materials

dealing with the assassination of President Kennedy and the murder of Lee Harvey Oswald, including the political aftermath, which I believe is an important consideration, the public reexamination of how the Warren Commission operated and the relationship of all other investigatory agencies to that Commission.

All materials that relate to those events should be declassified except those whose publication is inconsistent with human decency. The repository should be federally funded so that it may collect all relevant public and private materials and can become a center for serious scholarly inquiry into the issues that have evolved from those murders and which have brought so many people in practically full-time attendance to these committee hearings.

The second recommendation which I wish to make concerns communicating the select committee's conclusions and I suspect I don't need to make this recommendation.

The select committee should seriously consider how it can use visual as well as written means to communicate its own investigatory processes and its own findings, even beyond the conclusion of these hearings. The media form should not be designed, as I say, simply for immediate observation by the general public but should be available for repeat presentations to future audiences. You may not like my suggestion in this regard, but I submit to you that you will soon become the target that replaces the Warren Commission as the object of attack for the various critics of the investigation into President Kennedy's assassination.

Third, what do we do about possible future evidence that may bear upon the murders of President Kennedy and Lee Harvey Oswald? I suggest to the committee that if criminal prosecution remains possible for either of these murders under any applicable statutes of limitations, the select committee should recommend that the Attorney General of the United States establish a procedure and designate an Assistant Attorney General who will be responsible for the continued evaluation of evidence which may establish a basis for prosecution and for pursuing any leads. While this will undoubtedly have some consequences of encouraging spurious conspiracy claims, it will, in my opinion, have the more beneficial result of affirming the U.S. Government's continuing desire to ascertain the truth.

I might broaden that suggestion in a further regard and say that it may well be as a result of the mandate of this committee to investigate both the assassination of Martin Luther King and President Kennedy that an appropriate recommendation would be that an office be established within the Justice Department which would specialize in what I am identifying as political murder and out of that established committee, it seems to me there should not only be responsibility for investigating the loose ends which will exist because under the pressure of time also this committee will not complete its investigation for reasons that are political, but that there needs to be a capability to move quickly in the event of future assassinations. There needs to be a plan ready to be implemented which a successor Vice President can adopt with some sense that there has been reflection upon it and there needs to be an ability to draw upon techniques and staff without having to reinvent the wheel.

I would like to suggest some criteria that should be utilized in deciding how to structure a future investigation of a political murder. I think that it is important to identify the essential goals of any such investigation, and I would like to enumerate them, as I see them, for the benefit of this committee. The goals of any investigation into the assassination of the President of the United States should be, first of all, to ascertain the truth; second of all, to preserve the integrity of the governmental agencies or decision-makers against disruption by groups or individuals who would use uncertainties surrounding the political murders in order to achieve results that are not justified by the weight of evidence; third, to protect the civil liberties of individuals and groups who may become the objects of popular suspicion but against whom no violations of law can be proved in a judicial proceeding; fourth, to communicate accurately, honestly, and effectively to the American public the results of any investigation and the reasons for reaching those results; fifth, to maintain responsibility for a continuing investigation in the hands of trusted, unbiased and competent persons who have public accountability rather than leaving the field to be occupied solely by private vigilante groups.

Next, to collect, preserve, and make available for historical purposes all records related to the investigation of a political murder; furthermore, to establish the investigative agencies' independence from all existing branches of Government when the necessity requires; next, to obtain the widest possible political and public understanding of any investigation, and, last, to protect the national security.

In that final regard, I would like to suggest that an appropriate and essential responsibility of this committee is to candidly assess the factors that related to the CIA's withholding of information that it had attempted to assassinate Fidel Castro. And I would like to suggest that this committee must recommend how in the future any information should be handled which is relevant to domestic assassinations but whose disclosure might threaten the national security or interfere with the conduct of foreign affairs by the President.

I offer no insights as to how one does that. I merely pose it to the committee as an important task which I believe it faces.

Mr. Chairman, you have been very patient and I appreciate the opportunity to speak to you.

Chairman STOKES. Thank you, very much, Judge Griffin.

Our patience is due to the fact we know that you have taken a great deal of time to come here and give this committee the benefit of the kind of thinking that has gone into testimony that you have given here today. I think your testimony has been outstanding in the sense that you made the kind of evaluation that you have made of the work of the Warren Commission, the work of this committee and the kind of proposals that you have made to this committee.

Let me pose this question to you. During the course of the existence of this committee, from time to time we have heard people say, well, what have you come up with in terms of asking for a smoking gun to come out of our investigation.

ASSASSINATION

At one time, one of the Members of Congress even said to us on an occasion, well, when you finish, will your work have changed the course of history? Then I recall on another occasion we were asked about our work. Judge Preyer here made a comment early on in our investigation, he said that we don't know where our investigation will come out. It may well be that we will come out at the same place the Warren Commission did for different reasons. And then, of course, there are those who say, well, why are you spending all this money to come up with the same thing the Warren Commission came up with? And as one who was a member of the Warren Commission and one who is a highly respected citizen and judge that you are, why don't you just comment on that area, in terms of whatever salutary effect you find from this investigation.

Judge GRIFFIN. Mr. Stokes, you and I have known each other too long, I think, for you to think I am simply buttering you up. What I have to say is going to sound that way to everyone else.

I think this committee, by its conduct, regardless of what its conclusions are, has demonstrated that it is possible to reexamine or even to examine for the first time in a public forum matters which can have frightening consequences to the American people. I think that the conduct of this committee, as I have been able to perceive it from the provinces, from the newspapers that I read and the television that I have seen, has demonstrated that the fears that the Warren Commission expressed that it would not be possible to publicly examine those questions, and we were the products of a period where I think it had been demonstrated that things of that nature might not be able to be publicly examined because irresponsible people who would conduct the investigation, but I think your committee has done a tremendous service by showing that this House of Representatives and public officials can handle a sensitive matter like this in a highly responsible fashion.

I think that in light of the tremendous distrust that this country has come to have, not only about the events that surrounded the assassination of President Kennedy and Martin Luther King, but about the integrity of our Government in general, the mere fact that there has been an inquiry, that it has been conducted by a staff which has been determined to prove that the conspiracy theorists were right, that the Warren Commission was wrong, I think reaffirms our faith in our Government's honesty and the ability of us to have an open society.

And I think you have also done a service to thousands of Americans who have been deeply troubled by the investigations that have previously been conducted, who have honestly, and often I disagree with them, but I believe have honestly in the vast number of instances, attempted on their own to examine the failures of the Warren Commission. The existence of these people, many of whom I believe are sitting behind me and have been behind other witnesses for days, is strong evidence of how serious this concern has been throughout the United States.

We have educated men and women, intelligent men and women, who did not believe in the conclusions or the integrity of the investigation and who arrived at those conclusions, not in a frivolous fashion, but by incredible expenditures of effort and digestion

of materials, and I think the Government owed this investigation, reinvestigation to those people who cared so strongly.

Chairman STOKES. Thank you very much, Judge.

Several of the members have indicated that they wanted the time to be able to extensively examine you regarding policy matters and matters that relate to performance of the agencies, and due to this other commitment that I have, which was made some time ago in anticipation of the fact we were going to conclude today about 4 o'clock, I would beg leave of you at this time to make some concluding observations which I have promised those who have been following these hearings that I would attempt to do on the concluding day. With your permission, I will do that now.

Judge GRIFFIN. I yield 3 minutes to the chairman.

Chairman STOKES. Thank you very much, Judge.

This afternoon, the Select Committee on Assassinations ends this series of public hearings into fact and circumstances, the death of President John F. Kennedy. The committee, in November, will continue its public hearings into the assassination of Dr. Martin Luther King, Jr., and policy hearings on the death of both President Kennedy and Dr. King may be held in December.

There is a possibility, too, that the investigation of the Kennedy assassination will require 1 or more additional days of evidentiary hearings, though no decision has been made as yet on that point.

As we have announced, the committee will meet in public in December to reach its conclusion in the two investigations. At this time, I would like to make some general observations attempting to sum up this phase of the public work that ends today.

As I indicated when the committee convened on September 6, 1978, it had identified four main issues to investigate in order to fulfill its legislative mandate which is found in House Resolution 222. First, who assassinated President Kennedy? Second, how well did the agencies perform? Third, did the assassin or assassins have help; that is, was there a conspiracy? Fourth, what recommendations shall the committee make for the future?

During the past 3 weeks, the committee's hearings have moved through several general phases, although the evidence it has considered in each phase, obviously bears on the resolution of all of the issues.

First, evidence was received on the facts and circumstances surrounding the President's death and the connection, if any, between those facts and circumstances and the alleged assassin, Lee Harvey Oswald.

Second, an effort was made to evaluate the performance of the various Federal agencies—the Secret Service, the FBI, the CIA, and the Warren Commission.

Third, the committee examined certain conspiracy theories, some not so serious, some that cannot be rejected out of hand.

Throughout, the committee has strived to consider the recommendations it will make for the future. As I noted on September 25, 1978, in presenting its evidence, neither the committee nor its staff has tried to prove or disprove any particular theory. The staff has presented the evidence and the committee has made an effort to evaluate it. The purpose of these hearings has been to consider the evidence available on a particular point. That evidence may

ASSASSINATION

prove or disprove this or that theory or be insufficient to make a judgment either way.

Nevertheless, because these hearings are legislative in character and not a judicial trial, the committee has had a duty to make what it has learned public, even if the evidence falls short of what everyone might wish to know on any one question. It may be helpful to repeat what has been said here about the quality and quantity of evidence available to the committee.

As it has moved through each of the phases of its deliberations, in general, during the first phase of our hearings, the committee had available to it the hard stuff of science, quality and quantity of which was unusually high. As the committee turned to assessing the performance of the agencies, less scientific evidence was available, and it was necessary to rely more on documents and human memories; chiefly, those of public officials.

Then as the committee's attention turned to the question of conspiracy, the hard evidence of science and documents became even more rare. It was necessary to consider in its place oral testimony and recorded conversations. And those who have followed our hearings must recognize the difference in quality and quantity of three types of evidence.

Human testimony is sharply qualified by human perception and memory, to say nothing of bias, motive to lie, or fear of retaliation. It is, therefore, less reliable than scientific analysis or documents written, not for litigation, but as an accurate record of actual events.

In this context particularly, we must, as I have said, always distinguish between a suspected and a fact found.

Another point must be repeated for emphasis. These proceedings have not been a criminal trial. There was no indictment, there was no defendant, there was no prosecutor, there was no defense counsel. The normal rules of evidence found in criminal proceedings have not, therefore, been applicable here.

Because none of these elements played a role in our work, a caveat has been imposed on the committee, as evidence has been introduced before it, and should be imposed upon those who follow our proceedings: the caveat it is not to take the evidence that we have considered beyond what it fairly establishes or to sensationalize it. This caution is especially apt on the conspiracy question. When evidence of association has been considered, as I noted at the beginning of this week, conspiracy is founded on association, but more than association is required to establish conspiracy.

Reasoning that guilt goes hand in hand with association, the principal of guilt by association is to be abhorred in a free society. Those who have followed our hearings or read our record must evaluate the evidence as the committee, indeed, itself must evaluate. There is an obligation to reserve judgment until all the evidence is in and not to reach conclusions beyond what the evidence fully justifies.

I must also caution you that even though our public hearings have concluded in the Kennedy case, all of the evidence is not yet in. Obviously, it has not been possible for us to consider here every question of concern or even to consider old evidence on those questions. Much was considered in our executive hearings, our

depositions, our field interviews and file reviews that will be analyzed and made public in our final report.

What has been presented in these public hearings has been the distillation of over a year of effort by the committee, a staff of 40 attorneys, investigators and researchers. Nevertheless, I recognize that there have been loose ends in our hearings. Most of them, we hope, to be able to pin down or tie down in our final report. But frankly, life itself contains loose ends. As I said, not every question that can be asked can be answered. Not every question that can be answered can be answered to the satisfaction of all.

Apart from publication of our final report and perhaps 1 and 2, as yet, unscheduled days of hearings, this today brings the committee's public work on the assassination of President John F. Kennedy to an end. It has been a fairly intensive 17 days of hearings. In all, 59 witnesses appeared before us and well over 500 exhibits were entered into the record. The committee has heard from witnesses of all character—noted political figures and ordinary citizens, a former President of the United States, a current president of a foreign country and an individual who carried an umbrella on one sunny day in Dallas.

The committee and the staff has spent untold man-hours of sorting out a voluminous 15-year accumulation of information. Cities like Miami, New Orleans, and of course, Dallas was visited often. There were trips to foreign countries—Cuba, Mexico, France, Spain. In all, there were 385 trips to 564 points for a total of over 1,870 days in the field, and the work continues and has continued during the course of these very hearings that we have held in this room.

Witness interviews, for instance, have totaled over 1,548. Seventy five witnesses were questioned in executive session, 41 of whom were immunized. Over 500 files from the CIA, the FBI, the Secret Service, the Departments of State and Defense, as well as other agencies, have been reviewed. Files that range from a few pages to thousands. The FBI file on Lee Harvey Oswald alone consists of 238 volumes containing 5,754 serials.

Now, let me also point up some of the statistics related to some of the scientific projects which were made a major part of these hearings. First the contractors. The photo analysis enhancement, 470 man-days were consumed at a total cost to the committee of \$9,500. For acoustical analysis, for radio transmissions in Dallas on November 22, 1963, 160 man-days at a cost of \$72,000. For simulated gun tests in Dealey Plaza in conjunction with the acoustical test, 38 man-days at a cost of \$3,850.

The total, 668 man-days, \$167,350.

As for consultants, for photoanalysis enhancement, 270 man-days at a cost of \$50,000. Pathology, 101 man-days at \$29,000. Ballistics, 110 man-days at \$12,000. Medical illustrations, 78 man-days at \$10,000. Handwriting analysis, 35 man-days at \$6,000. Methodology, 20 man-days at \$3,200. Polygraph analysis, 16 man-days at \$2,500. Dentistry examination, 8 man-days at \$1,500. Neutron activation analysis, 23 man-days at \$1,500. Fingerprint analysis, 3 man-days at \$600. The totals, 828 man-days, \$146,200.

As all can clearly see, these hearings, while illustrative of our work, have reflected only part of that work. This then would con-

ASSASSINATION

clude my comments on the work of the committee and our public hearings. There are, however, a number of individuals and institutions to whom I would like to say a personal word of gratitude on behalf of this committee for their efforts in supporting us in the conduct of these public hearings.

Mr. David Fones, the sound engineer who installed a new PA system as the hearings began. Mr. Fones has worked long hours to insure the system functioned properly, has been available to this committee staff at all times. To the superintendent of the three House press galleries for their work in accommodating the press. Mike Michaelson and his assistant Tina Tate, Ben West, and his assistant Charlie Marsten, David Holmes, to Maurice Johnson of the Senate still photographers gallery. To Ed Poland of property supplies service and to all of the staff of the superintendent's office.

To Capt. Charles Parks, Lt. William Waters and the Capitol Police providing security for this hearing room 24 hours a day. To Marshall Jerome Bullet, Inspector Reed and his staff for providing extra security for Marina Oswald Porter and Jose Aleman. To the Congressional Reference Service of the Library of Congress for providing the committee with graphic illustrations of its exhibits. To Bara Photographics, Inc., for providing us with photographic enlargements. To the National Archives for providing the actual pieces of evidence for the gentleman whom they sent over here on every occasion that we ever requested.

To the Governments of Mexico and Cuba for their assistance in those countries. To the police departments of Dallas and Miami for the cooperation we received in those cities. And the Metropolitan Police Department of Washington, D.C.

Finally, to my fellow members of this committee who have given the Chair excellent cooperation in so many respects and to whom I will be forever grateful for the kind of cooperation given me, to the staff, the lawyers, the researchers, clerical staff, particular to Professor Blakey, chief counsel of the staff and to the young people on the staff who, in my opinion, have done an outstanding job.

A few days ago one of the scientists before this committee commented as he left the hearing room, that if the caliber of young people on this staff are any indication of the kind of young people that are coming along in this country today, the country is in good shape, and I would concur and echo his sentiments regarding the brilliant young people who work for us.

I would like to thank, also, in particular, the secretaries, the men who run the copying machines, the rest of the administrative staff who worked long into the night to prepare the press packets and briefing books for the members. Oftentimes we tend to overlook the amount of effort that goes on behind the scenes in preparing these kinds of hearings. I am sure that other members of the committee are as grateful as I am for the support that all of those people have given us.

Last, may I just say to the working press that has been here who have been with us every moment during these hearings, the press has been vigorous, I think, aggressive, probing, they have also been cooperative in many respects and courteous to this committee, to the Chair in many respects, and I want to acknowledge that.

All in all, I want to thank all persons who had anything to do with the way in which we were able to present these hearings. It is particularly important to me, and I think all members of this committee, to have the American people understand the nature of the undertaking this committee has undertaken, has, in our opinion, from the very beginning been a very serious undertaking. We were all determined these hearings would not be conducted in any kind of a circus atmosphere, they would have all of the professionalism of the House of Representatives behind them, they would be done professionally and competently. The Chair feels that has been accomplished and I appreciate the cooperation that we have received from everyone in being able to perform our work in that manner.

Thank you, and at this time, I will ask Judge Preyer if he will assume the Chair.

Mr. PREYER [now presiding]. Well, I hope the rest of the afternoon won't be anticlimactic after the Chairman's statement.

Have a good trip, Mr. Chairman, you have earned it.

Chairman STOKES. Thank you.

Mr. PREYER. Judge Griffin, we appreciate your statement, your deeply thoughtful statement. I think you went well beyond just talking about the facts of the Warren Commission study and the facts of this Commission's study and you have got into the question of the meaning of it, and you have talked to us about the meaning of criminal law and political murders and uses of history. It is certainly a stimulating paper.

We have one historian, at least, who is a member of this panel, and the Chair at this time would recognize Mr. Fithian.

Mr. FITHIAN. Thank you, Mr. Chairman and, judge, we welcome you to the committee hearings today, and you have given us some very thoughtful food for thought, recommendations, some of which I suspect we won't be able to carry out but some we will.

I have two or three categories of things I would like to explore with you, and I think rather than just ask for continuance of time repeatedly, I would like to take one of those areas first and then after others have had their chance to ask questions, perhaps I could get additional time.

I want now to go directly to the policy questions and policy recommendations that you make, which are large, I would like to return to those, but in 5 minutes before the second set of bells ring, I would like to explore some specific questions that come out of your testimony.

First, on your preliminary draft, which I went over last night, and repeated today, you indicated that certain things might have been done differently had you known certain kinds of information. Now, for your information, it seems to me as one member of this committee that upon occasion and sometimes even frequently the two agencies that we questioned most carefully, the CIA and the FBI, frequently excused themselves for not giving information to the Warren Commission by saying something like this—"we gave them whatever they asked for." But if the Warren Commission didn't know of its existence, the question logically arises, how could they ask for it.

ASSASSINATION

And when we talked to the Warren Commission members, including the President, the former President, and J. Lee Rankin, we seemed to get that refrain, we couldn't ask for something we didn't know existed. It reminds me ever so much of the chicken and egg dilemma that we get into sometimes in life.

But assuming that at some future date some other commission, some other group, some other time, might be faced with the same kind of problem for a political assassination, could you make any specific recommendations as to how we could break that at the outset institutionally or structurally?

Judge GRIFFIN. Well, you are talking specifically, I presume, about the failure of the CIA to reveal that they had supported, as I understand the evidence, actually initiated attempts to assassinate Premier Castro?

Mr. FITHIAN. That is one example. There are other lesser lights in the discussion.

Judge GRIFFIN. Certainly I think that is the most troublesome one.

I don't know what your evidence is as to what the President knew. I think that decision has to be made at the highest level, and I think that unless the President himself was kept ignorant, and I believe that the Attorney General has to be considered in this case, since he was the brother of the President, it strikes me that when you have a situation that seems to indicate, and I think it is a question that you must develop the facts on, that the decision may have been made at that level to keep information from the Commission. I don't think there is anything we can do about it.

Mr. FITHIAN. You don't think there is anything that the Commission could do about it?

Judge GRIFFIN. No; as far as what we do about that situation in the future, I think you are going to stumble onto that information.

Incidentally, I think, as I understand the evidence before this Commission, Allen Dulles, I believe, was privy to that information and did not convey it to the rest of the Commission members.

I would rather answer the question this way: I think it might be legitimate to keep that information from a commission provided within the governmental process there was an assurance that the President knew that there was a complementary investigation going on and that ultimately all of that information would be preserved and come to light. I am troubled even by that kind of suggestion.

Mr. FITHIAN. Yes.

Judge GRIFFIN. But I recognize that if it had been known in 1964 that the CIA was attempting to assassinate Fidel Castro, I think the possibilities were very great in that period that pressures would have been brought in this country to begin a war against Cuba which might have had implications that would have brought this country into a thermonuclear war with the Soviet Union.

Those are frightening consequences and I have frankly myself wondered whether the reason Chief Justice Warren said to us that our investigation had those implications, was that something that had been communicated to him by the President in that regard.

But I think in the long run if that decision is made and if made by a responsible official, that that is what is crucial, if it were

made by President Johnson, I think I could accept that decision being made by President Johnson provided—

Mr. FITHIAN. This is hypoethical?

Judge GRIFFIN. Yes, sir; talking about the future, Mr. Future President, I could accept that decision being made that something was crucial in the national interest that it could not even be revealed to a body such as ours, provided we could have substantial certainty that ultimately the record of this would be disclosed, that it would ultimately become available for examination, so that at a later stage in history we could assess whether that was a sound decision or not.

Mr. FITHIAN. Let me turn to another question related to that. In retrospect, many of the shortcomings of the Warren Commission, which you spoke of here today in your presentation seemed glaringly obvious, yet no member of the Commission has been willing or no one associated with the Commission, up to today, had been willing to acknowledge the shortcomings, and we have had, for example, as you know, former members of the Commission and the Chief Counsel.

This in itself seems to me to sort of contribute to the speculations over conspiracy, coverup, all of those dark terms. Why do you think that no one else who was directly associated with the Warren Commission has really been willing to make what I would call a candid critique of the successes and failures of the Commission?

Judge GRIFFIN. Well, one, I think that there are other people who were members of the staff who may genuinely and honestly disagree with my criticism. Some of the issues which I raised were actually raised and are apparent from the Commission documents and decisions were made at that point that the approach that I have suggested was an improper approach.

Frankly, many of the suggestions I have made, I made as a staff member, either in writing or orally, and there were differences of opinion, and I think that those other members, whom I respect both from the standpoint of their intelligence and their integrity, have honest differences of opinion on this.

I also think that we are all human and it is difficult, when we feel strongly about something, it is difficult to change our position. I guess in part what I am saying is that it is easier for me to do it because I am not changing my position that much.

Mr. FITHIAN. Let me turn to one of your stated goals of the Warren Commission. In your presentation you indicated that one of the, I should say unstated goals, of the Warren Commission was to conduct "an investigation in a manner as to protect the reputation and employment of individuals against whom did not exist convincing evidence of criminal conduct."

Not necessarily naming names, but could you give us examples of how this goal was implemented in the work of the Commission? Let me explain why I am asking the question, if I may.

When you omit from any official body of evidence a name or an activity, even with the very best of intent that you are trying to protect someone, you are legitimately trying to protect someone, you always open yourself up to that bane of existence, I suppose, and that is the advantage of 20-20 hindsight by someone who

ASSASSINATION

would like to say, well, they shouldn't have covered that up, we should have known about it.

Judge GRIFFIN. Let me say that I don't think anything was covered up with respect to any individual by the Commission of which I am aware, and I would be very interested if this committee has found any instance in which the Commission failed to preserve any information about any individual which it had in its possession.

I think the way in which the Commission attempted to achieve the objective of protecting the reputations and employment of people was in the way that the information which they received was handled.

One of the things that is so disturbing, I believe, to the critics of the Warren Commission is that they can find in many of the footnotes of the Warren Commission contradictory citations to contradictory documents, and when the Commission itself draws a conclusion that, for instance, there was no evidence, I think one of the conclusions that is written into the report is something to the effect that there was no evidence that Ruby was involved in any conspiracy with organized crime figures, which you have gone into.

The fact of the matter is there is a great deal of evidence in the Warren Commission footnotes and the documents that support them which have been available for public investigation to show that many of the names that have been recited publicly in these hearings, many of those people were interviewed and much of the information which this committee has been going over was then available to the Commission. The Commission could have published that in its report and said that so and so did such and such, Mr. Trafficante, for example, I don't know what we had on Trafficante, I think very little, or Lewis McWillie we had quite a bit, and we could have published things about Lewis McWillie and Lewis McWillie may not be involved in the kind of activities that I want my children to go into, or myself, but I think even with Lewis McWillie there is a question of whether the proper step is to publicly discuss him.

Now, although I must say we did publicly discuss McWillie, maybe there were instances of people who visited with Jack Ruby, a gentleman from Chicago, who saw him the night before Oswald was assassinated. We had a lot of questions about that relationship. We came to the conclusion that in all probability one of the things he was doing was cheating on his wife that evening. We decided not to publish that information, although anybody could read the investigatory materials and find that in there.

Those are the kinds of things I am talking about.

Mr. FITHIAN. You said on page 7 of your testimony, "Had the information been known to the Commission of CIA activities against Castro, the Commission's activity would have been greatly altered," and you go on to elaborate, although pretty briefly, about how that might be altered and—

Judge GRIFFIN. I don't think, for example—

Mr. FITHIAN. You project that it might have involved a rather prolonged investigation, as conspiracy investigations are wont to be.

Do you have any indication that your findings would have been different—

Judge GRIFFIN. I think that our findings—

Mr. FITHIAN. After 15 years?

Judge GRIFFIN. I would make this observation. I think our findings on Oswald's motive would have been different, and this is a question that I don't hear discussed very often, but I happen to believe it is a very important question, because I think if an analysis of the evidence indicates that the greatest possibility is that Oswald was motivated to do this because he was aware through his so-called underground, or whatever you want to call these sources, grassroots sources, that the CIA was involved in an assassination to murder, in plot to murder President Kennedy, then it becomes clear that the motive for the assassination was supplied by this activity of the CIA, and that raises a very vital question of public policy, and if that were to be the conclusion of this committee, it would have implications that would go beyond these particular events that you are studying.

So I think we would have had to pursue that. We frankly ducked, I think, everybody who has read the report knows, we ducked the question of motive. I do not think we could have ducked the question of motive under those circumstances.

Mr. FITHIAN. Are you satisfied with regard to the question of motive or the testimony that, the information that has come about and been reiterated time and again, that Lee Harvey Oswald's most likely motive for pulling the trigger was because he was mentally or psychologically bent in the direction of trying to become somebody important?

Judge GRIFFIN. Yes; I think that is a factor, but that does not explain why he selected President Kennedy or why he did it when he did. I mean, we know, I think many of us accepted this point, that Oswald attempted to assassinate General Walker. What motivated Oswald at that particular time to select Walker?

If Oswald in November of 1963, with all his personality problems, with the sense of total inadequacy that was being given him by his wife, was then in such a psychological state that he was prepared to pull another General Walker, it might not have been President Kennedy he might have gone after someone else and, therefore, it becomes very important that something, that perhaps that the U.S. Government did is what supplied the impetus to select President Kennedy rather than some other person.

Mr. FITHIAN. I have one more minor matter, then I would like to ask a policy recommendation question.

You use the word, very powerful words on page 12, of the consequences, nonetheless, that the Commission was powerless to combat, and you used the word "deliberate deceit by an investigative agency."

Judge GRIFFIN. Yes, sir.

Mr. FITHIAN. Can you give me any indication, is that your conclusion, it was deliberate deceit?

Judge GRIFFIN. I think the CIA deliberately deceived the Warren Commission, based on evidence that I have seen. I think the answer that they have given that they didn't provide the information because nobody asked them is the kind of statement I get from

ASSASSINATION

criminal defendants time in and time out, presiding over ordinary trials, and I think it is patent to me.

The FBI conducted, I think the Hosty incident, I am satisfied it was deliberate and not accidental, although that we did find out about. I am not familiar with what you have found out as far as withholding of information by the FBI so I wouldn't really comment upon anything beyond what happened in the Hosty episode.

Mr. FITHIAN. Finally, you make a very fervent plea for open hearings, open investigations, procedures in public, et cetera.

Judge GRIFFIN. At some point.

Mr. FITHIAN. Given the emotions of the 1963 and 1964 period, when you were working with the Warren Commission, is it not probable that the Warren Commission really couldn't have conducted a public hearing at that time?

Judge GRIFFIN. I think that merits very serious consideration. I think, as I reflect upon my state of trauma and what I think was the state of trauma of this country, even when the Commission came out, the Commission's report came out, it may be that with an event of that magnitude at that time, so close to the events, that a proper judgment is under those circumstances that there cannot be any public hearings.

I would think, however, that if one focused on the question in an intense way there would still be a way to structure public hearings that could avoid the trauma and could preserve the ultimate visual record for presentation at another time.

Mr. FITHIAN. Thank you, Judge.

I recognize the gentleman from Connecticut, Mr. McKinney.

Mr. McKINNEY. Judge, let me assure you our subway is running better and better everyday.

Judge GRIFFIN. Thank you, Mr. McKinney.

Mr. McKINNEY. Good to see you.

We have discussed these points before and they will be in the record. So, very briefly, I gather you are suggesting that this committee come forth with almost a body of Federal law that would set up a certain line to follow in the case of any public assassination?

Judge GRIFFIN. Mr. McKinney, I don't know whether legislation is needed in this area. I am inclined to believe that a recommendation from this committee that would be implemented administratively by the executive branch might deal with a lot of the problems and might in fact be a preferred way to do it, because I do think there has to be flexibility, and when you write a statute you are frozen for a long time.

But I think, for example, the recommendation I made about continuing this investigation in some way through the Justice Department, even after this committee ceases to operate, is one that could be implemented, and I think the further suggestion that a responsibility of the Justice Department should be to create a game plan which could be immediately implemented in the event of a future assassination. I think that could be implemented and those things could be done without legislation.

Mr. McKINNEY. I think one of the problems that we have had, in retrospect, relates to the trauma of the times. It would seem to me that we need to set up some sort of a pattern as to what must happen in a sequence.

Judge GRIFFIN. The only reason I answered the question that you pose in the way that I did is that I don't feel any confidence in my judgment about where you draw the line between legislation and administrative action, but it may be that there are matters, as you suggest, that require legislation, and it may be a form of legislation which imposed an obligation under certain guidelines upon an appropriate agency of government, which may be the Justice Department. Maybe that is what needs to be done.

Mr. McKINNEY. Of course, in neither one of these cases did we have a trial which is really the citizens chance to have the knowledge and the facts presented before them. It is perfectly possible and let's hope it never happens again, if something like this were to happen again, that there would be a trial, which would answer a lot of these problems.

Do you think it could be a good idea for this committee to suggest, through legislation that within any given period of time, after a political assassination, that there be an open public hearing, a year or two later, in which a commission would present all of the evidence to the American people?

Judge GRIFFIN. There might be substantial value in setting a timetable, because it may be a way of dealing with the problem of trauma that Mr. Fithian mentioned. If you always have to be deciding when are you going to get to this, it may be more difficult to deal with it, but if you say that there must be a public hearing in 2 years, or whatever period of time is, it has a number of not only psychological advantages but it perhaps insulates the investigators from pressure to prematurely go public.

Mr. McKINNEY. Far enough from the time itself to avoid an emotional witch hunt and close enough so people would be assured that everything the government knew would be put in front of them?

Judge GRIFFIN. That is right.

Mr. McKINNEY. It has been a great pleasure having you here again and I want to thank you for all the help you have given this committee in both its executive session and the public session.

Judge GRIFFIN. Thank you very much.

Mr. FITHIAN. We are just checking to see if Judge Preyer has anything. I see he has some notes.

Let me ask one question while you are getting in here.

Do you feel the Warren Commission was under such pressure of time that they couldn't do as complete a job as you wanted them to do?

Judge GRIFFIN. I feel that the time problems were resolved. They were agonizing questions. You put this to me in two ways. I think I am answering in one way, but I realize your question was, as much as I wanted to do. I wanted to do things that others didn't want to do. So my answer would be I think that we prematurely closed out, we may have—let me say maybe I would like to reflect on this more. There is a possibility we may have prematurely closed out the investigation from my standpoint.

I think, though, that in terms of the standards that were used, which I tried to discuss at the beginning of my remarks, in terms of the standards that were used in making a decision as to whether or not, I think that in the minds of my colleagues, who had the

PROPERTY OF
ASSASSINATION

policymaking authority, that this was not closed out prematurely. There were certainly, and the record is full of the evidence of the struggle within the staff on this issue, but I think in every instance where a staff member, after discussion, insisted that the investigation had to go forward, the opportunity was given to him to go forward, and I for one, at the time that we concluded the investigation, was satisfied that under the standards that were being applied, I had gone as far as I could go.

So, when I answered the question in saying that I would have gone further, it is because I would have undertaken a form of investigation that was actually different from the kind that we ultimately wound up taking. So, my kind of investigation would have taken longer.

Mr. FITHIAN. Thank you.

I have no further questions of the witness.

Mr. PREYER. Thank you, Judge Griffin.

I see I have a number of deep philosophical questions here which would probably best at this hour of the afternoon go unasked or at least I can ask you in private.

We do thank you for your very fine statement and I think you have made a real contribution.

I noticed when you set out the goals of the Warren Commission in the first part of your paper, one of those goals had nothing to do with how agencies had performed or how we should handle an assassination, a political murder, as you call it, if one came up in the future.

I think that is a goal this committee has in mind, that we want to study how the agencies performed, and in the unlikely, we hope unlikely, event of future assassinations, how it should be handled, and you have given us some very good practical answers on that subject.

Let me just ask you this one question and no other.

On the question of how a political murder should be handled in the future, is there anything further that you want to add to what you have already spelled out in your paper?

Judge GRIFFIN. I think I have nothing further to say other than to thank the committee for the opportunity to be here and to address all of you.

Mr. PREYER. We are grateful to you.

The chairman has thanked many people for their contribution in this public hearing. I would like to just very briefly name a few people who have worked so hard, and I am referring to the staff.

You mentioned, Judge, the incredible expenditure of effort, I think is the way you put it, on behalf of the staff, and I certainly agree with you on that.

We have recognized Mr. Blakey, but let me just briefly name a few other people who have done an outstanding job. Some have become media personalities now, such as the umbrella girl, Cynthia Cooper, but many have labored in obscurity, and I think at least we should name them. I think the morale in the whole team has been remarkable in view of the kind of hours they have worked. Probably one definition of what morale is is when you are united in a common effort, then each person is perhaps better than they

thought they could be, do more than they thought they were capable of. I think the staff has done that.

Mr. Blakey, of course, has been our chief counsel. Gary Cornwell has been our deputy chief counsel. Charlie Mathews our special counsel, who has been sitting here whispering in Mr. Stokes' and my ear for this month.

Kenney Klein, who sits just below me here, has been our assistant chief counsel and team I leader.

Cliff Fenton has been our chief investigator.

Jackie Hess, deputy chief researcher, who has done some work on the exhibition board.

Jim McDonald, team II and III leader, senior staff counsel.

Lee Matthews, senior staff counsel and team IV leader.

The Kennedy investigation is divided into five teams.

Michael Goldsmith, who is a senior staff counsel and the team V leader.

And Staff Counsel Surell Brady and Andy Purdy, Jonathan Blackmer, Belford Lawson, Bob Genzman, secretaries, who hadn't had the chance to appear here much, Ida Jane Ross, Jane Godfrey, Ann Misita, Rebecca Rife, Connie Smith, and the press officer, Dawne Miller, whose name we have all seen on many releases, and Lance Svendsen, and Paul Golden, who Xeroxed the press release material which you have been receiving regularly, and all the researchers and investigators whom I wish I had time to name.

One person who I think has become a media person, along with Cynthia, has been Elizabeth Berning, our clerk here, who has been very faithful and very efficient in keeping some 500-odd exhibits straight. We appreciate that very much.

So at this time, is there anything further from any member of the committee?

If not, the committee will adjourn sine die.

[Whereupon, at 4:56 p.m., the committee was adjourned, sine die.]

ASSASSINATION

INVESTIGATION OF THE ASSASSINATION OF PRESIDENT JOHN F. KENNEDY

FRIDAY, DECEMBER 29, 1978

HOUSE OF REPRESENTATIVES,
SELECT COMMITTEE ON ASSASSINATIONS,
Washington, D.C.

The committee met, at 9:10 a.m., in the Caucus Room, room 345, Cannon House Office Building, Hon. Louis Stokes (chairman of the committee) presiding.

Present: Representatives Stokes, Devine, Preyer, Fauntroy, Dodd, Fithian, and Edgar.

Chairman STOKES. The committee will come to order.

The Chair at this time wishes to make some opening remarks. Today, the Select Committee on Assassinations will hold 1 day of public hearings into the assassination of President John F. Kennedy. As those of you who followed our Kennedy hearings may recall, I observed at their conclusion that there might be a need for 1 or more additional day of public presentation of evidence. What I had in mind was the prospect of more hearings for our acoustics project, which is an analysis of an audio tape recorded at the scene of the assassination. The results of the project were first presented in a public hearing on September 11. Today we will hear an independent review of those results.

Since September, the committee has had the opportunity to contract for a refinement of the acoustical data. The results of this work have been fully presented to committee members by the staff and expert consultants in executive session or in formal briefings over the past 2 weeks. The committee has also given careful consideration to the implications of the acoustics evidence in terms of all aspects of the investigation of the Kennedy assassination. The committee is also now prepared to reach its final conclusions and to make its final recommendations on all of the questions before it in both the assassination of President Kennedy and Dr. Martin Luther King, Jr., which, indeed, it will do tonight after this public session has adjourned. Nevertheless, because of the significance of the new acoustics analysis, the committee thought it would be appropriate to examine it and explore its implications in public hearing before the formal vote by the committee.

I would now like to recognize Prof. G. Robert Blakey, the committee's chief counsel and staff director.

NARRATION BY PROF. G. ROBERT BLAKEY, CHIEF COUNSEL
AND STAFF DIRECTOR

Mr. BLAKEY. Thank you, Mr. Chairman.

Testimony in 1964 before the President's Commission to Investigate the Assassination of President John F. Kennedy, called the Warren Commission after its chairman, the former Chief Justice of the United States, Earl Warren, and before this committee over the last 2 years, has established that crucial issues in the assassination of President Kennedy turn on questions about the shots. How many were fired? Over what time span? From what direction?

Answers to these questions formed the basis for the Warren Commission's lone assassination finding. If three shots were fired from the Texas School Book Depository in a time period long enough for them to have been fired from one rifle, then the verdict of the Warren Commission may well stand. But the work of the Commission must be fundamentally reappraised, if the time span between the shots was too short for them to have come from one rifle, or if one or more of the shots came from different directions.

If either of these occurred, it must be frankly recognized that a conspiracy to kill President Kennedy may have been afoot in Dealey Plaza on November 22, 1963.

The Warren Commission was persuaded that there were at least two and most probably three shots fired in Dealey Plaza, each fired from the Book Depository building. In arriving at this finding, the Commission considered a variety of evidence, including medical and ballistics data as well as testimony by witnesses as to what they heard or saw. The Commission maintained that the time span between the shots was either 4.8 to 5.6 seconds or 7.1 to 7.9 seconds. The difference between the two sets of figures depended on which of the three shots the Warren Commission felt was a miss. The discovery of three spent cartridge cases on the sixth floor of the Book Depository was considered "convincing" proof of only three shots. The Commission also concluded that its extensive investigation "disclosed no credible evidence that any shots were fired from anywhere else."

The work of this committee on the number, timing and direction of the shots has been based almost entirely on scientific evidence. The committee has had available to it a motion picture record of the assassination made by Abraham Zapruder, forensic medical evidence and testimony, ballistics and neutron activation analysis, a trajectory reconstruction and, most significantly, an analysis of a recording of sound transmissions from a police motorcycle radio.

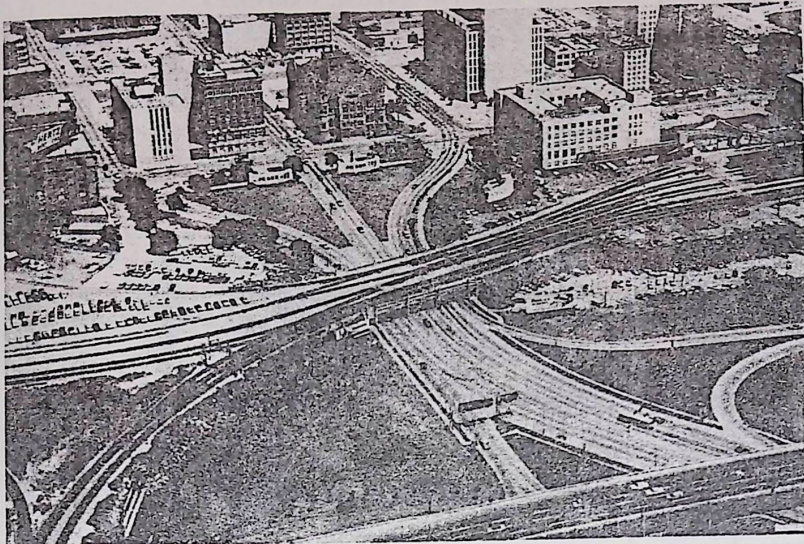
The hearing today, Mr. Chairman, will be concerned, for the most part, with that scientific evidence and its implications. Particular attention will be paid to results of a new analysis of data previously developed in the committee's acoustics project. It was conducted by independent consultants whose findings were recently submitted to the committee.

But before turning to the acoustics analysis, it may be useful, by way of introduction, to review some of the testimony of witnesses that was available to the Warren Commission in 1964. For that purpose, I request that JFK exhibit F-361 be entered into the record and appropriately displayed.

Chairman STOKES. Without objection, it may be entered into the record again and displayed appropriately at this time.

[The information follows:]

PROPERTY OF
ASSASSINATION



JFK EXHIBIT F-361

Mr. BLAKEY. Mr. Chairman, this is an aerial view of Dealey Plaza, the scene of the assassination. I would direct the committee's attention to the route of the presidential motorcade along Elm Street, the Texas School Book Depository to the rear of the President's limousine at the time of the shooting, and the grassy knoll, a parklike area that was to the right front of the President's car.

As the Warren Commission itself candidly acknowledged, testimony on the number of shots varied. While the consensus seemed to be three, some witnesses heard only two, and others said they heard four or as many as five or six.

The witnesses on the scene also gave varying accounts of the time span of the shots. Most agreed that they were all fired within a few seconds: The general estimate was five to six seconds. FBI tests indicated that Oswald's rifle could not be aimed and fired in less than 2.25 to 2.3 seconds. Consequently, for the Commission to conclude that only one assassin was involved, there had to be at least that time span between the shots.

As noted above, the Warren Commission had testimony that shots came from directions other than the Depository Building. But the Commission was persuaded that that testimony should not be credited because of the "difficulty of accurate perception" and since the "physical and other evidence" apparently did not support it. This general summary of the witness evidence is useful, but it does not give a full picture of what the Commission faced, particularly as it applies to resolving the issue of the direction of the shots.

Witness testimony may be summarized statistically. The committee has prepared an analysis of the statements of some 178 persons in Dealey Plaza that were available to the Commission. Mr. Chairman, I would ask that JFK exhibit F-360 be inserted into the record again and now be appropriately displayed.

Chairman STOKES. Without objection, it may be entered into the record again and displayed at this time.
[The information follows:]

TABLE III
Number of Shots Reported

	2	2 or 3	3	4	DON'T KNOW	TOTAL
TSBD	3 (4.6)	2 (1.9)	38 (35.5)	2 (1.6)	1 (2.4)	46
KNOLL	5 (2.0)	2 (0.8)	11 (15.4)	0 (0.7)	2 (1.1)	20
OTHER	2 (2.9)	1 (1.2)	22 (22.4)	3 (1.0)	1 (1.5)	29
DON'T KNOW	7 (7.5)	2 (3.1)	61 (58.6)	1 (2.7)	5 (4.0)	76
TOTAL	17	7	132	6	9	171*

The first entry is the obtained data. The number in parenthesis is the expected number of such judgements if the source and number of shots are independent judgements.

*7 other witnesses report 1, 4-5, 5, 6 or 8 shots.

JFK EXHIBIT F-360

Mr. BLAKEY. The committee's analysis of this testimony shows that out of a majority who could establish a direction, 49 of them—or 27.5 percent—thought the shots had come from the Book Depository; but 21 others—or 11.8 percent—believed that they had come from the grassy knoll; 30 of them—16.9 percent—thought they had originated elsewhere; and 78—or 43.8 percent—were unable to tell.

The actual statements of certain witnesses who felt the shots may have come from somewhere in addition to the Depository may, however, be more illuminating than statistics, especially in the case of law enforcement personnel, whose training could be expected to improve the quality of their judgment.

A Dallas police officer, Bobby W. Hargis, was, for example, riding a motorcycle to the left and slightly to the rear of the President's

ASSASSINATION

limousine. He was questioned by Samuel A. Stern, a Warren Commission counsel. I request at this time, Mr. Chairman, that a copy of the Warren Commission testimony of Dallas Patrolman Bobby W. Hargis be entered into the record as JFK exhibit F-644.

Chairman STOKES. Without objection, it is so ordered.

[The information follows:]

TESTIMONY OF BOBBY W. HARGIS

The testimony of Bobby W. Hargis was taken at 3:20 p.m., on April 8, 1964, in the office of the U.S. attorney, 301 Post Office Building, Bryan and Ervay Streets, Dallas, Tex., by Mr. Samuel A. Stern, assistant counsel of the President's Commission.

Mr. STERN. Will you stand, please.

Do you solemnly swear that the evidence you are about to give shall be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. HARGIS. I do.

Mr. STERN. Would you state for the record your name and residence address.

Mr. HARGIS. Bobby W. Hargis, 1818 Adelaide, Dallas, Tex.

Mr. STERN. What is your occupation?

Mr. HARGIS. Police officer.

Mr. STERN. How long have you been a member of the Dallas Police Department?

Mr. HARGIS. Nine years and about 7 months.

Mr. STERN. And you are now a member of the motorcycle—

Mr. HARGIS. Division.

Mr. STERN. Division?

Mr. HARGIS. Yes.

Mr. STERN. Were you a part of the motorcade on November 22d?

Mr. HARGIS. Yes; I was.

Mr. STERN. In what position?

Mr. HARGIS. I was at the left-hand side of the Presidential limousine.

Mr. STERN. At what part of the President's car?

Mr. HARGIS. Well—

Mr. STERN. Front, or rear?

Mr. HARGIS. Oh. Rear.

Mr. STERN. Riding next to Mrs. Kennedy?

Mr. HARGIS. Right.

Mr. STERN. Will you describe what occurred or what you observed as the limousine turned into Elm Street?

Mr. HARGIS. Well, at the time that the limousine turned left on Elm Street I was staying pretty well right up with the car. Sometimes on Elm we couldn't get right up next to it on account of the crowd, but the crowd was thinning out down here at the triple underpass, so, I was next to Mrs. Kennedy when I heard the first shot, and at that time the President bent over, and Governor Connally turned around. He was sitting directly in front of him, and a real shocked and surprised expression on his face.

Mr. STERN. On Governor Connally's?

Mr. HARGIS. Yes; that is why I thought Governor Connally had been shot first, but it looked like the President was bending over to hear what he had to say, and I thought to myself then that Governor Connally, the Governor had been hit, and then as the President raised back up like that (indicating) the shot that killed him hit him. I don't know whether it was the second or the third shot. Everything happened so fast.

Mr. STERN. But, you cannot now recall more than two shots?

Mr. HARGIS. That is all that I can recall remembering. Of course, everything was moving so fast at the time that there could have been 30 more shots that I probably never would have noticed them.

Mr. STERN. Did something happen to you, personally in connection with the shot you have just described?

Mr. HARGIS. You mean about the blood hitting me?

Mr. STERN. Yes.

ASSASSINATION

Mr. HARGIS. Yes; when President Kennedy straightened back up in the car the bullet him in the head, the one that killed him and it seemed like his head exploded, and I was splattered with blood and brain, and kind of a bloody water. It wasn't really blood. And at that time the Presidential car slowed down. I heard somebody say, "Get going," or "get going,"—

Mr. STERN. Someone inside—

Mr. HARGIS. I don't know whether it was the Secret Service car, and I remembered seeing Officer Chaney. Chaney put his motor in first gear and accelerated up to the front to tell them to get everything out of the way, that he was coming through, and that is when the Presidential limousine shot off, and I stopped and got off my motorcycle and ran to the right-hand side of the street, behind the light pole.

Mr. STERN. Just a minute. Do you recall your impression at the time regarding the source of the shots?

Mr. HARGIS. Well, at the time it sounded like the shots were right next to me. There wasn't any way in the world I could tell where they were coming from, but at the time there was something in my head that said that they probably could have been coming from the railroad overpass, because I thought since I had got splattered, with blood—I was just a little back and left of—just a little bit back and left of Mrs. Kennedy, but I didn't know. I had a feeling that it might have been from the Texas Book Depository, and these two places was the primary place that could have been shot from.

Mr. STERN. You were clear that the sounds were sounds of shots?

Mr. HARGIS. Yes, sir; I knew they were shots.

Mr. STERN. All right, what did you do then? You say you parked your motorcycle?

Mr. HARGIS. Yes, uh-huh—

Mr. STERN. Where?

Mr. HARGIS. It was to the left-hand side of the street from—south side of Elm Street.

Mr. STERN. And then what did you do?

Mr. HARGIS. I ran across the street looking over towards the railroad overpass and I remembered seeing people scattering and running and then I looked—

Mr. STERN. People on the overpass?

Mr. HARGIS. Yes; people that were there to see the President I guess. They were taking pictures and things. It was kind of a confused crowd. I don't know whether they were trying to hide or see what was happening or what—and then I looked over to the Texas School Book Depository Building, and no one that was standing at the base of the building was—seemed to be looking up at the building or anything like they knew where the shots were coming from, so—

Mr. STERN. How about the people on the incline on the north side of Elm Street? Do you recall their behavior?

Mr. HARGIS. Yes; I remember a man holding a child. Fell to the ground and covered his child with his body, and people running everywhere, trying to get out of there, I guess, and they were about as confused as to where the shots were coming from as everyone else was.

Mr. STERN. And did you run up the incline on your side of Elm Street?

Mr. HARGIS. Yes, sir; I ran to the light post, and I ran up to this kind of a little wall, brick wall up there to see if I could get a better look on the bridge, and, of course, I was looking all around that place by that time. I knew it couldn't have come from the county courthouse because that place was swarming with deputy sheriffs over there.

Mr. STERN. Did you get behind the picket fence that runs from the overpass to the concrete wall?

Mr. HARGIS. No.

Mr. STERN. On the north side of Elm Street?

Mr. HARGIS. No, no; I don't remember any picket fence.

Mr. STERN. Did you observe anything then on the overpass, or on the incline, or around the Depository? Anything out of the ordinary besides people running?

Mr. HARGIS. No; I didn't. That is what got me.

Mr. STERN. So, at that point you were still uncertain as to the direction of the shots?

Mr. HARGIS. Yes, uh-huh.

Mr. STERN. Then, what did you do?

Mr. HARGIS. Well, then, I thought since I had looked over at the Texas Book Depository and some people looking out of the windows up there, didn't seem like they knew what was going on, but none of them were looking towards, or near anywhere the shots had been fired from. At the time I didn't know, but about the only activity I could see was on the bridge, on the railroad bridge so—

Mr. STERN. What sort of activity was that?

Mr. HARGIS. Well, the people that were up there were just trying to get a better look at what was happening and was in a haze and running, or in a confused fashion, and I thought maybe some of them had seen who did the shooting and the rifle.

Mr. STERN. Then what did you do?

Mr. HARGIS. Then I got back on my motorcycle, which was still running, and rode underneath the first underpass to look on the opposite side in order to see if I could see anyone running away from the scene, and since I didn't see anyone coming from that direction I rode under the second underpass, which is Stemmons Expressway and went up around to see if I could see anyone coming from across Stemmons and back that way, and I couldn't see anything that was of a suspicious nature, so, I came back to the Texas School Book Depository. At that time it seemed like the activity was centered around the Texas School Book Depository, so, that is when I heard someone say, one of the sergeants or lieutenants, I don't know, "Don't let anyone out of the Texas School Book Depository," and so, I went to a gap that had not been filled, which was at the southwest corner.

Mr. STERN. And you remained there until you were relieved?

Mr. HARGIS. Yes.

Mr. STERN. Anything else that you haven't told us that you think is relevant to our inquiry?

Mr. HARGIS. No; I don't believe so.

Mr. STERN. Thank you very much, Mr. Hargis.

The reporter will transcribe your testimony and have it available for you to read and sign if you care to. Otherwise, you may waive your right to review and sign the testimony and she will mail it direct to the Commission, whichever you prefer. It is entirely your option.

Mr. HARGIS. Well; it really doesn't make any difference. It is more or less what you all think is best.

Mr. STERN. It's entirely up to you.

Mr. HARGIS. Well, how long will it be until she fixes it up?

Mr. STERN. Well, off the record.

(Discussion off the record.)

Mr. STERN. On the record.

Mr. HARGIS. All right. Well, just go ahead and I will just let you go ahead and send it in without the signature.

Mr. STERN. Thank you very much, Mr. Hargis.

PROPERTY OF
FEDERAL BUREAU OF
INVESTIGATION
ASSASSINATION

Mr. BLAKEY. Mr. Stern asked Officer Hargis to describe what occurred. Mr. Hargis said:

I was next to Mrs. Kennedy when I heard the first shot, and at that time the President bent over, and Governor Connally turned around.

Mr. Hargis was then asked if anything unusual had happened to him during the shooting. He replied:

Yes; when President Kennedy straightened back up in the car the bullet (hit) him in the head, the one that killed him and it seemed like his head exploded, and I was splattered with blood and brain.

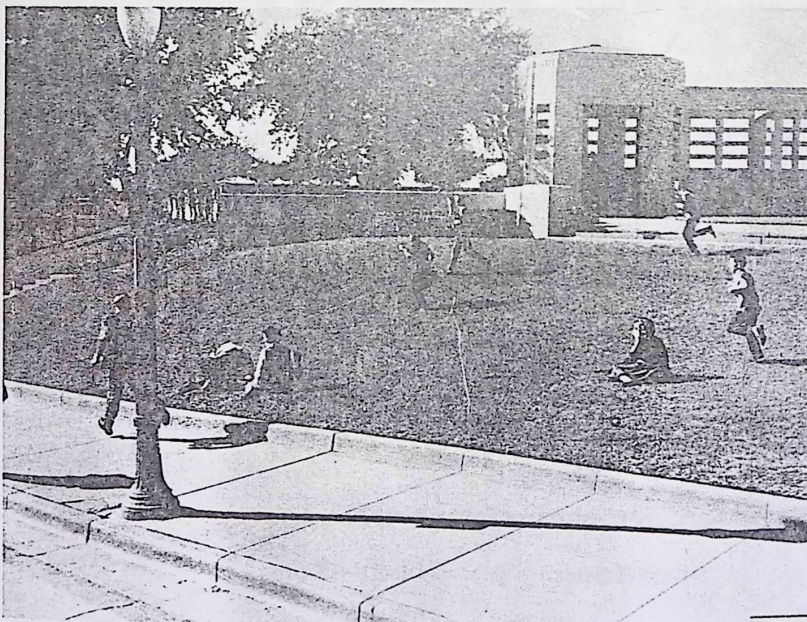
In describing this scene, Mr. Hargis was interrupted by Mr. Stern, who asked about the direction of the shots. Mr. Hargis replied:

Well, at the time it sounded like the shots were right next to me. There wasn't any way in the world I could tell where they were coming from, but at the time there was something in my head that said that they probably could have been coming from the railroad overpass, because I thought since I had got splattered * * * I had a feeling that it might have been from the Texas Book Depository, and these two places was (sic) the primary place that could have been shot from.

After the shooting, Mr. Hargis stated that he saw a man holding a child fall to the ground at the base of the incline and cover his child. He also saw other people running. I request at this time, Mr. Chairman, that JFK exhibit F-661 be entered into the record and appropriately displayed.

Chairman STOKES. Without objection, it may be entered into the record at this point.

[The information follows:]



JFK EXHIBIT F-661

Mr. BLAKEY. It is a photograph apparently of what Mr. Hargis saw. Mr. Hargis himself stopped his motorcycle and ran up the incline.

The man Officer Hargis saw lying on the ground was probably William Eugene Newman. I would, at this time, Mr. Chairman, request that a copy of Mr. Newman's statement to the Dallas County Sheriff's Department be entered into the record as JFK exhibit F-645.

Chairman STOKES. Without objection, it may be entered into the record at this point.

[The information follows:]

VOLUNTARY STATE. A. D. Judge Arthur. Form No. 68

**SHERIFF'S DEPARTMENT
COUNTY OF DALLAS, TEXAS**

Before me, the undersigned authority, on this the 22nd day of November, A. D. 1963,
personally appeared William Eugene Newman, Address 718 W. Glaranda, Dallas,

Age 22, Race No. WE 5-6082

Deposits and says: Today at about 12:45 pm I was standing in a group of people on Elm Street near the west end of the concrete standard when the President's car turned left off Houston Street onto Elm Street. We were standing at the edge of the curb looking at the car as it was coming toward us and all of a sudden there was a noise, apparently gunshot. The President jumped up in his seat, and it looked like what I thought was a firecracker had went off and I thought he had realized it. It was just like an explosion and he was standing up. By this time he was directly in front of us and I was looking directly at him when he was hit in the side of the head. Then he fell back and Governor Connally was holding his middle section. Then we fell down on the grass as it seemed that we were in direct path of fire. It looked like Mrs. Kennedy jumped on top of the President. He kinda fell back and it looked like she was holding him. Then the car sped away and everybody in that area had run upon top of that little mound. I thought the shot had come from the garden directly behind me, that was on an elevation from where I was as I was right on the curb. I do not recall looking toward the Texas School Book Depository. I looked back in the vicinity of the garden.

William E. Newman Jr

Subscribed and sworn to before me on this the 22nd day of November, A. D. 1963,
G. G. GENTRY
Notary Public, Dallas County, Texas

45

COMMISSION EXHIBIT No. 2003-Continued

JFK Exhibit F-645

ASSASSINATION

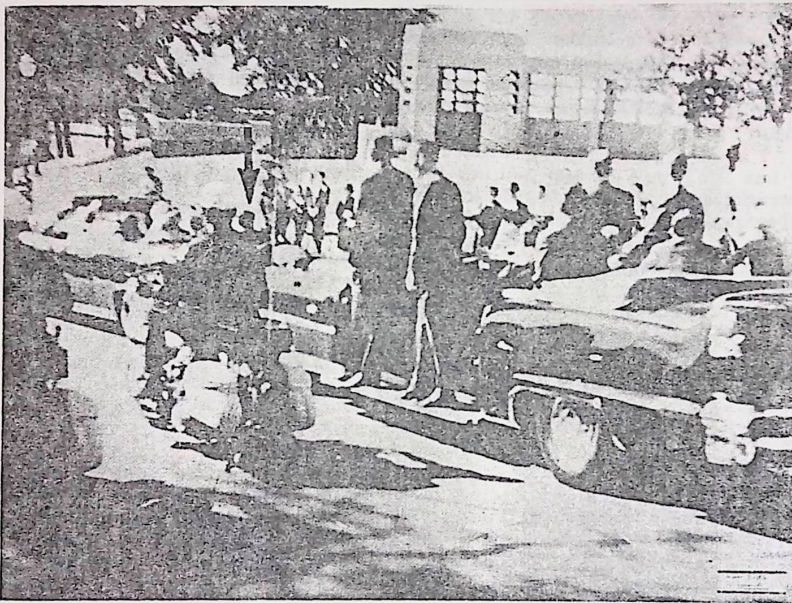
The Newmans were observing the motorcade from the curb near the west end of the concrete standard on Elm Street. Mr. Newman gave this description of their actions after hearing the shots:

Then we fell down on the grass as it seemed that we were in direct path of fire * * * I thought the shot had come from the garden directly behind me, that was on an elevation from where I was as I was right on the curb. I do not recall looking toward the Texas School Book Depository. I looked back in the vicinity of the garden.

Abraham Zapruder was standing with his 8 millimeter motion picture camera on a concrete abutment on the grassy knoll, just beyond the Stemmons Freeway sign. Here I would request that JFK exhibit F-155 be entered into the record again and appropriately displayed.

Chairman STOKES. Without objection, it may be entered into the record again at this point.

[The information follows:]



JFK EXHIBIT F-155

Mr. BLAKEY. It shows Mr. Zapruder as he is taking his motion picture. I would also ask at this time, Mr. Chairman, that a copy of Mr. Zapruder's Warren Commission deposition be entered into the record as JFK exhibit F-646.

Chairman STOKES. Without objection, it may be entered into the record.

[The information follows:]

TESTIMONY OF ABRAHAM ZAPRUDER

The testimony of Abraham Zapruder was taken at 1 p.m., on July 22, 1964, in the office of the U.S. attorney, 301 Post Office Building, Bryan and Ervay Streets, Dallas, Tex., by Mr. Wesley J. Liebeler, assistant counsel of the President's Commission.

Mr. LIEBELER. Mr. Zapruder, would you stand and take the oath, please? Do you solemnly swear this testimony you are about to give will be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. ZAPRUDER. I do.

Mr. LIEBELER. My name is Wesley J. Liebeler.

Mr. ZAPRUDER. What is your name?

Mr. LIEBELER. Wesley J. Liebeler [spelling] L-i-e-b-e-l-e-r. I am an attorney on the staff of the President's Commission on the Assassination of President Kennedy. I have been authorized to take your testimony by the Commission pursuant to authority granted to the Commission by Executive Order 11130 dated November 29, 1963, and the joint resolution of Congress, No. 137.

Under the rules of the Commission you are entitled to have your attorney present, should you desire to have him here. You are entitled to 3 days' notice of the hearing and you need not answer any questions you think would violate any rights or privileges that you may have. Did you receive the 3 days' notice of the hearing?

Mr. ZAPRUDER. I was out of town—I was in New York and my secretary called—she called me and told me that she made an appointment for me and that's about all that I know, Mr. Liebeler. The other proceedings—I don't know.

Mr. LIEBELER. I assume that you are willing to go ahead with your testimony today since you are here.

Mr. ZAPRUDER. Yes, I am.

ASSASSINATION

Mr. LIEBELER. Would you state your full name for the record, please?

Mr. ZAPRUDE. Abraham Zapruder.

Mr. LIEBELER. That's spelled [spelling] Z-a-p-r-u-d-e-r? Is that correct?

Mr. ZAPRUDE. Yes.

Mr. LIEBELER. What is your address?

Mr. ZAPRUDE. Home address?

Mr. LIEBELER. Yes.

Mr. ZAPRUDE. 3909 Marquette.

Mr. LIEBELER. Here in Dallas?

Mr. ZAPRUDE. In Dallas—yes.

Mr. LIEBELER. Are you in business here in Dallas, Mr. Zapruder?

Mr. ZAPRUDE. Yes.

Mr. LIEBELER. What business are you in?

Mr. ZAPRUDE. Manufacturing ladies dresses.

Mr. LIEBELER. The manufacture of ladies dresses?

Mr. ZAPRUDE. Yes.

Mr. LIEBELER. I understand that you took some motion pictures at the time of the assassination?

Mr. ZAPRUDE. That's correct.

Mr. LIEBELER. Could you tell us about the circumstances under which you did that, where you were at the time and what happened?

Mr. ZAPRUDE. Yes.

Mr. LIEBELER. And what you saw.

Mr. ZAPRUDE. Well, of course, what I saw you have on film, but that was the day, November 22, it was around 11:30. In fact, I didn't have my camera but my secretary asked me why I don't have it and I told her I wouldn't have a chance even to see the President and somehow she urged me and I went home and got my camera and came back and first I thought I might take pictures from the window because my building is right next to the building where the alleged assassin was, and it's just across—501 Elm Street, but I figured—I may go down and get better pictures, and I walked down, I believe it was Elm Street and on down to the lower part, closer to the underpass and I was trying to pick a space from where to take those pictures and I tried one place and it was on a narrow ledge and I couldn't balance myself very much. I tried another place and that had some obstruction of signs or whatever it was there and finally I found a place farther down near the underpass that was a square of concrete—I don't know what you call it—maybe about 4 feet high.

Mr. LIEBELER. I show you a picture that has been marked Hudson Exhibit No. 1 and ask you if you can in fact see yourself in that picture?

Mr. ZAPRUDE. Let me see—there it is here. That's me standing there—there's a girl—that's where I was standing.

Mr. LIEBELER. You are pointing out a concrete abutment that comes up immediately to the right of the sign that reads "Stemmons Freeway, Keep Right"?

Mr. ZAPRUDE. That's right. That's the girl behind me—that's my girl that works in my office. She was up there, too.

Mr. LIEBELER. So, you and this girl are shown standing on top of this concrete abutment there?

Mr. ZAPRUDE. That's right—she was right behind me and that's from where I took the pictures.

Mr. LIEBELER. Then, you can actually see yourself in this picture, can't you?

Mr. ZAPRUDE. Well, I can't distinguish myself being—I know I was there.

Mr. LIEBELER. Do you recognize that this picture was taken at the time you were there?

Mr. ZAPRUDE. Yes; I was there and I would say this couldn't be anybody else, unless—If this is an authentic photograph and it isn't composed now or changed—I would say that's me. That's the first time I have seen that. Were these pictures ever published in a magazine—there were pictures like that I suppose—actually?

Mr. LIEBELER. This picture here is in fact one of a series of pictures that is being sold down here in Dallas by a fellow named Willis, I believe his name is Phil Willis. He has a series of slides that are available and it's picture No. 5 of those slides in which you can see yourself back there.

Mr. ZAPRUDER. That must be it because there's another couple back there—I took some from there and I was shooting some of the pictures to start my roll from the beginning. I didn't want to have a blank and I shot some, in fact, they have it—the Federal Bureau of Investigation have those pictures.

Mr. LIEBELER. As you stood there on this abutment with your camera, the motorcade came down Houston Street and turned left on Elm Street, did it not?

Mr. ZAPRUDER. That's right.

Mr. LIEBELER. And it proceeded then down Elm Street toward the triple underpass; is that correct?

Mr. ZAPRUDER. That's correct. I started shooting—when the motorcade started coming in, I believe I started and wanted to get it coming in from Houston Street.

Mr. LIEBELER. Tell us what happened as you took these pictures.

Mr. ZAPRUDER. Well, as the car came in line almost—I believe it was almost in line—I was standing up here and I was shooting through a telephoto lens, which is a zoom lens and as it reached about—I imagine it was around here—I heard the first shot and I saw the President lean over and grab himself like this (holding his left chest area).

Mr. LIEBELER. Grab himself on the front of his chest?

Mr. ZAPRUDER. Right—something like that. In other words, he was sitting like this and waving and then after the shot he just went like that.

Mr. LIEBELER. He was sitting upright in the car and you heard the shot and you saw the President slump over?

Mr. ZAPRUDER. Leaning—leaning toward the side of Jacqueline. For a moment I thought it was, you know, like you say, "Oh, he got me," when you hear a shot—you've heard these expressions and then I saw—I don't believe the President is going to make jokes like this, but before I had a chance to organize my mind, I heard a second shot and then I saw his head opened up and the blood and everything came out and I started—I can hardly talk about it (the witness crying).

Mr. LIEBELER. That's all right, Mr. Zapruder, would you like a drink of water? Why don't you step out and have a drink of water?

Mr. ZAPRUDER. I'm sorry—I'm ashamed of myself really, but I couldn't help it.

Mr. LIEBELER. Nobody should ever be ashamed of feeling that way, Mr. Zapruder. I feel the same way myself. It was a terrible thing.

Let me go back now for just a moment and ask you how many shots you heard altogether.

Mr. ZAPRUDER. I thought I heard two, it could be three, because to my estimation I thought he was hit on the second—I really don't know. The whole thing that has been transpiring—it was very upsetting and as you see—I got a little better all the time and this came up again and it to me looked like the second shot, but I don't know. I never even heard a third shot.

Mr. LIEBELER. You didn't hear any shot after you saw him hit?

Mr. ZAPRUDER. I heard the second—after the first shot—I saw him leaning over and after the second shot—it's possible after what I saw, you know, then I started yelling, "They killed him, they killed him," and I just felt that somebody had ganged up on him and I was still shooting the pictures until he got under the underpass—I don't even know how I did it. And then, I didn't even remember how I got down from that abutment there, but there I was, I guess, and I was walking toward—back toward my office and screaming, "They killed him, they killed him," and the people that I met on the way didn't even know what happened and they kept yelling, "What happened, what happened, what happened?" It seemed that they had heard a shot but they didn't know exactly what had happened as the car sped away, and I kept on just yelling, "They killed him, they killed him, they killed him," and finally got to my office and my secretary—I told her to call the police or the Secret Service—I don't know what she was doing, and that's about all. I was very much upset. Naturally, I couldn't imagine such a thing being done. I just went to my desk and stopped there until the police came and then we were required to get a place to develop the films. I knew I had something, I figured it might be of some help—I didn't know what.

As to what happened—I remember the police were running behind me. There

ASSASSINATION

were police running right behind me. Of course, they didn't realize yet, I guess, where the shot came from—that it came from that height.

Mr. LIEBELER. As you were standing on this abutment facing Elm street, you say the police ran over behind the concrete structure behind you and down the railroad track behind that, is that right?

Mr. ZAPRUDER. After the shots?

Mr. LIEBELER. Yes.

Mr. ZAPRUDER. Yes—after the shots—yes, some of them were motorcycle cops—I guess they left their motorcycles running and they were running right behind me, of course, in the line of the shooting. I guess they thought it came from right behind me.

Mr. LIEBELER. Did you have any impression as to the direction from which these shots came?

Mr. ZAPRUDER. No, I also thought it came from back of me. Of course, you can't tell when something is in line—it could come from anywhere, but being I was here and he was hit on this line and he was hit right in the head—I saw it right around here, so it looked like it came from here and it could come from there.

Mr. LIEBELER. All right, as you stood here on the abutment and looked down into Elm Street, you saw the President hit on the right side of the head and you thought perhaps the shots had come from behind you?

Mr. ZAPRUDER. Well, yes.

Mr. LIEBELER. From the direction behind you?

Mr. ZAPRUDER. Yes, actually—I couldn't say what I thought at the moment, where they came from—after the impact of the tragedy was really what I saw and I started and I said—yelling, "They've killed him"—I assumed that they came from there, because as the police started running back of me, it looked like it came from the back of me.

Mr. LIEBELER. But you didn't form any opinion at that time as to what direction the shots did come from actually?

Mr. ZAPRUDER. No.

Mr. LIEBELER. And you indicated that they could have come also from behind or from any other direction except perhaps from the left, because they could have been from behind or even from the front.

Mr. ZAPRUDER. Well, it could have been—in other words if you have a point—you could hit a point from any place, as far as that's concerned. I have no way of determining what direction the bullet was going.

Mr. LIEBELER. Did you form any opinion about the direction from which the shots came by the sound, or were you just upset by the thing you had seen?

Mr. ZAPRUDER. No, there was too much reverberation. There was an echo which gave me a sound all over. In other words that square is kind of—it had a sound all over.

Mr. LIEBELER. And with the buildings around there, too?

Mr. ZAPRUDER. Yes, the reverberation was such that a sound—as it would vibrate—it didn't vibrate so much but as to whether it was a backfire—in other words, I didn't from the first sound, from him leaning over—I couldn't think it was a shot, but of course, the second—I think it was the second shot. I don't know whether they proved anything—they claim he was hit—that the first bullet went through him and hit Connally or something like that—I don't know how that is.

Mr. LIEBELER. Well, there are many different theories about that. One thing I would like you to do now—we have a series—a little book here that is Commission Exhibit No. 885 and it consists of a number of frames from motion pictures and I want to show you certain numbers of them which are important to our work and ask you if those look like they were taken from your film and if in fact you could recognize it as you look through this book that these are individual frame-by-frame pictures of the pictures that you took.

Mr. ZAPRUDER. Yes, they are frame by frame and they weren't very clear, for the simple reason that on the telephoto lens it's good to take stills—when you move—did you ever have binoculars and every time you move everything is exaggerated in the move—that's one reason why they are kind of blurred—the movement. Now, you want me to identify whether these are my pictures?

Mr. LIEBELER. Yes, specifically, I first call your attention to No. 185. This is No. 185 on the back of it and will you look at the whole book and identify it if you can and tell us that those are the pictures that—that those appear to be the pictures or copies of the pictures that you took from your motion picture camera?

Mr. ZAPRUDER. Well, I would say this, they look like—if they were taken from the film I had—these are the ones. I mean, I don't know how to express myself.

Mr. LIEBELER. Well, they were:

Mr. ZAPRUDER. Well, it looks like them—that's when they turned in from Elm Street. Is that it? I'm trying to visualize it. This is taking it from the opposite side of me, is it, where I would have been taking it, because I see this structure—I have been around there and—or these—this couldn't be here—where did they get this in there—how did they get this in there, if I was taking the pictures where did they get this in there? That shouldn't be there.

Mr. LIEBELER. This is the thing back up behind on Dealy Plaza, I think, isn't it?

Mr. ZAPRUDER. They have one there, too?

Mr. LIEBELER. Yes, I think there is. Now, if you will look at Hudson Exhibit No. 1, you will see that there is some kind of concrete structure there and is a different kind from that figure. It has bigger holes in it.

Mr. ZAPRUDER. That's right—in the back of this here, that's where it is—that's what I thought it was—that's where I got mixed up.

Mr. LIEBELER. You thought that the concrete latticework on the individual pictures in Commission Exhibit No. 885—

Mr. ZAPRUDER. Now I see it—that's where they have moved now the flowers and all that.

Mr. LIEBELER. Yes—I have to state this for the record—so they can understand what we are talking about—you confused it with the concrete latticework shown in the background in the individual photographs in Commission Exhibit No. 885, with the larger and obviously different concrete structure in the background of Hudson Exhibit No. 1?

Mr. ZAPRUDER. Yes, that—there is Elm Street there—this is a corner.

Mr. LIEBELER. Now, specifically here—let me show you the ones that have been numbered 185 and 186 and see if you can recognize those. This is 185 here that we are looking at now—of Commission Exhibit No. 885.

Mr. ZAPRUDER. Yes. This is where he came in from Houston Street and turned there.

Mr. LIEBELER. Yes; and they are going down Elm Street now?

Mr. ZAPRUDER. Yes; this is before—this shouldn't be there—the shot wasn't fired, was it? You can't tell from here?

Mr. LIEBELER (no response).

Mr. ZAPRUDER. I believe it was closer down here where it happened. Of course, on the film they could see better but you take an 8 millimeter and you enlarge it in color or in black and white, you lose a lot of detail. I wish I had an enlarger here for you.

Mr. LIEBELER. In any event, frame No. 185 does look like it's one of the frames, sir?

Mr. ZAPRUDER. Yes.

Mr. LIEBELER. And 186 is similar also?

Mr. ZAPRUDER. Yes.

Mr. LIEBELER. Now, I've got a list of them here that I want to ask you about—picture 207 and turn on over to this picture. It appears that a sign starts to come in the picture—there was a sign in the picture.

Mr. ZAPRUDER. Yes; there were signs there also and trees and somehow—I told them I was going to get the whole view and I must have.

Mr. LIEBELER. But the sign was in the way?

Mr. ZAPRUDER. Yes; but I must have neglected one part—I know what has happened—I think this was after that happened—something had happened.

Mr. LIEBELER. Do you remember when you looked at your pictures yourself, do you remember that there was a sign that does appear between the camera and the motorcade itself and you can see the motorcade for a while and the sign comes in the view?

PROPERTY OF
FEDERAL BUREAU OF
INVESTIGATION
ASSASSINATION

Mr. ZAPRUDE. That's right.

Mr. LIEBELER. And the motorcade comes behind it. Now, what about picture No. 210—however—there is no No. 210 in here.

Mr. ZAPRUDE. No.

Mr. LIEBELER. How about No. 222? Now, in No. 222 you can see the President's car coming out from behind the sign.

Mr. ZAPRUDE. Yes.

Mr. LIEBELER. And you can see Governor Connally right there in that center seat, I believe?

Mr. ZAPRUDE. Yes; Governor Connally—yes—these are all the same pictures—I remember the car was kind of buried and I was kind of low and I don't know how I got that view—I didn't get just the full view of the shot.

Mr. LIEBELER. Let's turn to 225 and there the car is coming further out from behind the sign.

Mr. ZAPRUDE. Yes.

Mr. LIEBELER. Is that still the same part of the sequence?

Mr. ZAPRUDE. Yes.

Mr. LIEBELER. You can now see the President for the first time.

Mr. ZAPRUDE. Yes; that's the President.

Mr. LIEBELER. The President appears to have his hand up by his throat as he is just coming from behind the sign.

Mr. ZAPRUDE. Yes; it looks like he was hit—it seems—there—somewhere behind the sign. You see, he is still sitting upright.

Mr. LIEBELER. Yes; he's sitting up and holding his hand up.

Mr. ZAPRUDE. Do we have the sequence—the next frames?

Mr. LIEBELER. Yes; it will be No. 227 and his hand comes up even more and he starts to move a little to his left.

Mr. ZAPRUDE. Apparently. And they started speeding the car then to—but he is still sitting up here. Is that still the President here?

Mr. LIEBELER. Yes; in picture No. 228—he still appears to have his hand up and in No. 229 it's even more pronounced.

Mr. ZAPRUDE. Yes.

Mr. LIEBELER. As the car keeps coming up from behind and in picture 230 he has raised both hands up.

Mr. ZAPRUDE. It looks to me like he went like this—did he go to his throat—I don't remember—I thought he went like this [holding both hands on the left side of his chest]. Did it show?

Mr. LIEBELER. Let's turn over to picture 231 here—these still appear to be the same sequence of pictures, do they not?

Mr. ZAPRUDE. Yes; you get about 16 per second and I think my camera was moving a little fast, maybe 18 frames per second. You see, we have a lot of pictures on there.

Mr. LIEBELER. And 235 is there.

Mr. ZAPRUDE. Yes; we've got that.

Mr. LIEBELER. In 235 both hands are up by his throat there or up to the top of his chest and Mrs. Kennedy is looking at him.

Mr. ZAPRUDE. To me it looks like it.

Mr. LIEBELER. You mean it looks to you as though he moved a little more sharply perhaps?

Mr. ZAPRUDE. Toward her—there are so many frames, of course, this is probably his first reaction, but he leaned over—it would be after the shot was fired, after I heard a sound, he went like this [leaning to the left and holding both hands to the left side of his chest].

Mr. LIEBELER. He moved over to his left and pulled his hands there?

Mr. ZAPRUDE. Yes; he moved to the left and pulled his hands somewhat in this direction.

Mr. LIEBELER. Does picture 235 appear to be one of the pictures that was taken from your sequence?

Mr. ZAPRUDE. Yes.

Mr. LIEBELER. How about 240—let's turn over to 240 and there he has turned his head toward the left a little bit more.

Mr. ZAPRUDE. There's only about 100 frames—they are so close.

Mr. LIEBELER. Five frames?

Mr. ZAPRUDER. Five frames is nothing—I believe.

Mr. LIEBELER. How about 249?

Mr. ZAPRUDER. No. 249—I just wonder if it was the motion that he went back with that I don't remember—it looks like he has got his hand on his head—I don't remember seeing that. Of course, the pictures would show.

Mr. LIEBELER. Yes; when you pick one of them out it's hard to break it down and pick them out.

Mr. ZAPRUDER. Yes; it's hard. We run them in single frames—and to get the main shot—it's hard.

Mr. LIEBELER. Now, let's turn over to picture 255—these all do look like they are from your film?

Mr. ZAPRUDER. Yes; they are—I know this—I have seen it so many times. In fact, I used to have nightmares. The thing would come every night—I wake up and see this.

Mr. LIEBELER. What about 255—what about that one?

Mr. ZAPRUDER. That's still the same series.

Mr. LIEBELER. That's still the same series—they keep moving along.

Mr. ZAPRUDER. Yes.

Mr. LIEBELER. And let's look at No. 213—as we go along here—then he does start moving sharply to the left.

Mr. ZAPRUDER. Yes; when you take it frame by frame, it could have been just 2 or 3 seconds, but the impression was that he was leaning over and not just sitting there and looking over that and grabbing himself at the left side.

Mr. LIEBELER. Yes; moving toward Mrs. Kennedy.

Mr. ZAPRUDER. That's what impressed me. Now, what number are you on?

Mr. LIEBELER. 313—you remember that one?

Mr. ZAPRUDER. That was—that was the horrible one.

Mr. LIEBELER. It appears to you then, that this book of pictures here as you look through it, are your pictures?

Mr. ZAPRUDER. Yes.

Mr. LIEBELER. Now, Mr. Zapruder, after you had the film developed I understand Mr. Sorrels from the Secret Service came over and helped you get the films developed and you gave two copies of your films to Mr. Sorrels, is that correct?

Mr. ZAPRUDER. Yes. One we have sent to Washington the same night and one went over for the viewers of the FBI on Ervay Street.

Mr. LIEBELER. That's the Secret Service?

Mr. ZAPRUDER. The Secret Service—I brought one roll there and they told me to dispatch it by Army plane or I don't know what they had done with it but it was supposed to have gone to Washington and one of them, I believe, remained here with Mr. Sorrels. He came to my office quite a few times to show them to different people.

Mr. LIEBELER. Now, I understand that you, yourself, retained the original film?

Mr. ZAPRUDER. No; I don't have that at all—I don't have any at all. They were sold to Time and Life magazines.

Mr. LIEBELER. You sold that to Life magazine?

Mr. ZAPRUDER. Yes.

Mr. LIEBELER. The Commission is interested in one aspect of this and I would like to ask you if you would mind telling us how much they paid you for that film.

Mr. ZAPRUDER. For the film?

Mr. LIEBELER. Yes.

Mr. ZAPRUDER. Well, I just wonder whether I should answer it or not because it involves a lot of things and it's not one price—it's a question of how they are going to use it, are they going to use it or are they not going to use it, so I will say I really don't know how to answer that.

Mr. LIEBELER. Well, I am not going to even urge you to answer the question. We will ask it and if you would rather not answer it—the Commission feels it would be helpful.

Mr. ZAPRUDER. I received \$25,000, as you know, and I have given that to the

PROPERTY OF
FEDERAL BUREAU OF
INVESTIGATION
ASSASSINATION

Firemen's and Policemen's Benevolence with a suggestion for Mrs. Tippit. You know that?

Mr. LIEBELER. I don't know that—you received \$25,000?

Mr. ZAPRUDER. \$25,000 was paid and I have given it to the Firemen's and Policemen's Fund.

Mr. LIEBELER. You gave the whole \$25,000?

Mr. ZAPRUDER. Yes. This was all over the world. I got letters from all over the world and newspapers—I mean letters from all over the world. It was all over the world—I am surprised—that you don't know it—I don't like to talk about it too much.

Mr. LIEBELER. We appreciate your answer very much.

Mr. ZAPRUDER. I haven't done anything, the way I have given it, at a time like this.

Mr. LIEBELER. I want to tell you, you may not be aware of it yourself, but I want to tell you that your film has been one of the most helpful things to the work of the Commission that we could possibly have had because it has enabled us to study the various positions of the people in the car and to determine by comparing it with the reenactment—by comparing it to the view from the window of the building, to develop with a fair degree of accuracy the facts here.

Mr. ZAPRUDER. I understand—and I am willing to be helpful but I am sorry it had to be on an occasion like this. I am willing to be helpful but I wish this would never have happened.

Mr. LIEBELER. Yes; that's right.

Mr. ZAPRUDER. I know they have taken my camera to Washington.

Mr. LIEBELER. It was a Bell & Howell camera, isn't that right?

Mr. ZAPRUDER. That's right.

Mr. LIEBELER. And you turned it over to the FBI and they have made tests on it?

Mr. ZAPRUDER. Yes; and then Bell & Howell wanted it for their archives and I thought they were through with it and let them have it. In return, they gave me, not for my personal use, but a sound projector which was given to the Golden Age Group. It's a place where old folks have a home. I asked them to donate something. I didn't want the camera. I didn't want anything for myself. Then the FBI wanted the camera again and I referred them to the Bell & Howell people.

Mr. LIEBELER. Yes; the FBI asked for the camera back because the Commission wanted to determine whether there was any difference in the frame speed as the camera unwound itself, as it went along.

Mr. ZAPRUDER. Well, they claimed they told me it was about 2 frames fast—instead of 16 it was 18 frames and they told me it was about 2 frames fast in the speed and they told me that the time between the 2 rapid shots, as I understand, that was determined—the length of time it took to the second one and that they were very fast and they claim it has proven it could be done by 1 man. You know there was indication there were two?

Mr. LIEBELER. Your films were extremely helpful to the work of the Commission, Mr. Zapruder.

Mr. ZAPRUDER. I am only sorry I broke down—I didn't know I was going to do it.

Mr. LIEBELER. Mr. Zapruder, I want to thank you very much, for the Commission, for coming down. It has been very helpful.

Mr. ZAPRUDER. Well, I am ashamed of myself. I didn't know I was going to break down and for a man to—but it was a tragic thing, and when you started asking me that, and I saw the thing all over again, and it was an awful thing—I know very few people who had seen it like that—it was an awful thing and I loved the President, and to see that happen before my eyes—his head just opened up and shot down like a dog—it leaves a very, very deep sentimental impression with you; it's terrible.

Mr. LIEBELER. Well, you don't have to feel ashamed about that at all, and thank you very much. I enjoyed meeting you very much.

Mr. ZAPRUDER. All right, any time you want some more help you can call on me and I will be glad to come in.

Mr. LIEBELER. All right, thank you a lot.

Mr. ZAPRUDER. Goodbye.

Mr. BLAKEY. Mr. Zapruder was questioned by Warren Commission counsel, Wesley Liebler:

Mr. LIEBELER. Did you have any impression as to the direction from which these shots came?

Mr. ZAPRUDER. No, I also thought it came from back of me. Of course, you can't tell when something is in line—it could come from anywhere, * * *

Mr. Liebler tried to focus Mr. Zapruder's memory of the event:

Mr. LIEBELER. But you didn't form any opinion at that time as to what direction the shots did come from actually?

Mr. ZAPRUDER. No.

Mr. LIEBELER. And you indicated that they could have come also from behind or from any other direction except perhaps from the left, because they could have been from behind or even from the front.

Mr. Zapruder then agreed that any direction was possible and that he had no way of determining the bullet's course. He did, however, distinguish between the shots:

Mr. LIEBELER. Did you form any opinion about the direction from which the shots came by the sound, or were you just upset by the thing you had seen?

Mr. ZAPRUDER. No, there was too much reverberation. There was an echo which gave me a sound all over * * * Yes, the reverberation was such that a sound—as it would vibrate—it didn't vibrate so much but as to whether it was a backfire—in other words, I didn't from the first sound, from him leaning over—I couldn't think it was a shot, but of course, the second—I think it was the second shot * * * (that gave the reverberations).

Secret Service Agent Paul E. Landis, Jr., wrote a statement on the shooting, dated November 30, 1963. Mr. Chairman, I would like to have that document entered into the record as JFK exhibit F-647.

Chairman STOKES. Without objection, it may be entered into the record.

[The information follows:]

ASSASSINATION

JFK EXHIBIT F-647

THE ASSASSINATION OF PRESIDENT JOHN F. KENNEDY
ON NOVEMBER 22, 1963, AT DALLAS, TEXAS

Statement of Special Agent Paul E. Landis, Jr., United States Secret Service, concerning his activities and official duties on November 22, 1963.

On November 22, 1963, I arrived at Love Field Airport, Dallas, Texas, at 11:35 a.m., having traveled from Ft. Worth, Texas, to Dallas, Texas, on board U. S. Air Force Flight #6970. Upon my arrival I disembarked from the aircraft and immediately walked to where the motorcade vehicles were parked. Special Agent Sam Kinney was the first person that I recognized, and I remember speaking to him and standing by the Follow-up car and jokingly asking him if he could tell me where the Follow-up car was.

After speaking to Sam, I walked over to Special Agent Win Lawson just to double check to see if I was still assigned to working the Follow-up car as had previously been arranged. He was standing by the front right fender of the car in which the President would be riding, and he told me that I was still to ride in the Follow-up car.

Only a very few moments later the President's Aircraft was pulling up to its mooring spot and I moved up to where I would be near the President and First Lady when they disembarked from the aircraft.

There appeared to be a very large crowd at the airport and most of the people were restrained behind a chain-link fence which was about four or five feet high. On the opposite side of the fence from the crowd there was a very narrow sidewalk and curbing which ran along the fence-line.

There were several people on the same side of the fence as the President but most of them were photographers.

As soon as the President and First Lady disembarked from the Aircraft, Mrs. Kennedy was presented a bouquet of roses. The President was also presented what appeared to be two hand-drawn charcoal portraits of himself and Mrs. Kennedy in a black leather and glass folding frame. I believe that this was given to him by a lady wearing a red coat.

Just after the President received the black leather frame I held out my hand and he handed it to me. I had been standing just off to Mrs. Kennedy's left, slightly in front of her. She was on the left side of the President.

At this time the President and First Lady started walking towards the crowd which was restrained behind the fence. On the way, they did stop for a few seconds to talk to an elderly lady in a wheel chair who was on the field area about thirty feet from where the above presentations were made.

They then walked over to the crowd and walked along the fence from their right to their left. At first I was in front of the President, clearing a pathway through the photographers and observing the crowd reaching over the fence;

Page Two of Statement of Special Agent Paul E. Landis, Jr., dated Nov. 30, 1963:

but I noticed that Mrs. Kennedy was moving along slower and becoming separated from the President so I asked another agent, I don't recall who, to move up where I was and I dropped back to assist Special Agent Clinton Hill who was next to Mrs. Kennedy. I continued to keep a pathway clear for Mrs. Kennedy, removing small hand signs that had been dropped in her pathway on the sidewalk and occasionally cautioning to watch out for the curbing. At one point, where the direction of the fence made a right angle turn to the left of the way we were moving, I do remember reaching up and holding a fairly large flag away that someone was waving over the fence. Only a few feet further and the fence and sidewalk made another 90 degree turn in the direction in which we were originally moving.

At this point we stopped momentarily and started in the direction of the cars which were slightly behind us and had been moving along towards us. Mrs. Kennedy asked where the President was and SA Hill noticed him continuing along the fence shaking hands with the crowd; so Mrs. Kennedy returned to the fence and did the same.

Only a short distance later the President and First Lady stopped shaking hands and entered their automobile. I stood by the right rear side until the car started moving and then hopped on the right rear portion of the right running board of the Follow-up car. I was standing with my right leg on the running board and my left leg up over and inside the Follow-up car. I stayed in this position until we were leaving the Airport area and remarked that, "I might as well get all the way in," and I did so. I glanced at my watch but I don't recall the time.

Special Agents Glen Bennett and George Hickey were seated to my left respectively in the rear of the Follow-up car. Mr. David Powers was seated directly in front of me in the center portion of the Follow-up car and Mr. Kenneth O'Donnell was seated on Mr. Power's left. Special Agent Sam Kinney was driving and ATSAIC Roberts was seated in the right front seat. Special Agents John Ready, Clinton Hill, and Tim McIntyre were standing on the right front, left front, and left rear portions of the running board, respectively.

The motorcade had not proceeded far when ATSAIC Roberts asked me to get back on the outside running board, "Just in case," which I immediately did. The crowd was about two deep along each side of the road and I would guess that we were traveling about twenty miles per hour.

As the motorcade proceeded towards the main business section of downtown Dallas I watched the crowd for anyone trying to run towards the President's car or any person who might be holding anything harmful in his hands. I observed the rooftops and windows of the buildings along the route. On the outskirts of town most of the buildings were of a one or two story type structure and very few people were on the rooftops. The crowd was three or more deep along the street as we proceeded towards downtown Dallas with most intersections more heavily crowded. The outskirts seemed to consist mostly of used car lots, junk

COMMISSION EXHIBIT 1024—Continued

ASSASSINATION
 RECORDS
 OF
 THE
 PRESIDENT
 OF
 THE
 UNITED STATES

Page Three of Statement of Special Agent Paul E. Landis, Jr., dated Nov. 30, 1963:

dealers, auto parts stores, and this typical type of neighborhood. At one intersection there were some Cuban Pickets but I don't recall exactly what their signs said except that they did have "Cuba" on them.

A little further towards town some people had a sign asking the President to please stop and shake hands, which he saw as he passed and stopped. I immediately ran up to his car as it stopped and assumed a position next to him and observed the crowd as it merged on the car, especially watching the hands. Most of the people were children but I do remember one of the adult ladies who was holding the sign, remarking, "It worked, our sign worked!"

At various places along the route I remember Mr. Dave Powers standing up and taking movies of the President's car and the crowd.

The closer we came to downtown Dallas the larger the crowds became. At several places they were forcing their way into the street and there was just barely enough room for the cars to get through. There were two motorcycle escorts on each side of the President's and the Follow-up car and in several instances the crowd was so close that the motorcycles could not get through and had to drop completely behind the Follow-up car. During these instances SA Clint Hill would run up and jump on the left rear bumper of the President's car and he would ride there until the crowd was further back away from the President's car.

Just before we reached the heart of downtown Dallas, I remember noticing some new looking, very high, multi-storied skyscrapers and I remarked to Jack Beady that there were even people way up on the roof of one. I think the motorcade made a right turn onto Main Street, as that is the only street sign I saw and remembered. I remember thinking to myself that about every town I know of has a Main Street.

I'm not sure how far we traveled on Main Street, but I do know that this is where the crowd seemed heaviest. The buildings were tall on both sides of the street but I didn't notice many people in the windows. I continued to scan the crowds on the street and the buildings along the route. I glanced at the President's car somewhere along Main Street and saw Clint Hill again standing on the left rear bumper behind Mrs. Kennedy who was seated to the President's left. Governor Connally was seated in front of the President and Mrs. Connally was in front of Mrs. Kennedy.

The crowd lined both sides of the street and in several places was right out into the street leaving barely enough room to get through.

Not long after we turned onto Main Street there was one boy who, I would say, was in his early teens who ran out from the crowd after the President's and Follow-up cars had passed and tried to overtake the President's car. I saw him coming and tapped SA Beady on the shoulder and pointed towards him. He was carrying a camera. SA Beady jumped off the running board, overtook the boy and pushed him back into the crowd.

Page Four of Statement of Special Agent Paul E. Landis, Jr., dated Nov. 30, 1963:

When we reached the end of Main Street we turned right and approached a gradual left turn. As we approached the intersection and while we were turning left, the crowd seemed to thin and almost disappear around the turn. I then made a quick surveillance of a building which was to be on the President's right once the left turn was completed. It appeared to be the last one in sight. It was a modernistic type building, approximately eight stories high, and it had large glass windows. I also seem to recollect orange paneling or siding. None of the windows were open, and I did not see anyone standing by them. I surmised that the building was closed or that all its employees were out on the street corner.

As the President's car continued around the corner, I continued to survey the crowd along the righthand side of the road and noticed that it was fairly scattered, with hardly enough people to form a single line. I continued to look ahead to an overpass over the route we were traveling. At approximately this point, I would say, the President's car and the Follow-up car had just completed their turns and both were straightening out.

At this moment I heard what sounded like the report of a high-powered rifle from behind me, over my right shoulder. When I heard the sound there was no question in my mind what it was. My first glance was at the President, as I was practically looking in his direction anyway. I saw him moving in a manner which I thought was to look in the direction of the sound. I did not realize that President Kennedy had been shot at this point.

I immediately returned my gaze, over my right shoulder, toward the modernistic building I had observed before. With a quick glance I saw nothing and immediately started scanning the crowd at the intersection from my right to my left. I observed nothing unusual and began to think that the sound had been that of a fire cracker but I hadn't seen any smoke. In fact, I recall Special Agent Jack Ready saying, "What was it? A Fire Cracker?" I remarked, "I don't know; I don't see any smoke." So far the lapsed period of time could not have been over two or three seconds.

All during this time I continued to scan the crowd, returning my gaze towards the President's car. It must have been another second or two before the next shot was fired because, as I recall having seen nothing out of the ordinary, I then thought that maybe one of the cars in the motorcade had had a blowout that had echoed off the buildings. I looked at the right front tire of the President's car and saw it was all right. I then glanced to see the right rear tire, but could not because the Follow-up car was too close.

I also thought of trying to run and jump on the President's car but did not think I could make it because of the speed at which we were traveling. I decided I had better stay where I was so that I would at least be near the First Lady, to whom I am assigned. I think that it was at this point that I thought, "Faster, Faster, Faster," thinking that we could not get out of the area soon enough. However, I don't have any idea as to how fast we were then moving.

COMMISSION EXHIBIT 1024—Continued

ASSASSINATION
DOCUMENT OF

Page Five of Statement of Special Agent Paul E. Landis, Jr., dated Nov. 30, 1963:

I had drawn my gun, but I am not sure exactly when I did this. I did leave my suit coat unbuttoned all during the motorcade movement, thinking at the time that I could get to my gun faster this way, if I had to.

I glanced towards the President and he still appeared to be fairly upright in his seat, leaning slightly toward Mrs. Kennedy with his head tilted slightly back. I think Mrs. Kennedy had her right arm around the President's shoulders at this time. I also remember Special Agent Clinton Hill attempting to climb onto the back of the President's car.

It was at this moment that I heard a second report and it appeared that the President's head split open with a muffled exploding sound. I can best describe the sound as I heard it, as the sound you would get by shooting a high powered bullet into a five gallon can of water or shooting into a melon. I saw pieces of flesh and blood flying through the air and the President slumped out of sight towards Mrs. Kennedy.

The time lapse between the first and second report must have been about four or five seconds.

My immediate thought was that the President could not possibly be alive after being hit like he was. I still was not certain from which direction the second shot came, but my reaction at this time was that the shot came from somewhere towards the front, right-hand side of the road.

I did not notice anyone on the overpass, and I scanned the area to the right of and below the overpass where the terrain sloped towards the road on which we were traveling. The only person I recall seeing clearly was a Negro male in light green slacks and a beige colored shirt running from my left to right, up the slope, across a grassy section, along a sidewalk, towards some steps and what appeared to be a low stone wall. He was bent over while running and I started to point towards him, but I didn't notice anything in his hands and by this time we were going under the overpass at a very high rate of speed. I was looking back and saw a motorcycle policeman stopping along the curb approximately adjacent to where I saw the Negro running.

After we rode under the overpass I again looked at the President's car and saw Special Agent Clint Hill lying across the trunk. He was looking back towards the Follow-up car shaking his head back and forth and gave a thumbs-down sign with his hand.

ATSAIC Roberts asked if anyone got the exact time of the shooting and someone said "about 12:30 p.m.;" then someone told me to get inside the car and pulled me by the arm. My sun glasses fell off and Special Agent Bennett handed them to me. By now we were on an Expressway and a few people were standing in spots along the way waving as we went by.

COMMISSION EXHIBIT 1024—Continued

Page Six of Statement of Special Agent Paul E. Landis, Jr., dated Nov. 30, 1963;

ASAIK Roberts was telling the other agents in the Follow-up car to cover Vice-President Johnson as soon as we stopped.

Sometime around 12:37 p.m. we arrived at Parkland Memorial Hospital. I immediately ran to the left rear side of the President's car, reached over and tried to help Mrs. Kennedy up by taking hold of her shoulders. She did not want to let go of President Kennedy whose head she held in her lap and she was bending over him. She said something like, "No, I want to stay with him!"

Agent Hill had in the meantime opened the left rear door of the Presidential Convertible, stepped inside and took Mrs. Kennedy by the arm. She released the President and someone said, "Cover up his head." Agent Hill took off his suit coat and covered up the President's head. I also remember Mr. Powers leaning in the car and saying, "Oh, No! Mr. President! Mr. President!"

By this time someone was lifting the President's body out of the right side of the car. Agent Hill helped Mrs. Kennedy out of the car, and I followed. Mrs. Kennedy's purse and hat and a cigarette lighter were on the back seat. I picked these three items up as I walked through the car and followed Mrs. Kennedy into the hospital.

The President's body was taken directly to an Emergency Room, and I think I remember Mrs. Kennedy following the people in but coming out almost immediately. The door to the Emergency Room was closed and I stayed by Mrs. Kennedy's side. Someone, in the meantime, had brought a chair for Mrs. Kennedy to sit in and she sat just outside of the Emergency Room. There were several people milling around and with the help of a nurse we cleared all unauthorized personnel out of the immediate area.

Someone came out of the Room that the President was in and asked if anyone knew his Blood Type. ASAIK Kellerman and SA Hill immediately reached for their wallets. ASAIK Kellerman gave the man the information first.

At one point someone else came out of the President's Room again and said he was still breathing. Mrs. Kennedy stood up and said, "Do you mean he may live?" No one answered.

Most of the time while in the hospital I stayed right next to Mrs. Kennedy. Twice, I believe, she went into the Room where the President was; however, I remained outside by the door. A short time later I still remember several people standing around, and I asked a doctor for help in clearing the area.

At approximately 2:00 p.m. the President's body was wheeled from the hospital in a coffin into an ambulance. Special Agent Andrew Berger drove the ambulance; ASAIK Kellerman and ASAIK Stout were in the front seat. Mrs. Kennedy, Admiral Burkley, and Agent Hill rode in the rear of the ambulance with the President's body.

ASSASSINATION
 OF
 PRESIDENT
 JOHN F. KENNEDY

Page Seven of Statement of Special Agent Paul E. Landis, Jr., dated Nov. 30, 1963:

I rode in the Follow-up car behind the ambulance which departed the hospital at 2:04 p.m.

At 2:14 p.m., the President's body arrived at Love Field Airport and several Secret Service agents immediately carried it on board U. S. Air Force No. One via the rear door. I followed on board behind Mrs. Kennedy and then moved to the forward section of the plane. I witnessed the swearing in of President Johnson at 2:39 p.m. in the center compartment on board Air Force #1, and at 2:47 p.m. departed Love Field Airport, Dallas, Texas, via Air Force No. One, with Mrs. Kennedy and the body of the late President Kennedy.

Upon our arrival at Andrews Air Force Base, Md., at 5:58 p.m. I helped carry the late President Kennedy's coffin from Air Force #1. The body was placed in an ambulance which departed Andrews Air Force Base at approximately 6:10 p.m., driven by Special Agent William Greer. ASAIC Kellerman, Admiral Burkley, and I rode in the front seat of the ambulance. Mrs. Kennedy and Attorney General Robert Kennedy rode in the rear of the ambulance with President Kennedy's body.

The above party arrived at Bethesda Naval Hospital, Bethesda, Md., at approximately 6:55 p.m. Special Agent Hill and I escorted Mrs. Kennedy to the 17th Floor where we immediately secured the area. Only hospital personnel assigned to the area, Kennedy family members and friends, and authorized personnel were allowed in the area.

I only left the 17th Floor twice while Mrs. Kennedy was there. Once, to find ASAIC Kellerman in the hospital morgue and give him a telephone message from Chief Rowley. The other time was to find a White House driver.

At 3:56 a.m., on November 23, 1963, Mrs. Kennedy and Attorney General Robert Kennedy departed Bethesda Naval Hospital via ambulance, accompanying the late President John F. Kennedy's body to the White House. Special Agent William Greer was driving and ASAIC Kellerman accompanied. Special Agent Clinton Hill rode in the first limousine behind the ambulance and I rode in the second limousine.

The above Party arrived at the White House at 4:24 a.m.

Paul E. Landis, Jr.

Paul E. Landis, Jr.
Special Agent
U. S. Secret Service

COMMISSION EXHIBIT 1024—Continued

Mr. BLAKEY. Mr. Landis was in the follow-up car, behind the Presidential limousine, on the outside running board on the right. He may be seen in JFK exhibit 155. He indicated that the first shot sounded like the report of a high-powered rifle from behind me, over my right shoulder. According to his statement, the second shot might have come from a different direction. He said: "I still was not certain from which direction the second shot came, but my reaction at this time was that the shot came from somewhere toward the front, right-hand side of the road."

Another witness, S. M. Holland, also saw signs of a shot coming from a group of trees on the knoll. Mr. Chairman, I would like to enter Mr. Holland's testimony before the Warren Commission, JFK exhibit F-648, into the record.

Chairman STOKES. Without objection, it may be entered into the record.

[The information follows:]

PROPERTY OF
ASSASSINATION

TESTIMONY OF S. M. HOLLAND

The testimony of S. M. Holland was taken at 2:20 p.m., on April 8, 1964, in the office of the U.S. attorney, 301 Post Office Building, Bryan and Ervay Streets, Dallas, Tex., by Mr. Samuel A. Stern, assistant counsel of the President's Commission. Mr. S. M. Holland was accompanied by his attorney, Mr. Balford Morrison.

Mr. STERN. Would you rise please and raise your right hand so as to be sworn.

Do you solemnly swear the testimony that you are about to give will be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. HOLLAND. I do.

Mr. STERN. Sit down, please.

You have recorded Mr. Morrison's presence?

The REPORTER. Yes.

Mr. STERN. Mr. Holland, you have received a letter from the Commission asking you to come and testify today?

Mr. HOLLAND. Yes.

Mr. STERN. As you know, the Commission is inquiring into all of the facts concerning the assassination of President Kennedy and we want your evidence concerning what you saw at the time of the assassination from the place you were standing. May we have, for the record, your name and residence address?

Mr. HOLLAND. S. M. Holland, 1119 Lucille Street, Irving, Tex.

Mr. STERN. What is your occupation?

Mr. HOLLAND. Signal supervisor for Union Terminal Railroad.

Mr. STERN. How long have you been employed by that organization?

Mr. HOLLAND. Union Terminal since 1933.

Mr. STERN. Now, on Friday, November 22, will you describe what you did, concerning the President's visit and where you were.

Mr. HOLLAND. Well, about 11:00 o'clock, a couple of policemen and a plainclothesman, came up on top of the triple overpass, and we had some men working up there, and I knew that they was going to have a parade, and I left my office and walked up to the underpass to talk to the policemen. And they asked me during the parade if I would come back up there and identify people that was supposed to be on that overpass. That is, the railroad people.

Mr. STERN. Where are your offices, Mr. Holland?

Mr. HOLLAND. At the Union Terminal Station.

Mr. STERN. Is that within walking distance of the triple overpass?

Mr. HOLLAND. Yes, it is. About—less than a quarter of a mile, a very short distance.

Mr. STERN. And these policemen that you spoke to, there were 3 altogether?

Mr. HOLLAND. Two—there were 2 city policemen and 1 man in plainclothes. I didn't talk to him. I talked to the city policemen.

Mr. STERN. You don't know what his affiliation was?

Mr. HOLLAND. I know he was a plainclothes detective, or FBI agent or some

thing like that, but I don't know, and I told him I would be back and after lunch I would go up there.

Mr. STERN. Approximately what time did you arrive up there?

Mr. HOLLAND. Oh, I arrived up there, I guess, about a quarter until 12, and I would identify each person that came up there that he worked at the Union Terminal, and department so-and-so.

Mr. STERN. Whom did you see there at 11:45 when you returned, from then until 12:30?

Mr. HOLLAND. Well, I would have to try to remember who all was up there then. There was Mr. Reilly and Mr. R. C. Dodd.

Mr. STERN. Mr. Reilly?

Mr. HOLLAND. Reilly.

Mr. STERN. Who was—

Mr. HOLLAND. R. C. Dodd, and N. H. Potter and Luke Winburn.

Mr. STERN. Luke?

Mr. HOLLAND. Winburn.

Mr. STERN. And—

Mr. HOLLAND. And a fellow by the name of Johnson, he works in the car department.

Mr. STERN. Johnson.

Mr. HOLLAND. And there was another fellow who worked at the car department, tall, blond-headed boy, and I can't remember his name.

Mr. STERN. That makes six people so far. Are these all employees of—

Mr. HOLLAND. Yes.

Mr. STERN. Of the terminal?

Mr. HOLLAND. Yes, and they were two men, one of them worked for the Katy, and one for the T. & P., that I don't know their names, but I do know that they were railroad people. They were over on business. Working on those business cars, and one of them was a Katy employee, and one was a T. & P. employee.

Mr. STERN. Could you give me their full names?

Mr. HOLLAND. Texas & Pacific, and the Missouri, Kansas, Texas Railroad.

Mr. STERN. You don't know the names of those particular men?

Mr. HOLLAND. No; I don't.

Mr. STERN. Did you see them here today?

Mr. HOLLAND. I know the policemen talked to them and got identification from them.

Mr. STERN. Yes; but they are not, as far as you know, the two gentlemen that you saw sitting in the anteroom to the U.S. attorney's office just before—

Mr. HOLLAND. No; neither one of those.

Mr. STERN. Did you recognize either of those two men?

Mr. HOLLAND. One of them is a cabdriver, and the other one is an electrician at Union Terminal. The large fellow is a cabdriver.

Mr. STERN. The electrician, do you know his name?

Mr. HOLLAND. Frank Reilly.

Mr. STERN. There were two other men out there. Perhaps you didn't notice them. I spoke to them after I spoke to you.

Mr. HOLLAND. Well, at the time the parade got started they was, I guess—Davey Cowzert was up there, too.

Mr. STERN. But, just to finish with the two, you didn't recognize either of the two people who were in the anteroom a few moments ago as being people who were on the overpass that day?

Mr. HOLLAND. No.

Mr. STERN. All right.

Mr. HOLLAND. There was two people I did recognize and that was the cabdriver and Mr. Reilly was out there and that policeman, he was up there with me.

Mr. STERN. You recognized the policeman as being the policeman who was on the triple overpass at the time?

Mr. HOLLAND. Yes.

Mr. STERN. Fine. Now, another name just occurred to you of someone else.

Mr. HOLLAND. Cowzert [spelling] C-o-w-z-e-r-t, Cowzert.

PROPERTY OF
ASSASSINATION

Mr. STERN. Is he also an employee?

Mr. HOLLAND. Yes; he is.

Mr. STERN. Were all the people there, as far as you know, at the time the Presidential motorcade—

Mr. HOLLAND. Yes.

Mr. STERN. Came into view?

Mr. HOLLAND. One more, if I can remember his name. One that run around the corner of the fence with me. He was right behind me—why in the world—he was one of the first ones around the fence when we run around the fence to what was happening.

Mr. STERN. Before we get to that, how about the police. How many police officers were on the overpass at the time?

Mr. HOLLAND. There were two Dallas Police officers up there at that time.

Mr. STERN. Tell me if this is correct, Mr. Holland. At the time the Presidential motorcade arrived, to the best of your recollection, on the overpass there were two uniformed Dallas Police, and the following employees of the Terminal Co.: Yourself, Mr. Reilly, Mr. Dodd, Mr. Potter, Mr. Winburn, Mr. Johnson, Mr. Cowzert, and perhaps one other man?

Mr. HOLLAND. That's right.

Mr. STERN. So, that would be eight including yourself, plus two employees of the railroad. One of the T. & P. and one of the Katy?

Mr. HOLLAND. That's right. At that time. Now, like I said a while ago, by the time they started there was quite a few come up there, but I can't remember who it was or their names, because—

Mr. STERN. Before the motorcade started?

Mr. HOLLAND. Before the motorcade started.

Mr. STERN. These were people you recognized as employees?

Mr. HOLLAND. Some of them, and some of them I did not recognize, but I think he was asking for credentials.

Mr. STERN. The uniformed policeman?

Mr. HOLLAND. Yes; one on that side, and one on this side to keep them—

Mr. STERN. Yes; and did you participate in identifying people as being terminal or railroad employees?

Mr. HOLLAND. When they first started arriving, yes; it was my purpose for going up there.

Mr. STERN. So, that it is fair to say that at the time the President's motorcade turned into this area, there was no one on the overpass that you didn't know either as Terminal Co. employees, or railroad employees, or as a policeman?

Mr. HOLLAND. Wouldn't be fair to say that, because there was quite a few came up there right in the last moments.

Mr. STERN. There were? Tell us about that.

Mr. HOLLAND. That I couldn't recognize. There wasn't too many people up there, but there were a few that came up there the last few minutes, but the policemen were questioning them and getting their identification, and—

Mr. STERN. Is this just about the time of the motorcade?

Mr. HOLLAND. Just about the time, or just prior to it, because there was a few up there that I didn't—that I didn't recognize myself.

Mr. STERN. Had they been, as far as you could tell, checked by the police?

Mr. HOLLAND. He was checking them as they came on top of the underpass.

Mr. STERN. Did it seem to you that everybody up there had been checked by this policeman for identification?

Mr. HOLLAND. I think everyone was checked by some person.

Mr. STERN. Yes. Can you estimate the number of people that were on the overpass immediately as the motorcade came into view?

Mr. HOLLAND. Well, I would estimate that there was between 14 to 18 people.

Mr. STERN. Now, where was the motorcade when you first saw it?

Mr. HOLLAND. Turned off the Main Street—in front of the county jail.

Mr. STERN. Turning right off of Main onto Houston?

Mr. HOLLAND. It was coming down Main and turned off of Main onto Houston.

Mr. STERN. At that time will you show me on this drawing where you were and just make a mark and put the No. 1 next to that mark. That is where

you were at that time? Roughly in the middle of the overpass over Elm Street?

Mr. HOLLAND. That's right.

Mr. STERN. And where, in relation to the concrete fence that—

Mr. HOLLAND. Picket fence or concrete?

Mr. STERN. No; the concrete.

Mr. HOLLAND. Oh, the concrete banister?

Mr. STERN. The concrete banister. Were you right at the banister?

Mr. HOLLAND. I was; would you like to see the exact location?

Mr. STERN. Yes.

Mr. HOLLAND. This is my son standing in the exact location I was in [indicating].

Mr. STERN. Off the record a moment.

(Discussion off the record.)

Mr. STERN. Back on the record. Well, then, we'll mark this as Exhibit B, reserving Exhibit A for this drawing, and Exhibit B is a photograph you took on Saturday, November 23, of your son standing in the position at the banister of the triple overpass where you were at the time the motorcade came into view.

Mr. HOLLAND. That's right.

Mr. STERN. Fine. That is quite a good picture. At that time, can you indicate, to the best of your knowledge where other persons were standing on the overpass, and particularly in relationship to the two police officers who were on the overpass?

Mr. HOLLAND. Well, as well as I remember, one police officer was standing right behind me, or pretty close behind me.

Mr. STERN. Put a "2" where you believe he was standing.

Mr. HOLLAND. He was standing in close enough so that he could see, but he could also see the people, and the other policeman, I think, unless he left immediately before this happened—see, when they turned there, I didn't turn around and look back any more, but the last time I saw this policeman he was standing over here on this side, about [indicating].

Mr. STERN. Standing almost directly behind you?

Mr. HOLLAND. Yes.

Mr. STERN. But, on the other side of the overpass, facing west?

Mr. HOLLAND. Yes; all this way, across the tracks. See, these are all railroad tracks, and he was standing over here on this side immediately before this motorcade turned this. Now, after they turned, I don't know, but—because I was watching them.

Mr. STERN. Yes.

Would you put a "3" where you believe he was standing and can you indicate on there where you believe the other 12 to 15 or 16 people were who were on the overpass at this time.

Mr. HOLLAND. Well—

Mr. STERN. Were they all standing in one group?

Mr. HOLLAND. There was a pretty close group between this column here, and this place right in there. In other words, if I can—had a shot of it, we could find that pretty close. I don't know that I have one.

Mr. STERN. What you have indicated on the drawing is on the part of the overpass from one side of Elm Street to the other.

Mr. HOLLAND. Yes; this is one side of Elm Street, and this would be the other. If you would get over here there would be a banister or something in your way, and this is grass out here, and you couldn't get to get too good a view, and most of the people was from this right in here, over to right in here [indicating].

Mr. STERN. All right. Now—

Mr. HOLLAND. And this bench runs right along similar to that, up here to this [indicating].

Mr. STERN. That is a wooden picket fence that you are describing that runs from the end of the concrete banister?

Mr. HOLLAND. That's right.

Mr. STERN. Over to a little—

PROPERTY OF
ASSASSINATION

Mr. HOLLAND. Little house there.

Mr. STERN. Little—

Mr. HOLLAND. What do they call that thing?

Mr. MORRISON. I don't know.

Mr. STERN. Little pavilion? Little concrete pavilion?

Mr. HOLLAND. Yes.

Mr. STERN. Now, what did you observe from that point on, Mr. Holland?

Mr. HOLLAND. Well, I observed the motorcade when it turned off of Main Street onto Houston Street and back on Elm Street. There was two young ladies right across from this sign, which would be, I judge—would say they were standing about here [indicating].

Mr. STERN. Put No. 4 there, please. Fine.

Mr. HOLLAND. And the motorcade was coming down in this fashion, and the President was waving to the people on this side [indicating].

Mr. STERN. That is the north side of Elm Street?

Mr. HOLLAND. Yes; on the north side.

Mr. STERN. All right.

Mr. HOLLAND. And she was looking in this direction [indicating].

Mr. STERN. "She," is Mrs. Kennedy?

Mr. HOLLAND. His wife. And about that time—

Mr. STERN. Was looking in a southern direction?

Mr. HOLLAND. In the southern direction.

Mr. STERN. South side of Elm Street?

Mr. HOLLAND. And about that time he went over like that [indicating], and put his hand up, and she was still looking off, as well as I could tell.

Mr. STERN. Now, when you say, "he went like that," you leaned forward and raised your right hand?

Mr. HOLLAND. Pulled forward and hand just stood like that momentarily.

Mr. STERN. With his right hand?

Mr. HOLLAND. His right hand; and that was the first report that I heard.

Mr. STERN. What did it sound like?

Mr. HOLLAND. Well, it was pretty loud, and naturally, underneath this underpass here it would be a little louder, the concussion from underneath it, it was a pretty loud report, and the car traveled a few yards, and Governor Connally turned in this fashion, like that [indicating] with his hand out, and another report.

Mr. STERN. With his right hand out?

Mr. HOLLAND. Turning to his right.

Mr. STERN. To his right?

Mr. HOLLAND. And another report rang out and he slumped down in his seat, and about that time Mrs. Kennedy was looking at these girls over here [indicating]. The girls standing—now one of them was taking a picture, and the other one was just standing there, and she turned around facing the President and Governor Connally. In other words, she realized what was happening, I guess.

Now, I mean, that was apparently that—she turned back around, and by the time she could get turned around he was hit again along in—I'd say along in here [indicating].

Mr. STERN. How do you know that? Did you observe that?

Mr. HOLLAND. I observed it. It knocked him completely down on the floor. Over, just slumped completely over. That second—

Mr. STERN. Did you hear a third report?

Mr. HOLLAND. I heard a third report and I counted four shots and about the same time all this was happening, and in this group of trees—[indicating].

Mr. STERN. Now, you are indicating trees on the north side of Elm Street?

Mr. HOLLAND. These trees right along here [indicating].

Mr. STERN. Let's mark this Exhibit C and draw a circle around the trees you are referring to.

Mr. HOLLAND. Right in there. (Indicating.)

There was a shot, a report, I don't know whether it was a shot. I can't say that. And a puff of smoke came out about 6 or 8 feet above the ground

right out from under those trees. And at just about this location from where I was standing you could see that puff of smoke, like someone had thrown a firecracker, or something out, and that is just about the way it sounded. It wasn't as loud as the previous reports or shots.

Mr. STERN. What number would that have been in the—

Mr. HOLLAND. Well, that would—they were so close together.

Mr. STERN. The second and third or the third and fourth?

Mr. HOLLAND. The third and fourth. The third and the fourth.

Mr. STERN. So, that it might have been the third or the fourth?

Mr. HOLLAND. It could have been the third or fourth, but there were definitely four reports.

Mr. STERN. You have no doubt about that?

Mr. HOLLAND. I have no doubt about it. I have no doubt about seeing that puff of smoke come out from under those trees either.

Mr. STERN. Mr. Holland, do you recall making a statement to an agent of the FBI several days after?

Mr. HOLLAND. I made a statement that afternoon in Sheriff Bill Decker's office, and then the Sunday or the Sunday following the Friday, there were two FBI men out at my house at the time that Oswald was shot.

Mr. STERN. Did you tell them that you heard distinctly four shots at that time?

Mr. HOLLAND. Yes.

Mr. STERN. You were certain then?

Mr. HOLLAND. I was certain then and I—in that statement I believe that I—

Mr. STERN. Well, the FBI report that I have said that you heard either three or four shots fired together, and I gather the impression of the agent was that you were uncertain whether it was three or four.

Mr. HOLLAND. At the time I made that statement, of course, I was pretty well shook up, but I told the people at the sheriff's office, whoever took the statement, that I believed there was four shots, because they were so close together, and I have also told those two, four, six Federal men that have been out there that I definitely saw the puff of smoke and heard the report from under those trees.

Mr. STERN. Did you realize that these were shots then?

Mr. HOLLAND. Yes; I think I realized what was happening out there.

Mr. STERN. You did?

Mr. HOLLAND. When Governor Connally was knocked down in the seat.

Mr. STERN. What did you then do?

Mr. HOLLAND. Well, immediately after the shots was fired, I run around the end of this overpass, behind the fence to see if I could see anyone up there behind the fence.

Mr. STERN. That is the picket fence?

Mr. HOLLAND. That is the picket fence.

Mr. STERN. On the north side of Elm Street?

Mr. HOLLAND. Of course, this was this sea of cars in there and it was just a big—it wasn't an inch in there that wasn't automobiles and I couldn't see up in that corner. I ran on up to the corner of this fence behind the building. By the time I got there there were 12 or 15 policemen and plainclothesmen, and we looked for empty shells around there for quite a while, and I left because I had to get back to the office. I didn't give anyone my name. No one—didn't anyone ask for it, and it wasn't but an hour or so until the deputy sheriff came down to the office and took me back up to the courthouse.

Mr. STERN. Did he know you personally?

Mr. HOLLAND. No, no; he had to find me and find where I was. He didn't know me, and I don't know who told me they wanted me over at the courthouse, so, I went back up there with him and made out the statement, and made—made out the statement before they found out the results on the shots, or before that Oswald had even shot that policeman.

PROPERTY OF
ASSASSINATION

I was making out the statement before that, so, it was immediately after the motorcade had passed through there.

Mr. STERN. What was your impression about the source of these noises, if you had one?

Mr. HOLLAND. Well, the impression was that the shots, the first two or three shots came from the upper part of the street, now, from where I was. ✓

Mr. STERN. East on Elm?

Mr. HOLLAND. Yes, up in here somewhere. [Indicating.] I didn't have the least idea that it was up any higher, but I thought the shot was coming—coming from this crowd in here [indicating]. That is what it sounded like to me from where I was.

Mr. STERN. You are indicating on this Exhibit C. Why don't you put a square around the area that you just pointed to. You had no idea, I take it, that the shots were coming from your area?

Mr. HOLLAND. No.

Mr. STERN. It is your impression that they did not, could not, as far as the sound was concerned?

Mr. HOLLAND. As far as the sound was concerned they did not.

Mr. STERN. Did you see anything on the overpass that seemed to you any way unusual?

Mr. HOLLAND. Oh, no; no.

Mr. STERN. All right. Off the record.

(Off the record.)

Mr. STERN. Back on the record. Now, Mr. Holland, I'm showing you a copy of an affidavit which I am marking as Exhibit D. That is the affidavit you made that you described a few moments ago?

Mr. HOLLAND. That's right.

Mr. STERN. Would you read that.

Mr. HOLLAND. "I am signal supervisor for the Union Terminal, and I was inspecting signal and switches and stopped to watch the parade. I was standing on the top of the triple underpass and the President's car was coming down Elm Street, and when they got just about to the arcade, I heard what I thought for a moment was a firecracker and he slumped over and I looked over toward the arcade and trees and saw a puff of smoke come from the trees and I heard three more shots after the first shot but that was the only puff of smoke I saw. I immediately ran around to where I could see behind the arcade and did not see anyone running from there. But the puff of smoke I saw definitely came from behind the arcade to the trees. After the first shot the President slumped over and Mrs. Kennedy jumped up and tried to get over in the back seat to him and then the second shot rang out. After the first shot the Secret Service man raised up in the seat with a machine gun and then dropped back down in the seat. And they immediately sped off. Everything is spinning in my head and if I remember anything else later I will come back and tell Bill."

That is Mr. Decker. And—brother it was, too.

Mr. STERN. I'm sure it was.

Mr. HOLLAND. Stand there and watch two or three men get killed—

Mr. STERN. Now, that statement makes clear that you heard four shots, thought you heard four shots at that time?

Mr. HOLLAND. Yes.

Mr. STERN. All right.

Mr. HOLLAND. But, two of them was rather close together, though.

Mr. STERN. So close do you think that might have been one shot?

Mr. HOLLAND. No, it was four.

Mr. STERN. You are clear there were four?

Mr. HOLLAND. No; it was different sounds, different reports.

Mr. STERN. All right. Mr. Morrison, are there any questions you would like to ask Mr. Holland to clarify any points that we discussed?

Mr. MORRISON. Mr. Holland, is there anything you might add to this?

Mr. HOLLAND. Well, the only thing that I remember now that I didn't then. I remember about the third car down from this fence, there was a station wagon backed up toward the fence, about the third car down, and a spot. I'd say 3 foot by 2 foot, looked to me like somebody had been standing there for a

204 165

period. I guess if you could count them about a hundred foottracks in that little spot, and also mud up on the bumper of that station wagon.

Mr. STERN. This was a car back—parked behind the picket fence? Well, why don't you put the Number "5" approximately where that car would have been.

Mr. HOLLAND. If we could call this the arcade [indicating]—

Mr. STERN. All right.

Mr. HOLLAND. And one, two, three, I think it would have been just about here [indicating].

Mr. STERN. All right.

Mr. MORRISON. That is Elm Street. It would be behind the fence, wouldn't it?

Mr. HOLLAND. Well, I have got the fence running up here, and this car would be back in there [indicating]. This is the trees out here, which would—and that is approximately the same location as—the car and the trees that I saw the smoke would probably be the same location.

Mr. STERN. All right. And this was a station wagon?

Mr. HOLLAND. Now, the reason I didn't think so much about that at the time, was because there was so many people out there, and there was law enforcement officers and I thought, well, if there is anything to that they would pick that up, or notice it, but it looks like someone had been standing there for a long time, because it was muddy.

Mr. STERN. Tracks you saw in the mud?

Mr. HOLLAND. It was muddy, and you could have if you could have counted them, I imagine it would have been a hundred tracks just in that one location. It was just—

Mr. STERN. And then you saw some mud on the bumper?

Mr. HOLLAND. Mud on the bumper in two spots.

Mr. STERN. As if someone had cleaned his foot, or—

Mr. HOLLAND. Well, as if someone had cleaned their foot, or stood up on the bumper to see over the fence.

Mr. STERN. I see.

Mr. HOLLAND. Because, you couldn't very well see over it standing down in the mud, or standing on the ground, and to get a better view you could—

Mr. STERN. Was there anything else you noticed about this station wagon?

Mr. HOLLAND. No.

Mr. STERN. Do you recall the—

Mr. HOLLAND. They searched all the cars in that location.

Mr. STERN. Did this occur to you—

Mr. HOLLAND. It occurred to me immediately when I saw it there; yes.

Mr. STERN. And you thought about it later in the day?

Mr. HOLLAND. I thought about it that night.

Mr. STERN. I see.

Mr. HOLLAND. In fact, I went to bed—it was about a week there I couldn't sleep, much, brother, and I thought about it that night, and I have thought about it a lot of times since then.

Mr. STERN. Did you ever go back to look at that site or look at the station wagon?

Mr. HOLLAND. No; I didn't go back that afternoon, because I spent the rest of the day in the county jail office over there, but a number of your Federal Agents went out there then and Secret Service men. It was just a beehive.

Mr. STERN. Yes.

Mr. HOLLAND. In a matter of a few minutes.

Mr. STERN. Did you tell any of the Federal officers, or any of the Dallas Police officers about it?

Mr. HOLLAND. I don't think I did.

Mr. STERN. So, this is really the first time—

Mr. HOLLAND. This is the first time that I have discussed it, that I remember. Now, I might have told in our conversation. I don't remember that, but I don't think I did.

Mr. STERN. I am not aware of any other occasion in which you did.

Mr. MORRISON. You thought the officers there would take care of that?

Mr. HOLLAND. I thought that the officers would take care of it because there

PROPERTY OF
FEDERAL BUREAU OF
INVESTIGATION
ASSASSINATION

were so many there, I thought they would take care of everything, and a layman didn't have any business up there, and I went on back to my office.

Mr. STERN. When you ran behind the picket fence after the shots were fired, did you come near the area where the station wagon was parked?

Mr. HOLLAND. Went up to behind the arcade as far as you could go.

Mr. STERN. So, you would have passed where this station wagon was?

Mr. HOLLAND. Yes.

Mr. STERN. Or, that area?

Mr. HOLLAND. Yes; immediately, but I turned around, see, and went to searching in there for empty shells, and three or four agents there then and that is when I walked back to the car there and noticed the tracks there in one little spot.

Mr. STERN. When you first came around, that was quite soon after the shots were fired?

Mr. HOLLAND. Yes.

Mr. STERN. And did you notice anything about this station wagon?

Mr. HOLLAND. I was in front of the cars, then I went in front of the cars.

Mr. STERN. In front of the cars—

Mr. HOLLAND. The cars they were parked pretty close to the fence, and I came up in front of the cars and got over to the fence and then walked back down looking around, just like the rest of them.

Mr. STERN. And that was later you came behind the station wagon?

Mr. HOLLAND. Oh, maybe 3 or 4 minutes after I got up there, and 3 or 4 minutes after I got up to the end of the fence.

Mr. STERN. This number of cars, this is an area in which cars are regularly parked?

Mr. HOLLAND. Yes.

Mr. STERN. A parking area for the School Book Depository?

Mr. HOLLAND. No; it is a parking area for the sheriff's department and people over to the courthouse. They park in there.

Mr. STERN. I see.

Mr. HOLLAND. Sheriff's department parks in there. District attorneys' cars park in there. It is railroad property, but they let them park in there and save that 25 cents. Don't put that down. Might get in trouble.

Now, do you want to know about the two policemen that were riding in that motorcade and one of them threw the motorcycle down right in the middle of the street and ran up towards that location with his gun in his hand.

Mr. STERN. Toward—

Mr. HOLLAND. The location that—

Mr. STERN. Where you saw the puff of smoke?

Mr. HOLLAND. Where I saw the puff of smoke. And another one tried to ride up the hill on his motorcycle and got about halfway up there and he ran up the rest of the way on foot.

Mr. STERN. Go ahead. This is at the time of the—

Mr. HOLLAND. At the time of the—

Mr. STERN. That the shots were fired?

Mr. HOLLAND. The shots was fired.

Mr. STERN. Two motorcycle policemen who were in the motorcade?

Mr. HOLLAND. In the motorcade, and one of them threw his motorcycle down right in the middle of the street and ran up the incline with his pistol in his hand, and the other motorcycle policeman jumped over the curb with his motorcycle and tried to ride up the hill on his motorcycle, and he—tipped over with him up there, and he ran up there the rest of the way with his—

Mr. STERN. Did you see anything further involving those two?

Mr. HOLLAND. No; I ran around, I was going around the corner of the fence.

Mr. STERN. When they were coming up the incline?

Mr. HOLLAND. When that happened.

Mr. STERN. But, nothing further came of that, that you observed?

Mr. HOLLAND. No.

Mr. STERN. Did you talk to them?

Mr. HOLLAND. No.

Mr. STERN. Anything else occur to you?

Mr. HOLLAND. No; that is about all of it. If I have been of any help, I am tickled.

Mr. STERN. You certainly have. I appreciate very much your coming here today. Our reporter, Mr. Holland, will transcribe your testimony, and you then have the opportunity of reviewing it and signing it, or if you prefer you can waive your signature and she will send it directly to the Commission. Either one, it is entirely up to you, whichever you prefer.

Mr. MORRISON. I prefer that he read it and sign it.

Mr. STERN. Fine. Then the reporter will get in touch with you as soon as his transcript is ready to read.

Mr. MORRISON. I would like to say—now, you will cooperate with the authorities in any way?

Mr. HOLLAND. I surely will.

Mr. MORRISON. To clear this up?

Mr. HOLLAND. I sure will.

Mr. MORRISON. And you and have—you and I have been close personal friends for over 10 years, haven't we?

Mr. HOLLAND. That's right.

Mr. MORRISON. And you wanted me to come down here because you thought you would be nervous, and if I were with you maybe you would be less nervous?

Mr. HOLLAND. That's correct, because I was real nervous when I went over to that sheriff's office that afternoon.

Mr. MORRISON. I believe that is all.

Mr. STERN. Thank you.

Mr. BLAKEY. Mr. Holland was standing on top of the overpass above Elm Street, looking down on Elm Street. Mr. Holland indicated that he had heard four shots. After the first, he said he saw Governor Connally turn around. Then there was another report. The first two sounded like they came from the upper part of the street. The third was not as loud as the others. He said: "There was a shot, a report, I don't know whether it was a shot. I can't say that. And a puff of smoke came out about 6 or 8 feet above the ground right out from under those trees. And at just about this location from where I was standing you could see that puff of smoke, like someone had thrown a firecracker or something out, and that is just about the way it sounded. It wasn't as loud as the previous reports or shots."

When Commission Counsel Stern asked Mr. Holland if he had any doubts about the four shots, he said: "I have no doubt about it. I have no doubt about seeing that puff of smoke come out from those trees either."

Later in his testimony, Mr. Holland commented on the activity after the shooting. He said:

Now, do you want to know about the two policemen that were riding in that motorcade and one of them threw the motorcycle down right in the middle of the street and run up toward that location with his gun in his hand.

Mr. STERN. Toward—

Mr. HOLLAND. The location that—

Mr. STERN. Where you saw the puff of smoke?

Mr. HOLLAND. Where I saw the puff of smoke. And another one tried to ride up the hill on his motorcycle and got about halfway up there and he run up the rest of the way on foot.

In addition to testimony relating to the direction of the shots, several witnesses also reported seeing bullets strike at various points in the plaza. For example, two witnesses said they saw bullets hit the pavement on Elm Street. I would like to enter into the record JFK exhibit F-649.

PROPERTY OF
ASSASSINATION

Chairman STOKES. Without objection, it may be entered into the record.

[The information follows:]

VOLUNTARY STATEMENT. Not Under Arrest. Form No. 53

**SHERIFF'S DEPARTMENT
COUNTY OF DALLAS, TEXAS**

Before me, the undersigned authority, on this the 22 day of November A.D. 19 63

personally appeared [Signature], Address 2500 Reagan
La 1 2745 Bus. address 215 Union Terminal Ri 1 1396
Age 23 Phone No. [Signature]

Deposits and says:-

I was standing on top of the train trestle where it crosses Elm Street with Austin Miller. We saw the motorcade come around the corner and I heard something which I thought was fireworks. I saw something hit the pavement at the left rear of the car, then the car got in the right hand lane and I heard two more shots. I heard a woman sa "Oh no" or something and grab a man inside the car. I then heard another shot and saw the bullet hit the pavement. The concrete was knocked to the South away from the car. xxx It hit the pavement in the left or middle lane. I then went down to my car radio to see if I could find out what happened. After I came back up, a policeman asked me if I had seen anything and brought me to the Sheriff's Office.

Ed Bishop Dallas, TX.

[Signature]

Subscribed and sworn to before me on this the 22 day of November A.D. 19 63

[Signature]
Notary Public, Dallas County, Texas

DECKER EXHIBIT No. 5323-Continued

JFK EXHIBIT F-649

Mr. BLAKEY. It is a statement by Royce Skelton made to the sheriff's department on November 22, 1963. Mr. Skelton related:

I was standing on top of the train trestle where it crosses Elm Street with Austin Miller * * * I heard something which I thought was fireworks. I saw something hit the pavement at the left rear of the car, then the car got in the right hand lane and I heard two more shots * * * I then heard another shot and saw the bullet hit the pavement. The concrete was knocked to the South away from the car. It hit the pavement in the left or middle lane.

Mr. Skelton also testified before the Warren Commission. Mr. Chairman, I would like to enter that testimony into the record as JFK exhibit F-650.

Chairman STOKES. Without objection, it may be entered into the record.

[The information follows:]

PROPERTY OF
ASSASSINATION

TESTIMONY OF ROYCE G. SKELTON

The testimony of Royce G. Skelton was taken at 2:45 p.m., on April 8, 1964, in the office of U.S. attorney, 301 Post Office Building, Bryan and Ervay Streets, Dallas, Tex., by Mr. Joseph A. Ball, assistant counsel of the President's Commission.

Mr. BALL. Will you raise your right hand and be sworn?

Do you solemnly swear that the testimony you are about to give before the Commission will be the truth, the whole truth and nothing but the truth?

Mr. SKELTON. I do.

Mr. BALL. Will you state your name, please, for the record?

Mr. SKELTON. Royce G. Skelton.

Mr. BALL. What is your business?

Mr. SKELTON. I am a mail clerk at the Texas Louisiana Freight Bureau.

Mr. BALL. Where do you work?

Mr. SKELTON. At the Texas Louisiana Freight Bureau.

Mr. BALL. Where were you born and where did you come from?

Mr. SKELTON. I was born in Henrietta, Tex., May 25, 1940.

Mr. BALL. And where did you go to school?

Mr. SKELTON. I attended all grade schools in Wichita Falls and I graduated from Wichita Falls High School.

Mr. BALL. Tell me where you went to school.

Mr. SKELTON. Wichita Falls through high school and I attended 1 year at Midwestern University.

Mr. BALL. And when did you go to work for the railroad?

Mr. SKELTON. February 1, 1933.

Mr. BALL. What kind of work do you do?

Mr. SKELTON. Mail clerk.

Mr. BALL. On November 22, 1963, did you watch the parade, the motorcade of the President?

Mr. SKELTON. Yes, sir; I went to the triple overpass about 12:20—I think it was 12:15, or something like that.

Mr. BALL. Whom did you go down there with?

Mr. SKELTON. Austin Miller and myself.

Mr. BALL. Where does he work?

Mr. SKELTON. He is a mail clerk also in the same company.

Mr. BALL. Where did you stand to watch the parade?

Mr. SKELTON. Well, we were directly over Elm Street.

Mr. BALL. Directly over Elm?

Mr. SKELTON. Maybe it would be to the left-hand side, if you were on the street.

Mr. BALL. Anybody else there on the overpass?

Mr. SKELTON. There were quite a few people up there.

Mr. BALL. Did you know any of them?

Mr. SKELTON. Well, I know by sight—I knew the electrician, an old man that's an electrician.

Mr. BALL. Frank Reilly?

Mr. SKELTON. Is that his name?

Mr. BALL. The man that was here a moment ago—his name is Reilly.

Mr. SKELTON. I know him when I see him.

Mr. BALL. Yes—

Mr. SKELTON. And Austin Miller, of course.

Mr. BALL. Did you know Dodd, the employee of the railroad?

Mr. SKELTON. No, sir; like I say, I recognized them off and on when I see them around there.

Mr. BALL. Did you see any police officers there?

Mr. SKELTON. Yes; this man right here—they say it was him—I don't recall whether it was or not.

Mr. BALL. Who—Mr. Brown?

Mr. SKELTON. The one who was in here just a while ago—they say he was the one up there, but I don't know.

Mr. BALL. You didn't recognize him there?

Mr. SKELTON. No; I didn't recognize him.

Mr. BALL. In other words, you saw some police officers up there?

Mr. SKELTON. Yes, sir.

Mr. BALL. Where were they standing?

Mr. SKELTON. There was one standing directly behind me, I think, or in the general vicinity, and there was one on the far side of the triple underpass.

Mr. BALL. By "far side," you mean where?

Mr. SKELTON. It would be back on this side.

Mr. BALL. It would be south?

Mr. SKELTON. No, sir; that would be the east side—isn't it?

Mr. BALL. Elm runs east and west.

Mr. SKELTON. It would be the west side.

Mr. BALL. It would be west?

Mr. SKELTON. Yes, sir; and then there was one back over here on Stemmons—I noticed one, at least, over there and one on the railroad overpass on Stemmons.

Mr. BALL. How many police officers were on this overpass, the railroad overpass?

Mr. SKELTON. Two, I would say, sir. That's all I saw.

Mr. BALL. And how many men did you see standing right near on the railroad overpass over Elm, just approximately?

Mr. SKELTON. Eight, including the officer—eight or nine.

Mr. BALL. Did you see the President's car turn on Elm Street?

Mr. SKELTON. Yes, sir; I saw the car carrying the Presidential flag turn.

Mr. BALL. And did you hear something soon after that?

Mr. SKELTON. Just about the same time the car straightened up—got around the corner—I heard two shots, but I didn't know at that time they were shots.

Mr. BALL. Where did they seem to come from?

Mr. SKELTON. Well, I couldn't tell then, they were still so far from where I was.

Mr. BALL. Did the shots sound like they came from where you were standing?

Mr. SKELTON. No, sir; definitely not. It sounded like they were right there—more or less like motorcycle backfire, but I thought that they were these dumb-balls that they throw at the cement because I could see the smoke coming up off the cement.

Mr. BALL. You saw some smoke come off of the cement?

Mr. SKELTON. Yea.

Mr. BALL. Where did it seem to you that the sound came from, what direction?

Mr. SKELTON. Towards the President's car.

Mr. BALL. From the President's car?

Mr. SKELTON. Right around the motorcycles and all that—I couldn't distinguish because it was too far away.

Mr. BALL. How long did you stand there?

Mr. SKELTON. I stood there from about 12:15 until the time the President was shot.

Mr. BALL. How many shots did you hear?

Mr. SKELTON. I think I heard four—I mean—I couldn't be sure.

Mr. BALL. You think you heard four?

Mr. SKELTON. Yes.

Mr. BALL. How long did you stay there after you heard the fourth shot?

Mr. SKELTON. Not very long—just as soon as the cars sped away and everything was in a big commotion—we ran down to listen to the radio. We couldn't get anything off of that—we heard that the President had been shot and so we went back up there and the police officer asked us if we had seen the assassination and we told him we had. He said he would like to get a statement from us, so he took us over to the sheriff's office.

Mr. BALL. Did you see any pigeons flying or anything like that?

Mr. SKELTON. No, sir; I didn't see anything like that—any pigeons at all.

Mr. BALL. I think that's all I have. This will be written up and submitted to you for your signature, if you want to sign it, or you can waive your signature.

PROPERTY OF
ASSASSINATION

Which do you want to do?

Mr. SKELTON. I will waive my signature. I am sure it is all right.

Mr. BALL. That is fine. Thank you very much.

Mr. SKELTON. There's one thing I could say—you have that other report?

Mr. BALL. What is that?

Mr. SKELTON. About when I saw one of the bullets where it hit on the pavement and it hit, the smoke did come from the general vicinity of where you say Oswald was.

Mr. BALL. Wait a minute—let me ask you some questions about that.

Tell me, now, about the smoke—did you see some smoke?

Mr. SKELTON. After those two shots, and the car came on down closer to the triple underpass, well, there was another shot—two more shots I heard, but one of them—I saw a bullet, or I guess it was a bullet—I take for granted it was—hit in the left front of the President's car on the cement, and when it did, the smoke carried with it—away from the building.

Mr. BALL. You mean there was some smoke in the building?

Mr. SKELTON. No; on the pavement—you know, pavement when it is hit with a hard object it will scatter—it will spread.

Mr. BALL. Which way did it spread?

Mr. SKELTON. It spread just right in line, like you said.

Mr. BALL. I haven't said anything—tell me what you think it was?

Mr. SKELTON. Like I said—south of us—it would be southwest, you know, in a direct line from the Texas Depository.

Mr. BALL. I see. In other words, the spray seemed to go to the west; is that right?

Mr. SKELTON. Yes.

Mr. BALL. All right. Thanks very much.

I'm going to get you to mark one of these maps and show where you were standing. Here is Elm and here is the railroad underpass and pay no attention to the diagrams, but show me about where you were standing.

Mr. SKELTON. I was about right there (marked instrument referred to as requested by Counsel Ball).

Mr. BALL. By that "X" we will put the word "Skelton" and that is where you were standing with your friend?

Mr. SKELTON. Approximately—yes.

Mr. BALL. Now, did you see any smoke or anything from any place around there?

Mr. SKELTON. No, sir; I just stated to your secretary that I heard people say they did, but I didn't.

Mr. BALL. But you did see something light on the street?

Mr. SKELTON. Yes, sir.

Mr. BALL. About where?

Mr. SKELTON. A bullet—let's see—this is kind of out of proportion [referring to diagram], and I would say the bullet hit about right here [indicating on diagram].

Mr. BALL. Then, let's mark that as "Skelton (2)" and we will make the first Skelton number (1) and then Skelton number (2), and this "X" mark here is where you saw the bullet, and which way did the spray go?

Mr. SKELTON. Just like it was going there.

Mr. BALL. Mark an arrow showing the direction that you think the spray was going.

Mr. SKELTON. (Marks the diagram with arrow.)

Mr. BALL. That's fine, and we will make that as an exhibit, Skelton Exhibit A and attach it to your deposition.

(Instrument marked by the reporter as "Skelton Exhibit A," for identification.)

Mr. BALL. Thank you and that is all.

Mr. SKELTON. Thank you.

Mr. BLAKEY. On that occasion, Mr. Skelton said that he saw smoke rise from the pavement where the bullet hit and that he thought the gunfire had come from the area of the presidential limousine.

* * * I saw a bullet, or I guess it was a bullet—I take for granted it was—hit in the left front of the President's car on the cement, and when it did, the smoke carried with it—away from the building.

Later he said that the smoke "would be southwest, you know, in a direct line from the Texas Depository."

Another witness to see a bullet was Ms. Virgie Baker. It would be appropriate to enter into the record JFK exhibit F-651, Ms. Baker's statement to the FBI, dated November 24, 1963.

Chairman STOKES. Without objection, it may be entered into the record at this point.

[The information follows:]

PROPERTY OF
ASSASSINATION

JFK EXHIBIT F-651

FEDERAL BUREAU OF INVESTIGATION

1

Date 11/25/63

VIRGIE RACKLEY, 405 Wood Street, telephone 544-3827, employed as a bookkeeper at the Texas School Book Depository, second floor, corner of Houston and Elm Streets, Dallas, Texas, furnished the following information:

From an examination of the photograph of LEE HARVEY OSWALD, she does not believe that she has ever seen him and is certain that she has never spoken to him. She works on the second floor at the front of the building and rides to work on an elevator located in the east end of the building which goes only to the first four floors.

At about 12:15 p.m. on November 22, 1963 she left her office and went out the south door of the Texas School Book Depository Building to watch the Presidential motorcade pass. She was standing across the street immediately in front of this building but on the north side of the entrance to the Triple Underpass along which the motorcade traveled. She observed President KENNEDY's car pass her point of observation and almost immediately thereafter heard three explosions spaced at intervals which she at first thought were firecrackers. It sounded as though these sounds were coming from the direction of the Triple Underpass, and looking in that direction after the first shot she saw something bounce from the roadway in front of the Presidential automobile and now presumes it was a bullet bouncing off the pavement. She stated she did not see President KENNEDY being shot and that she did not realize this was what happened until later.

After the shots she and others in the crowd moved on down toward the Triple Underpass and on returning to the building were told they could not go inside. She did not go inside until about 3:00 p.m.

She stated that just before the shooting a man had passed out on the parkway between the Elm Street entrance and the Main Street entrance to the Triple Underpass and that an ambulance had picked him up and

on 11/24/63 at Ferris, Texas File # DL 89-43
by Special Agents BARDWELL D. ODUM &
JOSEPH G. PEGGS/sah Date dictated 11/24/63

This document contains neither recommendations nor conclusions of the FBI. It is the property of the FBI and is loaned to your agency; it and its contents are not to be distributed outside your agency.

2

DL 89-43

left the scene just seconds before the Presidential car came into sight on Houston Street.

This ambulance picked up the man directly across Houston Street from the Sheriff's Office.

RACKLEY stated that she did not look up at the Texas School Book Depository Building since she did not think that the sounds were coming from that building. She recalled no one who had mentioned seeing anyone in the windows of the building prior to the shooting although just after the shooting some unidentified man who had been sitting on a wall directly across the street and south of the Texas School Book Depository Building stated "I saw everything". She did not know what he was talking about at the time and does not know whether he saw anyone in the windows of the building or not.

She recalled that after the second shot she smelled gunsmoke but did not know where it was coming from.

Mr. BLAKEY. Ms. Baker was standing across the street from the Texas School Book Depository when she heard the shots. She thought they came from the direction of the triple overpass.

When she looked that way, she saw what she presumed to be a bullet bouncing off the pavement.

Mr. Chairman, I would also like to enter into the record JFK exhibit F-652, Ms. Baker's testimony before the Warren Commission.

Chairman STOKES. Without objection, it is so ordered.
[The information follows:]

PROPERTY OF
ASSASSINATION

TESTIMONY OF MRS. DONALD BAKER

The testimony of Mrs. Donald Baker was taken at 11:50 a.m., on July 22, 1964, in the office of the U.S. attorney, 301 Post Office Building, Bryan and Ervay Streets, Dallas, Tex., by Mr. Wesley J. Liebeler, assistant counsel of the President's Commission.

Mr. LIEBELER. Before you sit down, will you raise your right hand and please take the oath? Do you solemnly swear that the testimony you are about to give will be the truth, the whole truth, and nothing but the truth, so help you God?

Mrs. BAKER. I do.

Mr. LIEBELER. Mrs. Baker, my name is Wesley J. Liebeler. I am an attorney on the staff of the President's Commission investigating the assassination of President Kennedy. I have been authorized to take your testimony by the Commission, pursuant to authority granted to it by Executive Order 11130, dated November 20, 1963, and the joint resolution of Congress No. 137. Under the rules of the Commission, you are entitled to have an attorney present and you are entitled to 3 days' notice of the hearing. You don't have to answer any questions that you think would violate any of your constitutional rights. I presume from the nature of the testimony that we are going to ask you about that you don't want your attorney present and that you are willing to proceed with the testimony at this point; is that correct?

Mrs. BAKER. Yes, sir.

Mr. LIEBELER. Would you state your full name for the record, please?

Mrs. BAKER. Mrs. Donald Baker.

Mr. LIEBELER. Have you been married since the 22d of November 1963?

Mrs. BAKER. February 1, 1963.

Mr. LIEBELER. You were married on February 1, 1963?

Mrs. BAKER. Yes, sir.

Mr. LIEBELER. Are you Virgie Rachley or is that somebody else?

Mrs. BAKER. That's me.

Mr. LIEBELER. How come I have your name as Virgie Rachley and also Mrs. Donald S. Baker?

Mrs. BAKER. I don't know.

Mr. LIEBELER. Well, I have a report from the FBI that is dated November 24, 1963, and they refer to you as Virgie Rachley in that report, but you had already been married at that time; is that correct?

Mrs. BAKER. I married this year.

Mr. LIEBELER. Oh, February of 1964?

Mrs. BAKER. This is 1964—I'm sorry.

Mr. LIEBELER. That's right. Now, we've got it. You were Virgie Rachley on November 24, 1963, and you were married in February 1964.

Mrs. BAKER. Yes; that's right.

Mr. LIEBELER. I understand that you were employed at the time of the assassination as a bookkeeper at the Texas School Book Depository; is that correct?

Mrs. BAKER. Yes.

Mr. LIEBELER. How long had you worked there?

Mrs. BAKER. Well, I have been there since July 18, 1963.

Mr. LIEBELER. Last year?

Mrs. BAKER. Yes.

Mr. LIEBELER. Did you ever meet Lee Harvey Oswald or have occasion to see him while you were employed at the Texas School Book Depository?

Mrs. BAKER. I had seen him.

Mr. LIEBELER. You had seen him?

Mrs. BAKER. Yes.

Mr. LIEBELER. Had you ever said anything to him or talked to him at all?

Mrs. BAKER. No, sir.

Mr. LIEBELER. Did you form any impression of him just from seeing him around the building?

Mrs. BAKER. Just that he was awful quiet.

Mr. LIEBELER. Other than that, did you form any impression of him at all?
Mrs. BAKER. No, sir.

Mr. LIEBELER. Tell me what happened on the 22d of November in connection with the motorcade, would you please, what you saw and what you did?

Mrs. BAKER. Well, we came out of the building across the street at approximately 12 or 12:15 and we stood out in front, directly in front of the Depository Building and as the motorcade came by the President waved and he got down—

Mr. LIEBELER. Where were you standing at this point, at the time the motorcade came along?

Mrs. BAKER. Well, there is a divisional line—I don't know exactly what you would call it—the little part of the street that runs in front of the Depository and then there is—I don't know what you would call it—the grassy stuff that comes out to form the plaza along the front.

Mr. LIEBELER. You say there is a little street that runs immediately in front of the School Book Depository Building; is that right?

Mrs. BAKER. Yes.

Mr. LIEBELER. Do you know, if that street has a name or not?

Mrs. BAKER. I'm sure it doesn't—I have never seen one.

Mr. LIEBELER. And then after that little street that runs right in front of the Depository Building, there is a little strip of grass with some trees on it; is that correct?

Mrs. BAKER. Yes.

Mr. LIEBELER. And then comes Elm Street; is that right?

Mrs. BAKER. Yes.

Mr. LIEBELER. And on the other side of Elm Street there is a sort of a triangular plot of grass.

Mrs. BAKER. I guess you could say we were standing just at the edge of Elm Street at the side of the Depository because we were out almost in the street—Elm Street.

Mr. LIEBELER. Elm Street is separated from another street that runs down through the triple underpass. Do you know the name of that street that runs right down here—I am showing you Commission Exhibit No. 334, an aerial view of the street that runs by and three streets converge and go under the railroad tracks and that's the triple underpass.

Mrs. BAKER. I think that goes out to Stemmons Expressway or leads into Stemmons Expressway.

Mr. LIEBELER. The street that runs right down through here, the middle, is that Main Street?

Mrs. BAKER. That would be Main Street and this one would be Commerce.

Mr. LIEBELER. Now, can you point to me approximately where you were standing?

Mrs. BAKER. Let me find the building here—it would be right here—we were standing right at the edge, approximately directly in front of the building or at the edge of the building; we were standing right here.

Mr. LIEBELER. So, you were standing directly in front of the Texas School Book Depository Building and on the same side of Elm Street that the Texas School Book Depository is located?

Mrs. BAKER. Yes.

Mr. LIEBELER. Tell me what you saw?

Mrs. BAKER. Well, after he passed us, then we heard a noise and I thought it was firecrackers, because I saw a shot or something hit the pavement.

Mr. LIEBELER. And you heard that immediately after the first noise; is that right?

Mrs. BAKER. Yes.

Mr. LIEBELER. Could you tell or did you have any idea where the noise came from when you first heard it?

Mrs. BAKER. No; I thought there were some boys standing down there where he was—where the President's car was.

Mr. LIEBELER. Down farther on the street, you mean?

Mrs. BAKER. Yes; close to the underpass.

PROPERTY OF
ASSASSINATION

Mr. LIEBELER. Had the President's car already passed you at the time you heard the first noise?

Mrs. BAKER. Yes.

Mr. LIEBELER. Can you tell me approximately how far down the street it had gone when you heard the first shot?

Mrs. BAKER. I don't know exactly—I could still see the back of the car—I can't judge distance so I really couldn't tell you.

Mr. LIEBELER. It hadn't gone out of sight in your opinion?

Mrs. BAKER. No, sir.

Mr. LIEBELER. Could you still see the President?

Mrs. BAKER. Not too well.

Mr. LIEBELER. There is a gradual curve on Elm Street and the car had already started slightly into the curve by the time it had gone by you?

Mrs. BAKER. Yes.

Mr. LIEBELER. You say you saw something hit the street after you heard the first shot; is that right?

Mrs. BAKER. Yes.

Mr. LIEBELER. Where did you see it hit the street?

Mrs. BAKER. Have you got that—can you see the signs on that picture there?

Mr. LIEBELER. Well, you can't see the signs too well on that picture, which is Commission Exhibit No. 354, but I will show you some other pictures here on which the signs do appear. First of all, let me show you Hudson Exhibit No. 1 on which appears a sign that says, "Stemmons Freeway, Keep Right."

Mrs. BAKER. Yes.

Mr. LIEBELER. Could you see that sign?

Mrs. BAKER. No.

Mr. LIEBELER. The Stemmons Freeway sign from where you were standing?

Mrs. BAKER. No; I couldn't see the sign because I was angled—we were stepping out in the street then and it was approximately along in here, I presume, the first sign—I don't know which one it is, but I saw the bullet hit on down this way, I guess, right at the sign, angling out.

Mr. LIEBELER. You think the bullet hit the street, only it was farther out in the street?

Mrs. BAKER. Yes.

Mr. LIEBELER. Even though you couldn't see the sign, you could see this thing hit the street near the sign?

Mrs. BAKER. Yes, sir.

Mr. LIEBELER. It appears to me from looking at Commission Exhibit No. 354, that you can in fact make out where the signs are located along the side of the road and let's see if these do look like the signs. Now, as you come down Elm Street past the place you were standing going toward the triple underpass, there is a tree here on this little grassy triangular spot that is on the side of Elm Street toward the Texas School Book Depository Building, right on Dealey Plaza here by this concrete structure. Then, after the tree, going on down toward the triple underpass, it appears in the aerial photograph—a spot that looks like a sign or a shadow—it looks like a sign to me.

Mrs. BAKER. There is a sign there.

Mr. LIEBELER. And then there's another sign farther on down there.

Mrs. BAKER. This was a big sign here and there was a small one here.

Mr. LIEBELER. And you think that it was approximately near the first sign?

Mrs. BAKER. As I can remember, it was.

Mr. LIEBELER. As you went down Elm Street that you saw this thing hit the street—what did it look like when you saw it?

Mrs. BAKER. Well, as I said, I thought it was a firecracker. It looked just like you could see the sparks from it and I just thought it was a firecracker and I was thinking that there was somebody was fixing to get in a lot of trouble and we thought the kids or whoever threw it were down below or standing near the underpass or back up here by the sign.

Mr. LIEBELER. Would they have been as far down as the underpass or somewhere near the sign to have thrown a firecracker in the street?

Mrs. BAKER. It was near the signs.

Mr. LIEBELER. How close to the curb on Elm Street was this thing you saw

hit; do you remember? It would have been on the curb side—near the curb side away from the Texas School Book Depository Building on the opposite side of the street; is that right?

Mrs. BAKER. Yes.

Mr. LIEBELER. How close to the opposite curb do you think it was?

Mrs. BAKER. It was approximately in the middle of the lane—I couldn't be quite sure, but I thought it was in the middle or somewhere along in there—I could even be wrong about that but I could have sworn it that day.

Mr. LIEBELER. You thought it was sort of toward the middle of the lane?

Mrs. BAKER. Toward the middle of the lane.

Mr. LIEBELER. Of the left-hand lane going toward the underpass; is that correct?

Mrs. BAKER. Yes.

Mr. LIEBELER. Where was the thing that you saw hit the street in relation to the President's car? I mean, was it in front of the car, behind his car, by the side of his car or was it close to the car?

Mrs. BAKER. I thought it was—well—behind it.

Mr. LIEBELER. Had the car already gone by when you saw this thing hit in the street?

Mrs. BAKER. Yes.

Mr. LIEBELER. Do you remember whether it hit toward the left-hand side or the right-hand side of the President's car, or was it just immediately behind it? If you can't remember it that closely, all right.

Mrs. BAKER. I can't remember it.

Mr. LIEBELER. Did you actually see the President get hit by any bullets?

Mrs. BAKER. No, sir.

Mr. LIEBELER. How many shots did you hear?

Mrs. BAKER. Three.

Mr. LIEBELER. When did you first become aware that they were shots?

Mrs. BAKER. With the second shot.

Mr. LIEBELER. Did you have any idea where they were coming from?

Mrs. BAKER. Well, the way it sounded—it sounded like it was coming from—there was a railroad track that runs behind the building—there directly behind the building and around, so I guess it would be by the underpass, the triple underpass, and there is a railroad track that runs back out there and there was a train that looked like a circus train as well as I can remember now, back there, and we all ran to the plaza—the little thing there I guess you call it a plaza—back behind there—this other girl and I almost ran back over there and looked and we didn't see anything.

Mr. LIEBELER. When you say the plaza, you mean Dealey Plaza, the area that lies between Elm Street and this little street that runs by the Texas School Book Depository Building; is that correct? Is that what you mean?

Mrs. BAKER. Yes, sir.

Mr. LIEBELER. After you heard the shots, you ran down the little street that runs in front of the School Book Depository?

Mrs. BAKER. Along the grass.

Mr. LIEBELER. Along the grass—alongside there, running toward the triple underpass where Elm Street goes, but you were actually running down the little street or alongside the street on the grass, alongside the street that runs right in front of the Texas School Book Depository?

Mrs. BAKER. Yes.

Mr. LIEBELER. And you say there are some railroad tracks back in there; is that right?

Mrs. BAKER. Yes.

Mr. LIEBELER. Immediately behind Dealey Plaza away from Elm Street?

Mrs. BAKER. Yes.

Mr. LIEBELER. And is that where you thought the shots came from?

Mrs. BAKER. Yes.

Mr. LIEBELER. And when you went down there and looked, did you see anybody at all?

Mrs. BAKER. Just a policeman and several people were down there around the tracks working.

PROPERTY OF
ASSASSINATION

Mr. LIEBELER. But you didn't see anybody you thought might have been the assassin?

Mrs. BAKER. No, sir.

Mr. LIEBELER. Now, you have subsequently heard, I'm sure, and from reading in the newspapers and one thing and another, that it appears that the shots actually came from the Texas School Book Depository Building; is that right?

Mrs. BAKER. Yes.

Mr. LIEBELER. Does that seem possible to you in view of what you heard at the time?

Mrs. BAKER. Well, I guess it might have been the wind, but to me it didn't.

Mr. LIEBELER. The sounds you heard at the time did not appear to come from the Texas School Book Depository Building?

Mrs. BAKER. No, sir.

Mr. LIEBELER. Did you look up at the Texas School Book Depository Building at all while you were standing there?

Mrs. BAKER. No, sir.

Mr. LIEBELER. So, you had no occasion to see anybody in any of the windows in that building?

Mrs. BAKER. No, sir.

Mr. LIEBELER. According to the FBI report of the interview that you gave them on November 24, you said that just after the shooting some man who had been sitting on a wall directly across the street from you came up and said he saw everything; is that so?

Mrs. BAKER. Yes.

Mr. LIEBELER. Did you ever find out what that man's name was?

Mrs. BAKER. No, sir; I did not. I didn't see him after that.

Mr. LIEBELER. Did he tell you what he had seen?

Mrs. BAKER. No; I don't remember—he came over—I don't know when he came over now, but he told us he had seen everything—it might have been later that afternoon. I think it was—I think it was later that afternoon.

Mr. LIEBELER. Did he tell you where he had been, where he could see all this?

Mrs. BAKER. He said he was sitting on that wall.

Mr. LIEBELER. Now, when you say "that wall" I show you again Commission Exhibit No. 354.

Mrs. BAKER. This wall here [indicating].

Mr. LIEBELER. Are you referring to a wall that is on the triangular spot formed by Elm Street and Main Street and across Elm Street from the Texas School Book Depository Building? And on Commission Exhibit No. 354; that area has some ink marks on it around part of it?

Mrs. BAKER. Yes.

Mr. LIEBELER. Did this man tell you exactly where on the wall he had been sitting?

Mrs. BAKER. No; I presume it was on this high wall here—it sticks up real high—I presume he was up there on top.

Mr. LIEBELER. You have indicated the part of the wall that faces toward the triple underpass down toward where Elm Street and Main Street and Commerce all come together?

Mrs. BAKER. Yes.

Mr. LIEBELER. Now, there has been some speculation that perhaps the shots might have come from right off the triple overpass, from the railroad tracks that go up over the top, were you able to see these railroad tracks at the time from where you were standing down here—when I say, "Down here," I mean the railroad tracks that actually go over Elm Street and Main Street and Commerce.

Mrs. BAKER. No, sir.

Mr. LIEBELER. You could not see that?

Mrs. BAKER. No, sir.

Mr. LIEBELER. Did the shots sound like they had come from that area, or did they sound like they had come from the area more around toward the Texas School Book Depository Building and behind Dealey Plaza?

Mrs. BAKER. It sounded like it was coming from along in here—it didn't sound like it was too far off.

Mr. LIEBELER. It didn't sound like it was coming, however, directly from the railroad tracks that go over Elm, Main, and Commerce; is that right?

Mrs. BAKER. No, sir.

Mr. LIEBELER. The FBI report also indicates that after the second shot you began to smell gunsmoke; is that correct?

Mrs. BAKER. Yes.

Mr. LIEBELER. Could you tell where it was coming from?

Mrs. BAKER. No, sir.

Mr. LIEBELER. Looking at Commission Exhibit No. 354, could you pick out the place on Elm Street as the approximate place where you saw this object hit the ground for us, and we will mark it with a pen or pencil. Let's first of all mark the place where you were standing, Mrs. Baker, if we can.

Mrs. BAKER. Okay, after he had gone by, I got out into the street, I guess, along in here in the middle of the lanes.

Mr. LIEBELER. Is that in the middle of the right-hand lane?

Mrs. BAKER. Yes; the right-hand lane.

Mr. LIEBELER. So, we will mark that as No. 1 and we will put a circle around it and its right in front of the Texas School Book Depository Building.

Mrs. BAKER. Yes.

Mr. LIEBELER. On Elm Street in the right-hand lane.

Mrs. BAKER. Yes.

Mr. LIEBELER. And I guess that this tree was along in here somewhere?

Mrs. BAKER. I couldn't be sure.

Mr. LIEBELER. There appear to be two trees, one on this side of Elm Street—this looks like a tree right here on the opposite side of Elm Street toward the Dealey Plaza.

Mrs. BAKER. That's correct.

Mr. LIEBELER. And across the street—across Elm Street there appears to be another tree just down from the wall.

Mrs. BAKER. There's not a tree there.

Mr. LIEBELER. There's not a tree there?

Mrs. BAKER. No, there's a sign there, I think.

Mr. LIEBELER. That's a sign.

Mrs. BAKER. I think so.

Mr. LIEBELER. Can you tell us by judging from the tree that's in the corner of Dealey Plaza closest towards the School Book Depository Building, judging from that, where the thing hit the street?

Mrs. BAKER. Approximately right here—between the sign and the tree.

Mr. LIEBELER. Right here, would you say?

Mrs. BAKER. Yes.

Mr. LIEBELER. We have indicated the approximate area where you think it hit and we will indicate it by the No. 2, is that correct?

Mrs. BAKER. Yes.

Mr. LIEBELER. I have marked this photograph, Baker Exhibit No. 1, and I have placed my initials on it and would you put your initials on it just below mine so that we can identify the picture for the purposes of our record?

Mrs. BAKER. [Complied with request of Mr. Liebel.]

Mr. LIEBELER. Will you look at that picture and see if you can tell from it where you were standing and if that helped you to place the spot where the bullet hit?

Mrs. BAKER. It would be back in here behind this car.

Mr. LIEBELER. That would have been where you were standing or where the bullet hit?

Mrs. BAKER. I really can't tell for the tree there and everything—but it was right in here.

Mr. LIEBELER. Now, as we look at this picture this is Baker Exhibit No. 1, starting from the left front, there are—there is a car down there and there is a Volkswagen panel truck in the picture and then there are two cars immediately behind the Volkswagen and then there is a convertible out—approximately in the middle of the street, isn't that right?

Mrs. BAKER. Yes.

PROPERTY OF
ASSASSINATION

Mr. LIEBELER. And you think you might have been standing somewhere behind the spot where that convertible is located in this picture; is that right?

Mrs. BAKER. Either there or right in here.

Mr. LIEBELER. Right in back around the second car behind the Volkswagen?

Mrs. BAKER. Yes.

Mr. LIEBELER. Now, this picture actually shows the little grassy area and the trees that lie between Elm Street and the little street that runs in front of the Texas School Book Depository, doesn't it?

Mrs. BAKER. Yes.

Mr. LIEBELER. Can you give me an estimate, looking at this picture, where that thing might have hit the street?

Mrs. BAKER. Yes.

Mr. LIEBELER. It may not be in this picture—I don't know that it is.

Mrs. BAKER. I just can't tell—I would say it was over in here somewhere in this picture.

Mr. LIEBELER. Somewhere in about here?—

Mrs. BAKER. It could have been further on up.

Mr. LIEBELER. Well, we will mark the place "X", but you think it might have been right along here or somewhere farther down. Now, is there a concrete divider somewhere here on Elm Street?

Mrs. BAKER. Not until you pass the underpass.

Mr. LIEBELER. Not until you get down here towards the underpass and then there are concrete dividers here between Elm Street and Main Street?

Mrs. BAKER. Yes.

Mr. LIEBELER. Back up here toward the intersection at Houston Street, there is a curb on the side of Elm Street and that's all?

Mrs. BAKER. Yes, sir.

Mr. LIEBELER. In other words, you turn down from Houston Street and go right on down Elm Street?

Mrs. BAKER. Yes.

Mr. LIEBELER. You saw this thing hit the street before you heard the second shot; is that correct?

Mrs. BAKER. Yes, sir; yes.

Mr. LIEBELER. Are you absolutely sure of that?

Mrs. BAKER. I hope I am—I know I am.

Mr. LIEBELER. In marking the "X" on Baker Exhibit No. 1 that we marked, we were assuming, were we not, that the "X" was fairly near the first sign on the right-hand side of Elm Street going toward the triple underpass after the Texas School Book Depository Building?

Mrs. BAKER. I think that's right.

Mr. LIEBELER. I think that we will find that the "X" is—well, it is very difficult to tell the exact spot from which Baker Exhibit No. 1 was taken, but if in fact we are correct, if in fact it is taken from the side of Main Street toward Commerce Street, then the "X" would not be in the right place, would it, if this lamppost here that appears in the picture is actually at the end of the grassy spot made by Main Street and Elm Street, then the "X" that we have on Baker Exhibit No. 1 would be too far down toward the Triple Underpass to be in the right place where you saw it hit, isn't that right; do you follow me?

Mrs. BAKER. Yes.

Mr. LIEBELER. Because, if this is actually the end of this grassy spot, if the lamppost is actually the end of the grassy spot here between Elm Street and Main Street, this "X" is very close to the Triple Underpass.

Mrs. BAKER. Yes.

Mr. LIEBELER. And you didn't see the bullet hit that far down the street, did you?

Mrs. BAKER. No; not that far.

Mr. LIEBELER. It would have been much closer, up towards the Texas School Book Depository Building—near the first sign?

Mrs. BAKER. This right here are the steps—to the plaza.

Mr. LIEBELER. That's right, and as a point of fact, as we look at that now, it becomes quite clear that it was taken from a spot much closer to the triple

underpass than we had originally thought, because in the left-hand side of the picture you can see the steps coming down from the plaza.

Mrs. BAKER. It must have been right here in this area because these were the steps—I can't tell which sign is which, but I know there were four girls standing near the sign and it must have been back up here because there must have been another sign closer up.

Mr. LIEBELER. Looking at Hudson Exhibit No. 1, which was taken at the time of the assassination, it shows Dealey Plaza here and there are some steps that go down over here in the very background of the picture and they go down onto the sidewalk and it runs along past Elm Street here.

Mrs. BAKER. This would be the first sign here.

Mr. LIEBELER. The Stemmons Freeway sign.

Mrs. BAKER. This one over here—the steps are already here.

Mr. LIEBELER. Yes; the steps are toward the background in Hudson Exhibit No. 1 and those appear to be the steps that are also toward the front left of Baker Exhibit No. 1.

Mrs. BAKER. It was probably back over this way.

Mr. LIEBELER. Yes, so the "X" on Baker Exhibit No. 1 is actually in the wrong place as far as these pictures here—it is not correct—it should be further back on up here.

Mrs. BAKER. Yes; definitely.

Mr. LIEBELER. So, we will put a "Y" back up here toward the School Book Depository Building, and actually if you look at Commission Exhibit No. 354, you can see the steps coming right down to Elm Street.

Mrs. BAKER. Yes.

Mr. LIEBELER. At the end of Dealey Plaza toward the Triple Underpass, and I think that those steps are the same steps we can see in the left front foreground of Baker Exhibit No. 1.

Mrs. BAKER. That's the sign right in there—that big sign there, and I don't know—the sign would be here, you know.

Mr. LIEBELER. That's right, and the sign that we see in the very left front foreground of the picture would be the sign here that is toward the Triple Underpass from the steps to go down to Dealey Plaza on the right-hand side of Elm Street?

Mrs. BAKER. Yes; this is confusing.

Mr. LIEBELER. In any event, you are quite clear in your mind that you saw this thing hit before you heard the second shot?

Mrs. BAKER. Yes.

Mr. LIEBELER. So, if what you saw hitting the street was, in fact, a bullet, it would have been the first shot?

Mrs. BAKER. Yes.

Mr. LIEBELER. Did you see anything else around the area of the Texas School Book Depository Building that day that you think might have anything to do with the assassination?

Mrs. BAKER. I don't know, but before the parade ever got there, someone passed out and I guess it would be to the left, coming down Elm Street over in this plaza between Elm Street and Main, because an ambulance pulled up and picked someone up—we never could tell who. This was before the motorcade ever got to Houston Street—I would say onto Elm Street.

Mr. LIEBELER. About how long before the motorcade came did this ambulance come and pick up this person?

Mrs. BAKER. I'll judge—5 minutes—about 5 minutes.

Mr. LIEBELER. The ambulance had already left the area about 5 minutes before the Presidential motorcade came?

Mrs. BAKER. Yes.

Mr. LIEBELER. What time did you come to work that morning; do you remember?

Mrs. BAKER. Well, it could have been 6:30 or 7, because I rode with daddy: my daddy works behind the Depository for the Katy Railroad and if he had to be there at 6, then I got there at 6, but that morning, I couldn't tell you, but whatever time daddy had to be at work, that's when I had to be there.

PROPERTY OF
ASSASSINATION

Mr. LIEBELER. Did you see Oswald on the morning of November 22 at any time?

Mrs. BAKER. No, sir.

Mr. LIEBELER. Do you know Billy Lovelady?

Mrs. BAKER. Yes, sir.

Mr. LIEBELER. I show you Commission Exhibit No. 203, and I call your attention to a man standing in the doorway of the Texas School Book Depository Building?

Mrs. BAKER. Yes.

Mr. LIEBELER. Do you recognize him?

Mrs. BAKER. That looks like Billy.

Mr. LIEBELER. That looks like Billy Lovelady?

Mrs. BAKER. Yes.

Mr. LIEBELER. And that man you pointed to is immediately as we face the picture to the right of the mark "A" in the picture?

Mrs. BAKER. Yes.

Mr. LIEBELER. And is standing directly against the side of the doorway of the building—of the Texas School Book Depository Building?

Mrs. BAKER. Yes.

Mr. LIEBELER. Thank you. If you don't have anything else you would like to tell us about this that you think we should know and that I haven't asked you, I have no other questions at this point.

Mrs. BAKER. Thank you.

Mr. BLAKEY. Mr. Liebelier asked her where the noise she heard came from. Ms. Baker thought it was close to the underpass. Mr. Liebelier then continued with respect to the bullet:

Mr. LIEBELER. How close to the curb on Elm Street was this thing you saw hit; do you remember? It would have been on the curb side—near the curb side away from the Texas School Book Depository Building on the opposite side of the street; is that right?

Mrs. BAKER. Yes.

Mr. LIEBELER. How close to the opposite curb do you think it was?

Mrs. BAKER. It was approximately in the middle of the lane—I couldn't be quite sure, but I thought it was in the middle or somewhere along in there.

Mr. BLAKEY. Later Ms. Baker describes the bullet's relation to the car: "I thought it was—well—behind it."

In addition to those who heard shots, saw smoke, or saw the impact of bullets, there is testimony in the Commission's record of what may be fairly described as suspicious conduct around the knoll—footprints by the fence, an individual who identified himself as a Secret Service agent when no agent was supposed to be in that area, activity that could be called flight—but the fact remains that no one gives credible testimony that he saw anyone with a rifle around the fence at the time of the assassination. In the absence of such testimony or hard evidence that would corroborate or independently substantiate the ear- and eye- witness testimony pointing toward the knoll shot, the Commission concluded the shots came from only one place: The Texas School Book Depository where Lee Harvey Oswald, the alleged assassin, worked.

In September 1977, the committee learned of the possibility of obtaining what the Commission lacked: An acoustics analysis of a sound recording of what happened in Dealey Plaza. There was in existence a Dallas police tape that had recorded the sounds of the assassination from the transmitter of a motorcycle policeman whose microphone switch was in the on position. The committee hoped it might obtain evidence not considered by the Commission.

The committee searched for the best people in the acoustics field. After careful consideration, it contracted with the firm of Bolt, Beranek & Newman of Cambridge, Mass., for an analysis of the tape.

Early testing by the firm was uneventful, since all that had been made available to the committee was a copy of the original tape on which no audio sounds could be discerned. But with the help of a retired assistant chief of the Dallas Police Department, the committee eventually obtained the original of the November 22, 1963, dispatch tape, along with dictabelts that had recorded the transmission.

The analysis of the dispatch tape was conducted by James E. Barger, chief scientist at B.B. & N. After preliminary filtering, Dr. Barger was able to locate several segments of the tape that contained impulses that might have been caused by gunfire. The impulses were then put through six screening tests, as follows:

One: Did the impulse patterns occur at the approximate time of the assassination?

Two: Were the impulse patterns unique and not repeated elsewhere in the tape?

Three: Did the intervals between the impulses approximate the timing of the shots as indicated on the Zapruder film?

Four: Did the shape of the impulses resemble the shape of recorded impulses produced by tests of comparable gunfire through comparable transmission systems?

Five: Was the amplitude of the impulses similar to that recorded in tests of comparable gunfire through comparable transmission systems?

Six: Did the number of impulses in the expected echo pattern of Dealey Plaza approximately correspond to what was recorded on the tape?

In actual firing tests conducted on behalf of the committee by the Dallas Police Department in Dealey Plaza in August, Dr. Barger set out to determine what the echo structure looks like for two shooter locations—the TSBD and the grassy knoll—and several target locations along the motorcade route. He then matched his 1978 Dealey Plaza environment data with the 1963 tape, and he was able to arrive at several conclusions:

First, the motorcycle whose radio transmitted the broadcast was apparently in Dealey Plaza; second, there was a 95-percent probability that two of the impulses were caused by gunshots; and, three, there was a 60- to 70-percent probability there were three shots. And finally, four, there were indications of a fourth shot from the grassy knoll, but at the time he was to testify in public hearing of the committee in September 1978, Dr. Barger was only willing to call it a 50-50 probability.

The committee then asked two independent experts who had been recommended to the committee by the Acoustical Society of America to review the work of Dr. Barger and determine if they might be able to refine it. Prof. Mark Weiss and his assistant, Mr. Ernest Aschkenasy, agreed to try to refine Dr. Barger's work. At the committee's request, they focused on the third shot, the one that Dr. Barger thought might have come from the grassy knoll.

PROPERTY OF
ASSASSINATION

The effort took from September until the end of November. They are available to testify here this morning.

Professor Weiss received a B.E.E. degree from the City College of New York in 1952, and an M.S. in electrical engineering from Columbia University in 1957. From 1957 until 1964, he worked as a project engineer for the Federal Scientific Corp., and from 1965 until 1974 he was vice president of that corporation for acoustical research. He is presently a professor in the Department of Computer Science of Queens College of the City University of New York, a position he assumed in 1974.

Professor Weiss is the author of over 30 articles and technical reports concerning electronics for acoustical engineering. He has worked on projects such as the development of instruments for real-time spectrum analysis of audio signals; development of the first real-time system for extraction of vocal pitch using the cepstrum approach; and he is currently involved in development of techniques for reducing wide band noise and other interference on speech recordings to increase the detectability and intelligibility of speech.

From November 1973 until June 1974, Professor Weiss was a member of a panel of technical experts appointed by Chief Judge John J. Sirica to examine the White House tape recordings in connection with the Watergate grand jury investigation.

He is a fellow of the Acoustical Society of America and a member of the Institute of Electrical & Electronics Engineering.

Mr. Ernest Aschkenasy received a B.E.E. from the City College of New York in 1967, and his M.S. from the City College of New York in 1972. From 1967 until 1974, he worked as an engineer with the Federal Scientific Corp., where he had primary responsibility for the development of computer programs for analysis and reduction of large volumes of acoustic data. In 1974, Mr. Aschkenasy also assisted in the Watergate tape analysis and began his present work as a research associate for the Department of Computer Science at Queens College of the City University of New York, where he is presently acting as Prof. Mark Weiss' assistant.

It would be appropriate at this time, Mr. Chairman, to call as witnesses Professor Weiss and his associate, Mr. Aschkenasy.

Chairman STOKES. The committee calls Professor Weiss and Mr. Aschkenasy. May I ask both of you to stand, raise your right hand and be sworn? Do you solemnly swear the testimony you give before this committee is the truth, the whole truth, and nothing but the truth, so help you God?

Mr. WEISS. I do.

Mr. ASCHKENASY. I do.

Chairman STOKES. Thank you. You may be seated. The committee recognizes deputy chief counsel Gary Cornwell.

TESTIMONY OF PROF. MARK WEISS AND MR. ERNEST ASCHKENASY

Mr. CORNWELL. Thank you, Mr. Chairman. Professor Weiss and Mr. Aschkenasy, are you familiar with the work of Dr. Barger and his team of scientists at Bolt Beranek & Newman, which led to Dr. Barger's testimony in September of this year before the committee?

Mr. WEISS. Yes; we are.

Mr. CORNWELL. When did you first have the opportunity to review that work?

Mr. WEISS. In August of this year we examined the results of Dr. Barger's analysis up to that time, and also reviewed the plan for the reconstruction experiment to be conducted in Dallas and judged whether the experiment was necessary to be performed. We did visit Dr. Barger at his lab in Cambridge, Mass., and had a lengthy discussion with him, saw his result, and reported back to the committee that in our opinion the reconstruction experiment was not only fully justified but also necessary for the continuance of his analysis.

Mr. CORNWELL. So at that time you simply reviewed the processes and techniques that Dr. Barger was using and specifically you did so for the purpose of rendering an independent opinion to the committee as to the necessity of going to Dallas and conducting the lab test; is that correct?

Mr. WEISS. That is correct.

Mr. CORNWELL. After the hearings of September were concluded, were you again asked to look at the work of the team of Bolt, Beranek & Newman in more detail?

Mr. WEISS. That is correct. We were asked to take a more detailed look at not only their work, but also at the Dallas police tape recording.

Mr. CORNWELL. What was the purpose of that request? What were you asked to do on this occasion?

Mr. WEISS. The object there was to perform a refined analysis of the data relating to the presumed shot occurring, the third possible shot that was examined by Dr. Barger, the one that was thought to have been the result of a gun firing at the grassy knoll.

Mr. CORNWELL. And you began that work in early October?

Mr. WEISS. That is correct.

Mr. CORNWELL. And you just very recently concluded the work; is that correct?

Mr. WEISS. Yes, sir.

Mr. CORNWELL. Based upon the work, were you able to reach a conclusion with any greater degree of certainty as to whether or not that shot did or did not occur?

Mr. WEISS. Yes, sir, we did.

Mr. CORNWELL. And what was your conclusion?

Mr. WEISS. It is our conclusion that as a result of very careful analysis, it appears that with a probability of 95 percent or better, there was indeed a shot fired from the grassy knoll.

Mr. CORNWELL. Let me ask you—just very, very recently you reached that conclusion—would you tell us why it was that it took from early October until just very recently to complete your work?

Mr. WEISS. Yes, sir, our problem was that we had other obligations in addition to working on this problem. We have a major contract with the Air Force for development of some special purpose speech processing equipment, and in order to both work on that and work on this problem, we could not work on this problem fulltime.

Mr. CORNWELL. Would you very generally describe for us what the scientific principles are that you utilized in your work?

PROPERTY OF
ASSASSINATION

Mr. WEISS. Well, the principles are basically the fundamental principles in acoustics, namely, that if someone makes a loud noise somewhere, like here [witness claps his hands], that sort of thing, everybody in this room can hear that noise, which means that sound moves out in all possible directions. A second principle is that that sound which they hear directly also will bounce off walls and be reflected. So they will hear not only the direct sound but also sounds called echoes bouncing from walls, corners, and other surfaces. The third principle, also very fundamental, is that the speed of sound is constant in whatever direction it may go. So that the farther you are from the source of the sound, the longer it will take for that sound to reach you, whether that source is, in fact, the original source of the sound or a reflecting surface which would cause an echo. I would like to illustrate basically what is meant by echoes at this point here. I think everybody is pretty much aware of what happens if you stand at a canyon and holler something like "Hello" and you get back a series of "Hello, hello, hello," that sort of thing. You can hear each of these echoes in such a circumstance because the reflecting surfaces are quite far apart from you and from each other. In a situation such as an echo generated in Dealey Plaza, you have reflecting surfaces, also the walls and corners of the buildings there. They, too, will generate echoes, but they will tend to come in very much more closely in sequence so that even if you have a very short, sharp sound such as a rifle firing, OK, or again a clap of the hands, you will get back what to an observer or many observers will sound like a single, loud bang-type thing. But if you were to record that and play it back at one-quarter or one-eighth the speed you recorded it, you will be able to hear something like the independent echoes coming back, in fact what you would hear would be something like bang-bang-bang-bang, and diminishing in amplitude as you get echoes over longer periods. To the human ear you don't hear that because the first loud sound partially deafens the ear, and it decreases your sensitivity to the later arriving sounds. What you hear is a single loud sound with a diminishing intensity.

Mr. CORNWELL. In what we might describe as a complex urban type of environment with a number of different solid structures in it such as you might find in any city or in Dealey Plaza, do I understand, then, that the echoes would arrive back at a varied spacing in time; they would not all arrive back at the evenly spaced intervals?

Mr. WEISS. That is correct. They will arrive back at spacings which depend entirely on where the listener is relative to the surfaces that produce the reflections that generate the echo paths and also it will depend on where the source of the sound is.

Mr. CORNWELL. So if then you were given one location for the listener and one location for the sound source, would you get the same type of pattern time after time if you reproduce the sounds from that location?

Mr. WEISS. Yes. In fact, if you had to listen, as in the specific case of Dealey Plaza, if you had a listener standing someplace in the Plaza, say on the sidewalk near the depository building, and he stood still and a rifle was exactly held in another place, as the rifle fired, he would hear a succession of echoes. If it was fired again, he

would hear identically the same succession of echoes if nobody moved. If he came back 15 years later and the buildings were the same, as they are in this case, and he stood in the same spot and a rifle was fired from exactly the same spot and the temperature of the air was the same he would, in fact, even then hear exactly the same sequence of echoes. If somebody is standing close by, but not in exactly the same place, he will hear a similar succession of echoes but not identically the same. There will be small measurable differences. The farther away the other listener gets from the first person, the greater the difference will be in the pattern of echoes that he hears.

Mr. CORNWELL. And likewise, I take it if you were to move the location of a sound source, whether it is someone clapping their hands or rifle fire, you also, by moving it a few feet, would get a different echo pattern?

Mr. WEISS. You would get a different echo pattern.

Mr. CORNWELL. How well established are these acoustics principles you have been describing?

Mr. WEISS. These have been established a very long time. They have been known for several hundred years. These are fundamental things in acoustics, the things taught in high school or college undergraduate level physics.

Mr. CORNWELL. Were there other more complex or more sophisticated principles that you were required to use in your analysis which were not so well established, which were newer or less well established?

Mr. WEISS. No, sir. We only needed to apply these basic well-tested, well-established principles; nothing more.

Mr. CORNWELL. In your analysis, what equipment were you required to use?

Mr. WEISS. Basically we used a large plan map of Dealey Plaza.

Mr. CORNWELL. A survey map?

Mr. WEISS. A survey map; that is correct. The scale was 1 inch corresponding to 10 feet in Dealey Plaza. We used a long graduated ruler that could be extended to measure long distances on the map. We used a hand calculator for computing some very simple things, and we used a device, an electric device called an oscilloscope, for observing the wave shapes of the sounds that we got when we played back tape recordings, and also a device that enabled us to plot these patterns on paper so that we could examine them in very fine detail.

Mr. CORNWELL. Were you required to use anything sophisticated such as a computer or anything beyond what you have mentioned?

Mr. WEISS. No, sir. This is the only equipment that we used.

Mr. CORNWELL. Would you very generally describe what the basic process was that you went through in applying these principles to the available data?

Mr. WEISS. Well, basically the idea was this. As I indicated, each position in the plaza would have a unique set of echoes associated with it. If a sound heard on the police tape was, in fact, the sound of gunfire heard by a microphone—and a microphone, remember, is kind of an electronic ear—it hears the same as an ear will hear—if that indeed was the case, then I ought to be able to find a position for that microphone and a position for the gun such that I

could predict a pattern of echoes that would match the sounds heard on the police tape to a high degree of accuracy. I could then say that this kind of match of a predicted pattern with the observed pattern is so close that the probability that what I am really looking at on the Dallas police tape is noise becomes very small. So we set out to be able to predict what the echo structures would be at various locations in Dealey Plaza. This was the whole art of it. As I say, it was done by using the simple concept that sound would travel in all directions from a source and that it will reflect off surfaces and travel back.

Mr. CORNWELL. In your attempt then to calculate various echo patterns and find out if they precisely matched or relatively precisely matched what is on the Dallas police tape, did you or were you required to use in any way the test that Dr. Barger conducted with his team from B.B. & N.?

Mr. WEISS. Yes, sir, that set of test data, in fact, proved to be invaluable in this case. It was by analysis of a number of these firings that Dr. Barger and his associates recorded in, I guess it was, August of this year that we got to become familiar with the acoustical structure of Dealey Plaza. By using these recordings in conjunction with this map of Dealey Plaza, we got to know where the buildings—where were the reflecting surfaces that gave rise to the echoes that could be heard.

Mr. CORNWELL. In addition to the tests that Dr. Barger conducted, did you need anything else, any other information in order to follow this process?

Mr. WEISS. Well, yes. We needed, in order to perform this prediction process, we needed to know a number of things. First, we needed to know where the sources of sound were.

Now, of course, that means we had to have some idea of where a shooter might have been, and by all indications, he had to be someplace up on the grassy knoll, and we had that area taken care of.

We had to know, of course, also where the reflecting surfaces were. That is for a particular assumed position of the microphone, where the major reflecting surfaces were. So we had to refine our understanding of how the echoes were produced in that case. We had to know approximately where the motorcycle was, because although this technique is simple and straightforward, it can become pretty tedious if you don't know approximately where or reasonably well where the motorcycle is, and you can assume it to be anywhere in the Plaza. So we had to have some idea where it was. And what we assumed was that it was approximately in the neighborhood of that microphone that gave the strongest matching pattern in Dr. Barger's experiment between a shot from the knoll and the impulses audible on the police tape recordings.

Furthermore, in order to calculate the echo times, the time of arrival at each of these echoes, we had to know what the velocity of sound was in the air. As I said before, the velocity of sound is constant in all directions. However, it is not always the same value. In particular, it is a function of the temperature of the air. So we had to find out what was the temperature of the air at the time of the assassination. And that was about all we really had to know in order to perform the prediction.

Mr. CORNWELL. Would you have an opinion to know what speed the tape recorder ran at that recorded the initial sounds?

Mr. WEISS. Yes. We had an estimate from Dr. Barger that the speed of the tape recorder was about 5 or so percent slow from a normal, nominal speed, and we had to build this factor into the correction of time observed on the tape so we could get a time interval for the echoes, if, indeed, these impulses are echoes, that would be true for a correctly running tape.

Mr. CORNWELL. Just to be sure I understood one statement you made, you said you needed to know the source of the sound, the location of the source of the sound, and the location or approximate location of the motorcycle.

Do I understand from that that what you are saying is you need to know a general area in which to begin making your calculations?

Mr. WEISS. That is correct, that is what I meant. As I said, I assumed that the motorcycle would have been somewhere in the vicinity of microphone 4, for example, which was down on Elm Street in the experiment performed by Dr. Barger.

Mr. CORNWELL. So you didn't take as a given that the motorcycle was in that location, and you simply began to look in that general area.

Mr. WEISS. That is correct, and if we had not found it, we would have looked in a wider and wider zone.

Mr. CORNWELL. Ultimately you may have found it was not even in the Plaza.

Mr. WEISS. That is correct. In fact, this brings up another point. If, in fact, after diligent searching we could not get a pattern of echoes, a predicted pattern of echoes, that would sufficiently closely match the impulses visible on the police tape recording, then we would have to conclude either that we did not have a shot recorded there, or that if we did have a shot recorded, then the motorcycle was not anywhere near the position we had assumed it to be, or the shooter was not anywhere near the position we assumed to be, or both conditions.

Mr. CORNWELL. Mr. Chairman, I would ask at this time that we leave exhibit F-361, which has previously been admitted, on the easel, and also add to it, the exhibit F-349, which was previously admitted in these hearings in September, and, in addition, I would request that exhibits F-672 and F-667 be admitted into evidence and displayed so that all four exhibits are displayed simultaneously.

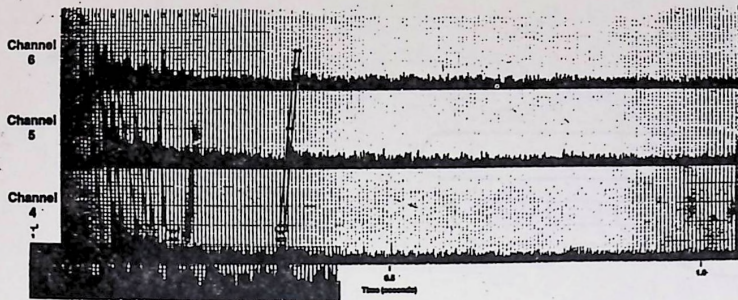
Chairman STOKES. Without objection, they may be entered into the record and displayed appropriately.

[The exhibits follow:]

PROPERTY OF

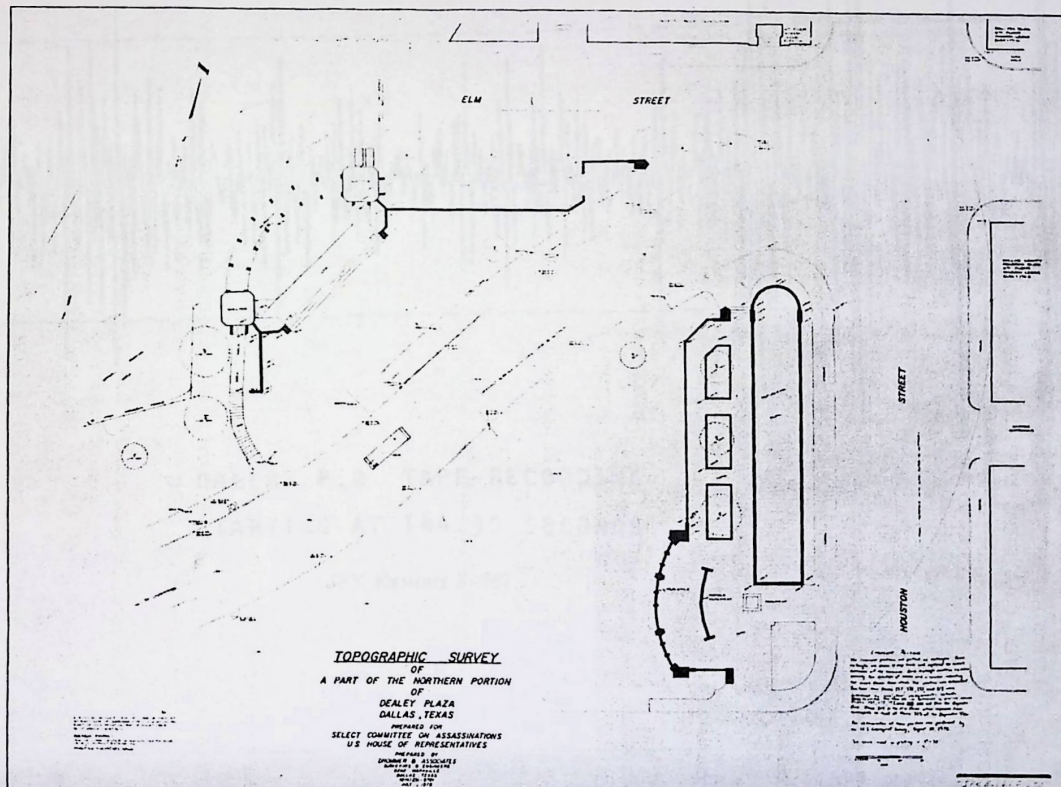
Test Pattern for Shot 8 (Knoll, Target No. 3)
Received at Array 3, Microphones 4, 5, and 6

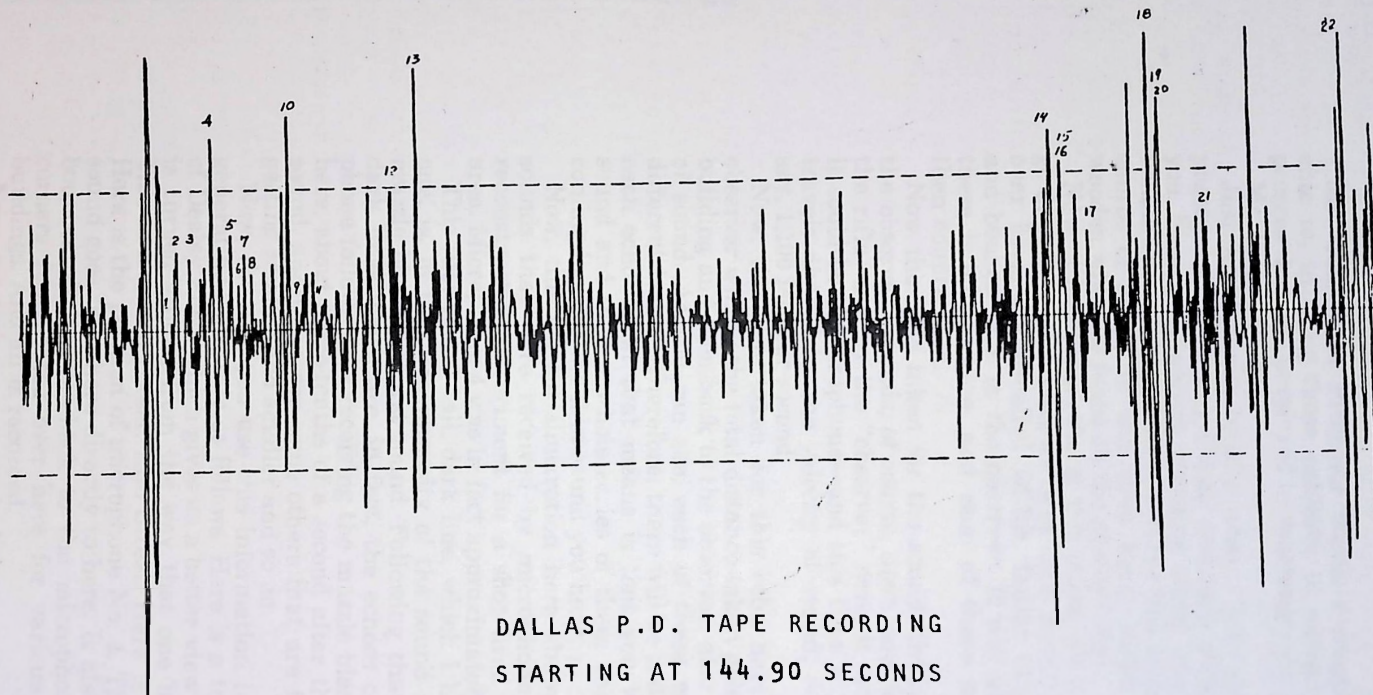
Echo Pattern From Stuck-Transmitter
Recording Beginning at Time 145 Seconds.



JFK EXHIBIT F-349

PROPERTY OF
ASSASSINATION





DALLAS P.D. TAPE RECORDING
STARTING AT 144.90 SECONDS

JFK EXHIBIT F-667

Mr. CORNWELL. Professor Weiss, I would ask, if you would be able to, utilizing those exhibits, to actually illustrate for us the process that you employed in reaching your final conclusion.

Mr. WEISS. Sure.

Just to illustrate briefly what I was saying before, here is a photograph of Dealey Plaza, and let's assume for a moment that you have an observer standing right around over here, sort of visible on the street between these two trees, and then you have a source of sound in this area here, which would be behind the wooden stockade fence on the grassy knoll.

Now, if he fires a rifle at this point, the sound of that firing will go directly to the observer over here. It will also go to this building over here, the so-called DCRB, Dallas County Records Building, and bounce back to the observer. It will also go to the corner of these buildings here, and each of these corners' reflections will then bounce back.

Now the time taken for the sound, the original sound to reach the observer depends, of course, upon how far the observer is from the rifle—and by the "observer" here, it could be an individual or it could be a microphone—and this time is the distance the sound travels divided by the velocity of sound, which is approximately, say, 1,100 feet per second.

Now, the time taken for this echo here to come back to the observer will be the total distance taken going from the rifle to the building and then back to the observer, also divided by the velocity of sound. As you can see, each of these echo paths will have a different length. Therefore, there will be a different travel time for each echo. What that means is that you will hear first the one sound and then a whole series of them coming in, each of these coming in after the first sound you hear.

Now, this exhibit illustration here shows the intensity of the sounds that were received by microphone No. 4 in the Dallas reconstruction experiment for a shot fired from the grassy knoll area. Microphone 4 was in fact approximately over here.

This first rather tall, dark line, which I hope is visible to everyone, is, in fact, the intensity of the sound received for the direct muzzle blast, the first sound. Following that, there are a series of dark lines which are, in fact, the echoes coming into the microphone following its receiving the muzzle blast sound. Way out over here, about three-tenths of a second after the first one, is another sound, and there are some others that are further out and sort of getting smaller and smaller and so on.

Now, the way you use this information in identifying the echo-generating sources is as follows. Here is a topographic survey map of Dealey Plaza which gives us a better view of where things are, it is turned around from the way that one is. Here is Elm Street. This is Houston Street. Elm Street. Here is the grassy knoll area. Here is the position of microphone No. 4. The shooter is here. The sound goes from here directly to here. It also goes to this building, bounces off it, goes back to the microphone. It goes to various corners represented over here for various other structures and buildings. And all is recorded.

Now, supposing we want to know what was the echo producing surface that gave rise to this echo in the recording. Well—

Mr. CORNWELL. Professor, excuse me one more time.

Mr. WEISS. Sure.

Mr. CORNWELL. The wiring is having trouble picking up your voice. Could we move the mike up perhaps to your tie or lapel?

Mr. WEISS. OK.

Now we know what the time taken for the direct sound to reach the microphone was, because we know the distance precisely from the rifle to the microphone.

Mr. CORNWELL. And again you are still now talking about on the test?

Mr. WEISS. Yes, this is simply for the purpose of confirming our understanding of exactly where, and it is important to know exactly where, the echo-generating surfaces are.

Mr. CORNWELL. So you, in other words—

Mr. WEISS. So this location is approximately in Dealey Plaza.

Mr. CORNWELL. So, in other words, you are using Dr. Barger's test waves, which are the exhibits you have been referring to, and when those were generated, of course we were all standing there watching, and we know exactly where the shooter was located and exactly where the microphone was. Is that correct?

Mr. WEISS. That is correct. We had good information as to where both of these points were so we could know in advance what the distance was from the shooter to the microphone, and we knew what the time would be that it took for the sound to go directly from the rifle to the microphone.

Now, we also know what the additional time was from the time that the first sound of the rifle was received to the time this echo here that we are interested in was received. If you add this amount of time to the direct time, you have a total time taken to go from here to some echo-generating surface and to the microphone. All right? If you know what that total time is, you can, therefore, predict what the total path length was. OK? Because you now take that total time, now you multiply it by the velocity of sound, and you can compute how many feet, in fact, that sound traveled before it came back and was recorded as this highest peak at this point.

Fine. What you do is the following: Knowing the length of that path—and this is scaled, as I said, approximately at 1 inch equals 10 feet—you can find out the length of that path in inches; you simply cut a piece of string to that length—and I just happen to have some string here pre-cut.

Now I am going to put a pin in here at the position of the rifle. I am going to put another pin in at the known position of the microphone.

Now this piece of string, the length of this corresponds, in fact, to the distance the sound must have traveled in order to have produced this echo. And I sort of now loop it between here and here.

Now sound travels in straight lines so that this string if—I hope it is visible—now if I pull tight on it, it forms two straight lines. It will form a line going from the rifle to some reflecting surface and then bouncing from that surface back to the microphone.

OK. Well, so we start looking—well, there is nothing out here, over here—and what you do is move the string along here over until it intercepts a surface. Well, in passing through here, has to go further, so this can't be it. And you keep on trying, and because

it is easier to do with a pencil, OK, so we can now sort of see the arc formed, the possible positions for a reflecting—a surface that will generate an echo.

And as I bring it along, you can see that it just touches this building over here. If I proceed on, it moves away from it, and, in fact, this is the only point at which this line will just touch the surface. It can't go beyond it, and can't fall in front of it. It just, just touches it in order to be considered to be a surface that generated that echo. And so we have now the location of the surface that produced this echo over here. And it is, in fact, the wall of the Dallas County Records Building.

Now we can take another echo, just to illustrate the process again. We take one that's closer in; we pull out this string; and for that one, again, the same calculation. We know what the time to get from the rifle to the microphone is. We know what the time, later, that we hear this additional echo is, so we know how long that echo actually traveled from the rifle to some surface back to the microphone. And we do the same thing: We compute that in terms of real distance, and then we cut a string according to that distance, scaled to this map. I hook one end of it around the position of the rifle.

As one can see, one does not need a large digital computer to do this kind of thing. Put one end where the microphone or observer is, and we start again doing this business of stretching, and, as again you can see, there is really nothing in here that just touches anything.

So we try the other side here and, lo and behold, we hit this corner over here. There's a wall that is apparently about 4 or 5 feet high at this point, and this string has now just touched this point, so that for this instance the echo traveled from the rifle to this corner of the wall, and now back up to the microphone.

So that's how we identified or confirmed these two points as echo-generating surfaces.

Well, we picked out, in fact, a total of some 20 or so, or 22 actually, echo paths that we were able to determine by analysis of exactly this sort, just continuing on down the line, picking up these echoes as they can be seen on here and using this technique to actually find where they were generated.

Mr. CORNWELL. Then from that process, as I understand, you were able to sort of confirm what the real echo structure of Dealey Plaza was?

Mr. WEISS. Yes, sir.

Mr. CORNWELL. Which surfaces in it generated echoes from roughly the area of the grassy knoll and being received roughly in the area of the second pin?

Mr. WEISS. That is correct. These surfaces would be correct for that set of conditions for something out here and for something in around here. For something elsewhere it would have been perhaps a different set of echo-generating surfaces.

Mr. CORNWELL. So after you had made that determination, what use did you make of what you had learned?

Mr. WEISS. OK. As I said earlier, the objective was to be able to see if we could, in fact, predict a set of echoes that would closely

PROPERTY OF
ASSASSINATION

match the impulses that we could hear and observe on the Dallas police tape recording.

Now this is a wave form chart of the Dallas police tape recording. Here is actually what you hear, but this is what it looks like in terms of the variations of electrical signals as times goes on. Here is time moving along in this direction, and here's how the signal strength varies. It's a big bang here and here and here (indicating).

These are primarily the impulses I am talking about in this set of data.

Mr. CORNWELL. Let me ask you, before you begin to describe that exhibit: Why is it that the wave form which you have printed there from the Dallas P.D. tape appears to us to look absolutely nothing like the test tape wave forms that Dr. Barger created?

Mr. WEISS. Dr. Barger's wave form here represents the total power or strength of the signal as we see it.

The problem here was to actually be able to look, indicate points where that energy level was significantly above the background noise level, which was relatively quiet here, but also to get some sense of the relative strengths of these echoes coming back. This is different because we were interested in very precise measures of time elapsed from any point to any other point in this pattern.

Mr. CORNWELL. In other words, it's simply a different way of displaying—

Mr. WEISS. That's all it is.

Mr. CORNWELL [continuing]. The sound?

Mr. WEISS. The same information is displayed in both of them; yes, sir.

Mr. CORNWELL. In other words, it is the space between the peaks, and not whether they go up or below the line, that is important?

Mr. WEISS. That is correct.

Mr. CORNWELL. OK. Would you proceed?

Mr. WEISS. Now what we did, very simply, was, we put a shooter someplace on the knoll over here, we put a microphone someplace in the plaza over here, and then we started the prediction process.

Now the prediction process is sort of the reverse of the process we had used before.

Could I have the scale? Thank you.

In the prediction process, you don't know, of course, where the shooter is, and you don't know where the microphone is. You make an assumption. You say, "Well, I am going to put him down over here somewhere, let's say the corner of the fence, and I am going to put the microphone over here, let's say somewhere on to the right side, closer to the north side of Elm Street here," and, OK, fine.

So now I have this position here; I can measure off on here what the total path length is, and I can convert that into the time it would take for the sound to travel directly from here to here. Fine.

Now I know where my echo-generating surfaces are, so I now can measure from the rifle to an echo-generating surface to a point; and then I can measure from that point, let's say, back to the microphone. I have a total path length; I can convert that into the total time it took for this echo to travel from here to this position here.

Now I know that original direct travel travel time; I know the echo time. The difference between these two corresponds to the time spacing—say, in this case—between this large bang of the muzzle blast, and some echo time.

Now I believe there is a blackboard here that I can use. Is there chalk?

Let me just sort of represent things this way here.

Chairman STOKES. Professor, can you turn the blackboard just a little bit so the committee can see it?

Mr. WEISS. Surely. We will move this back again later on.

OK. Supposing that, in fact, this represents time running along here, and this is the time at which you received the muzzle bang itself, OK, which would correspond to this again, this first large dark mark on the exhibit there, and I have computed now for this first position echo a time that that echo would arrive, which might be, let's say, over here. OK, that's one echo.

Now I go ahead and I say, OK, that's one surface. I know there are other surfaces here, and I start computing the echos that would be received at that position of the microphone for that position of the shooter, I have assumed when echoes would come in from other surfaces that are known to be echo generators for this set of positions, and I might get some kind of pattern, OK, like this, and I would want to compare that with, in fact, the pattern for the Dallas police tape recording.

And so I line up what looks like the muzzle blast, the sound, which is this very first, very large peak over here, and I say, all right, that one corresponds to this over here, so let's put this one in over here; and now I have a set of sounds which sort of looks like this.

And then there are a few things out further here, and then maybe something else out over here.

Well, you crank this all through, and you find it doesn't match at all. This is nowhere near it, so what you do is, you start moving the microphone around and/or moving the motorcycle—pardon me, the rifle—around.

Mr. CORNWELL. In other words, what you have concluded by the very first choice, arbitrary choice, is that the shooter was not in the location you chose, or the microphone was not in the location, or both?

Mr. WEISS. That is correct, or both—you don't really know—both are variables. So we start moving them around. The whole process is one of experimentation, trial and error, until finally you begin to get some set of data that begins to look reasonable, and then you can close in on a set of positions that will give a reasonably good and accurate match.

Well, this is, in fact, what happened. I got a set of positions which gave an extremely good match to this early set of echoes. This is the Dallas Police Department tape; these are the predictions. OK, here's what is actually being matched to, the observed data, and this is the predicted data.

Now after a while we got some very good agreements with this set of data here that was not as good for the echoes that were out at a distance there. All right, so we started adjusting again until, in fact, we got excellent agreement for here. Only what happened

PROPERTY OF
AGASSINATION

now was, we didn't get such good agreement as we had before for the early echoes.

And after doing this enough times, the light finally dawned, and it occurred to us that the concept wasn't complete. We weren't dealing with a shooter here and a microphone here. We were dealing with a shooter here all right, but with a microphone that wasn't just here; it was in motion; it was going down the street. If it was a motorcycle in the motorcade, it had to have been in motion; it couldn't just be standing there in the middle of the street; and, in fact, if it was going down the street it was probably going at about the speed of the motorcade, which was supposed to be about 11 miles an hour.

So we started moving the microphone down the street at 11 miles an hour, and for this set of moved positions—now predicting what the echo pattern would be at every position as it comes on down—let's say, at what time it would receive each of these echoes.

This is a somewhat more complicated process. It is the same process; it just takes a lot longer because you have to do a lot more calculations.

As soon as we started doing that, it became immediately obvious we could quite easily find positions for the rifle and for the motorcycle, such that the match at both the early and the late echoes was getting increasingly close; and, in fact, once we were there, we were practically in the ballpark. It was a little more work, and we closed on a set of echoes that we could predict that matched the observed impulses on this pattern with an accuracy of approximately one-thousandth of a second.

Mr. CORNWELL. So you found that by moving the microphone at approximately 11 miles an hour, the peaks that you predicted the wave form would look like were correct all the way through from the beginning to the end of particular parts of a tape?

Mr. WEISS. That's correct. That's correct.

Mr. CORNWELL. And each of those peaks fell exactly where you would expect them to fall within one-thousandth of a second?

Mr. WEISS. That is correct. In fact, I have on here numbered some 22 peaks for which I can predict an echo path that will match it to within one-thousandth of a second.

Mr. CORNWELL. Are you able to quantify in some fashion the probability that results from the ability to identify a large number of peaks, as you did, to that degree of precision?

Mr. WEISS. Yes, if you have a fit of some 22 points, you have a terrific fit to begin with. It really is hard to imagine this could be an accident, but you can't express it in those terms. You have to reduce it to some formal number that you can actually show is reasonable.

Now some of these echoes, and particularly the early ones coming from surfaces such as doorways over here and some corners over here, come in small. In fact, they come in below the noise level of impulse peaks in the general area of the recording where this is heard.

There is noise that is heard; there is the motorcycle noises; there is electrical noise; static is coming in. All of this is approximately at the level shown by these dashed lines on this exhibit.

Now we didn't want to include anything that might be noise in this comparison; we wanted to deal only with things of which we could be reasonably certain. So we excluded from the consideration anything which was at the noise level itself. If we knew it was below that level, then it was more probably noise than anything else, we excluded it. We wanted to know do those things that exceeded this noise level match? Well, if so, how many are there, how many do we expect to find, and how many are matched?

The answer to those three points is that there are a total of some 14 of these greater-than-noise-level peaks observed; there are a total of 10 of them that, in fact, correspond very closely to echo paths that we have been able to predict.

Now our predictions also show that we should have had 12 larger-than-noise-level peaks present; but if you take these numbers and put it in an equation or formula known as the binary correlation formula, you get a number, known as a binary correlation coefficient, of .77, which says, in effect, that this pattern matches, is matched by a corresponding pattern of strong echoes with a coefficient of .77.

If you take that now and you say, well, what is the probability that this is noise, that it is just an accident that these impulses happened to fall into this sequence of spacings, the answer that you get then is that the probability that this is noise is less than 5 percent.

In fact, putting it in a slightly different way, if I may, if I were a betting man, I would say that the odds are 20 to 1 that this is not noise; and I would take 20-to-1 odds.

Mr. CORNWELL. Just to be sure that it is clear, could you have put the microphone at where—I mean, the shooter—at where you ultimately located it and moved the microphone alone and compensated for the error?

Let's suppose you erroneously placed the shooter.

Mr. WEISS. OK. In fact, we performed experiments along that line. Once we knew where everything was, we then tried to adjust positions, and we found that if you move the shooter by perhaps 5 feet on here, you could compensate in a sense for that by moving the initial position of the microphone by about 1 foot, but that when you did that, the compensation was never going to be perfect and, in fact, the range of fit of prediction to observed peak was now somewhat greater than 1 millisecond; it ran to about 1.5 milliseconds.

If you started moving the shooter much more than 5 feet away, you really could not find a position of the microphone that would give any kind of decent fit anymore.

Mr. CORNWELL. So the only two locations in Dealey Plaza which would produce this echo pattern would be the shooter as you have located it on the grassy knoll within the 5 feet circumference?

Mr. WEISS. That is correct.

Mr. CORNWELL. And likewise, a microphone location within about a foot and one-half?

Mr. WEISS. That is correct. We tried numerous positions for the shooter on the grassy knoll area and, of course, many positions for the microphone, and these are the two that yield the tightest and best fit.

PROPERTY OF
ASSASSINATION

Mr. CORNWELL. From that, I take it that you have established to a very high confidence level that it is a shot from some sort of firearm.

Let me ask you if you were able to tell from the wave forms what kind of firearm it was, whether it was supersonic or subsonic, or a rifle or a pistol?

Mr. WEISS. Right. Of course, we have been dealing, up until now, with the question of the sounds of the muzzle blast, which this is identified as, and of all the different echoes that come in later on.

Now if—if this was a rifle firing a supersonic bullet, then we would expect that immediately preceding the sound of the muzzle blast we would find the sound of the shockwave generated by the bullet while it is in flight that always precedes the muzzle blast; and, of course, it precedes it because the bullet is flying at a speed much greater than the speed of sound.

And if we look in the data, we, in fact, do find a very strong impulse preceding the muzzle blast by a reasonable distance that is not so close so that it could not possibly be it, nor is it too far away. It is pretty much in the right position to be considered to be a probable shockwave sound, recorded just before the recording of the direct muzzle blast sound.

You can see similar such events, of course, over there on the recording of the test firings in Dealey Plaza.

Over here I have been pointing previously to the muzzle blast sound arriving. Well, just before it, over here, there is a dark line which, in fact, is the sound of the shockwave that arrives at the microphone before the muzzle blast.

Mr. CORNWELL. So are you telling us that the indications are that it was a supersonic bullet and, therefore, probably a rifle?

Mr. WEISS. That is correct.

Mr. CORNWELL. And would you also be able to tell us from the wave form what direction the rifle was pointed, what its target was, and whether or not it hit its target?

Mr. WEISS. Well, to deal with the first question, it is quite difficult to say exactly where the rifle would have to have been pointing. It could have been pointing—now, it could have been pointing approximately in a zone, let's say, this wide, so that it could have included the last position of the limousine at frame 312 of the Zapruder film, but, of course, it could have been firing off elsewhere. It couldn't have been firing, for example, straight up in the air. You would never have observed the shockwave for such a condition, nor for that matter could he have been firing off toward, let's say, the underpass region, because again you would simply not have observed it. There are other positions where in all likelihood you would have observed it, but it would have come in at drastically different times than it does here.

If you figure out what the region is for the rifle to have been aimed at, it does include this sort of a region along here [indicating].

Mr. CORNWELL. And if that's the direction it was aimed, can you tell us how far out the bullet went before it terminated?

Mr. WEISS. No, I cannot, because in order to know that, you have to know both precisely where the rifle was fired—and, as I indicated, you cannot know that really—and you must know exactly what

the muzzle velocity of the bullet was, and there is no way of determining that from these data.

Mr. CORNWELL. You said you cannot know precisely where the rifle was fired; you mean at what target?

Mr. WEISS. In what direction it was fired, exactly at what target it was aimed at the time it was fired.

Mr. CORNWELL. And if you were to vary the velocity of the rifle bullet from, say, what you might expect to be a normal rifle velocity, somewhere in the 2,000-foot-per-second range up to something considerably higher, up to the upper 3,000 or perhaps 4,000-foot-per-second range, I take it that every time you would vary any assumption like that you would also conclude that there would be a different assumption about where the bullet struck?

Mr. WEISS. That is correct. Even if one makes the assumption that it was aimed directly at the head of the President, you could, for a range of such velocities, assume that it fell short of the target, that it fell at the target, that it went well beyond the target. There is simply no way of knowing.

Mr. CORNWELL. With respect to the last point, Mr. Chairman, I might suggest that we admit as an exhibit, F-673, which is simply a Xerox copy of a 1963 Gun Digest which has the number of velocities of rifles that were available at that time period ranging from everything from just above supersonic speed, all the way up to above 4,000 feet per second.

Chairman Stokes. Has it been marked as an exhibit, counsel?

Mr. CORNWELL. Yes, it has.

Chairman Stokes. All right. Without objection, it may be entered. [The exhibit follows:]

PROPERTY OF
ASSASSINATION

1963

JFK EXHIBIT F-673
17th Annual Edition

\$3.95

Gun Digest

edited by John T. Amber



NEW! - SAKO
LEVER ACTION RIFLE
IN .243, .244, .308

Biggest & Best Gun Digest Ever! • 384 Pages! All New For '63!

WINCHESTER C.F. PISTOL & REVOLVER CARTRIDGES—BALLISTICS AND PRICES

Western cartridges are identical with Winchester loads having the same basic caliber designation, hence the ballistics given will serve for both brands. Western cartridges not duplicated by Winchester are listed in boldface type. The foregoing also holds true for Remington and Peters loads. Peters cartridges not duplicated by Remington are listed in boldface type.

CARTRIDGE	WT. GRS.	BULLET TYPE	BARREL LENGTH	MUZZLE VELOCITY FT. PER SEC.	MUZZLE ENERGY FT. LBS.	PENETRATION 1/4 SOFT FW ROAD AT 15 FT. PER 30	PRICE FOR 30
25 Automatic (Oilproof).....	50	F.P.	7"	810	73	3	\$4.30
254 Winchester Magnum.....	60	S.P.	8"	2200	650	—	N.A.
30 Mauser (7.63 m/m) (Oilproof).....	86	F.P.	5 1/2"	1410	380	11	5.75
30 Luger (7.63 m/m) (Oilproof).....	93	F.P.	4 3/4"	1220	307	11	5.75
32 Automatic (Oilproof).....	71	F.P.	4"	960	145	5	4.80
32 Smith & Wesson Blank.....	—	No Bullet	—	—	—	—	3.25
32 Smith & Wesson Blank (Black powder).....	—	No Bullet	—	—	—	—	3.25
32 Smith & Wesson (Oilproof) Inside Lubricated.....	85	Lead	3"	680	87	3	3.65
32 Smith & Wesson Long (Oilproof) Inside Lubricated.....	98	Lead	4"	705	115	4	3.85
32 Short Colt (Oilproof) Greased.....	80	Lab.	4"	745	100	3	3.65
32 Long Colt (Oilproof) Inside Lubricated.....	82	Lab.	4"	755	104	3	3.85
32 Colt New Police (Oilproof) Inside Lubricated.....	98	Lead	4"	680	100	3	3.85
32-20 Winchester (Oilproof) Inside Lubricated.....	100	Lead	6"	1030	271	6	5.35
32-20 Winchester (Oilproof).....	100	S.P.	6"	1020	271	6	6.40
357 Magnum Super-X (Oilproof) Inside Lubricated.....	158	Lab.	8 3/4"	1410	695	12	5.45
357 Magnum Metal Piercing Super-X (Oilproof) Inside Lubricated Lead Bearing.....	158	Met. Pt.	8 3/4"	1410	695	12	6.20
9 m/m Luger (Parabellum) (Oilproof).....	115	F.P.	4"	1140	332	10	6.00
38 Smith & Wesson Blank.....	—	No Bullet	—	—	—	—	3.25
38 Special Blank.....	—	No Bullet	—	—	—	—	4.60
38 Smith & Wesson (Oilproof) Inside Lubricated.....	145	Lead	4"	685	151	—	4.50
38 Special Super-X (Oilproof) Inside Lubricated.....	150	Lab.	6"	1065	377	9	4.90
38 Special Metal Piercing Super-X (Oilproof) Inside Lubricated Lead Bearing.....	150	Met. Pt.	6"	1065	377	11	5.85
38 Special (Oilproof) Inside Lubricated.....	158	Lead	6"	855	256	7	4.60
38 Special (Oilproof) Inside Lubricated Lead Bearing.....	158	Met. Pt.	6"	855	256	7.5	5.70
38 Special Mid-Range Match Sharp Corner Clean Cutting (Oilproof) Inside Lubricated.....	148	Lead	6"	770	195	—	4.80
38 Special Super Match (Oilproof) Inside Lubricated.....	158	Lead	6"	855	256	—	4.70
38 Special (Oilproof) Inside Lubricated.....	200	Lead	6"	730	236	7.5	4.80
38 Short Colt (Oilproof) Greased.....	130	Lab.	6"	730	155	4	4.05
38 Long Colt (Oilproof) Inside Lubricated.....	150	Lab.	6"	730	175	6	4.50
38 Colt New Police (Oilproof) Inside Lubricated.....	150	Lead	4"	680	154	4	4.50
38 Automatic Super-Speed. For use in 38 Colt Super Automatic Pistol (Oilproof).....	130	F.P.	5"	1280	475	10	5.10
38 Automatic. For all 38 Colt Automatic Pistols (Oilproof).....	130	F.P.	4 1/4"	1040	312	9	5.10
380 Automatic (Oilproof).....	95	F.P.	3 3/4"	955	192	5.5	4.90
38-40 Winchester (Oilproof).....	180	S.P.	5"	975	380	6	7.85
41 Long Colt (Oilproof) Inside Lubricated.....	200	Lab.	6"	730	237	3	5.25
44 Smith & Wesson Special (Oilproof) Inside Lubricated.....	244	Lab.	6 1/2"	755	311	4	6.15
44 Magnum.....	240	Lab.	6 1/2"	1470	1150	—	8.10
44 40 Winchester (Oilproof).....	200	S.P.	7 1/4"	975	422	6	8.25
45 Colt (Oilproof) Inside Lubricated.....	255	Lead	5 1/2"	860	420	6	6.15
15 Automatic (Oilproof).....	230	F.P.	5"	850	269	6	6.55
45 Automatic Super Match Clean Cutting.....	185	M.C.	5"	775	247	—	6.80
45 Automatic Super Match (Oilproof) Clean-Cutting.....	210	Lead	5"	710	235	—	6.80
45 Automatic Metal Piercing Super-X (Oilproof).....	230	M.C.	5"	945	456	11	7.10

American—European
Caliber Equivalents

Rifle Cartridges

American	European
22 Hornet.....	5.6 x 35R
22 Savage.....	5.6 x 32R
22 Remington.....	6.5 x 52
25-35 Winchester.....	6.5 x 52R
7 m/m Mauser.....	7 x 57
30-30 Winchester.....	7.62 x 51R
7.62 Russian.....	7.62 x 52R
30-06 Springfield.....	7.62 x 63
303 British.....	303 Inch Mark VI or VII

8 m/m Mannlicher-Schönauer (M/1908)..... 8 x 56

8 m/m Mauser..... 8 x 57

Pistol Cartridges

American	European
25 Automatic.....	6.35 Browning
30 Luger.....	7.65 m/m (Parabellum)
30 Mauser.....	7.65 m/m Mauser
32 Automatic.....	7.65 m/m Browning
38 Automatic.....	9 m/m Browning
380 Automatic.....	9 m/m Browning Short (Corta, Kurz)
9 m/m Luger.....	9 m/m Luger (Parabellum)

WINCHESTER R.F. CARTRIDGES—BALLISTICS AND PRICES

CARTRIDGE	WT. GRS.	BULLET TYPE	VELOCITY		ENERGY		MID-RANGE TRAJECTORY	PISTOL-REVOLVER BALLISTICS	PRICE FOR 30		
			FT. PER SEC. MUZZLE	100 YDS.	FT. LBS. MUZZLE	100 YDS.				BARREL LENGTH	FT. PER SEC.
22 Short Super Speed.....	29	K	1125	920	81	54	4.3	6"	1035	69	\$.45
22 Short H.P. Super Speed.....	27	K	1155	920	80	51	4.2	6"	1095	77	.75
22 Long Super Speed.....	29	K	1240	965	99	40	3.8	6"	1125	112	.80
22 Long Rifle Super Speed.....	40	K	1335	1045	158	97	3.3	6"	—	—	.90
22 Long Rifle H.P. Super Speed.....	37	K	1365	1040	149	86	3.3	—	—	—	.70
22 W.R.F. (22 Rem. Spl.) Sup. Sp. Inside Lub.....	No. 12	—	—	—	—	—	—	—	—	—	1.50
22 W.R.F. Magnum H.P.....	45	K	1450	1110	210	123	2.7	6 1/2"	1550	210	2.60
22 W.R.F. Magnum.....	40	M.C.	2000	1390	355	170	1.6	6 1/2"	1550	210	2.60
22 Short Leader.....	29	L*	1045	—	70	—	5.6	6"	865	48	.65
22 Long Rifle Leader.....	40	L*	1145	975	116	84	4.0	6"	950	80	.80
22 Long Rifle, Improved L.V. EZX, Smokeless.....	40	L*	1120	950	111	80	4.2	—	—	—	1.25
22 Long Rifle Super-Match Mark III.....	40	Lead	1120	950	111	80	4.2	—	—	—	1.25
22 Long Rifle Super-Match Mark IV.....	40	Lead	—	—	—	—	—	6 1/2"	1060	100	1.25
22 Short Super Match For Pistols.....	29	Lead	—	—	—	—	—	6 1/2"	1020	67	1.00
22 Short Spatterproof (Gallery Pack).....	29	D*	1045	—	70	—	—	—	—	—	Box of 500 6.50
22 Short Spatterproof (Gallery Pack).....	15	D*	1070	—	97	—	—	—	—	—	Box of 500 6.50
22 Winchester Automatic Inside Lubricated.....	45	K	1055	930	111	86	4.6	—	—	—	2.00

L*Max Coated M.C.—Metal Case L*—Lead, Lubricated K—Kegged Lub—Lubeloy D*—Disintegrating Courtesy Western-Winchester

Western cartridge are identical with Winchester loads having the same basic caliber designation, hence the ballistics given will serve for both brands. Winchester cartridges are listed in boldface type. The foregoing also holds true for Remington and Peters loads. Peters cartridges not duplicated by Remington are listed in boldface type.

WINCHESTER C.F. RIFLE CARTRIDGES—BALLISTICS AND PRICES

CARTRIDGE	W.L. Cal.	Type	VELOCITY—FT. PER SEC.				ENERGY—FT. LBS.				MID-RANGE TRAJECTORY				PRICE Per 20
			Muzzle	100 yds.	200 yds.	300 yds.	Muzzle	100 yds.	200 yds.	300 yds.	100 yds.	200 yds.	300 yds.	400 yds.	
218 Box Super Speed*	46	H.P.	2860	2160	1610	1200	835	475	265	145	0.7	3.8	11.5	\$4.90	
219 Zipper Super Speed	43	S.P.	2890	2030	1510	1150	720	410	230	130	0.8	4.3	13.0	4.70	
220 Normal Super Speed	43	S.P.	2890	2030	1510	1150	720	410	230	130	0.8	4.3	13.0	4.70	
221 Normal Super Speed	46	H.P.	2890	2030	1510	1150	720	410	230	130	0.8	4.3	13.0	4.70	
222 South Super Speed	46	H.P.	2890	2030	1510	1150	720	410	230	130	0.8	4.3	13.0	4.70	
223 Remington	30	S.P.	3200	2640	2170	1740	1140	785	520	340	0.5	2.5	7.0	3.15	
224 Winchester Super Speed	80	S.P.	3500	3080	2750	2410	1880	1030	610	370	0.5	1.8	4.7	3.30	
225 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
226 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
227 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
228 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
229 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
230 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
231 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
232 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
233 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
234 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
235 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
236 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
237 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
238 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
239 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
240 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
241 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
242 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
243 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
244 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
245 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
246 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
247 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
248 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
249 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
250 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
251 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
252 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
253 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
254 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
255 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
256 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
257 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
258 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
259 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
260 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
261 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
262 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
263 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
264 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
265 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
266 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
267 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
268 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
269 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
270 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
271 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
272 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
273 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
274 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
275 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
276 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
277 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
278 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
279 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
280 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
281 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
282 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
283 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
284 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
285 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
286 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
287 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
288 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
289 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
290 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
291 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
292 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
293 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
294 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
295 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
296 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
297 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
298 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
299 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
300 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
301 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
302 Winchester Super Speed	100	Powder P.	3700	2790	2540	2320	2090	1730	1430	1190	0.5	2.2	5.5	4.30	
303 Winchester Super Speed	100														

REMINGTON C.P. RMR CARTRIDGES—BALLISTICS AND PRICES

CARTRIDGE	Wt. Gr.	BULLET Style	VELOCITY—FEET PER SECOND				ENERGY—FOOT POUNDS				MID-RANGE TRAJECTORY				PRICE
			Muzzle	100 yds.	200 yds.	300 yds.	Muzzle	100 yds.	200 yds.	300 yds.	100 yds.	200 yds.	300 yds.	Per 20	
218 Bee Hi-Speed*	46	Mush.	2860	2180	1610	1300	835	475	265	145	0.7	3.8	11.3	\$4.90	
219 Zipper Hi-Speed*	46	Mush.	3110	2440	1810	1550	1050	740	410	300	0.4	1.9	5.5	4.30	
220 Hornet Hi-Speed*	45	Mush.	2690	2030	1510	1150	720	410	240	130	0.8	4.3	13.0	4.70	
221 Hornet Hi-Speed*	45	S.P.	2490	2030	1510	1150	720	410	240	130	0.8	4.3	13.0	4.70	
222 Smith Hi-Speed*	48	S.P.	4110	3490	2930	2440	1800	1300	915	635	0.3	1.4	3.8	4.70	
223 Remington Hi-Speed*	50	S.P.	3200	2650	2170	1750	1140	740	320	240	0.5	2.5	7.0	3.15	
224 Remington Hi-Speed*	50	S.P.	3200	2650	2170	1750	1140	740	320	240	0.5	2.5	7.0	3.15	
225 Remington Magnum Hi-Speed*	55	S.P.	3300	2800	2340	1930	1330	935	670	435	0.5	2.3	6.1	3.45	
243 Winchester Hi-Speed*	80	Pi.S.P.	3500	3080	2710	2410	2380	1890	1320	1010	0.4	1.8	4.7	4.30	
244 Winchester Hi-Speed*	100	Pi.S.P.C.L.	3070	2790	2540	2320	2090	1730	1480	1190	0.5	2.2	5.5	4.30	
244 Remington	70	Pi.S.P.	3500	3070	2640	2290	2040	1570	1180	875	0.4	1.9	4.9	4.30	
244 Remington	70	Pi.S.P.	3200	2850	2530	2320	2050	1630	1280	995	0.5	2.1	4.9	4.30	
244 Remington	70	Br.P.	3200	2850	2530	2320	2050	1630	1280	995	0.5	2.1	4.9	4.30	
25-20 Winchester Hi-Speed*	60	Mush.	2150	1680	1240	1030	475	265	145	80	1.2	6.3	21.0	4.25	
25-20 Winchester*	86	Lead	1440	1180	1030	940	405	265	200	170	2.4	12.5	32.0	3.35	
25-20 Winchester*	86	S.P.	1440	1180	1030	940	405	265	200	170	2.4	12.5	32.0	3.35	
250 Savage Hi-Speed*	87	S.P.	3030	2660	2330	2060	1770	1370	1050	870	0.6	2.8	8.4	4.90	
250 Savage Hi-Speed*	100	Pi.S.P.C.L.	2890	2550	2210	1940	1740	1390	1080	825	0.6	2.8	8.4	4.90	
250 Savage Hi-Speed*	100	S.P.C.L.	2820	2550	1970	1670	1750	1320	840	630	0.6	3.1	8.1	4.90	
25-35 Winchester*	117	M.C.	2300	1950	1680	1460	1370	985	730	555	1.0	4.6	15.0	3.70	
25-35 Winchester Express*	117	S.P.C.L.	2300	1910	1600	1340	1370	945	685	465	1.0	4.6	15.0	3.70	
257 Roberts Express*	100	Pi.S.P.C.L.	2900	2580	2280	2000	1870	1480	1150	885	0.4	2.7	6.7	4.45	
257 Roberts Express*	117	S.P.C.L.	2650	2310	1980	1710	1450	1180	985	740	0.7	3.4	8.8	4.45	
260 Winchester Magnum*	3700	3240	2880	2550	2040	1840	1440	1140	840	640	1.6	4.3	8.8	4.45	
264 Winchester Magnum*	140	Pi.S.P.C.L.	3200	2940	2700	2480	2180	2090	1770	1510	0.3	2.1	4.9	4.85	
270 Winchester Hi-Speed*	100	Pi.S.P.	3480	3070	2690	2340	2090	1600	1250	945	0.4	1.8	4.7	4.85	
270 Winchester Hi-Speed*	130	Pi.S.P.C.L.	3140	2850	2580	2320	2040	1740	1390	1080	0.5	2.1	5.3	4.75	
270 Winchester Hi-Speed*	130	S.P.C.L.	3140	2850	2580	2320	2040	1740	1390	1080	0.5	2.1	5.3	4.75	
270 Winchester Hi-Speed*	130	S.P.C.L.	2890	2440	2140	1870	1610	1380	1160	940	0.6	2.9	7.4	4.75	
280 Remington	3270	3140	2890	2580	2320	2040	1740	1390	1080	840	0.4	1.9	4.9	4.75	
280 Remington	135	Pi.S.P.C.L.	3190	2880	2590	2320	2020	1840	1490	1140	0.5	2.1	5.3	4.75	
280 Remington	135	Pi.S.P.C.L.	2890	2440	2140	1870	1610	1380	1160	940	0.6	2.9	7.4	4.75	
280 Remington	135	Pi.S.P.C.L.	2890	2440	2140	1870	1610	1380	1160	940	0.6	2.9	7.4	4.75	
7mm Remington-Union	130	Pi.S.P.C.L.	3240	2940	2700	2480	2180	2090	1770	1510	0.3	2.1	4.9	4.85	
30-30 Winchester Express*	150	S.P.C.L.	2410	1940	1620	1360	1190	1380	875	615	0.9	4.3	13.0	3.85	
30-30 Winchester Express*	160	M.C.	2220	1870	1600	1370	1240	910	665	450	1.0	5.0	15.0	3.75	
30-30 Winchester Express*	170	M.C.	2220	1870	1600	1370	1240	910	665	450	1.0	5.0	15.0	3.75	
30-30 Winchester Express*	170	S.P.C.L.	2220	1890	1630	1410	1860	1350	1000	750	1.2	4.6	12.5	3.75	
30 Remington Express*	170	S.P.C.L.	2220	1890	1630	1410	1860	1350	1000	750	1.2	4.6	12.5	3.75	
30 Remington High Velocity*	170	L.B.P.	2220	1890	1630	1410	1860	1350	1000	750	1.2	4.6	12.5	3.75	
30-40 King Hi-Speed*	2470	S.P.C.L.	2470	2250	2040	1830	1640	1440	1240	1040	0.8	3.8	9.8	4.75	
30-40 King Hi-Speed*	180	Pi.S.P.C.L.	2470	2250	2040	1830	1640	1440	1240	1040	0.8	3.8	9.8	4.75	
30-40 King High Velocity*	220	L.B.P.	2200	1930	1700	1510	1340	1160	1000	840	1.0	4.6	12.0	4.75	
30-40 King Express*	220	S.P.C.L.	2200	1930	1700	1510	1340	1160	1000	840	1.0	4.6	12.0	4.75	
30-06 Springfield Hi-Speed*	110	Pi.S.P.	2420	2040	1740	1510	1310	1110	940	740	0.4	2.1	5.6	4.75	
30-06 Springfield Hi-Speed*	150	Br.P.	2970	2710	2410	2190	1970	1740	1510	1270	0.5	2.1	6.0	4.75	
30-06 Springfield Hi-Speed*	150	Pi.S.P.C.L.	2970	2670	2400	2130	1930	1700	1470	1240	0.5	2.1	6.0	4.75	
30-06 Springfield Hi-Speed*	125	Pi.S.P.	2500	2180	1880	1620	1420	1240	1060	880	0.5	2.2	5.6	4.75	
30-06 Springfield Hi-Speed*	180	S.P.C.L.	2750	2320	2010	1740	1510	1270	1040	840	0.7	2.9	7.0	4.75	
30-06 Springfield Hi-Speed*	180	Pi.S.P.C.L.	2750	2320	2010	1740	1510	1270	1040	840	0.7	2.9	7.0	4.75	
30-06 Springfield Palma Match*	180	M.C.H.	2750	2320	2010	1740	1510	1270	1040	840	0.7	2.9	7.0	4.75	
30-06 Springfield Express*	220	M.C.L.	2410	2120	1870	1620	1420	1240	1060	880	0.8	3.9	9.8	4.75	
30-06 Springfield Express*	220	S.P.C.L.	2410	2120	1870	1620	1420	1240	1060	880	0.8	3.9	9.8	4.75	
300 N. & H. Magnum Hi-Speed*	180	Pi.S.P.C.L.	2970	2670	2400	2130	1930	1700	1470	1240	0.5	2.1	6.0	4.75	
300 N. & H. Magnum Hi-Speed*	180	M.C.H.	2970	2670	2400	2130	1930	1700	1470	1240	0.5	2.1	6.0	4.75	
300 N. & H. Magnum Express*	220	M.C.L.	2620	2320	2050	1820	1620	1420	1240	1060	0.7	3.2	8.2	4.60	
300 Savage Hi-Speed*	150	S.P.C.L.	2670	2270	1950	1680	1420	1240	1060	880	0.7	3.2	8.2	4.60	
300 Savage Hi-Speed*	150	Br.P.	2670	2270	1950	1680	1420	1240	1060	880	0.7	3.2	8.2	4.60	
300 Savage Hi-Speed*	150	Pi.S.P.C.L.	2670	2270	1950	1680	1420	1240	1060	880	0.7	3.2	8.2	4.60	
300 Savage Express*	180	Pi.S.P.C.L.	2370	2160	1940	1720	1500	1280	1060	840	0.9	3.7	9.2	4.60	
303 Brinn Express*	215	S.P.	2180	1800	1640	1440	1240	1060	880	700	1.1	4.9	12.5	4.75	
303 Savage Express*	180	L.B.P.	2140	1810	1550	1340	1160	1000	840	715	1.1	5.4	14.0	4.75	
303 Savage Express*	180	S.P.C.L.	2140	1810	1550	1340	1160	1000	840	715	1.1	5.4	14.0	4.75	
308 Win. Hi-Speed*	110	Pi.S.P.	3340	2810	2340	1920	1620	1340	1060	840	0.5	2.2	6.0	4.75	
308 Win. Hi-Speed*	150	Pi.S.P.C.L.	2860	2570	2300	2050	1770	1500	1240	1040	0.6	2.4	6.3	4.75	
308 Win. Hi-Speed*	180	Pi.S.P.C.L.	2610	2380	2170	1970	1720	1480	1240	1040	0.8	3.1	7.4	4.75	
32 Remington Express*	170	S.P.C.L.	2220	1890	1630	1410	1860	1350	975	740	1.0	4.6	12.0	4.85	
32 Winchester Special Express*	170	M.C.L.	2280	1920	1630	1410	1860	1350	1000	750	1.0	4.6	12.0	4.85	
32 Winchester Special Express*	170	S.P.C.L.	2280	1920	1630	1410	1860	1350	1000	750	1.0	4.6	12.0	4.85	
32-20 Winchester Hi-Speed*	80	Mush.	2100	1430	1090	930	780	365	210	160	1.5	8.5	24.5	7.15	
32-20 Winchester*	165	Lead	1290	1060	940	840	370	250	195	155	3.5	15.5	48.0	5.35	
32-20 Winchester*	100	S.P.	1290	1060	940	840	370	250	195	155	3.5	15.5	48.0	5.35	
348 Winchester Hi-Speed*	150	S.P.	2890	2340	1840	1420	1180	940	740	570	0.4	1.1	2.8	3.45	
348 Winchester Hi-Speed*	200	L.B.P.	2330	2140	1820	1570	1340	1110	940	740	0.8	3.7	9.0	3.45	
348 Winchester Express*	200	S.P.C.L.	2330	2140	1820	1570	1340	1110	940	740	0.8	3.7	9.0	3.45	
35 Remington Hi-Speed*	150	Pi.S.P.C.L.	2400	1990	1580	1280	1030	820	635	545	0.9	4.6	13.0	3.30	
351 Winchester Self-Loading*	180	S.P.	2110	1820	1540	1310	1140	975	825	685	1.1	5.2	14.0	4.30	
351 Winchester Self-Loading*	177	S.P.	1850	1540	1310	1140	975	825	685	570	1.3	7.9	21.1	8.05	
375 N. & H. Magnum*	270	S.P.	2740	2440	2210	1990	1800	1600	1400	1200	0.7	2.9	7.1	8.05	
375 N. & H. Magnum*	300	S.P.	2740	2440	2210	1990	1800	1600	1400	1200	0.7	2.9	7.1	8.05	
38-40 Winchester*	180	S.P.	1330	1070	940	830	705	340	270	220	0.7	3.4	9.2	6.50	
38-55 Winchester*	240	S.P.	1850	1450	1150	1000	885	760	625	565	2.9	13.0	32.0	4.20	
44 Magnum Casing*	240	S.P.	1850	1450	1150	1000	885	760	625	565	2.9	13.0	32.0	4.20	
44-40 Winchester*	200	S.P.	1310	1040	940	830	740	490	390	305	3.3	15.0	36.5	8.25	
45-70 Government*	405	S.P.	1160	940	830	740	490	390	305	240	1.1	13.5	35.0	12.5	5.00
458 Winchester Magnum*	510	S.P.	2130	1840	1600	1400	1240	1060	880	700	1.1	5.2	14.0	4.30	
458 Winchester Magnum*	210	S.P.	2490	2170	1900	1700	1500	1300	1100	900	0.7	2.9	7.1	8.05	
7 mm. Mauser Express*	175	S.P.	2490	2170	1900	1700	1500	130							

REMINGTON R.F. CARTRIDGES—BALLISTICS AND PRICES

CARTRIDGE		BULLET	VELOCITY—FEET PER SECOND		ENERGY—FOOT POUNDS		M.L. TRAJECTORY		PRICE
"28 per Box	"28 per Box	Weight	Grains	Style	Muzzle	100 Yards	Muzzle	100 Yards	Per 10
REMINGTON "H-SPEED"									
22 Short.....	29	Lead	1125	920	81	54	4.3		\$.45
22 Short.....	27	Hollow Point	1151	920	80	51	4.2		.75
22 Short Hi-Speed Rocket.....	15	—	1710	—	97	—	—		.37
22 Long.....	29	Lead	1240	965	97	60	3.8		.30
22 Long Rifle.....	40	Lead	1335	1043	158	97	3.3		.40
22 Long Rifle.....	36	Hollow Point	1365	1040	149	163	3.0		.30
22 W.R. (Remington Special).....	43	Lead	1450	1110	210	188	2.7		2.00
REMINGTON—STANDARD VELOCITY									
22 Short.....	29	Lead	1045	—	70	—	—		.45
22 Short Gallery Special Spatter-Load.....	29	Lead	1045	—	70	—	—		3.25
22 Short Spatter-Load.....	29	Lead	1045	—	70	—	—		.45
22 Short New and Improved Spatter-Load.....	15	—	1710	—	97	—	—		.37
22 Long Rifle.....	40	Lead	1145	975	116	84	4.0		.40
22 Winchester Automatic.....	40	Lead	1055	930	111	86	4.0		2.00
REMINGTON—SPECIAL MATCH CARTRIDGES									
22 Long Rifle—Remington Match.....	40	Lead	1145	975	116	84	4.0		1.25

REMINGTON SHOT SHELLS

Gauge and Brand	Length Shells	Powder Grains	Shot Oz.	Size Shot	RETAIL PER BOX ZONES 1-3-4-5
EXTRA LONG RANGE—Flat-Top Crimp					
10 Ga. Remington Exp.....	3 1/2	3 1/2	2 1/2	2, 4	\$4.25 \$4.30
12 Ga. Remington Exp.....	3 1/2	3 1/2	2 1/2	2, 4, 5, 6, 7 1/2, 9	3.50 3.55
12 Ga. Remington "SP".....	3 1/2	3 1/2	2 1/2	2, 4, 5, 6, 7 1/2, 9	3.45 3.70
*16 Ga. Remington "SP".....	3 1/2	3 1/2	2 1/2	2, 4, 5, 6, 7 1/2, 9	3.20 3.25
12 Ga. Remington Exp.....	3 1/2	3 1/2	2 1/2	2, 4, 5, 6, 7 1/2, 9	3.25 3.30
*16 Ga. Remington "SP".....	3 1/2	3 1/2	2 1/2	2, 4, 5, 6, 7 1/2, 9	3.05 3.10
20 Ga. Remington Exp.....	3 1/2	3 1/2	2 1/2	2, 4, 5, 6, 7 1/2, 9	3.15 3.20
410 Ga. Remington Exp.....	3 1/2	3 1/2	2 1/2	2, 4, 5, 6, 7 1/2, 9	2.35 2.40
410 Ga. Remington "SP".....	3 1/2	3 1/2	2 1/2	2, 4, 5, 6, 7 1/2, 9	2.75 2.80
MAGNUM LOADS					
10 Ga. Remington Exp.....	3 1/2	5	2	2, 4	7.25 7.30
12 Ga. Remington Exp.....	3 1/2	4 1/2	2 1/2	2, 4, 5, 6	4.00 4.05
12 Ga. Remington "SP".....	3 1/2	4 1/2	2 1/2	2, 4, 5, 6	4.15 4.20
12 Ga. Remington Exp.....	3 1/2	4 1/2	2 1/2	2, 4, 5, 6	4.75 4.80
12 Ga. Remington "SP".....	3 1/2	4 1/2	2 1/2	2, 4, 5, 6	4.90 4.95
12 Ga. Remington Exp.....	3 1/2	4 1/2	2 1/2	2, 4, 5, 6	4.40 4.45
12 Ga. Remington "SP".....	3 1/2	4 1/2	2 1/2	2, 4, 5, 6	4.55 4.60
*16 Ga. Remington "SP".....	3 1/2	3 1/2	2 1/2	2, 4, 5, 6	3.50 3.55
*20 Ga. Remington "SP".....	3 1/2	3 1/2	2 1/2	2, 4, 5, 6	3.20 3.25
*20 Ga. Remington "SP".....	3 1/2	3 1/2	2 1/2	2, 4, 5, 6	3.35 3.40
BUCKSHOT—Rifled Crimp					
12 Ga. Remington Exp.....	3 1/2	4	—	00 Buck—12 Falters	4.75 4.80
12 Ga. Remington "SP".....	3 1/2	4	—	00 Buck—12 Falters	4.90 4.95
12 Ga. Remington Exp.....	3 1/2	4 1/2	—	00 Buck—15 Falters	5.45 5.50
12 Ga. Remington "SP".....	3 1/2	4 1/2	—	00 Buck—15 Falters	5.60 5.65
12 Ga. Remington Exp.....	3 1/2	4 1/2	—	4 Buck—41 Falters	5.45 5.50
12 Ga. Remington "SP".....	3 1/2	4 1/2	—	00 Buck—9 Falters	4.20 4.25
12 Ga. Remington Exp.....	3 1/2	4 1/2	—	00 Buck—9 Falters	4.35 4.40
12 Ga. Remington "SP".....	3 1/2	4 1/2	—	0 Buck—12 Falters	4.20 4.25
12 Ga. Remington Exp.....	3 1/2	4 1/2	—	1 Buck—12 Falters	4.35 4.40
12 Ga. Remington "SP".....	3 1/2	4 1/2	—	1 Buck—12 Falters	4.50 4.55
12 Ga. Remington Exp.....	3 1/2	4 1/2	—	1 Buck—12 Falters	4.20 4.25
12 Ga. Remington "SP".....	3 1/2	4 1/2	—	4 Buck—27 Falters	4.20 4.25
12 Ga. Remington Exp.....	3 1/2	4 1/2	—	4 Buck—27 Falters	4.35 4.40
12 Ga. Remington "SP".....	3 1/2	4 1/2	—	1 Buck—12 Falters	4.20 4.25
16 Ga. Remington Exp.....	3 1/2	3	—	1 Buck—12 Falters	4.20 4.25
16 Ga. Remington "SP".....	3 1/2	3	—	1 Buck—20 Falters	4.20 4.25
*20 Ga. Remington "SP".....	3 1/2	2 1/2	—	3 Buck—20 Falters	4.20 4.25
RIFLED SLUG—Rifled Crimp					
12 Ga. Remington Exp.....	3 1/2	3 1/2	1	Rifled Slug	5.25 5.30
12 Ga. Remington "SP".....	3 1/2	3 1/2	1	Rifled Slug	5.40 5.45
16 Ga. Remington Exp.....	3 1/2	3 1/2	1	Rifled Slug	5.00 5.05
20 Ga. Remington Exp.....	3 1/2	3 1/2	1	Rifled Slug	4.80 4.85
28 Ga. Remington Exp.....	3 1/2	3 1/2	1	Rifled Slug	4.90 4.95
410 Ga. Remington Exp.....	3 1/2	3 1/2	1	Rifled Slug	4.50 4.55
FIELD LOADS—Flat-Top Crimp					
12 Ga. Shur Shot.....	3 1/2	3 1/2	1	4, 5, 6, 8	2.75 2.80
12 Ga. Shur Shot.....	3 1/2	3 1/2	1	4, 5, 6, 8, 9	2.90 2.95
12 Ga. Shur Shot.....	3 1/2	3 1/2	1	4, 5, 6, 8	2.95 3.00
12 Ga. Shur Shot.....	3 1/2	3 1/2	1	7 1/2, 8	3.10 3.15
12 Ga. Shur Shot.....	3 1/2	3 1/2	1	4, 5, 6, 8, 9	2.60 2.65
16 Ga. Shur Shot.....	3 1/2	3 1/2	1	4, 5, 6, 8, 9	2.75 2.80
20 Ga. Shur Shot.....	3 1/2	3 1/2	1	4, 5, 6, 8, 9	2.45 2.50
20 Ga. Shur Shot.....	3 1/2	3 1/2	1	4, 6, 8	2.65 2.70
SCATTER LOADS—Rifled Crimp					
12 Ga. Shur Shot.....	3 1/2	3 1/2	1	8	3.05 3.10
16 Ga. Shur Shot.....	3 1/2	3 1/2	1	8	2.75 2.80
20 Ga. Shur Shot.....	3 1/2	3 1/2	1	8	2.60 2.65
TARGET LOADS—Flat-Top Crimp					
12 Ga. Shur Shot.....	3 1/2	3 1/2	1	7 1/2, 8, 9 New Load	2.90 2.95
12 Ga. Shur Shot.....	3 1/2	3 1/2	1	7 1/2, 8 New Load	3.00 3.05
16 Ga. Shur Shot.....	3 1/2	3 1/2	1	9	2.60 2.65
20 Ga. Shur Shot.....	3 1/2	3 1/2	1	9	2.45 2.50
28 Ga. Remington Exp.....	3 1/2	3 1/2	1	9	3.15 3.20
410 Ga. Remington Exp.....	3 1/2	3 1/2	1	9	2.35 2.40
410 Ga. Remington "SP".....	3 1/2	3 1/2	1	9	2.75 2.80

*Paper shells in these loads available only while stock lasts.

Courtesy Remington Arms Co.

FEDERAL SHOT SHELLS

Lead No.	Length Shells	Gauge	Powder Grains	Quince Shot	SHOT SIZES Standard Shot	RETAIL PER BOX ZONES 1-3-4-5
HI-POWER Brand						
HP127.....	2 1/2	12	3 1/2	1 1/2	8, 2, 4, 5, 6, 7 1/2, 9	\$3.50 \$3.55
HP143.....	2 1/2	16	3 1/2	1 1/2	2, 4, 5, 6, 7 1/2, 9	\$3.20 3.25
HP164.....	2 1/2	16	3 1/2	1 1/2	2, 4, 5, 6, 7 1/2, 9	3.05 3.10
HP203.....	2 1/2	20	3 1/2	1 1/2	2, 4, 5, 6, 7 1/2, 9	3.15 3.20
HP281.....	2 1/2	28	3 1/2	1 1/2	4, 5, 6, 7 1/2, 9	2.35 2.40
HP412.....	2 1/2	410	Max	1 1/2	4, 5, 6, 7 1/2, 9	2.75 2.80
HP413.....	3	410	Max	1 1/2	4, 5, 6, 7 1/2, 9	2.75 2.80
MAGNUM LOADS						
HP120.....	2 1/2	12	4	1 1/2	2, 4, 5, 6	4.00 4.05
HP131.....	3	12	4 1/2	1 1/2	8, 2, 4, 5, 6	4.75 4.80
HP145.....	2 1/2	16	4 1/2	1 1/2	8, 2, 4, 5, 6	4.40 4.45
HP205.....	2 1/2	20	3 1/2	1 1/2	2, 4, 5, 6, 7 1/2, 9	3.50 3.55
HP282.....	2 1/2	28	3 1/2	1 1/2	4, 5, 6, 7 1/2, 9	3.20 3.25
HP282.....	2 1/2	28	3 1/2	1 1/2	4, 5, 6, 7 1/2, 9	3.40 3.45
BUCKSHOT—Rifled Slugs						
HP131.....	3	12	Sup-Mag	1 1/2	00 Buck—15 Falters	5.45 5.50
HP127.....	2 1/2	12	Max	1 1/2	00 Buck—12 Falters	4.20 4.25
HP127.....	2 1/2	12	Max	1 1/2	00 Buck—9 Falters	4.20 4.25
HP127.....	2 1/2	12	Max	1 1/2	1 Buck—16 Falters	4.20 4.25
HP127.....	2 1/2	12	Max	1 1/2	4 Buck—27 Falters	4.20 4.25
HP127.....	2 1/2	12	Max	1 1/2	1 Buck—12 Falters	4.20 4.25
HP127.....	2 1/2	12	Max	1 1/2	3 Buck—20 Falters	4.20 4.25
HP127.....	2 1/2	12	Max	1 1/2	Rifled Slug	5.25 5.30
HP127.....	2 1/2	12	Max	1 1/2	Rifled Slug	5.00 5.05
HP127.....	2 1/2	12	Max	1 1/2	Rifled Slug	4.80 4.85
HP127.....	2 1/2	12	Max	1 1/2	Rifled Slug	4.50 4.55
MONARK Brand						
M120.....	2 1/2	12	3	1 1/2	4, 5, 6, 8	2.75 2.80
M121.....	2 1/2	12	3	1 1/2	4, 5, 6, 8, 9	2.90 2.95
M123.....	2 1/2	12	3 1/2	1 1/2	4, 5, 6, 7 1/2, 8, 9	2.95 3.00
M124.....	2 1/2	12	3 1/2	1 1/2	7 1/2, 8	3.10 3.15
M161.....	2 1/2	16	2 1/2	1 1/2	4, 5, 6, 8, 9	2.60 2.65
M162.....	2 1/2	16	2 1/2	1 1/2	4, 5, 6, 7 1/2, 8, 9	2.75 2.80
M201.....	2 1/2	20	2 1/2	1 1/2	4, 5, 6, 8, 9	2.45 2.50
M202.....	2 1/2	20	2 1/2	1 1/2	4, 5, 6, 7 1/2, 8, 9	2.65 2.70
OPEN LOADS						
M125.....	2 1/2	12	3	1 1/2	8	3.05 3.10
M160.....	2 1/2	16	2 1/2	1 1/2	8	2.75 2.80
M205.....	2 1/2	20	2 1/2	1 1/2	8	2.60 2.65
TARGET LOADS						
M119.....	2 1/2	12	2 1/2	1 1/2	7 1/2, 8, 9	2.90 2.95
T120.....	2 1/2	12	3	1 1/2	7 1/2, 8, 9	2.90 2.95
S165.....	2 1/2	16	2 1/2	1 1/2	8, 9	2.60 2.65
S206.....	2 1/2	20	2 1/2	1 1/2	8, 9	2.45 2.50
S280.....	2 1/2	28	2 1/2	1 1/2	9	3.15 3.20
S412.....	2 1/2	410	Max	1 1/2	9	2.35 2.40
S413.....	3	410	Max	1 1/2	9	2.75 2.80



AMMO

BALLISTIC DATA FOR WEATHERBY MAGNUM CALIBERS

Bullets		Velocity				Foot-Pounds of Energy				Trajectory*			
Weight	Type	100 yds.	200 yds.	300 yds.	Muzzle	100 yds.	200 yds.	300 yds.	400 yds.	100 yds.	200 yds.	300 yds.	400 yds.
357 Weatherby Magnum Price, \$6,600													
87	SpP	3730	3450	3100	2850	2971	2615	2267	2004	5.9	6.9	8.2	9.5
117	RN	3730	3450	3100	2850	2971	2615	2267	2004	5.9	6.9	8.2	9.5
270 Weatherby Magnum Price, \$6,600													
300	SpP	3920	3575	3275	2980	2828	2460	2167	1972	1.4	4.4	8.5	12.5
357 Weatherby Magnum Price, \$6,600													
110	SpP	3950	3545	3180	2860	3378	2974	2541	1968	6.8	27.7	6.5	21.1
130	SpP	3950	3545	3180	2860	3378	2974	2541	1968	6.8	27.7	6.5	21.1
150	SpP	3950	3545	3180	2860	3378	2974	2541	1968	6.8	27.7	6.5	21.1
150	RN	3240	2955	2590	2300	4489	2870	2324	1761	1.3	5.0	10.1	15.1
200	RN	3010	2800	2460	2160	4489	2870	2324	1761	1.3	5.0	10.1	15.1
7mm Weatherby Magnum Price, \$6,600													
139	SpP	3465	3195	2970	2685	3709	3153	2649	2233	1.0	3.2	7.1	11.1
154	SpP	3280	3035	2820	2607	3627	3160	2727	2330	1.2	3.8	8.3	12.3
173	RN	3067	2790	2600	2270	3662	3024	2429	2000	1.5	5.0	11.5	15.5
300 Weatherby Magnum Price, \$7,700													
110	SpP	4050	3625	3300	3095	3850	3479	3078	2678	1970	8.7	27.6	46.6
150	SpP	3930	3360	3095	2850	4389	3751	3195	2706	8.0	30.6	47.6	71.6
200	SpP	3810	3240	2975	2725	4477	3810	3254	2875	10.0	35.0	50.0	75.0
220	RN	3000	2740	2475	2230	4000	3667	3288	2892	1.9	6.9	12.9	18.9
300 Weatherby Magnum Price, \$8,800													
270	RN	2940	2680	2420	2175	5181	4307	3531	2835	1.9	6.5	12.5	18.5
300	RN	2800	2510	2270	2025	5223	4197	3432	2725	2.5	6.4	12.5	18.5
378 Weatherby Magnum Price, \$15,000													
300	RN	3012	2725	2440	2200	6075	4954	4209	3424	1.4	4.2	8.9	13.9
300	RN	3212	2725	2440	2200	6075	4954	4209	3424	1.4	4.2	8.9	13.9
460 Weatherby Magnum Price, \$17,500													
300	RN	2725	2480	2240	2025	8245	6820	5570	4550	2.0	7.0	13.0	19.0

REMINGTON C.F. PISTOL AND REVOLVER CARTRIDGES—BALLISTICS AND PRICES

Wet Gr.	Catridge	BULLET		Velocity Feet Per Sec.	Wet Feet Per Sec.	Barrel Feet Per Sec.	Front P.C.
		Gr.	Style				
22 Jw		40	S.P.	2460	535	87½	4.50
22 (6.35 mm.) Automatic		50	AMP	810	73	7	4.25
22 (6.35 mm.) Long		100	AMP	1010	100	10	4.25
22 (7.63 mm.) Weaver Automatic		85	AMP	1410	375	3½	4.75
22 (7.63 mm.) Long		100	AMP	1410	375	3½	4.75
22 Long Cal.		80	Lead	790	111	4	3.85
22 Long Cal.		100	Lead	790	111	4	3.85
22 (7.65 mm.) Automatic Pistol		75	AMP	980	145	4	3.85
22 (7.65 mm.) Long		100	AMP	780	107	7	3.85
22 Smith & Wesson Long		98	Lead	705	97	3	3.65
22 Smith & Wesson Long		100	Lead	705	97	3	3.65
22½ Magnum Hi-Speed		158	M.P.	1420	377	8½	4.25
22½ Magnum Hi-Speed		158	M.P.	1420	377	8½	4.25
9 mm. Long		124	AMP	1130	345	4	4.00
9 mm. Long		124	AMP	1130	345	4	4.00
22 Smith & Wesson		200	AMP	853	256	6	4.00
22 Special		138	AMP	853	256	6	4.00
22 Special		138	AMP	853	256	6	4.00
22 Special Wad. Corder Targetmaster		148	Lead	770	193	6	3.80
22 Special Wad. Corder Targetmaster		148	Lead	770	193	6	3.80
Master		110	Special	1320	433	5	3.80
22 Smith & Wesson Hi-Speed		110	Special	1320	433	5	3.80
22 Colt New Police		150	Lead	880	154	3	3.80
22 Short Colt		150	Lead	740	140	3	3.80
22 Long Cal.		130	Lead	770	197	6	4.00
22 Long Cal.		130	Lead	770	197	6	4.00
22½ Automatic Hi-Speed		120	AMP	1040	469	5	3.10
22½ Automatic		130	AMP	1040	469	5	3.10
280 Automatic		95	AMP	955	192	3½	4.00
280 Automatic		120	AMP	955	192	3½	4.00
44 Smith & Wesson Special		246	Lead	1735	311	6½	4.10
44 Smith & Wesson Special		246	Lead	1735	311	6½	4.10
44 Remington-Union Hi-Speed		240	G. G.	1400	400	4	3.80
44 Remington-Union Hi-Speed		240	S.P.	1470	410	4	3.80
44 Automatic		230	AMP	1085	405	3½	4.10
44 Automatic		230	AMP	1085	405	3½	4.10
44 Automatic Wad. Corder Targetmaster		185	AMP	775	245	3	3.80
44 Automatic Wad. Corder Targetmaster		185	AMP	775	245	3	3.80

*Mid-range, with telescope sights.
Bullets—SpP: Spire Point; RN: Round Nose. All cartridges 20 per box.

normal Ballistics

Index no.	Cartridge	Bullet Weight grs.	Velocity, feet per sec.				Energy, foot pounds				Max. height of impact, in. ft.		
			Muzzle	100 yds.	V	200 yds.	Muzzle	100 yds.	E	200 yds.	Tr., 100 yds.	Tr., 200 yds.	Tr., 300 yds.
	.220 Swift												
2	Soft point pointed	50	4111	3411	3123	2681	1877	1448	1090	799	-2	.9	3.0
1	Full jacket semi pointed	50	4111	3448	2950	2481	1877	1329	962	585	-3	.9	3.1
	.222 Rem.												
3	Soft point pointed	50	3202	2649	2170	1750	1137	786	523	340	.0	2.0	6.2
4	Full jacket semi pointed	50	3202	2419	2000	1630	1137	756	430	295	.0	2.1	7.1
	.243 Win.												
5	Hollow point	75	3550	3070	2660	2290	2041	1570	1179	873	.0	1.4	4.1
151	Soft point pointed	75	3550	2790	2360	2020	2093	1629	1423	1195	.1	1.8	5.0
148	Full jacket semi pointed	100	3070	2790	2460	2120	2093	1629	1423	1195	.1	1.8	5.0
	.244 Rem.												
7	Hollow point	75	3550	3070	2660	2290	2041	1570	1179	873	.0	1.4	4.1
8	Soft point pointed	90	3202	2930	2533	2230	2047	1624	1279	994	.1	1.6	4.9
	.250 Savage												
9	Soft point pointed	87	3202	2485	2157	2054	1778	1493	1074	815	.0	1.9	5.8
10	Soft point pointed	110	2822	2314	1916	1666	1719	1364	1096	850	.1	2.2	6.6
101	Soft point pointed	120	3445	2425	2177	1914	1645	1342	1243	1028	.2	2.5	7.6
	.257 Roberts												
11	Soft point pointed	120	2905	2598	2291	2020	1868	1438	1166	906	.1	2.1	6.2
12	Soft point pointed	120	2645	2405	2177	1914	1863	1542	1263	1028	.2	2.5	7.0
	6.5 Japs.												
13	Soft point pointed boat tail	139	2428	2280	2130	1990	1820	1625	1401	1223	.3	2.8	7.7
14	Soft point round nose	156	2067	1871	1679	1529	1821	1213	992	810	.4	4.4	11.9
	6.5 x 54 MS												
15	Soft point pointed	77	3117	2731	2367	2036	1462	1274	960	710	.0	1.9	5.6
16	Soft point pointed boat tail	120	2730	2420	2120	1870	2058	1808	1591	1388	.2	2.4	6.5
164	Full jacket boat tail	156	2481	2240	2020	1840	2098	1738	1432	1173	.3	3.0	8.2
143	Full jacket round nose	156	2441	2240	2020	1840	2098	1738	1432	1173	.3	3.0	8.2
	6.5 x 55												
105	Soft point pointed	77	3110	2730	2370	2040	1464	1235	961	712	.0	1.9	5.6
15	Soft point pointed boat tail	120	2910	2705	2397	2120	2050	1512	1085	762	.0	1.9	6.0
20	Soft point pointed boat tail	120	2799	2433	2140	2020	2142	1863	1422	1142	.1	2.0	5.4
22	Soft point pointed boat tail	120	2799	2430	2140	2020	2142	1863	1422	1142	.1	2.0	5.4
17	Soft point boat tail	120	2799	2430	2140	2020	2142	1863	1422	1142	.1	2.0	5.4
18	Soft point round nose	120	2799	2430	2140	2020	2142	1863	1422	1142	.1	2.0	5.4
19	Soft point round nose	156	2493	2271	2042	1847	2153	1767	1473	1208	.3	2.9	7.9
	.270 Win.												
24	Soft point pointed	110	3248	2964	2694	2435	2578	2150	1773	1448	.0	1.4	4.3
24	Soft point pointed boat tail	130	3140	2884	2629	2404	2547	2041	1649	1347	.0	1.6	4.7
24	Hollow point boat tail	130	3140	2860	2593	2338	2487	2362	1941	1578	.0	1.6	4.7
24	Full jacket boat tail	156	2753	2564	2354	2147	2467	2290	2188	1964	.1	1.4	4.3
28	Soft point pointed boat tail	150	2902	2614	2344	2162	2616	2290	1977	1705	.0	1.0	3.0
161	Full jacket pointed	150	2902	2616	2346	2162	2616	2290	1977	1705	.1	2.0	5.2



6,5 x 55

PROPERTY OF
ASSASSINATION

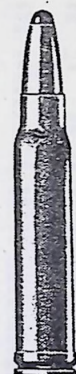
norma —Continued

Index no.	Cartridge	Bullet Weight grs.	Velocity, feet per sec.				Energy, foot pounds				Max. height of trajectory, inches		
			Muzzle	100 yds.	200 yds.	300 yds.	Muzzle	100 yds.	200 yds.	300 yds.	100 yds.	200 yds.	300 yds.
29	7 x 57												
30	Soft point pointed	110	2048	2797	2578	2277	2300	1904	1541	1247	.0	1.4	3.0
31	Soft point pointed boat-tail	130	2754	2639	2331	2123	3230	2148	1814	1514	.1	2.2	4.2
32	Full jacket boat-tail	150	2754	2539	2321	2123	3230	2148	1814	1514	.1	2.2	4.2
33	Soft point round nose	175	2490	2170	1900	1680	2410	1830	1420	1097	.4	3.3	9.0
34	7 x 61 S & W (.76 in.)												
35	Soft point pointed boat-tail	100	3108	2977	2757	2595	3415	3045	2701	2397	.0	1.5	4.3
36	30 US Cartr.												
37	Soft point round nose	110	1970	1995	1830	1690	948	422	412	290	.8	4.4	19.8
38	Soft point pointed boat-tail	110	1970	1995	1830	1690	948	422	412	290	.8	4.4	19.8
39	32 - 32 Win.												
40	Soft point flat nose	170	2220	1890	1630	1410	1841	1347	1020	750	.7	4.1	11.9
41	308 Win.												
42	Soft point pointed boat-tail	130	2920	2890	2730	2530	3428	1927	1527	1190	.1	2.1	4.2
43	Soft point pointed boat-tail	150	2640	2590	2330	2130	3725	2000	1740	1420	.1	2.0	5.9
44	Soft point pointed boat-tail	100	2610	2400	2210	2020	2725	2303	1933	1621	.3	2.5	4.4
45	308 Norma Magnum												
46	Norma "Dust Coat"	180	3100	2881	2468	2144	3642	2318	1944	1627	.0	1.4	4.4
47	30 - 06												
48	Soft point pointed boat-tail	130	3281	2951	2434	2238	3108	2514	2006	1578	.1	1.5	4.4
49	Full jacket boat-tail	130	3281	2951	2434	2238	3108	2514	2006	1578	.1	1.5	4.4
50	Soft point pointed boat-tail	150	2972	2600	2402	2141	2943	2372	1922	1527	.0	1.9	5.7
51	Full jacket boat-tail	150	2972	2600	2402	2141	2943	2372	1922	1527	.0	1.9	5.7
52	Soft point pointed boat-tail	180	2700	2484	2294	2107	2914	2487	2107	1778	.1	2.3	4.4
53	Full jacket boat-tail	180	2700	2484	2294	2107	2914	2487	2107	1778	.1	2.3	4.4
54	Soft point round nose	180	2700	2530	2345	2156	2914	2539	2234	1944	.1	2.2	6.1
55	Full jacket round nose	220	2411	2197	1994	1829	2642	2138	1842	1599	.3	3.1	8.5
56	300 H & H												
57	Soft point pointed boat-tail	180	2920	2764	2500	2297	3420	2927	2499	2100	.0	1.9	5.3
58	Full jacket pointed boat-tail	180	2920	2764	2500	2297	3420	2927	2499	2100	.0	1.9	5.3
59	Soft point round nose	220	2425	2400	2170	1984	3367	2614	2301	1927	.3	2.5	7.8
60	Full jacket round nose	220	2425	2400	2170	1984	3367	2614	2301	1927	.3	2.5	7.8
61	7.65 Argentine												
62	Soft point pointed	150	2920	2420	2355	2105	2941	2304	1840	1474	.1	2.0	5.8
63	303 Brit.												
64	Soft point pointed	130	2789	2480	2195	1929	2244	1780	1311	1075	.1	2.3	4.7
65	Soft point pointed	150	2770	2440	2170	1920	2443	1923	1459	1241	.1	2.2	4.5
66	Soft point pointed boat-tail	100	2540	2340	2147	1945	2549	2187	1823	1544	.2	2.7	7.3
67	Soft point round nose	215	2182	1947	1723	1541	2273	1810	1421	1134	.5	4.1	11.2
68	7.7 Jap.												
69	Soft point pointed	130	2930	2425	2340	2045	2512	2004	1581	1231	.1	2.0	5.9
70	Soft point pointed boat-tail	180	2493	2293	2101	1922	2484	2100	1745	1477	.3	2.5	7.7
71	Soft point round nose	215	2244	2027	1802	1620	2448	2154	1850	1522	.5	3.2	10.4
72	8 x 57 JR												
73	Soft point round nose	194	2342	2045	1741	1513	2428	1820	1520	994	.4	2.7	10.4
74	8 x 57 JRS												
75	Soft point round nose	194	2295	2074	1795	1525	2477	1813	1497	1024	.4	3.5	10.3
76	8 x 57 J												
77	Soft point round nose	159	2273	2342	2030	1731	2418	1970	1455	1032	.3	2.4	7.9
78	Full jacket round nose	159	2273	2342	2030	1731	2418	1970	1455	1032	.3	3.1	9.1
79	Soft point round nose	184	2524	2195	1894	1627	2778	2097	1540	1152	.3	3.1	9.1
80	8 x 57 JS												
81	Soft point pointed	123	2687	2415	2170	1817	2727	1728	1264	942	.3	2.3	4.8
82	Soft point round nose	139	2723	2443	2030	1734	2418	1970	1455	1032	.3	2.5	7.9
83	Soft point round nose	194	2425	2195	1894	1627	2778	2097	1540	1152	.3	3.1	9.1
84	Full jacket boat-tail	198	2425	2414	2214	2028	3021	2540	2140	1808	.7	2.5	4.9
85	Soft point round nose	198	2425	2414	2214	2028	3021	2540	2140	1808	.7	2.4	4.5
86	Soft point round nose	227	2320	2085	1855	1640	2722	2192	1725	1313	.4	3.4	9.5
87	358 Win.												
88	Soft point semi pointed	200	2530	2210	1910	1640	2942	2170	1421	1195	.4	3.1	8.8
89	Soft point semi pointed	250	2150	2010	1780	1570	2611	2243	1759	1319	.4	3.9	10.4
90	358 Norma Magnum												
91	Soft point semi pointed	250	2790	2493	2231	2001	4222	3451	2744	2223	.3	2.4	4.4
92	9.3 x 57												
93	Full jacket boat-tail	222	2329	2022	1743	1527	2795	2127	1622	1220	.4	3.7	10.4
94	Soft point round nose	254	2067	1818	1595	1424	2714	2099	1414	1252	.4	4.8	13.3
95	9.3 x 62												
96	Full jacket boat-tail	227	2425	2204	2009	1742	3551	2735	2000	1544	.3	2.8	8.1
97	Soft point pointed	232	2425	2200	2092	1835	3551	2944	2255	1773	.3	2.7	7.4
98	Soft point round nose	284	2342	2088	1827	1612	3544	2749	2144	1651	.4	3.5	9.8
99	Full jacket round nose	284	2342	2088	1827	1612	3544	2749	2144	1651	.4	3.5	9.8
100	9.3 x 74 R												
101	Full jacket boat-tail	230	2425	2204	2009	1742	3551	2735	2000	1544	.3	2.8	8.1
102	Full jacket pointed	232	2425	2200	2092	1835	3551	2944	2255	1773	.3	2.7	7.4
103	Soft point round nose	284	2342	2088	1827	1612	3544	2749	2144	1651	.4	3.5	9.8
104	Full jacket round nose	284	2342	2088	1827	1612	3544	2749	2144	1651	.4	3.5	9.8
105	375 H & H												
106	Soft point semi pointed	270	2740	2440	2210	1990	4502	3679	2979	2375	.3	2.4	4.5
107	Soft point semi pointed	300	2530	2290	2040	1830	4323	3444	2773	2221	.3	2.8	7.4

Trajectory is given in relation to line of sight 1" above center of bore at muzzle.



308 Norma Magnum



358 Norma Magnum

BP or Bk—Black Powder
C—Cardite
MC—Mica-Cellulose
CN—Catal. Canite
B—Bastard Masilla
SM—Soft Mass
CP—Copper Paint
CT—Copper Tube
L—Lead
MP—Mellow Paint

BP or Bk—Black Powder
C—Cardite
MC—Mica-Cellulose
CN—Catal. Canite
B—Bastard Masilla
SM—Soft Mass
CP—Copper Paint
CT—Copper Tube
L—Lead
MP—Mellow Paint

Mr. CORNWELL. In addition to the characteristics of the form which you have just described as indicating that the weapon fired a supersonic bullet, was there anything else about the waveforms that you discovered in your analysis?

Mr. WEISS. Yes; there are perhaps two things that are relevant to confirming that what we are dealing with here is not noise but is in fact a sound recording of a bullet, of a gunshot by equipment such as was used by the Dallas police motorcycle men. First and simplest is the following: that if, in fact, this was—no, let me put it differently.

You can in, as part of the prediction, you can determine what the general pattern of the shape will be at the microphone as you receive it. Now, for example, if at the microphone, as you receive it, you expect that—well, let me go back to the blackboard here, if I may.

Now if the muzzle blast came in looking something like this, it goes up, it goes down, and then it sort of settles back, then from some of these surfaces you can quite accurately predict that it will do exactly the same sort of thing, let us say that the echo shape will be simply a mirror image replica of the muzzle blast.

Now if this is noise, then there is nothing which says that it has to start out going positive. It could equally, let us say, going upwards, the sound could equally, with equal probability, start out going this way and come back this way. But in every one of these instances where we identified an echo as coming back from a flat reflecting surface, it has precisely the correct replication quality when compared to the pattern of the muzzle blast.

As I say, for noise, you have no right to expect that sort of thing will happen. It is like saying I have a coin which is going to flip once, and the first time it comes up heads, and thereafter every time it is going to come up heads. It doesn't happen that way.

The second thing is; if you look at these patterns in somewhat more expanded detail than perhaps is visible here, you will see in the case of the muzzle blast there is a very sharp, short, initial, positive, upward going spike or peak, then it goes strongly down, and then it comes up again, and so on.

Now, in fact, as recorded through a high-fidelity system and an open microphone, it really does this, it is very sharply upward first, then it goes down and so on.

Well, something must have happened to this upward, strong one to make it seem much smaller. It now is just a little bitty one over here. It goes down, and now it comes up afterwards, and does that sort of thing. And we considered why that is so, and thought that it is probable that if this is a microphone on the motorcycle, and the motorcycle, in fact, is over here in Dealey Plaza, facing in this direction, and if there is a rifle over here, that the windshield of the motorcycle is sort of between the sound that comes directly at it from the muzzle blast and the microphone, so the windshield is screening the microphone to some degree.

Well, the effect of that can be predicted. But to confirm our understanding of this, we arranged with the New York City Police Department to perform some experiments at their shooting range in the Bronx. We went out there, and they trotted out an old Harley-Davidson motorcycle and put a transmitter on it, vintage

1963 or 1964, and an old microphone pretty much the same kind as was used by the Dallas Police Department, and we performed some experiments with people firing rifles at various locations, sometimes with the motorcycle facing the shooter, sometimes with the motorcycle crosswise to the shooter. At the same time we made recordings using high fidelity equipment of the sounds of the shots.

Now there were two kinds of recordings made. The first, as I say, was high fidelity equipment, good microphone, good recorder on the spot. The second was through the microphone which was on the motorbike, which was a microphone of the type used in Dallas, through the transmitter, and recorded downtown at the police communications laboratory. And we compared the results of these two recordings, and what we found was exactly what we had thought we would find, that is, that in the case of the high fidelity recording, we got that kind of big, first spike upward and downward, and so on. In the case of the recording made through the police microphone, that first spike was greatly attenuated and it went negative and came back up and so on. This was true, however, only in the case where the motorcycle was facing the rifle.

When the motorcycle was crosswise to the rifle, the recording made by the police microphone fairly closely matched, looks, looked pretty much like, with some distortions, but looked pretty much like the recording made using the high fidelity equipment. So it was essentially confirmed that the windshield really does have this effect on reducing the strength of that initial, very sharp spike received, and, of course, this is what we have over here. It is consistent with the assumption that this is a microphone behind the windshield facing a rifle.

Mr. CORNWELL. Thank you, I have no further questions.

Chairman STOKES. Professor, you may resume your seat at the witness table.

The committee will now operate under the 5-minute rule.

Professor Weiss, I guess I am sort of reminded this morning of how, some months ago, when several members of this committee and I appeared before the House Administration Committee, which is the committee of the Congress that recommends funding for all of the committees in Congress, and one of the distinguished members of the committee posed the question to me, he said, "Stokes, has your investigation revealed anything that would change the course of history?" And I said to that Member of Congress that nothing that we had uncovered thus far would, in my opinion, change the course of history.

I am sure that as a scientist that you are aware of the enormous impact that your testimony has here today, because if the committee accepts your testimony, the committee then, in effect, accepts the fact that on that particular day in 1963 when the President was assassinated, there were two shooters in Dealey Plaza.

From that premise, one can further assume association, and then from association there can be the further legal assumption, the possibility of a conspiracy. So I am sure that you are aware of the enormous impact of your testimony here today in terms of history.

Mr. WEISS. I am, sir; yes, sir.

Chairman STOKES. For that reason, I would assume that you realize that for many years to come your work will be scrutinized

PROPERTY OF
ASSASSINATION

extremely carefully by persons who are interested in this fascinating aspect of evidentiary material.

I would, therefore, at this point ask you the question I asked you in executive session. I would ask you to play the devil's advocate for us for a moment. Obviously there are other scientists in your field, men who are, or women perhaps, who are as eminently qualified as you and your associate are.

Would you, for this committee, then tell us what type of criticisms could other members of your field have of your work here?

Mr. WEISS. Well, a few things. I would, of course, assume that other researchers would read our written report before volunteering criticisms of what we have presented here today. But if I were a critic of this work, I would look to see if, in fact, it left out of these considerations any important parameters of the situation that existed in Dealey Plaza on November 22, 1963, that could affect the predicted positions of echoes, as I have done.

Now, when we did this work, we tried very hard to take into account every possible thing that might affect the accuracy of our predictions. We took into account, for example, the fact that the map itself is probably accurate to only about 1 foot, so we knew that there was no point in attempting to push for accuracies greater than that quoted, approximately 1 millisecond.

We took into account the temperature as given to us by staff members of this committee. We investigated the question, the fact of whether humidity might have any affect on the velocity of sound. We considered the question of whether there had been any significant changes in the architecture in Dealey Plaza area for those structures that could have given rise to echoes. We considered the question of waveshape, and of distortion of microphone, and of the transmitter, and tried to take into account additional distortions that probably would have been produced by the receiver and the Dictabelt recorder.

Now, if there is any weakness in the results of our analysis, it has to be in some consideration that has escaped us entirely, and that, contrary to anything I can imagine, would have significant impact on the measurements we have made.

We, in fact, in performing this work, made every single measurement there many times, each of us made the measurements on the map, checked the results of the other fellow's measurement, checked the calculations out many times, and just to be sure that there were no errors that had crept in and then propagated through this analysis. Otherwise, I really cannot see a basis for finding significant fault with the acoustical analysis as described.

Chairman STOKES. Then as a scientist, you are comfortable with the statement to this committee that beyond a reasonable doubt, and to a degree of 95 percent or better, there were four shots in Dealey Plaza?

Mr. WEISS. Well, I would agree with that, with the somewhat clarification, that since our work concentrated primarily on the third shot, the one from the grassy knoll area, I would imply for the moment, limit the statement to that, with a, again, a confidence level of 95 percent or higher, which I guess if I were a lawyer, I might well express as beyond a reasonable doubt, that shot took place. And then relying upon the corresponding confi-

dence expressed by Dr. Barger about the other shots, I would agree with the statement that there is an overall probability of 95 percent or better that there were four shots fired in Dealey Plaza.

Chairman STOKES. Let me ask you this. This is 1978, this tape existed in 1963. Had this tape been given, let's say, to you or other scientists who specialized in this particular area, have you done anything new that could not have been done in 1963 with this tape?

Mr. WEISS. No, sir; the only thing that is new—this is an old technology that we are dealing with—the application is new, insofar as the use of the physics and science of acoustics for predicting the position of a microphone and/or a gun. I believe that the first application of it was only several years ago, and by Dr. Barger, in the case of the Kent State shootings. But other than that, there is nothing new in this at all.

Chairman STOKES. I recall at the executive session, I believe Professor Blakey asked you, for purposes of clarifying it for the committee, whether what you were basically using was high school physics and geometry principles, and that basically that is what you have done here.

Mr. WEISS. That is correct, sir.

Chairman STOKES. Now, what about the work of Dr. Barger? When Dr. Barger testified before our committee on September 11, based upon the work that he had done, he said to us at that time that there were definitely three shots, but would not commit himself to more than a possibility of a fourth shot. And, of course, we have now heard Dr. Barger's testimony in executive session, and we will hear it here later today.

Tell the committee whether or not, if he has now changed his opinion to agree with yours, whether such a conservative estimate on his part at that time and his unwillingness to say that, in fact, there was beyond a reasonable doubt a fourth shot, is the proper type of analysis that a scientist should have made at that time, prior to additional work being performed on his work.

Mr. WEISS. Yes, sir; Dr. Barger's analysis was exactly right, as a matter of fact. The difference between his analysis and ours, which is, in fact, might be considered to be a kind of extension by analysis, by mathematical analysis, of what he had done, or a refinement, if you will, of what he did, is the following: that in our matching of the pattern, by being able to predict precisely for a precise location of a microphone in the plaza what the echo pattern would have been, I was able to use an uncertainty window of about plus or minus 1/1,000 of a second at each of the echo points that I had predicted when I made the comparison to the peaks on the waveform of the Dallas Police tape recording.

Now, in Dr. Barger's work, because his data were based on an array of microphones that were strung out in Dealey Plaza, microphones spaced, as I recall, 18 feet apart, he could not be sure where the presumed motorcycle microphone was in relationship to any one of those microphones, so he had to use an uncertainty window which was wider. The microphone on the motorcycle, for example, could have been halfway between two of his microphones, or closer to one, or closer to another.

PROPERTY OF
ASSASSINATION

Because he could not know precisely where it was, he had to use a window which was about plus or minus 6 milliseconds wide, total width of about 12 milliseconds, compared to a total width here of about 2.

Now, that difference is very significant in the, insofar as it affects the degree of confidence that you can express in whether or not the patterns that is observed there that matches a prediction or an observed set of data is, in fact, perhaps noise and not meaningful data.

And his number is a very reasonable one. Fifty percent is what I, myself, would have quoted under those circumstances.

Chairman STOKES. Thank you, Professor.

My time has expired.

The gentleman from North Carolina, Mr. Preyer.

Mr. PREYER. Thank you, Mr. Chairman.

Thank you, Dr. Weiss. I think that many of us who aren't scientists, when we first heard of the acoustics test, tended to think of it as some sort of arcane science, perhaps like a polygraph test, which my former colleague, Senator Erwin, once called modern witchcraft. But I gather you are telling us that this is not like a polygraph test or modern, electronic witchcraft. It doesn't involve any subjective judgment; it is based on everlasting and relative simple mathematical principles.

It was interesting to me to see you use pen and string and thread, that you can physically maneuver and physically see until you come out with the kind of match which would not happen in the nature of things otherwise.

Mr. WEISS. That is correct. The differentiation is even greater than a matter of interpretation, as one would have to do in case of polygraph. You have to recall that polygraphs and other such devices are based on assumed physiological responses of the human being to some set of conditions or stimuli.

This has nothing to do with human responses or to interpretation, which may vary from one observer of results of a test to another observer. This is simple, pure, basic physics and geometry.

Mr. PREYER. I might say, the committee's experience with polygraphs, our expert panel, looking at various polygraphs that Jack Ruby, James Earl Ray, Nosenko and others have taken, hasn't been very encouraging as to the scientific accuracy of it; but it does seem to me that you pointed out this is quite a different situation.

We all know as human beings that sound plays tricks on our ears when we hear it. We had Dr. Green, a professor at MIT, a psychoacoustics expert, testify in connection with the witnesses that Professor Blakey mentioned earlier who testified as to where the sound came from, and he pointed out that the shockwave of a bullet causes a confusion of the direction of the sound, and it would make a spectator point to the direction from which the sound came that was actually being perpendicular from the area in which the sound came.

While I am sure your kind of equipment doesn't play the sort of tricks that sound plays on the human ear, a layman like me would wonder if other sounds had played tricks.

For example, what is the possibility of the backfire on a motorcycle making this sort of waves and spikes?

Mr. WEISS. Well, the answer to that question is, first, I haven't had the opportunity to examine the waveshape of a backfire of a motorcycle, so I cannot say absolutely that this might not resemble it in some way, but if there was a motorcycle backfiring in this instance, that motorcycle was up there behind the stockade fence in Dealey Plaza.

Mr. PREYER. You mentioned—and we will all be looking for possible flaws in your analysis in view of the importance of it, as Chairman Stokes pointed out—you mentioned that you excluded in your calculations anything at the noise level, and you matched peaks above the noise levels. You then said something like there are 10 such peaks, and I understood you to say there should have been 12. What was the meaning of that?

Mr. WEISS. Well, in fact, there are those 12 that were predicted, are actually there. Just two of them, for reasons that I am not sure of, came in somewhat smaller than I expected them to be, and indeed fell below the noise level. Because they fell below the noise level, although I was confident that I had actually confirmed their identification, I did not include them in the correlation equation. Had I done so, it would only have strengthened the equation, and quite significantly strengthened it. But in order to be conservative in this calculation, I had to simply reject them from consideration. In fact, in the act of rejecting them I simply—in computing the equation, the fact that I expected 12 but found only 10—I actually weakened the correlation.

Mr. PREYER. So you did not exclude two, which did not confirm your analysis?

Mr. WEISS. No, sir.

Mr. PREYER. But you had two which would have further corroborated—

Mr. WEISS. That is correct.

Chairman STOKES. The time of the gentleman has expired.

The gentleman from Ohio, Mr. Devine.

Mr. DEVINE. Thank you, Mr. Chairman.

Dr. Weiss, we appreciate your contribution to the record now in public session.

Do you consider your profession pretty much of an exact science?

Mr. WEISS. Yes, sir.

Mr. DEVINE. Much more so, I take it, than you feel in the polygraph field, because the human factor is not as prevalent?

Mr. WEISS. That is correct.

Mr. DEVINE. Do you consider Dr. James Barger an expert?

Mr. WEISS. Yes, sir, I do.

Mr. DEVINE. And do you respect his opinion very much?

Mr. WEISS. I do.

Mr. DEVINE. Do you think that he made an incomplete study, inasmuch as his conclusions, when he testified here, I think on September 11, suggested that there was about a 50-50 chance that a shot was fired from the grassy knoll?

Mr. WEISS. No, sir. That study, as it was being performed, was moving exactly along the path that any study of this sort ought to move.

Mr. DEVINE. Yet you saw fit to supplement his study by a number of things—and I have outlined them here—by seeking to

PROPERTY OF
ASSASSINATION

determine where the source of the sounds were, where reflection surfaces were, where the motorcycle was—you assumed it was in the neighborhood of the strongest impulses from the grassy knoll—the velocity of sound at the temperature given on November 22, 1963, as well as the time intervals and the echoes.

Now did Dr. Barger fail to take these important things into consideration in his study, or are these things that you found necessary in order to arrive at a different conclusion?

Mr. WEISS. No; as a matter of fact, Dr. Barger actually intrinsically used all of his information in his study and, in fact, it really was as a result of his study that we were able in the first place to say that the motorcycle was there in Dealey Plaza. It was because of his study that we were able to say that at the time of shot No. 3 it was, in fact, in the vicinity of the microphone No. 4 position in the array when the experiment was performed in Dealey Plaza.

All of the things that Dr. Barger did were natural steps along this kind of investigation. I am sure that had it been continued, or had there been more time available to Dr. Barger, this further result would have been the natural evolution of that process.

Mr. DEVINE. Thank you.

Going into a different direction, I assume you were not present when Dr. Barger testified on the previous occasion; however, if I am not mistaken, at that time they played a recording of the sounds, and I think, inferentially, although you suggested that all of these tests may have been available to the Warren Commission had they sought them, that under the more sophisticated electronic sound selection, to use an expression, that you are able to pretty well remove the motorcycle noise, remove the street noise and still have the blips left on the tape.

As I recall, when those tapes were played before this committee, one, two and four sounded quite alike, but the third blip, which from your testimony would suggest the one from the grassy knoll, was of a different sound, at least to a layman's ear. You have probably heard those statements since that time.

Have you come to any conclusions that the sounds were identical or that there was a difference?

Mr. WEISS. No. As a matter of fact, I did not hear that tape.

Mr. DEVINE. You did not hear it?

Mr. WEISS. No, sir.

Mr. DEVINE. Do you have an opinion as to whether, if in fact there was a shot from the grassy knoll, whether it hit anything in the motorcade?

Mr. WEISS. I have no way of knowing that, sir. There is no way of predicting or determining that from the data that are available.

Mr. DEVINE. Did you not try to coordinate the tapes with the Zapruder films and come to conclusions?

Mr. WEISS. Well, we had tried some matching, but now we are sort of out of the area of pure acoustics and getting into other areas, and there are various matters that in fact can be raised, but since that is not an area of my expertise, I really would rather not comment on that.

Mr. DEVINE. Thank you very much.

You, of course, understand the very difficult position that this committee finds itself in. I think it was pretty well put in an

editorial by a local paper here, how much weight in an evidentiary study, whether by a court or a congressional committee, should be assigned to an arcane science understood only by the same experts who draw the conclusions?

Mr. WEISS. Well, I beg to disagree with the phrasing, as elegant as it is. This is not an arcane science insofar as it is taught in high school and college level physics, to begin with, and it can be explained and demonstrated in the manner in which I attempted to, and I think can be understood by anybody who has ever heard an echo.

Mr. DEVINE. Thank you, Mr. Chairman.

Chairman STOKES. The time of the gentleman has expired.

The gentleman from the District of Columbia, Mr. Fauntroy.

Mr. FAUNTROY. Thank you, Mr. Chairman.

Mr. Weiss, you have cleared up for us the question as to whether you employed the marvels and refinements of computerized electronics to reach your conclusion about the 95 percent chance of a shot from the grassy knoll. You have also dealt with noises which are indistinguishable to the unaided ear. And is it your testimony that the shots that you have distinguished were not backfires?

Mr. WEISS. Not exactly so, sir. In the case of shot No. 3, since there is evidence of a shockwave preceding the muzzle blast, then it would have to be concluded that this was not a backfire, since backfires are not known to produce shockwave sounds.

Mr. FAUNTROY. Then your answer is yes, that the shot which you examined, the noise that you examined, was not in fact a backfire?

Mr. WEISS. That is correct, sir.

Mr. FAUNTROY. If it had been a backfire, you testified it would have had to come from the grassy knoll?

Mr. WEISS. That is correct, since I did not concern myself with the nature of the sound, only the location at which it originated.

Mr. FAUNTROY. But from your knowledge of sound and the velocity of a missile traveling at that speed, it would not have been a backfire?

Mr. WEISS. That is correct.

Mr. FAUNTROY. All right. Thank you.

Second, the problem that we have is that nobody saw anyone with a rifle in that area. My question is: Could a shot from a pistol have created the same noise, shockwaves and echoes?

Mr. WEISS. In order to do so, the bullet fired from such a pistol would have had to have left the muzzle at supersonic speed, and so, if indeed there are pistols that fire supersonic bullets, the answer would be yes in such a circumstance. However, to my understanding, most pistols do not fire supersonic bullets.

Mr. FAUNTROY. So that on the basis of your knowledge we would have to identify a pistol that fired that fast before you could conclude that it was probably a pistol or could have been a pistol?

Mr. WEISS. Could have been; that is correct.

Mr. FAUNTROY. I guess my question, Mr. Chairman, now goes to staff, Mr. Cornwell or Mr. Blakey, and that is, what do we know about the alleged encounter with a person bearing Secret Service credentials in the area of the grassy knoll?

PROPERTY OF
ASSASSINATION

Mr. BLAKEY. Mr. Fauntroy, the committee did look into that incident and did what it could 15 years later to determine whether it occurred and, if it occurred, could we identify the individual.

The testimony in essence is that an individual identified himself by showing what he said to be Secret Service credentials behind the picket fence, and based on that was allowed to continue.

A careful examination of where all of the Secret Service agents were that day, and their duty assignments, indicates that no Secret Service agent was in that area. And that is about as far as we have been able to carry it.

Mr. FAUNTROY. But who had the encounter?

Mr. BLAKEY. My memory is, a policeman, one of the first to come up over the fence, ironically, with a gun drawn, encountered an individual who, seeing the gun, identified himself as a Secret Service agent and was thus able to pass on.

Mr. FAUNTROY. Thank you, Mr. Chairman.

Chairman STOKES. The time of the gentleman has expired.

Mr. FAUNTROY. I yield back the balance of my time.

Chairman STOKES. The gentleman yields back the balance of his time.

The gentleman from Connecticut, Mr. Dodd.

Mr. DODD. Thank you, Mr. Chairman.

Thank you, Dr. Weiss, for your testimony this morning.

In responding to Judge Preyer's question about the degree of exactitude in your science of acoustics, has the science progressed to such a significant note in the past 15 years that what you have done could also have been done by the Warren Commission?

Mr. WEISS. Well, as a matter of fact, the science, insofar as what I needed to know in order to do what I have done, was known long before 15 years ago, so that it could have been done at that time, yes, sir.

Mr. DODD. What about the tests of Dr. Barger?

Mr. WEISS. Yes, those also.

Mr. DODD. So there has been no appreciable improvement in the science in 15 years that what you did or what Dr. Barger did would have precluded the Warren Commission or someone conducting a similar test in 1963 from reaching the same conclusions that you have?

Mr. WEISS. Nothing that I know of. The only difference that I recall is that in part of the work that Dr. Barger did, in order to establish that there were no indications of shots earlier than the timeframe indicated, he used a novel type of filtering technique to remove the sound, to reduce the sound level of the motorcycle and thereby hopefully expose impulse sounds similar to those that we have observed in the region of the shot here.

That technique has been developed only in the last 15 years.

Mr. DODD. You, in responding to Chairman Stokes and Mr. Fauntroy, indicated that as a result of your assessment of these wave forms you rule out the possibility of backfire as causing a similar echo pattern. Is that correct?

Mr. WEISS. Well, not so much the echo pattern as the evidence of a shockwave present, but also, as I indicated, that if there was backfire it had to have been from the same location that I place the shooter of the rifle.

Mr. DODD. My point is this: Are you excluding all other possible noise patterns that could have produced a similar kind of wave form that we see on your predicted response tape or that was evident on the Dallas Police Department tape?

Mr. WEISS. If there are other kinds of sounds which resemble sounds produced by a bullet in supersonic flight followed by the sound of a muzzle blast, then they must, of course, be considered, but I don't know that there is.

Mr. DODD. Could you share with this committee what other possible noises could produce that sort of thing, other than a rifle or a pistol?

Mr. WEISS. I don't know—that is the point I was trying to reach—can I think of any that might resemble it.

Mr. DODD. Was there any assessment made of other things that might have been occurring at that time at Dealey Plaza which could have produced that kind of noise pattern?

Mr. WEISS. I think somebody had once suggested a firecracker being thrown, or something like that.

Mr. DODD. Well, there was a train. I think we had evidence that there was a freight train that was moving or present at the time in Dealey Plaza. Could a train have done anything, cars backing into each other?

Mr. WEISS. No, sir, they would not have produced this kind of pattern.

Mr. DODD. Let me ask you something and see if I have, after listening to you—this is my third or fourth time, I think I am beginning to understand some of the terminology.

Is this statement correct? Would the absence of any identifiable pattern in the predicted response from the Dallas Police Department tape, would that raise a serious question as to the authenticity of the test, the absence of an identifiable pattern, and one from the other?

Mr. WEISS. Well, the test is authentic, regardless. If I could not find a pattern that matched sufficiently closely, I would only have been able to conclude that we have not found proof either that this is a shot that was recorded or that there was a microphone at that location in Dealey Plaza.

Mr. DODD. So it would raise questions, anyway, as not necessarily to the authenticity of the test, but rather whether or not your predicted response compared favorably to a certain degree of probability with the original tape?

Mr. WEISS. That is correct. We could not make a statement that there was a 95-percent probability of having identified a shot.

Mr. DODD. Conversely, could we also say that the inclusion of a wave form in the Dallas Police Department tape that it would have been impossible to record on the predicted response recording, would also raise serious questions?

Mr. WEISS. I'm not quite sure what you are asking.

Mr. DODD. We have evidence that there was a Dallas Police Department tape under, I guess it is exhibit F-355, the carillon bell going off in Dealey Plaza. That is on the Dallas Police Department tape.

To the best of our knowledge, there were no bells ringing in Dealey Plaza at that time, November 22, 1963. How do we explain

PROPERTY OF
ASSASSINATION

the ringing of a carillon bell that would be impossible to record at Dealey Plaza?

Mr. WEISS. Offhand, I really can't address that question, since I didn't consider it in any detail when I was examining these data.

Mr. DODD. As someone who is trained and provides expertise in this area, my point is, can you have the sound of something that could be impossible to be heard on a tape-recording and somehow that be picked up some other place? Was it possible for another policeman to have had his tape-recorder on at some other location?

Mr. WEISS. Yes; that is a possibility. I think Mr. Aschkenasy wants to say something.

Mr. ASCHKENASY. You are making an assumption that there was a source of a bell in Dealey Plaza, but that is your assumption. However, you have to look at the tape and the data on the tape a little more carefully, and one can see there an indication of a keying-on-transient which means that someone else tried to get onto the channel at that very time. He may have been in position to be close to a source of a carillon bell rather than anyone in Dealey Plaza, because there is associated with that carillon bell some indication of somebody else transmitting at the same time, which puts it just equally as well outside of Dealey Plaza.

Chairman STOKES. The time of the gentleman has expired.

Mr. DODD. Mr. Chairman, could I ask for unanimous consent just to proceed for a couple of additional minutes?

Chairman STOKES. Without objection, the gentleman is recognized for 2 additional minutes.

Mr. DODD. I realize that you are not an expert on police transmitters, motorcycle transmitters, but to my knowledge, anyway, having looked into this a little bit, it would be impossible for—and you correct me if I am wrong—but I am led to believe it would be impossible for someone else to interrupt a transmission once there is a transmission occurring.

Do you understand what I am saying?

Mr. ASCHKENASY. Yes. What you mean to say is, if one guy has the channel—

Mr. DODD. Has the channel open, it is impossible to break in?

Mr. ASCHKENASY. It is not impossible to break. It is a question of the strength of each individual transmitter and its relation to the antenna that is receiving the transmission.

The one who has the stronger signal is the one who grabs the channel, notwithstanding whether someone else is on the channel at that time.

If I am coming in with a big 20-kilowatt signal, I will swamp everybody else in sight.

Mr. DODD. Then you are telling me it would be impossible to record two sounds at the same time?

Mr. ASCHKENASY. No.

Mr. DODD. Or is it?

Mr. WEISS. No. As a matter of fact—let me respond to that one. We sort of play ping-pong here. In fact, if you listen to the police tape recording during the entire period of the so-called—the 5 minutes when the microphone on this motorcycle was accidentally on, you can in fact hear other transmitters coming on. Most of

them failed insofar as all you hear is the microphone click and you hear a kind of a chirp as they try to capture the channel.

But there are a number of times where you do hear other voices coming on, other people communicating, sometimes very distorted sounds of the voices, sometimes quite clear and intelligible; and it is all during the time that this one transmitter has been on. In fact, as you go on in time past the point at which the shots occur, the ability of other transmitters to come into the channel becomes increasingly—it occurs more frequently. You hear more people coming in. You hear comments to the effect that somebody has his microphone button stuck, and it is all audible and understandable, so there are indeed several transmitters being received simultaneously during that period, and therefore it could very well have been that there was another motorcycle who happened to key on at just that point in time and picked up the sound of a bell somewhere.

Mr. DODD. Let me try to conclude this, by asking you this, though. Having said that, and using the expertise that you have in acoustics, you, I think, said, Dr. Aschkenasy, that to have found a sound that you developed in your predicted response in some place other than Dealey Plaza, it would have been necessary to reconstruct, in effect, Dealey Plaza in some other place?

Mr. ASCHKENASY. Correct.

Mr. DODD. So that even if that sound that we hear is the third or fourth response, that would have only been able to have come, based on your expertise and your tests, only could have come from Dealey Plaza, unless you could have recreated Dealey Plaza?

Mr. ASCHKENASY. Yes. Congressman Sawyer at that time asked the question, if somebody were to tell me that the motorcycle was not at Dealey Plaza—and he was in fact somewhere else and he was transmitting from another location—my response to him at that time was that I would ask to be told where that location is, and once told where it is, I would go there, and one thing I would expect to find is a replica of Dealey Plaza at that location. That is the only way it can come out.

Chairman Stokes. The time of the gentleman has again expired. The gentleman from Indiana, Mr. Fithian.

Mr. FITHIAN. Thank you, Mr. Chairman.

Mr. Weiss, Chairman Stokes alluded earlier to some of the problems that your analysis will undoubtedly cause this committee, and indeed cause history and people who look at this on down the way. We may, in fact, be in the position of finally having raised more serious questions than we answered as a committee.

We are particularly aware of the lateness in the life of this committee, matched up with your findings. I suppose we could take some comfort in the fact that you came up with your findings 3 weeks before, rather than 3 weeks after, we rendered our findings, but I must, without being personal, now pursue some lines of questioning which I think will be asked of us, and of you and of your professional characteristics and findings, so please don't take the initial questions at least, personally, but I think that they must be asked.

When you and Mr. Aschkenasy entered into this series of mathematical and geometrical computations, did you set out with any particular result desired?

Mr. WEISS. No, sir.

Mr. ASCHKENASY. No, sir.

Mr. WEISS. We had no preconception as to what we were going to find. If anything, when we first heard the tape recording and first began to examine the data, our initial reaction was, somebody has got to be kidding; this can't be gunshots. But as we examined the data more carefully, subjected it to all the tests that we have described, the procedures that we have described, the results of the analyses themselves convinced us of where we were heading.

Obviously, we did not have any plan or any objective other than to do the best we could to find out what really these data represent.

Mr. ASCHKENASY. If I may—

Mr. FITHIAN. Yes, sir; go ahead.

Mr. ASCHKENASY. If I may say just one line, it's that the numbers could not be refuted. That was our problem. The numbers just came back again and again the same way, pointing only in one direction, as to what these findings were. There just didn't seem to be any way to make those numbers go away, no matter how hard we tried. It was not a question of interpretation of the numbers; it was a question of what the analysis yielded, the mechanical analysis, because it was just a hand calculator and a piece of string, as you saw it, a tape measure, and it all just came out the same way.

Mr. FITHIAN. What were your instructions from the committee staff when you set out to extend or refine Dr. Barger's work?

Mr. ASCHKENASY. Is there any way to take Dr. Barger's statement of 50-50 percent and move it off center either way?

Mr. FITHIAN. And so you are telling me that it really didn't matter to you which way it moved, that you were trying to get at more certainty than a probability of 50-50?

Mr. ASCHKENASY. That is correct, sir.

Mr. FITHIAN. Did you have any instructions from any member of the committee, any suggestions, any recommended lines of pursuit, that you should follow?

Mr. ASCHKENASY. We were totally independent of the committee.

Mr. FITHIAN. Now during your testimony, Dr. Weiss, you stated that the principles you employ are really basically very simple; they are mathematical; they are a part of the physical sciences. Has this technique been commonly employed in criminal investigations in recent years?

Mr. WEISS. I think, as I stated earlier, the only application of this technique that comes to mind is the one in the instance of the shootings at Kent State College, and in that analysis and investigation the technique was developed originally by Dr. Barger.

Mr. FITHIAN. Then we are in a pretty small circle, the two of you and Dr. Barger and his firm, in what must be a much larger field, that is, the field of acoustics.

Are we saying, then, that this whole thing is really rather novel, that is, the application of acoustical principles to criminalistics, if you will?

Mr. WEISS. Yes, sir; the application is novel in this area, perhaps because these are first times that questions of this sort have been raised, that is, "Given sounds on a tape which may or may not be a gunshot, can you identify what it was, and if so, can you tell where the gun was fired from or where the microphone was listening?"

I don't know if that question had ever been raised before Kent State, and for that matter how many times it has been raised since then.

Mr. FITHIAN. I realize criminalistics and so forth is not your profession, but as far as you know this is the first application of the principles of acoustics to ascertain the precise origin of a gunshot?

Mr. WEISS. That is correct.

Mr. ASCHKENASY. Congressman, if I may give you an analogy to that, it is almost like taking a wheel and putting it either on a bicycle, or on something newer than that, on a car. It is the same wheel. Principles of a pneumatic wheel of a tire, are the same for both, and they are basically simple and basically straightforward and incontrovertible, those principles, and yet there was one application before, and now you have another application which is new; but the results of the game are the same.

Mr. FITHIAN. Now I want to clarify in my own mind the distinction between your work and Dr. Barger's, and I have some additional questions on that which will come a little later; but if I understand you correctly, you did not, in fact, analyze the nature of the impulses, that is, you weren't working with filtering systems and the like to get rid of the extra noise. You were only working with the output of Dr. Barger's work in that area; is that correct?

Chairman STOKES. The time of the gentleman has expired.

Is the gentleman seeking additional time?

Mr. FITHIAN. I seek additional recognition for two additional minutes.

Chairman STOKES. Without objection, the gentleman is recognized for two additional minutes.

Mr. ASCHKENASY. Congressman, our input to this process were two tapes, basically, the tape of the test shots in Dallas in August and the other one was a high quality copy of the Dallas police tape recording in its pristine, natural form, without any filtering whatsoever, and that is what you actually see on that exhibit. That is from the Dallas police tape recording.

Mr. FITHIAN. To refine my question somewhat, as I understand, Dr. Weiss, the only additional analysis you made other than the mathematical computations with measurements and moving those around until you got a match was the possibility of sound alteration by the windshield of the bicycle or the motorbike?

Mr. WEISS. Yes, sir; that is correct.

Mr. FITHIAN. So that that was the limited area of your analysis of the impulse or impulses on the Dallas P.D. tape; is that correct?

Mr. WEISS. That is right, sir.

Mr. FITHIAN. Mr. Chairman, I think my other questions can be grouped together a little later.

Chairman STOKES. The time of the gentleman has expired.

The gentleman from Pennsylvania, Mr. Edgar.

Mr. EDGAR. Thank you, Mr. Chairman.

PROPERTY OF
ASSASSINATION

Mr. Chairman, before I begin my questioning I would like to simply state that the questions that I am about to ask have been shaped and assisted by several people who have come and attempted to help me with this. The first is Dr. Arthur Lord, who is sitting behind me, who is a professor at Drexel University and has extensive background in ultrasonics and acoustics. And also in the audience we have Dr. Francis Davis, who is the dean of science at Drexel University, and a fellow in the American Meteorological Society; and also Dr. Marvin Wolfgang, who is a criminologist and a professor at the University of Pennsylvania.

These three gentlemen, at my request, came and reviewed the testimony which you gave a week ago, as well as the testimony that was presented to the committee back in September by Dr. Barger; and they have assisted me in asking, I think, some questions that are a little bit more technical and perhaps different from the questions previously asked; and they start with the whole question of temperature.

When asked about this previously this morning, you had indicated, I believe, that you received the temperature data that you took into consideration from the committee staff; is that correct?

Mr. WEISS. That is correct.

Mr. EDGAR. Did you feel that the use of temperature was not that important to the findings of this particular study?

Mr. WEISS. No; it was important to know approximately what the temperature was. The precise knowledge is not that important because the effect is not that great. We, for example, took into account the temperature of Dealey Plaza at the time that Dr. Barger's experiment was being performed and particularly at the time the shot was fired from the grassy knoll that was recorded by microphone 4, and that was known to be about 90° F. at that time. It was very near at the end of his tests and they had been noticing what the temperature was as the tests progressed.

Now at that temperature the velocity of sound in air is about 1,150 feet per second. By contrast, the temperature on November 22, 1963, was given to me as 65°, and the velocity of sound in air corresponding to that temperature is 1,123 feet per second; therefore, there is approximately a 27-feet-per-second increment over a roughly 25° F. change, or approximately 1 foot per second per degree.

Had there been a, say, 5° or so difference from the 65° I was quoted, it would have affected the calculations slightly, but not seriously, and certainly not affected them significantly for the earliest arriving or the earlier arriving set of echoes, but only for the really late echoes.

Mr. EDGAR. The temperature that you determined in November of 1963, you said was 65°?

Mr. WEISS. That is what I was told, yes.

Mr. EDGAR. Do you know where they determined that temperature?

Mr. WEISS. No, sir; I do not.

Mr. EDGAR. So there really was no accurate way of determining the exact temperature in Dealey Plaza at the time of the assassination, other than statements that were given to you; is that correct?

Mr. WEISS. That is correct. I would again, however, assume that if the temperature were quoted as 65°, measured at one place, then it would not be likely to be more than, say, 5° higher at another place in the immediate vicinity.

Mr. EDGAR. Well, let's make the assumption that they called the Weather Bureau and asked what's the exact weather on that particular day; the Weather Bureau presumably would have taken a look at their records, taken at a temperature gauge somewhere near the airport where their findings would have been taken, and if we just have that as an average temperature for the city of Dallas at that time, you drew on the map with your string and pins straight lines from the point of the presumed shot to the point of the microphone, and also straight lines to the point of the echoes. That was assuming that at the muzzleblast sound, concentric circles went out similar to throwing a rock or a pebble into a creek or pond, and those ripples went out in even circles.

Couldn't temperature have affected the time it took for the sound to have in fact reached the microphone or to have in fact hit the corner of a building and bounced back to the microphone where it was being received?

Mr. ASCHKENASY. Well, as we mentioned earlier, Congressman, we had received this temperature of 65° from the committee staff. We assumed that they had done their homework as to getting the temperature that was actually measured on that day. However, as Professor Weiss also just pointed out, is that the difference of temperature—it does, of course—it does affect, because we see that on the day of the experiment the temperature was 90°, and at the day of—on November 22, 1963—was 65°, and the tables give you two different speeds for the velocity of sound, one 1,123 at the lower temperature, and 1,150.

If we just take a linear extrapolation between those two numbers and we say that instead of being 65° on November 22, maybe close to 70°, so instead of 1,123, we have measured 1,128 feet per second.

Now what does that mean? A change of 5 over 1,100 approximately, a change of a half a percent. Now half a percent change would not affect our measurements because we did not know the accuracy of the map that we have. Was it accurate to a half percent? As a matter of fact, we discovered in looking at photographs and looking at the map that some of the details there were actually not correct.

So this is why we assumed that the 65° was a good, reasonable, ballpark figure, since, No. 1, it was given by the committee staff, and No. 2, distances over which we were measuring echoes, the distances are not miles; the distances are only hundreds of feet, and in 100 feet, half a percent of error is hardly measurable in terms of our measurement; and this is basically the thought processes that we followed.

Mr. EDGAR. In the first part of your comment you said it affected the later echoes; is that correct?

Mr. ASCHKENASY. It may have affected the later echoes, but the measurement of those later echoes is not that much later in relation to the earlier echoes. Everything occurs here within approximately three-tenths of a second, the whole echo pattern.

PROPERTY OF
ASCHKENASY

Mr. EDGAR. But how would that have affected your 95 percent certainty that you have just talked about?

Mr. ASCHKENASY. We said 95 percent or better; so it would have made the "better" a little bit smaller.

Chairman STOKES. The time of the gentleman has expired.

Mr. EDGAR. Mr. Chairman, I will not ask unanimous consent for 5 additional minutes if it is understood that we are going to a second and a third round of questions at this time.

Chairman STOKES. We will continue as long as the committee has questions.

Mr. EDGAR. I will come back to this question.

Chairman STOKES. Professor Weiss, let me ask you this: The bullet from the grassy knoll, do we know where it went?

Mr. WEISS. No, sir, we do not.

Chairman STOKES. And do we know the speed of the bullet?

Mr. WEISS. No, we do not know that either.

Chairman STOKES. Can you tell us, then, why we do not know those things about the bullet from grassy knoll?

Mr. WEISS. Well, because the data won't permit us to determine it. All we know from the data is that there appears to be a shockwave impulse that precedes a muzzle blast sound by some number of milliseconds. I believe the number is actually 24 milliseconds.

Now if you knew—you have to know two things in order to find a third in this sort of situation—you have to know the direction in which the bullet was fired, and you need to know the muzzle velocity in order to be able to determine where the bullet's flight terminated.

Alternatively, if you knew where it terminated and knew where it was aimed, you could determine its velocity. Or, if you knew where it terminated and you knew what its velocity was, you could then determine where it was aimed.

But, you see, there are three unknowns that we are dealing with, and we only have one fact, and there is simply no way to be able to resolve the ambiguity here.

Chairman STOKES. So, for our purposes, we would be in the position of not knowing whether the bullet was fired straight up in the air or toward the limousine, or back away from—

Mr. WEISS. That is not quite correct, sir. We can say that the bullet was not fired straight up in the air because had it been, you would not have received a shockwave impulse at that microphone position; and, indeed, if it had been fired in a direction reverse to that of the limousine, you also would not have received a shockwave impulse.

Chairman STOKES. Then you are able to say, then, that the bullet would have been fired in the vicinity of the limousine?

Mr. WEISS. Well, one could say it was fired in the general direction of it. That could mean something well in front of it and something well behind it, as well as right at it.

Chairman STOKES. What happened to it after that we have no way of knowing?

Mr. WEISS. No, sir, we do not.

Chairman STOKES. Thank you.

The gentleman from North Carolina, Mr. Preyer.

actually, the adjustment was—instead of using 5 percent, we used 4.3 percent.

Mr. PREYER. If I might just ask one other question, Mr. Chairman, in another area.

You mentioned that this involves a new application of old and incontrovertible principles, and that the Kent State was the first application of the new techniques; and I gather it was the first application of the new technique which would rule out low level sound so that you would be able to hear the higher level sound?

Mr. WEISS. Not in the work that we did. We did not actually use any technique for suppressing low-level sounds. We just took the tape exactly as it had been recorded and analyzed it that way.

Mr. PREYER. My question that I wanted to get at was: Was your analysis, or any acoustic analysis from experts, admitted into evidence at any of the Kent State hearings or trials?

Mr. WEISS. I'm not sure what the results of that analysis were. I think Dr. Barger would be better able to answer that question.

Chairman STOKES. The time of the gentleman has expired.

The gentleman from Ohio, Mr. Devine.

Mr. DEVINE. Thank you, Mr. Chairman.

Dr. Weiss, I don't know how closely related are the science of acoustics and ballistics, but wouldn't it be a fact that muzzle velocity from a rifle would exceed the speed of sound?

Mr. WEISS. For most rifle bullets I believe that is true, yes.

Mr. DEVINE. Therefore, the bullet or the projectile would probably arrive at the target before the sound would be heard by people at the target area?

Mr. WEISS. That is correct.

Mr. DEVINE. Therefore, in order to coordinate the Zapruder film with the dispatcher's tape of the broadcast on the motorcycle and the Dr. Barger acoustics studies, you would have to take into consideration the sound-impact lag, would it not?

Mr. WEISS. That is correct. It would depend entirely upon what you were trying to relate. If you wish to relate the moment at which an impact might have occurred, you might get one set of relationships or adjustments. If you wanted to, however, synchronize—if that is the idea—sound and film to what would have been heard in the automobile, then you might get a slightly different, but only a slightly different, set of synchronizations.

Mr. DEVINE. Of course, the picking up of the sound from different areas would be different than at the target area itself?

Mr. WEISS. That is correct, absolutely correct.

Mr. DEVINE. Let me just finally comment that I have had some experience with expert witnesses in the medical field and psychiatric field and the ballistics field and the fingerprint field and so forth. Wouldn't you agree, those of you that are engaged in expert opinion testimony, that reasonable minds can reach different conclusions from the same set of facts?

Mr. WEISS. Well, if the facts can bear alternative interpretations, yes, that would be true, they can. The only question, I think, would be relating to the premises on which the facts may have been based.

Mr. DEVINE. Thank you, Mr. Chairman.

Chairman STOKES. The time of the gentleman has expired.

The gentleman from the District of Columbia, Mr. Fauntroy. Mr. FAUNTROY. Mr. Weiss, you have on several occasions indicated that there was, in fact, no new electronic equipment utilized by you to establish these facts?

Mr. WEISS. That is fundamentally true; yes, sir.

Mr. FAUNTROY. Therefore, we need not look for an analysis of how reliable the new equipment you used is, because you didn't use any?

Mr. WEISS. That is correct, sir.

Mr. FAUNTROY. Mr. Chairman, I just have one question, and that question is of staff; therefore, I would like staff to tell us the source of the 65-degree temperature determination which was provided the team here.

Chairman STOKES. Professor Blakey, do you want to reply to that?

Mr. BLAKEY. Mr. Chairman, I obviously would be corrected by the record and if my memory today is like it is normally, it is probably in error. My memory is that we got it from the Weather Bureau, which, of course, keeps relatively accurate temperatures; and they differentiated the temperature in various areas, and we took the one that was the closest to Dealey Plaza.

If that is wrong, I will stand corrected and bring it to the attention of the committee as soon as possible and insert it in the record.

I might add just a comment, and perhaps I could do it in the form of a question so that I am not in the position of inserting something in the record:

Professor Weiss, if you would comment on the following hypothetical: If you knew where the gun was, if you knew the muzzle velocity of the gun, and you knew where it hit, and you had a recording, could you determine the temperature of the air?

Mr. WEISS. Yes, sir.

Mr. ASCHKENASY. Yes, sir.

Mr. BLAKEY. If it is true from extrinsic data, apart from the acoustic study, that we know those factors about, one, the first shot, the second shot and the fourth shot, then the temperature in the air at Dealey Plaza could be determined by the known shots that had been related by the medical and ballistics neutron activation analysis of Lee Harvey Oswald's gun, couldn't we? It is a possibility; is that correct?

Mr. ASCHKENASY. That is correct, except that you have to remember that when you hypothesize you are hypothesizing laboratory-ideal conditions which do not exist in the real world.

Mr. BLAKEY. Did you gentlemen make that determination?

Mr. WEISS. No, sir, we did not.

Mr. BLAKEY. How difficult would it be to do so?

Mr. WEISS. From the data that are available, I don't know.

Mr. BLAKEY. I wonder if you could supplement your testimony at this point with a letter telling us what mathematically the temperature of the air had to have been at Dealey Plaza based on an analysis of shots one, two, and four?

Mr. WEISS. That would require, for example, redetermining the locations of the echo-generating surfaces for the position from the

PROPERTY OF
ASSASSINATION

sixth floor window of the depository building, and that will take some time to do.

Mr. ASCHKENASY. It isn't easy.

Mr. BLAKEY. But it is a mechanical possibility?

Mr. WEISS. It is a doable thing.

Mr. BLAKEY. Thank you.

Mr. FAUNTROY. Mr. Chairman, I want to be sure that I understand the answer to counsel's question. We know that the second shot struck President Kennedy somewhere behind the sign on the film. You can determine the distance roughly between the middle of that sign and the sixth floor window, can you not?

Mr. ASCHKENASY. Those who are expert at doing that sort of thing can.

Mr. FAUNTROY. You drew me a line a minute ago.

Mr. WEISS. One can determine the distance, yes.

Mr. FAUNTROY. The question, therefore, is, if you know where the shot emanated and where it struck, if you took the time, could you determine the temperature? And the answer is?

Mr. WEISS. Yes, you could.

Mr. FAUNTROY. Thank you.

Mr. WEISS. I was going to add another comment apropos of the precision of knowing the temperature. Since the effect of a variation in the temperature is slight, is that its only primary effect in fact in this set of calculations, will be to move the position, the initial position, of the motorcycle at the start of, relative to the point at which it is now, too, so that it might be either a little bit closer or a little bit further from the rifle at the time it first receives the muzzleblast sound? For example, if the temperature is, say, 5 degrees warmer, then as Mr. Aschkenasy pointed out, the effect will be a one-half of 1 percent adjustment. In fact, that adjustment can be applied quite easily to the position of the motorcycle. The motorcycle in that estimation is something like 200 feet away from the grassy knoll area, which would mean moving it by 1 additional foot forward or backward, whichever way.

Mr. EDGAR. Would the gentleman yield?

Chairman STOKES. The time of the gentleman has expired.

Mr. EDGAR. I ask unanimous consent that the gentleman have 1 additional minute.

Mr. FAUNTROY. I ask it, too, and I yield that minute to the gentleman from Pennsylvania.

Chairman STOKES. Without objection, the gentleman may have 1 additional minute.

Mr. EDGAR. What is the statistical evidence that atmospherically your temperature is not off by more than 5?

Mr. WEISS. I have no idea, sir.

Mr. EDGAR. If it is off by 10 percent, doesn't that affect—

Mr. WEISS. Then there would be a net 1-percent change in the velocity of sound, and I have to move the motorcycle not by 1 foot but by 2 feet to compensate. That is the total effect, sir.

Mr. EDGAR. But doesn't that affect the number of millisecond signals that you use?

Mr. WEISS. No, sir. It simply means that the starting position of the motorcycle has been moved. If I had to move him 10 feet

forward, then I probably could not get a decent match anymore. But that would probably be a 100-percent error in the temperature.

Mr. EDGAR. Are you 95 percent sure that the temperature was within the 5- to 10-percent difference that we are talking about, 5- to 10-degree difference?

Mr. ASCHKENASY. We had no reason to doubt the committee staff in getting the correct answer to the question that we put to them. We explained to them that it was important to know what the temperature was on November 22, 1963, in Dealey Plaza. This is the number that they came back with. Now whether there was any error intentional or unintentional on their part, right now we have to make the statement that it was never taken into consideration that there may be an error in that number.

Mr. EDGAR. I yield back.

Chairman STOKES. The time of the gentleman has expired.

The gentleman from Connecticut, Mr. Dodd.

Mr. DODD. Thank you, Mr. Chairman.

Just following up on this point because, as I understood it, you made adjustments not just for temperature but you made them as well for the location of the receiver, the location of the alleged fire of the gun. Apparently, and I may have misheard you, but you also discovered some incorrect location in the map, itself, that apparently you had to make some adjustments for as well; is that correct?

Mr. ASCHKENASY. We did not make any adjustments. We just noticed that the map was not an exact survey. For example, the vertical, as is shown there in the lower right-hand corner in the photograph, shows evenly spaced columns. The map we were given by committee staff did not show evenly spaced columns. Columns could be echo sources. In this case they were not, but this came to our attention. We want to point out it was not perfect.

Mr. DODD. What I'm getting at is this. Assuming that any error that may have existed in temperature would be minimal, do you believe that a reenactment of it, of what occurred in Dealey Plaza, placing a person firing a rifle at exactly the location that you adjusted for, having a tape recorder going at exactly the same speed that the recorder was allegedly going on November 22, 1963, and exactly accounting for the adjustments that were made in the motorcycle, do you think that would in any way possibly narrow your prediction down even further? Would it be worthwhile, in other words?

Mr. WEISS. No; I believe all that would happen if you trotted a motorcycle down the street with a microphone receiving the sounds, that you would, in fact, come up with a set of echoes that would very closely match the set that has been predicted.

Mr. DODD. With regard to the placement of the firing person on the grassy knoll, to what degree of error do you allow? We have discussed this before in executive session, and I tried to recall your response. It seems to me you talked about 5 feet, a radius of 5 feet.

Mr. WEISS. Yes.

Mr. DODD. Are you suggesting that if we, one, move that firer by 10 feet or more from where you placed him, that that would throw off the pattern significantly, that the probability that you have arrived at here would diminish significantly?

PROPERTY OF
ASSASSINATION

Mr. WEISS. Depending upon how you moved the shooter, you would affect one or another or several of the predicted echoes and, of course, depending upon how far you moved him. Now, if the movement is a small amount, let's say 5 feet along the line of the fence, then you can compensate for that adequately by moving the motorcycle a little bit and still get a pattern that will match. It may not match as close as plus or minus one one-thousandth of a second. It might be $1\frac{1}{2}$ thousandths of a second. If you start moving the shooter significantly greater distances—

Mr. DODD. What do you mean by significantly?

Mr. WEISS. Ten to 20 feet from where I have it now; then the likelihood is that one after another of these echoes will fail to be matched by any reasonable pattern.

Mr. DODD. Mr. Blakey, do we have a graph of the grassy knoll at all? Do we have any evidence that blows that up at all? Could you explain on the blackboard and draw a little picture of the area in which we placed the fireman, the rifleman, in the grassy knoll?

Mr. WEISS. You mean in terms of what you would see if you were standing there, actually a photograph sort of thing?

Mr. BLAKEY. I didn't understand the question. There is an exhibit already in the record. I believe it is No. 155 that shows the fence from the ground level. He would be able to indicate from there.

Mr. DODD. Is it from behind the fence?

Mr. BLAKEY. In front of the fence.

Mr. DODD. Maybe the blackboard would be better, it might be more graphic, and you can place it more clearly. Could you draw the fence as you would perceive it, looking out onto Dealey Plaza, and then place the rifleman in a spot where you think he would have had to fire from?

Mr. ASCHKENASY. Just to refer you to this map here, here is what is shown as the 5-foot high wooden fence. It runs in this direction approximately north-south and approximately east-west. I will just reproduce it larger.

Mr. DODD. That would be helpful.

Mr. ASCHKENASY. This is what I pointed out before, and we show, if we take a scale of 1 inch—let's say this is 10 feet—1 inch equals 10 feet. This piece of chalk equals 10 feet, and we originally placed him here, 8 feet from the corner.

Mr. DODD. Going along the fence.

Mr. ASCHKENASY. Running along the fence, since this represents 8 feet, we say we could move him within 5 feet of this location, from here to here, and get a reasonable match, still.

Mr. DODD. Where would be the direction of the highway or the motorcade?

Mr. ASCHKENASY. The motorcade is coming down here on Elm Street, right here.

Mr. DODD. And your margin of error would be anything beyond 10 feet you start having difficulties?

Mr. ASCHKENASY. Yes; then you put him already on the other side of the crux and the position begins to change, or you put him further out here. We certainly would have to exclude this region here because he would not want to be visible. If we put him too far back here, he would not be able to see down to the limousine, which is below his level.

Mr. DODD. I am talking just from an acoustical assessment. Then you would have difficulty with the degree of probability?

Mr. ASCHKENASY. That is right.

Mr. DODD. Thank you, Mr. Chairman.

Thank you.

Chairman STOKES. The time of the gentleman has expired. The gentleman from Indiana, Mr. Fithian.

Mr. FITHIAN. I was about to ask chief counsel or one of the members of the staff, as I recall way back when we had a photograph that the photographic panel was working with and there was a linear object behind the wall. I was wondering if, though that is not very conclusive evidence, if that linear object and that undefined object is roughly what we are talking about here.

Mr. BLAKEY. Mr. Fithian, again the record will correct me if my memory is wrong—we analyzed two places, photographed to determine if something could be seen. The photographic panel indicated that the area on the fence, which was one possible one, was not profitable. We could not get anything out of it. Consequently, additional work was not done on it. The photograph we analyzed in some detail in the hearing was of a possible person and a linear object behind the concrete abutment and not behind the picket fence. I might ask, Mr. Chairman, that exhibit F-155 be displayed at this point, and this is just moments before the assassination, and I would direct the committee's attention to the arrow pointing at the President's head. If the committee would look up and slightly to the left, you will see the cement colored area and above it, you will see the outlines of the picket fence. This is the concrete abutment, and this is the approximate area where an analysis was made previously. This is the line of the wooden picket fence. It extends in this direction back, and this is the area that is shown from the other side if we would refer again to the larger aerial photograph of Dealey Plaza; this is the picket fence coming this way and back over; and the line of fire, assuming a shot did occur from the grassy knoll, would be down in this direction. As in this situation, it would be down in this direction, coming from the picket fence down toward the car. So this could give you a visual image of what happened.

Mr. FITHIAN. The picket fence is some feet behind the concrete wall?

Mr. BLAKEY. That is correct.

Mr. FITHIAN. Thank you. Dr. Weiss, I want to pursue in this particular round of questioning the nature of the receiver and its ability to determine and therefore turn out the kind of shape that you worked with. If I remember Dr. Barger's testimony correctly before the committee in September, I was just going back through the documents, and I can find several references to it which I could read to you if you would like, but basically what he said was that given the limited nature or capacity of the motorcycle radio, that it did not indeed transmit the full picture of a very, very loud sound, that is, it attenuated or modified that sound simply because it could not accommodate that much of an impulse. Are you familiar with that particular problem that we ran into?

Mr. WEISS. Yes, I am.

PROPERTY OF
ASSASSINATION

Mr. FITHIAN. Now, does that problem pose any significance for you in the kind of mathematical extension that you made on shot No. 3?

Mr. WEISS. No, it does not affect the time at which an impulse will occur, only the amplitude or strength with which it is observed.

Mr. FITHIAN. Well, then, let me ask it another way. You were concerned about the alteration of the nature of the impulse by the windshield of the motorcycle?

Mr. WEISS. That is correct, only insofar as it is another means of observing a consistency between what is seen in the pattern and what is expected to be seen based upon both theory and experiment, that is, that the leading edge is much smaller than the cycle that immediately follows it. In reality, when a muzzle blast occurs, that leading edge is very much larger than the cycle that will follow it. There are two things that are reducing it as we observe it here. The first is the effect of the windshield, and the second is the effect of the compression caused by limiting action in the microphone and transmitter and almost certainly in the receiver and recorder as well.

Mr. FITHIAN. Does that in any way call into question the identification of the sound, itself, as that which reflects a gunshot from a rifle?

Mr. WEISS. Not seriously. Well, in effect, actually, rather than contradicting it, in a sense it supports it because all we see is all explainable and consistent with what we should expect to see if we take into account all the factors of the situation.

Mr. FITHIAN. Thank you. One other area that I am concerned about, as I was concerned in September in my own questioning of Dr. Barger, and that had to do with what he called false alarms. Is that term familiar to you?

Mr. WEISS. Yes, sir.

Mr. FITHIAN. As I understand it, to go back again and find some indications of this in Dr. Barger's testimony, but as I understand it, the reason he could not come up with a greater probability that there was a fourth shot was in part, at least, due to the possibility of false alarms being generated in the various noises. I guess what I am curious to know is how you eliminated those false alarms that were reducing Dr. Barger's probability estimate?

Mr. WEISS. The elimination, in fact, is a byproduct of the ability to narrow the window down from 12 milliseconds wide to only 2 milliseconds wide. By so doing, it is possible to now predict that the probability of a noise occurrence matching this closely is significantly reduced and indeed reduced below the 5 percent level that I have mentioned.

Chairman STOKES. The time of the gentleman has expired.

Mr. FITHIAN. Let me just for the record, Mr. Chairman, well perhaps more properly pursue this with Dr. Barger, but on page 68-69 of the transcript, Dr. Barger answers in part:

Therefore it would not be unreasonable to expect that approximately 5 of the remaining 10 correlations were also false alarms. That would indicate that about one-half of the detections that I did not previously indicate to be false alarms, about one-half of the remaining 10, are false alarms. This would indicate that the probability that each one is a correct detection is about one-half.

From that he went on to the 50-50 probability. Now, do I understand you correctly in that you are saying that simply by narrowing down the window, as you use the term, narrowing down the area——

Mr. ASCHKENASY. It is the uncertainty window.

Mr. FITHIAN. The uncertainty window to a very narrow space in numbers of feet and whatever other uncertainties you went into, that it is in that process that you reduce the probability of false alarm?

Mr. WEISS. That is correct, sir.

Chairman STOKES. The time of the gentleman has expired. The gentleman from Pennsylvania, Mr. Edgar.

Mr. EDGAR. Thank you, Mr. Chairman. Just for a moment, I would like to go back to one of your previous answers in reference to the temperature. You had indicated that if the temperature was off by 10°, that that would necessitate your simply moving the motorcycle plus or minus 2 feet; is that correct?

Mr. WEISS. I believe so. I really would want to do the calculation before answering that firmly, but it is probably correct.

Mr. EDGAR. Isn't that somewhat of an oversimplification of the process? Wouldn't you also have to go back and redo the calculations of all the echoes that are coming off of the buildings?

Mr. WEISS. That is correct; for a 1-foot movement it would shift the other echoes, but, remember, it would also shift the time of the travel of sound from the source to those points. For example, supposing that the temperature was warmer by some number of degrees, which means the sound would travel faster and all sounds would be received at the microphone sooner, well, the echoes would come in sooner, for sure, but so would the direct muzzle blast come in sooner. This is a kind of self-compensating process. It doesn't compensate exactly and in order to find the correct compensation, you have to move the motorcycle a little bit. Remember, we are dealing with a difference in time of arrival between the direct muzzle blast and the echo, not the absolute time of arrival of these events. This difference becomes somewhat less sensitive to temperatures than each of the events, themselves.

Mr. EDGAR. I have been given a piece of paper that indicates that on November 22, 1963, at the tower of the Texas Book Depository, they actually had a temperature of 68° signaled at the top of it. Evidently this is backed up by some pictures. It has not been determined where that particular temperature had been derived from or determined in order to put it up on the tower. It also does not take into account the differing temperatures that might occur at the ground level or toward the tree area as opposed to next to a building where temperatures could vary. Is it your experience that in situations like this that temperature just doesn't vary that much?

Mr. WEISS. If we are dealing with a temperature variation of only 3°, for example, from what I have reported, the effect on the calculations would be negligible. As far as experience of temperature variations of a grassy area as opposed to a building, I have no experience there. But if we are dealing with temperature variations that are not of a large range, then the chances are it would have negligible effect. The sound goes to the building and then

PROPERTY OF
ASSASSINATION

comes away from the building again, so it is affected only as it approaches the building closely and as it leaves the building closely. Once it's out in the street, if we are out of the building range, in a normal temperature range it's going to be, in the main, near the average temperature of the area.

Mr. EDGAR. As I listened to your testimony this morning, it occurs to me that what you are sharing with us is a very well done analysis that is, in a sense, done in a test tube; that is, your calculations are made with basic science tools, basic skills that have been known for a long period of time. You were given by Dr. Barger the set of parameters around which you were to look, and that namely the third shot, and you have been able to calculate in an office, apart from Dealey Plaza, the echo pattern off of buildings that you had some approximate knowledge of where they were. You don't have the exact knowledge of the exact angle at which the echoes are leaving the building; is that correct?

Mr. WEISS. If one makes an assumption as to where the motorcycle is, you have an exact knowledge of what the angle is, if you can believe the topographic survey map. You can easily calculate the angle, if that is necessary, but the angle is not an important consideration because it does not affect the time of travel of sound. It will affect, to some degree, the strength of the echo as we see at a particular point, but not its time of travel.

Mr. EDGAR. But essentially you were using a test-tube setting in order to come up with the calculations. While temperature was important, it was not that important. I would assume that you would say while wind might be a factor, it was not that important. Aren't there a number of variables like wind, temperature, number of people, number of cars, number of objects in Dealey Plaza that might have some effect on your calculations?

Mr. WEISS. In answering that, I would like to start with a quote that we have pasted to the wall in our office to the effect that the only difference between theory and practice is that in practice you can ignore nothing, you can leave out nothing. This is what we very strenuously tried to do in performing this calculation, recognizing that one could easily get into a test-tube situation by forgetting effects or by not estimating what these effects are going to be or can be. This is why we did take the trouble of taking into account the temperature, as a matter of fact, and to be concerned about other effects as well. It is our belief that we have, in fact, accounted for all of the things that can really significantly—and by significantly, I mean can affect the accuracy of the prediction, by significantly, I mean prevent us from finding a pattern that matches it within the kind of window we are talking about. As far as the effect of other people are concerned, and there certainly were plenty of people in the street at the time, they are not going to particularly affect the time of arrival of echoes received from the hard surfaces in the environment there. The walls of the building will still receive and reflect sounds. The people there can perhaps affect the strength of some of these sounds, but they are not going to greatly alter the time of arrival. Now, this understanding is not only ours. We, in fact, corroborated it by talking with other acoustics experts, and they agreed on this.

Mr. EDGAR. It is my understanding that due to the short time interval between shot No. 3 and shot No. 4, approximately 0.5 to 0.7 seconds, the possibility of an acoustical mirage should be considered as a possible explanation. Perhaps the most common illustration of the effect of an acoustical mirage is the optical mirage we see riding along a highway, and we look on the distance and see wet pavement, and when we get to the spot, we find it is not wet pavement, but a trick on our eyes. The phenomenon of an acoustical mirage, which I believe is called refraction or bending, is it possible that the closeness of the two shots, No. 3 and No. 4, could have, in fact, come from the same muzzle blast and could, in fact, be an acoustical mirage, a reflection, a bending off of the sound patterns, or a different approach of the sound to the microphone?

Mr. WEISS. No, sir; because in order for that to be true, you would have to, in effect, have had the sound of the muzzle blast transported by some means to the location of the grassy knoll area, and there emitted as if it had originated from that point. Since every echo that was predicted corresponded to an echo arising from a sound rising from that location, what you would have required is that echoes otherwise generated from a shot fired, say, from the depository window, would each have had its own peculiar distortion, transmission, characteristics such that by some marvelous process it occurred at the microphone, intact, and at the correct position. Second: As far as I understand acoustical ducting, which is what you are referring to, these things occur over very much greater distances than a few hundred feet as we are observing here. So I don't think that sort of phenomenon could have accounted for these two shots.

Chairman STOKES. The time of the gentleman has expired. Are there further members seeking further recognition?

The gentleman from Indiana, Mr. Fithian.

Mr. FITHIAN. Thank you, Mr. Chairman.

Dr. Weiss, when you performed the test on the Harley Davidson with the New York Police Department, did you discover any characteristics that might help us understand why the officer inadvertently had the microphone on?

Mr. WEISS. Yes. I think Mr. Aschkenasy can answer.

Mr. ASCHKENASY. I am certainly glad you asked that question. At the time we conducted those tests, there was an officer who had been a member of the motorcycle police force in New York City for quite awhile. Once he saw we were playing around with the microphone and radio, and he was assisting in turning on the motorcycle and turning it off at our directions, he let on as to how many times that stupid microphone would go on every time he pulled the brake cable because the brake cable passed within a half inch of the microphone button that activates the microphone button, enabling it to transmit. That was a totally voluntary comment on his part which indicated to us that indeed it is possible inadvertently for a microphone to transmit without the rider being aware of it.

Mr. FITHIAN. The second question: Were there any changes in Dealey Plaza between 1963 and 1978 which altered the echo pattern?

PROPERTY OF
ASSASSINATION

Mr. WEISS. Not that I know of. We compared photographs and maps, aerial photographs, land maps, et cetera. All of the surfaces that we have considered are intact since 1963.

Mr. FITHIAN. The reason I ask the question is that if I remember Dr. Barger's testimony, they had to move one of the targets a bit because of the new freeway sign that does appear very, very close—

Mr. WEISS. That is correct, but, in fact, none of the echoes—well, insofar as that overhead sign, since it was not there in 1963, it could not have caused an echo in 1963.

Mr. FITHIAN. What I was getting at was, did you get some extra echoes that you could not account for?

Mr. WEISS. As a matter of fact, we found echoes in Dr. Barger's experiment not from the overhead sign for microphone position No. 4, but actually from the supporting columns that hold the overhead sign up, these cylindrical columns about 14 or so feet high. There were some very small echoes that bounced off there and could be related to those posts, but they were very weak compared to the other echoes.

Mr. DODD. If you will yield, it has been asked in the past, and I think you responded to it already, but the construction of the Hyatt Hotel is a rather significant addition in the vicinity. Did that make any difference whatsoever?

Mr. WEISS. No; because echoes from that structure would have come in much, much beyond the three-tenths of 1 second or half second that we have been considering.

Mr. DODD. Thank you.

Mr. FITHIAN. I yield back the balance of my time.

Chairman STOKES. The gentleman yields back the balance of his time.

The gentleman from Pennsylvania, Mr. Edgar.

Mr. EDGAR. Thank you, Mr. Chairman. Dr. Weiss, are you aware of the phenomenon that exists out on the open sea when ships are trying to locate the port and they hear a foghorn in the distance? Are you aware of the phenomenon that occasionally the sound from that foghorn directs the ship in a false direction, as opposed to the accurate direction of seeking a safe harbor, and, in fact, in some instances those ships wind up on the rocks and go in exactly the opposite direction of where they should go?

Mr. WEISS. No, sir; I am not.

Mr. EDGAR. I would like to congratulate you for what I think is a refreshingly good answer. Let me ask you if you are aware of the fact that on radar scopes, sometimes the blips that occur on radar scopes are not accurate?

Mr. WEISS. That I am not aware of. I have some knowledge of radar, and I am not sure of quite what you mean by not accurate in this instance. If you could define the condition that might produce the inaccuracy, I could respond to it, but I have some knowledge of radar, having spent some years working with it.

Mr. EDGAR. How do you know that the squiggly lines you are looking at are really supersonic?

Mr. WEISS. We do not know it at all.

Mr. ASCHKENASY. They are not supersonic. Those are sound waves. Those are presentations of sound waves. The question, what

you might want to ask, is about whether we can tell a bullet was there, namely, was it creating a supersonic shock wave. That is what you are questioning. And those are not supersonic sound waves. Those are sound waves as recorded by a microphone, and put into electrical form by the equipment that was used to transmit it and record it, and there is nothing supersonic in those squiggles that we have up there on that board.

Mr. EDGAR. Would you answer the question I wanted to ask?

Mr. ASCHKENASY. Well, because you have a bullet that travels faster than sound, it will get to someplace faster than the sound reaching that same point. We are talking about two components, the bullet and the muzzle blast. The bullet flies, let's just pick a number, at 2,220 feet per second, so that it travels at twice the speed of sound for this particular example, when you fire the gun.

And it flies, let's say for 200 feet. It will get at the target 200 feet away in a certain period of time. Just like a boat pushes the water ahead of it creating the V-shape wake behind the boat, that is similar to what you see in a shock wave from a bullet. And that shock wave is what is recorded by the microphone that is right next to the target. Sometime later, finally the sound catches up to it and gets to the target, and the muzzle blast is recorded. That interval of time is fixed, by the fact that you have a certain muzzle velocity and you have a certain distance, they occur in a fixed time relationship. We have also the first, it's covered by the photograph—could somebody remove that photograph, please. If I may point something out there.

Mr. EDGAR. Yes.

Mr. ASCHKENASY. I can point out here also these first impulses before the muzzle blast, those are the shock waves, and if you look carefully—I am sure you cannot look that carefully at that distance—but if you look at these graphs, because these microphones are located at different positions on the street, the relationship between the shock wave and the muzzle blast changes, and it changes in a predictable manner because the manner in which you expect them to change is related to where the observer, or the microphone is picking up both the shock waves and the muzzle blast.

Now, you measure here about on the average of about 14 milliseconds, 14 thousandths of a second delay between the shock wave and the muzzle blast. We go now here to the police tape and the measurement that we found was around 24 milliseconds here. It is now reasonable to assume because of the measured time interval that the impulse may have attributes of a shock wave.

If you expand the experiment tape and take an even better look at it, you find there is a little shock wave echo right in between the shock wave and the muzzle blast, and if you expand the police tape properly, you find similar patterns, implying to us that this impulse has the qualities, attributes of a shock wave.

Mr. EDGAR. Two further questions relating to that. Your length of little squiggly lines which represent this particular shot, does that impinge on the next shot?

Mr. ASCHKENASY. No, no; this point right here in time is approximately seven-tenths of a second before the beginning of the next

shot, and this whole display here is approximately three-tenths of a second.

Mr. EDGAR. I know this was not part of your scientific work, but when you look at the whole tape played out, how many muzzle blasts did you see?

Mr. ASCHKENASY. We did not look at the whole tape as you describe it, laid out. We saw, we examined this one in very great detail, and we examined the other candidates that we had been asked when we reviewed the first approach and before the experiment that Dr. Barger performed.

Mr. EDGAR. But would it be your expert opinion that Dr. Barger would be able to have described and looked at the number of muzzle blasts?

Mr. ASCHKENASY. I am sure that he looked—I don't understand what you mean. When, muzzle blast relating to the Dallas police tape?

Mr. EDGAR. It seems to me if you have large lines indicating when the muzzle blast occurred, that if you looked at the total tape played out across the room, that we would see four things that would look like four muzzle blasts.

Mr. ASCHKENASY. However, they will not look the same, because at the locations where they were picked up the motorcycle was in different orientation relative to the sound source, and as was discussed earlier, the windshield has an effect, the position of the microphone, which we suspect was on the left side of the motorcycle, those all would affect the quality, if I can call it that you know, the shape of the received muzzle blast.

Chairman STOKES. Time of the gentleman has expired.

Mr. FITHIAN. Mr. Chairman, I have just one question of Mr. Aschkenasy before he steps down.

Chairman STOKES. Mr. Fithian is recognized.

Mr. FITHIAN. I did not quite understand what you said. Would the shock wave produce the same echo pattern as the muzzle blast?

Mr. ASCHKENASY. No, no; the shock wave produces its own echo pattern. I do not know exactly what it is, but this sure does look like one. It is a qualitative statement rather than a quantitative statement.

Mr. FITHIAN. Thank you.

Chairman STOKES. Mr. Edgar.

Mr. EDGAR. Mr. Chairman, I just have one additional question and that is the question of probability. The thing we have been reading about in the newspaper and what you have testified this morning is you are 95 percent sure that what we are seeing is a fourth shot. And if I understand the use of the word probability, it is based on some history. I wonder if you could describe the history around which your 95-percent probability is based.

Mr. WEISS. Well, the probability we are talking about here is simply that sort of calculation that says well, look, let us not talk in terms of echoes and so forth. We have a range here of about 300 milliseconds, and let us divide it up into 2-millisecond intervals, giving 150 intervals. Now suppose that we are dealing with a deck of 150 cards, and I tell you that in this deck there are only 12 spades. All right, if I give you 14 chances to deal cards from the deck, what are the chances that you are going to deal out 10

spades? The probability of that is less than 5 percent. In other words, the probability of something happening by a random process, that would have generated, in fact, a set of data that closely matches a known set of events, that is to say a predicted set of echoes, they are the knowns, the chances of that occurring is less than 5 percent.

Mr. EDGAR. So what you are saying is if we would go back to Dallas, and have a gunman perched on top of the railroad overpass shooting at a target, that there would be only a 5 percent chance.

Mr. WEISS. No; that is different situation entirely. That is not a random event. That is a systematical one. You are describing a specific process.

Mr. EDGAR. What I am suggesting is 100 different locations in Dealey Plaza where you could shoot a rifle and get echo patterns.

Mr. WEISS. No; again we are dealing with generative processes, not one of them will match exactly, unless he is merely within a few feet. If you pick the microphone where it was and move it at the right rate, and now we have all of these people spread all over Dealey Plaza shooting wherever they want, then not one of them is going to match as well as this does here.

If, however, you have a radio receiving signals, and everybody has heard radios that receive signals, there is a lot of static, and a lot of crackling noises going on, and some of those noises are people turning microphones on and off. These are random events, there is nothing systematic about it. It can occur at any time. There is nothing which forces a crackle to occur at any one particular time. That is the sort of thing we are talking about. Is this noise, or is this something that occurred through a systematic process? The chances of this being noise is less than 5 percent.

Mr. EDGAR. But, what experience do we base that on?

Mr. WEISS. Oh, long theoretical experience in probability studies of exactly this sort. This has been proven time and time and time again over many years, this sort of analysis.

Chairman STOKES. The gentleman from Connecticut, Mr. Dodd.

Mr. DODD. Just going a step further, as I understood your response to Mr. Edgar's question and, in fact, your response earlier to the chairman's question with regard to the degree of probability, you are 95 percent sure that there was a noise emanating from the grassy knoll. To what extent are you sure, based on your responses to questions I raised with you, with like sounds that could create that pattern, to what degree are you sure that this was a rifle that was fired from the grassy knoll?

Mr. WEISS. Well, I never, I have not done any kind of consideration of certainty there. I cannot, in fact, say I am sure at all, all I can again do is point to the evidence of a shock wave preceding the muzzle blast, and, in fact, as Mr. Aschkenasy pointed out, there is even a kind of early shock wave echo.

Mr. DODD. But you were fairly, in response to my questions about similar things that could occur that would create a sound, you said to me that you did not know of anything else that could create a pattern such as we have seen here other than a rifle.

Mr. ASCHKENASY. Well, the question that you posed to us just a few seconds ago is what kind of a probability did we assign to the question of whether there was a rifle there or not; correct?

PROPERTY OF
ASSASSINATION

Mr. DODD. Correct.

Mr. ASCHKENASY. Now, how we did the analysis was to locate the source and the receiver, namely, the motorcycle. And the detail of analysis that we applied to that process was not applied to the question of whether it was a rifle or not. To us, we were satisfied enough that there were indications of a rifle, but we did not proceed to the extent that we did with locating the source and in locating the motorcycle. The question of whether it was a rifle or not is equally important and must be addressed with the same degree of refinement that we applied to that one.

Mr. DODD. Are there acoustical tests that could be performed that would provide us with some degree of probability as to whether or not that, in fact, was a rifle?

Mr. ASCHKENASY. I would take 10 minutes to think it.

Mr. DODD. I am sorry?

Mr. ASCHKENASY. I would need 10 minutes to think some tests up.

Mr. DODD. But there are tests——

Mr. ASCHKENASY. Oh, sure.

Mr. DODD. That could be performed?

Mr. ASCHKENASY. Oh, sure.

Mr. WEISS. By the way, for clarification of those listening who may be wondering what a shock wave is, that is the well-known crack sound that you hear when a rifle is fired that precedes the muzzle blast. It is normally almost simultaneous with the bang or muzzle blast, itself. It is similar to the sort of thing you hear when someone cracks a whip and, of course, a very louder and deeper toned example is the sound you hear when an airplane goes by overhead at a greater speed than the speed of sound. It is a sharp, very brief, but very intense sound.

Mr. DODD. May I address this to Mr. Blakey. I am curious as to why we did not ask for an acoustical analysis of that which created the sound in addition to its location.

Mr. BLAKEY. We began with oral testimony, an eyewitness testimony that heard rifle fire from that direction. We began with oral testimony of people seeing smoke from that direction. And the question was, was there scientific corroboration for what the people heard and saw in Dealey Plaza: That is, gunmen shooting from different directions.

When we asked Dr. Barger to determine whether he could detect gunfire on the tape, we asked him literally to do that. He did, and what he found on the tape apparently was gunfire that we had substantial corroboration for on shots 1, 2, and 4 from the depository in the ballistic and neutron activation analysis, and in the other areas. The material that they looked at for a possible shot from the grassy knoll on 3 looked like the other patterns, and the question that was asked of us was not did a rifle fire from that direction, but did a shot fire from that direction. And consequently what we have, what we were concerned with was the direction of the shot.

Mr. DODD. We made an assumption that it was a shot?

Mr. BLAKEY. No; I think that the match between the known shot in Barger's test and the possible shot in the 1963 tape was sufficiently clear on a 50-50 probability that it was 50-50 that it was

rifle. Now, the next question was, could we carry that direction further, and we did. I don't know if it is fair to say we assumed it was a rifle. But what it corresponded to was a rifle shot. To the degree that it had a supersonic wave preceding it, one would suppose it was a rifle. In the original test shots it ought to be appropriate to note that we fired a pistol from the grassy knoll and we did not assume that it was either a rifle or a pistol on it. We fired both, and the correspondence was to the rifle, not the pistol.

Mr. DODD. You fired both the pistol and rifle?

Mr. BLAKEY. We fired both a pistol and rifle from the grassy knoll, and the correspondence was to the rifle. Mr. Cornwell has something to add to that, Mr. Dodd.

Mr. CORNWELL. I might note just for the committee's interest that marksmen with the Dallas Police Department that fired the pistol hit in an area after several shots, I did not check it all the way to the end, but after several shots you could cover all of their pistol shots with a quarter, so even though they were obviously excellent shots, the distances involved are not lengthy, so that, roughly speaking, the ability to hit a target at those distances would be somewhat comparable whether you used a pistol or a rifle.

Mr. FAUNTROY. Mr. Chairman.

Chairman STOKES. The gentleman from the District of Columbia, Mr. Fauntroy.

Mr. FAUNTROY. That raises the question in my mind as to whether in fact, there were at that time pistols that could create the impulse of a rifle in terms of the speed of the muzzle blast, and I have the feeling that we do not have that information available to us now. In short, you recall my question earlier.

Mr. BLAKEY. Mr. Fauntroy, I think we may.

Mr. FAUNTROY. I would like to know about the pistols fired.

Mr. BLAKEY. Mr. Cornwell is looking at a Gun Digest that may have that data in it.

Mr. FAUNTROY. Very good. Mr. Chairman, I will yield at this point.

Mr. CORNWELL. Mr. Chairman, the Gun Digest which we have previously admitted as JFK exhibit F-673 does reflect that there were pistols available on the market in 1963 which fired ammunition supersonically, above the speed of sound.

Mr. FAUNTROY. Thank you, Mr. Chairman.

Chairman STOKES. Any members seeking further recognition.

Mr. Cornwell, do you have a further request of the Chair?

Mr. CORNWELL. Yes, Mr. Chairman. I might request that you consider asking Mr. Aschkenasy and Professor Weiss if they could provide us in some written form a supplement for this record which would correspond to the diagrams they previously drew on the blackboard and, of course, which we lost in the process of erasing and creating subsequent diagrams.

Mr. WEISS. Yes, we can.

Mr. DODD. Mr. Chairman, may I make an additional request. We are going to have Dr. Barger on this afternoon, and I think it would be highly appropriate if we had both of our present witnesses with him at the time so that if there are questions that would be asked of Dr. Barger that he may want to refer to either

PROPERTY OF
ASSASSINATION

Dr. Weiss or Dr. Aschkenasy, they would be right there so we would have some consistency in the questioning.

Chairman STOKES. As long as the gentlemen can be available to us, the committee would appreciate it.

Professor Weiss, Mr. Aschkenasy, at the conclusion of witnesses testimony before our committee——

Mr. BLAKEY. Excuse me, Mr. Chairman. I would note Mr. Aschkenasy has a religious obligation that will prevent him from being here this afternoon. And I think Mr. Weiss could make it.

Mr. WEISS. Yes.

Chairman STOKES. Professor Weiss, Mr. Aschkenasy, at the conclusion of a witness testimony before our committee, the witness has 5 minutes during which time they may in any way explain or amplify their testimony before this committee. I would extend to the two of you at this time 5 minutes for that purpose, if you so desire.

Mr. WEISS. Thank you, Mr. Chairman. I will not take very much time at all. I simply would like to take this opportunity, as I did in the executive session, to put on the record my appreciation for the great work of the committee staff in getting information to us that we had requested that was important in our analysis.

I also would like to express my deep appreciation for the fine cooperation of the New York City Police Department in arranging for and performing for us the various experiments that were conducted at their firing range and that really greatly helped us to understand better what we were looking at.

Thank you, Mr. Chairman.

Chairman STOKES. Well, thank you, and on behalf of the committee I certainly want to thank both of you for the time you expended, the cooperation you have given to both the staff and this committee, and for the testimony that you have rendered here in this hearing room today. We are indebted to both of you and thank you very much.

Mr. WEISS. Thank you, Mr. Chairman.

Mr. ASCHKENASY. Thank you.

Chairman STOKES. The Chair recognizes Professor Blakey.

Mr. BLAKEY. Thank you, Mr. Chairman.

As you will recall, the time span between the shots allegedly fired by Oswald from the Texas School Book Depository itself potentially raises the specter of a conspiracy. FBI expert testimony to the Warren Commission indicated that Oswald's rifle could not be aimed and fired in less than 2.25 to 2.3 seconds. Consequently, for the Commission to conclude that Oswald fired two or more shots, there had to be at least that time interval between them.

The acoustics project has now made available to the committee evidence indicating that shots 1 and 2 from the depository were 1.59 seconds apart. If the FBI expert testimony is correct, Oswald could not have been firing alone from the Texas School Book Depository building—there had to be another gunman.

As you will also recall, Mr. Chairman, I reported to the committee on September 11 the results of preliminary tests conducted by the staff at the Metropolitan Police Department firing range in Lorton, Va, under the general supervision of Sgt. Cecil Kirk. Those tests established that a Mannlicher-Carcano could be operated ac-

curately in considerably less time than had been indicated by the FBI.

I indicated in September that these were preliminary tests and that more refined tests would be subsequently performed. They had been scheduled for the early part of December. Unfortunately, Sergeant Kirk had to undergo surgery, delaying the test results. Delayed test results are, therefore, not expected until the first of the year. Nevertheless, the preliminary tests are sufficient to cast into serious doubt the previously established FBI time intervals.

The difference between the two sets of tests may be accounted for by the simple fact that a telescopic sight was used by the FBI, while the open iron sights of the Mannlicher-Carcano were used by committee staff marksmen. It is the view of the committee's expert firearms panel that the open sights on Oswald's Mannlicher-Carcano would have been preferred, given the conditions in Dealey Plaza in 1963. It is worth noting that in firing tests for the committee in Dealey Plaza in August 1978, Dallas Police Department marksmen, using open iron sights, had no difficulty hitting their targets.

The results of the acoustics project not only led the committee to reexamine the FBI firing data, it also led the committee to look for a policeman on a motorcycle. The acoustics experts had predicted that the motorcycle with the stuck microphone was located in an area where neither they nor the committee had seen a motorcycle. If it could be proved that no motorcycle was in the predicted location at the time of the shots, then serious doubt would be raised about the reliability of the acoustics project. Similarly, when Professor Weiss and Mr. Aschkenasy later told the committee that their analysis of the waveforms indicated that the microphone was probably located on the left side of the motorcycle, no one knew the identity of the officer, or if, in fact, his microphone was mounted on the left.

The committee then began a review of the available documentation and film coverage of the motorcade to see if the acoustics predictions could be verified. It was a classic, scientific experiment. Our first efforts were disappointing. We found a picture of a DPD motorcycle parked in front of the Texas School Book Depository, showing its microphone mounted on the right side, not the left, and we could not find a motorcycle that appeared to be in the right location in Dealey Plaza.

Nevertheless, the investigation continued. The initial plans of the Dallas Police Department specified that the motorcade would be led by five motorcycles, followed closely by the lead car containing Chief Curry, and then the Presidential limousine. Eight motorcycles were to flank the Presidential limousine, four to its left and four to the right rear side. Motion pictures of the actual motorcade reflect that the initial plans were altered slightly on the morning of November 22, and only four motorcycles remained close to the Presidential limousine during the motorcade, two on each side. The other four, ridden by Officers McLain and Courson on the left and Baker and Haygood on the right, were spaced throughout the parade route at varying distances, but generally several car lengths separated them and they were behind the Presidential limousine.

PROPERTY OF
ASSASSINATION

Ultimately, the committee found film coverage, however, of the motorcycle in Dealey Plaza showing a bikeman on Houston Street several car lengths behind the Presidential limousine as it turned in front of the Texas School Book Depository from Houston onto Elm, the place that the acoustics project suggested it would be. The officer riding that motorcycle has been identified as Officer H. B. McLain.

It would be appropriate now, Mr. Chairman, to call Officer McLain.

Chairman STOKES. The committee calls Officer McLain.

Mr. McLain, may I ask you to raise your right hand, please, and be sworn?

Do you solemnly swear the testimony you are about to give before this committee is the truth, the whole truth, and nothing but the truth, so help you God?

Mr. McLAIN. I do.

Chairman STOKES. Thank you. You may be seated.

The Chair recognizes counsel, Gary Cornwell.

**TESTIMONY OF POLICE OFFICER H. B. McLAIN, DALLAS
POLICE DEPARTMENT, DALLAS, TEX.**

Mr. CORNWELL. Thank you, Mr. Chairman.

Mr. McLain, what is your present occupation?

Mr. McLAIN. Police officer, city of Dallas.

Mr. CORNWELL. How long have you been so employed?

Mr. McLAIN. I am working on my 26th year.

Mr. CORNWELL. What is the nature of your present assignment with the Dallas Police Department?

Mr. McLAIN. At the present, an accident investigator.

Chairman STOKES. Would the witness please pull the microphone a little closer to him?

Mr. CORNWELL. Directing your attention to 1963, what was the nature of your assignment during that year?

Mr. McLAIN. I was assigned to ride a solo motorcycle.

Mr. CORNWELL. And how long had you been riding a solo motorcycle?

Mr. McLAIN. Approximately 8 years.

Mr. CORNWELL. If I could direct your attention to November 22, 1963, the day that President Kennedy came to Dallas, were you part of the motorcade escort for the motorcade on that day?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. Mr. Chairman, may I have marked and admitted as JFK exhibit F-679, a memorandum of the Dallas Police Department, dated November 21, 1963?

Chairman STOKES. Without objection.

[The information follows:]

JFK EXHIBIT F-679

November 21, 1963

Mr. J. E. Curry
Chief of Police

Subject: President J.F. Kennedy's Dallas
Visit & Parade - Assignments,
Friday, November 22, 1963

Sir:

The following plans are submitted for policing the parade, and other traffic and security assignments.

The manpower used to handle these assignments will come from the Traffic Division and available Police Reserves. All personnel to be on assignment before 10:00 A.M., unless otherwise specified.

Deputy Chief R. H. Lunday - In Charge of Detail - 6
Captain P. W. Lawrence - Assistant in Charge - 125

Presidential Solo Escort:

Lead	Sgt. S. Ellis-150 *Lt. E. Gray-156 *Lt. D. Brewer-137 W. G. Lumpkin-152 *H. R. Freeman-153	} 1/2 Block REAR OF PRESIDENT'S CAR
Left Side	B. W. Hargis-153 B. J. Martin-151 *H. B. McLean-153 *J. W. Courson-155	
Right Side	D. L. Jackson-153 J. H. Chaney-151 *C. A. Haygood-152 *M. L. Baker-151	REAR OF PRESIDENT'S CAR
Rear	*Sgt. R. Smith-151 *C. J. Dale-151	1st. PHILIPPS - AR. (WHITE AR. CAR - RED LIGHTS)

*Will cover Stemmons Freeway entrance from the rear of escort to prevent any vehicles from passing Presidential party.

Advance Unit (Ahead of Parade):

Sgt. S. Q. Bell-150 *W. B. Garrison-151 *G. C. McBride-153	} SILENCE WHEN NEEDED } 1/2 BLOCKS
--	--

PROPERTY OF

Motor Pool (Trade Mart Command Post):

Sgt. R. L. Striegel-130
 Sgt. W. C. Campbell-280 (After)
 L. H. Marshall-139
 W. J. May-111
 W. R. Featherston-154 (After)
 J. H. Taylor-157 (After)
 E. D. Wafford-159 (After)
 J. W. Williams-162 (After)

J. O. Fenley-274 (After) J. W. Williams - 162
 R. K. Higgins-282 (After) E. D. Wafford - 159
 E. Jones-293 (After) J. H. Taylor - 157
 W. Price-295 (After)
 G. L. Purnell-277 (After) W. R. Featherston - 154
 C. F. Fields-275 (After)
 C. W. Watt-266 (After)

Traffic and Security Assignments, Trade Mart (7:00 A.M. assignment):

Sgt. W. R. Russell-230
 P. H. Cooper-(3 Wh)-281
 W. R. Jordan (3 Wh)-273
 E. F. Mynareik (3 Wh)-287
 M. A. Rhoades (3 Wh)-292
 J. C. Robinson (3 Wh)-291

Parade Route Traffic and Security Assignments:

Lt. W. F. Southard - 128

Sgt. W. A. Simpson-250 (1) Love Field to Turtle Creek
 (2) Love Field to Mockingbird & Hines
 Sgt. B. F. Rodgers-220 (1) Turtle Creek & Cedar Springs to Harwood
 (2) Hines, Industrial to Inwood Rd.
 Sgt. D. V. Harkness-260 (1) Main & Field to Houston & Elm
 (2) Industrial & Hines
 Sgt. W. C. Campbell-280 (1) Main-Harwood to Field
 (2) Motor Pool, Trade Mart

No-Parking Detail: (7:00 A.M. Assignment):

Sgt. L. B. Howard-290
 J. T. Griffin-279
 C. R. Hamilton-233
 T. A. Watson-284
 E. S. Standfield-261

Assignment #1 (W)	Assignment #2 (W)	Assignment #3 (W)	Officer
Cedar Springs & Driveway at Love Field Statue (WEST SIDE)		Cedar Springs & Driveway at Love Field Statue (EAST SIDE)	J. Y. Alvis-265 (3-Wh) H. M. Collins W. E. Lankham
Cedar Springs & Mockingbird	All officers work West side North-bound Stemmons Serv. Rd. between entrance & Industrial	Cedar Springs & Mockingbird	C. E. Whitman-257 (car) J. B. Jones J. E. Jennings W. H. Huggins

Assignment #1	Assignment #2	Assignment #3	Officer
Mockingbird & Lemmon	3-4 officer work Continental entrance to Stemmons Frey - other man work West side Northbound Stemmons Serv. Rd. between entrance & Industrial	Mockingbird & Denton	²⁶¹ C.M. Barnhart-262 (3-4th) P. W. Britton
Lemmon & Inwood	3-4 officer work Indust- rial Exit of Stemmons at Northbound Stemmons Frey- other man work West side Northbound Stemmons Serv. Rd. between entrance & Industrial	Mockingbird & Maple	L.E. Eilharz,-269 (3rd) V. Glasgow
Lemmon & Cotton Belt RR (atop RR overpass)	Work West side North- bound Stemmons Serv. Rd. between entrance & Industrial	Mockingbird & Hines Service Rd.	W.C. Brasher-263 (3rd) (COVER) (transport officers below) J. W. MURDOCK U. Brooks J. H. Phillips (COVER)
Lemmon & Long Alto (Both intersections above 3rd Mill trans- port) COVER	Both officers work West side Northbound Stemmons Serv. Rd. between entrance & Industrial COVER	Mockingbird & Hines Service Road COVER	
Lemmon & Douglas		Inwood & Hines (under Hines)	J. H. Caldwell-267 (3rd) (transport officers below)
Lemmon & Oak Lawn (above 3rd mill transport)		Mockingbird & Forest Park Rd.	W. E. Barker B. E. Wilson
Lemmon & Turtle Creek (3)		Hines & Butler Hines & Lofland	(1) B. G. Horn-255 (car) (2) A. B. Gass (3) M.E. Baker
Turtle Creek & Hall			R. F. Gale-272 (3rd) G. H. Harmon
Turtle Creek & Bowen			O. M. Henley-268 (3rd) N. L. Williams
Cedar Springs & Turtle Creek Blvd.		Motor Pool-Trade Mart	J.O. Fenley-274 (3rd)

PROPERTY OF
ASSASSINATION

Cedar Springs & Katy RR overpass (stop overpass)		W.R. Bardin-259 (car)
Cedar Springs & Fairmount (above car will transport)		F. T. Chance-252
Cedar Springs & Maple	Motor Pool-Trade Mart	R.K. Higgins-282 (37) J.A. Greenhaw
Cedar Springs & Olive	Motor Pool-Trade Mart	E. Jones-293 (31) G.R. Spears
Cedar Springs & Harwood (3)	RR Crossing on Industrial (Hines) Industrial & Hinos	(1) M.W. Perkins-265 (37) (2) W.H. Tippet (3) W.D. Sanders
Harwood & McKinney	Motor Pool-Trade Mart	W. Price-295 (37) W. A. Smith
Harwood & Ross	Motor Pool-Trade Mart	G.L. Purnell-277 (35) E. W. Speir
Harwood & San Jacinto		H. L. Cox
Harwood & Bryan		Leo Hale
Harwood & Live Oak	Motor Pool-Trade Mart	C.F. Fields-275 (34)
Harwood & Pacific		G.M. Hoskins L. Middleton
Harwood & Elm	Motor Pool-Trade Mart	C.W. Watt-265 (37) E. L. Greenhaw
Harwood & Main		J. H. Harkins H. A. Innon-286 (37)
Main & St. Paul	J.W. BOONS R. G. HEATH	R. L. Venable C. L. ... E. E. Sawyer C. ...
Main & Ervey	J. J. HUNTER	B. J. Boyd ...-289 (37)
Main & Stone	JAMES R. JENNAN	W. R. Flinigen E. H. Gilbert
Main & Akard		T. M. Hanson M.J. Wise

Main & Field

~~Motor Pool-Trade Mart~~

G. R. CULPEPPER

J. W. Williams-162 (Solo)

R. H. George

Main & Murphy

M. L. Altom

~~Joe B. Jones~~ W. K. King-289 (3H)

Main & Griffin

~~Motor Pool-Trade Mart~~

J. C. Boggs

E. D. Hafford-159 (Solo)

R. T. DRY

Main & Poydres

D. L. Kemper

~~Motor Pool-Trade Mart~~

J. W. Taylor-157 (Solo)

H. E. FAY

Main & Lamar

C. Dyer

D. D. East

Main & Austin

E. K. Shetler

~~Motor Pool-Trade Mart~~

W. B. Featherston-151 (S)

R. T. FOWKS

Main & Market

W. A. Springs

~~TILLMAN L. KELLEY~~

R. W. Williams-296 (3H)

Main & Record

M. A. Dawees

A. E. Garrison

Main & Houston

B. J. Fox

C. E. Lewis

W. H. Denham

Houston & Elm

W. E. Barnett

J. H. Smith

E. L. Smith

Elm & RR Overpass
(both officers atop
RR overpass - one man
on East side & one man
on West side)

J. W. Foster

J. C. White

Stemmons Freeway Serv.
RD. OVERPASS (atop
overpass)

J. E. Murphy-271 (3H)

RR Overpass across
Stemmons Freeway (just
North of Elm Street -
one man on South catwalk &
other man on North catwalk)

J. A. Iomax

E. V. Brown

Stemmons Overpass at
Industrial (3 Wheeler
atop Overpass on East side)

C. E. Shankles-298 (3H)

PROPERTY OF
ASSOCIATION

Stammons Service Road &
Industrial

J.R. Mackey-279 (37)
R.J. Kosen
W.E. Wilson

(Police Reserve Crowd Control assignments attached)

HARWOOD & SAN JACINTO

HARWOOD & FEDERAL

" " "

Respectfully,

T. E. GEE

W. E. GENTRY

C. L. HALLAM

R. H. Lunday
Deputy Chief of Police

PATROL HARWOOD - ROSS TO MAIN

" " " " "

C. A. KNOWLES - 294

C. WRIGHT - 264

PATROL MAIN - HARWOOD TO FIELD

" " " " "

D. F. ROACH - 288

B. J. BEETS - 294

PATROL MAIN - FIELD TO HOUSTON

" " " " "

W. R. KING - 287

R. M. WILLIAMS - 296

PATROL HOUSTON - MAIN TO ELM.

H. A. INMON - 286

FILL-IN * MID-BLOCK

#

Wm. E. LANGHAM

~~CURTIS T. MOORE~~

~~JOE W. ATWOOD~~

BILLY F. PERLAN PERHAM

WELDON E. RABINS

JOSEPH R. SALES

EUGENE A. WILNERSON

Zonean Intersections

Reserve Officer

[illegible]

020

Mr. CORNWELL. Officer McLain, the exhibit which we just marked for identification and which I showed you last night reflects that there were five motorcycles assigned to ride as the lead in the motorcade in front of Chief Curry's car, and then there were four motorcycles initially contemplated on November 21, the day before the motorcade, to escort the President's car on the left rear side, and another four motorcycles on the right rear side.

Would it be consistent with your memory that those initial plans were altered somewhat on the actual day of the motorcade, and that in fact only two motorcycles flanked the President's car on the left and right in close proximity to it?

Mr. McLAIN. Yes, sir; that's the way it was.

Mr. CORNWELL. In the initial plan for the escort dated the day before, you were listed as being assigned to ride the left side of the President's car. We have reviewed film coverage of the motorcade, and I would ask you if it would be consistent with your memory that you rode several car lengths back, but still on the left side of the motorcade from the President's car?

Mr. McLAIN. Yes, sir; I rode in the general vicinity of Vice President Johnson's car.

Mr. CORNWELL. Do you happen to recall who would have been riding to your rear on the same side of the motorcade?

Mr. McLAIN. I believe that was Courson.

Mr. CORNWELL. That is Officer J. W. Courson?

Mr. McLAIN. J. W., yes.

Mr. CORNWELL. Do you happen to recall who would be riding in approximately the same position as you on the right side of the motorcade?

Mr. McLAIN. That would be M. L. Baker.

Mr. CORNWELL. As the motorcade progressed from Love Field through downtown and ultimately into Dealey Plaza, would the positions, say, of yourself and the other motorcycles have been constant with respect to any particular car or, on the other hand, would it have fluctuated within the general area of the motorcade?

Mr. McLAIN. Yes, it would vary from, say, the Vice President's car back to the bus, some four or five car-lengths, I would say.

Mr. CORNWELL. Let me ask you another question: The motorcade would also—the spacing of it, would that be constant, or would that have varied?

Mr. McLAIN. No, that varies, too. Generally, it is pretty close to the same, but on turns and stuff they'll jam up and then they'll spread out.

Mr. CORNWELL. OK. So both the motorcycles and the motorcade would slow up and jam up at turns, and then speed up and spread out a little bit during the stretch areas; is that correct?

Mr. McLAIN. Yes, sir.

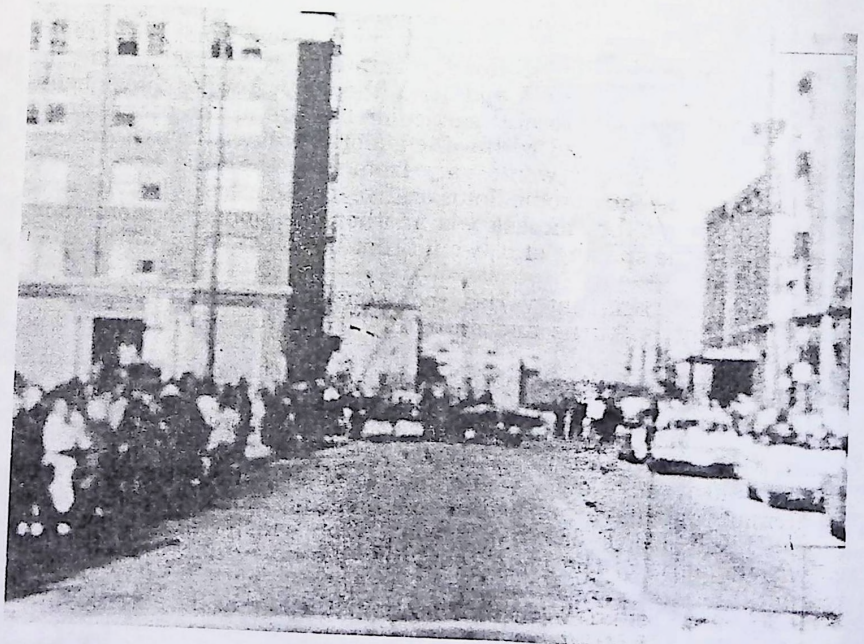
Mr. CORNWELL. Now I would like to show you, if I might, Mr. Chairman, and have marked as exhibits and admitted as exhibits No.'s JFK F-668, F-669, F-670 and F-671, which are photographs of various parts of the motorcade. May we have those admitted as exhibits?

Chairman STOKES. Without objection, they may be entered into the record.

[The information follows:]



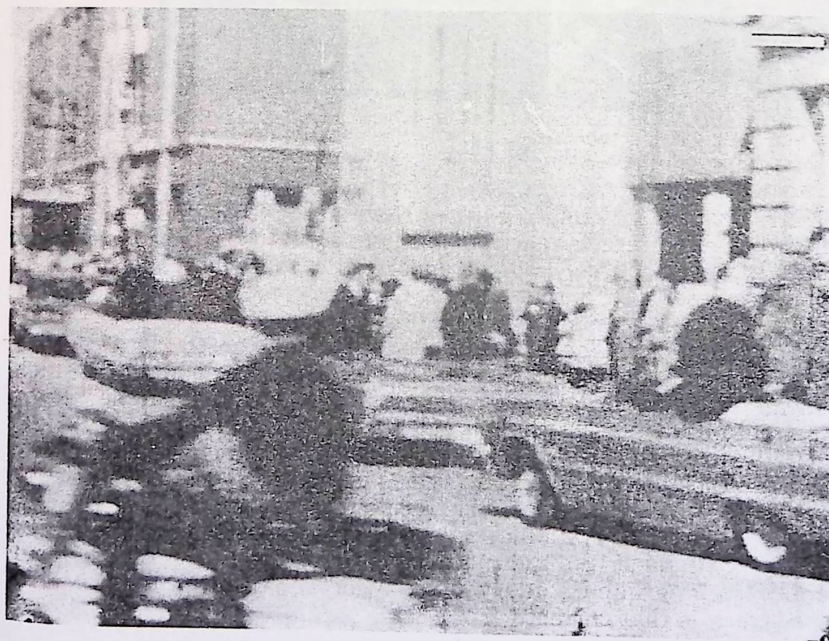
JFK EXHIBIT F-668



JFK EXHIBIT F-669



JFK EXHIBIT F-670

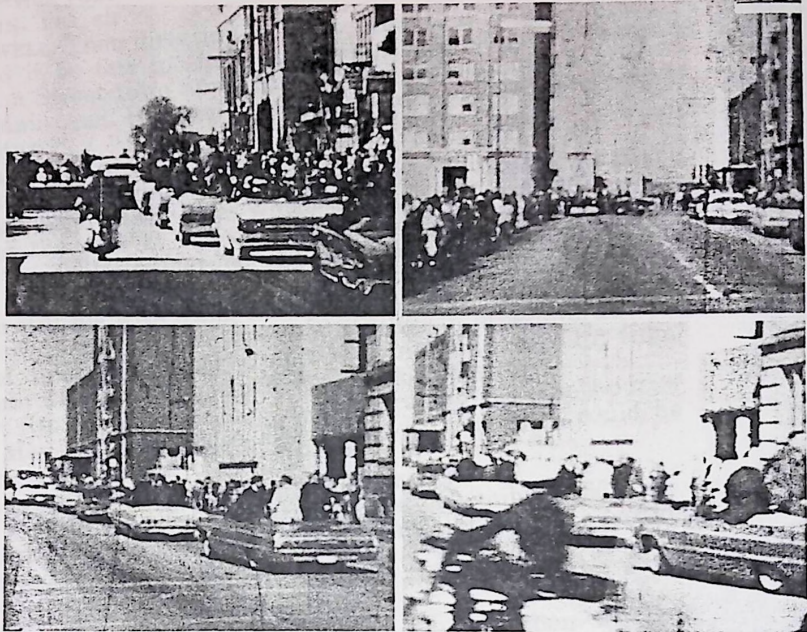


JFK EXHIBIT F-671

Mr. CORNWELL. And simply because the clarity might be better, we have a consolidation of those in a smaller scale, which has been marked for identification as exhibit F-681. May we also have that admitted into the record?

Chairman STOKES. Without objection, it may be entered into the record.

[The information follows:]



JFK EXHIBIT F-681

Mr. CORNWELL. I might explain that each of these large 30 by 40 inch blowups were taken from a single frame of a motion picture. You have, of course, had an opportunity to review such motion pictures yesterday; is that correct, Officer?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. The first exhibit, JFK F-668, on the left, reflects the motorcade from its left side. There is an officer a short distance ahead of the cameraman, a number of cars, and then further down the motorcade, also on the left side, two motorcycles.

Do you recognize the street that that was taken on?

Mr. McLAIN. That looks like it was taken on Houston.

Mr. CORNWELL. Approaching Houston?

Mr. McLAIN. No; on Main Street, approaching Houston.

Mr. CORNWELL. So then, Houston Street would be where the buildings break apart and you see a lot of sky toward the end of the street; is that correct?

Mr. McLAIN. Yes, sir.

PROPERTY OF
ASSASSINATION

Mr. CORNWELL. Where Houston crosses Main?

Mr. McLAIN. The tree that you see there will be on the opposite side of Houston.

Mr. CORNWELL. In Dealey Plaza?

Mr. McLAIN. Yes, sir. You will turn between the tree and the building on Houston.

Mr. CORNWELL. Can you tell us whether or not the motorcycle officer in the foreground of that picture—the one closest to the cameraman—was you?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. Then directing your attention to the next exhibit, F-669, would it be fair to state that that is a photograph taken down Houston Street from approximately the location of the intersection of Main and Houston, looking toward the Texas School Book Depository?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. I might state for the record, Mr. Chairman, that in frames just prior to the ones which have been blown up here, it is clear that the cars at the extreme portion of the photograph, away from the photographer, consist of the Presidential limousine, flanked by two motorcycles, and the Secret Service followup car; but you can still see with some clarity in the photograph the Secret Service followup car and the two motorcycles. In other words, the Presidential limousine is right at the corner and turning from Houston onto Elm, and from the School Book Depository.

The next two photographs have been placed on the easels out of sequence. May we have those altered just so that they could be viewed with more clarity?

The last two—we need to just switch their location.

Exhibit F-670 would be several frames after exhibit F-669, also looking down Houston Street, showing essentially the same portion of the motorcade.

And then the following exhibit, F-671, would be, again, a few frames later.

When viewing the entire film intact, you can then see that within a matter of seconds after the Presidential limousine turns in front of the depository, a police officer riding a motorcycle enters right in front of the photographer—and that is exhibit 671—right onto Houston Street from Main.

Can you tell us, Officer McLain, would that have been you?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. Do you have a memory of hearing any shots while you were in Dealey Plaza?

Mr. McLAIN. I only remember hearing one.

Mr. CORNWELL. And approximately where were you when you heard that shot?

Mr. McLAIN. I was approximately halfway between Main and Elm Streets on Houston.

Mr. CORNWELL. So you would have heard it sometime after the picture was taken in exhibit F-671, the last one on the right?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. And before you got to the corner and turned the corner from Houston onto Elm; is that correct?

Mr. McLAIN. That's correct.

Mr. CORNWELL. When you heard the shot, what, if anything, did you look at or what did you do?

Mr. McLAIN. I just looked up the street and the only thing I saw was a bunch of pigeons flew out behind the school book depository.

Mr. CORNWELL. So you heard the shot, your memory was, looking up, seeing the school book depository in front of you, and seeing the pigeons fly off?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. After you heard this shot, would it be accurate to state that you continued on motorbike, made the corner from Houston onto Elm, and started down Elm Street?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. At some point thereafter did you hear anything with respect to what was going on? Did you hear any radio broadcast?

Mr. McLAIN. Yes, sir. The chief came on across the radio and said head back for Parkland Hospital.

Mr. CORNWELL. Now had you personally had any occasion on that day, to your memory, to use your radio, to talk through it?

Mr. McLAIN. No, sir.

Mr. CORNWELL. Do you have a distinct memory of what channel your radio was set on?

Mr. McLAIN. It's normally set on channel 1.

Mr. CORNWELL. And do you remember anything differently on that day?

Mr. McLAIN. No, sir.

Mr. CORNWELL. The answer is no?

Mr. McLAIN. Nope.

Mr. CORNWELL. Then it would be fair to state that since you neither have a distinct memory nor, in fact, recall using your radio, we simply can't determine from your memory which of the two channels your radio may have been on at the time of the motorcade; correct?

Mr. McLAIN. No, sir.

Mr. CORNWELL. That's correct.

I would like to ask you next, what happened after you heard the broadcast from Chief Curry about proceeding to Parkland Hospital?

Mr. McLAIN. Well, everybody broke and headed for the hospital.

Mr. CORNWELL. At the time that this occurred, you said "proceeding." I take it that means that you revved your engine up and started up at high speed to go toward the hospital?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. Do you have a memory of where the Presidential or Vice Presidential limousines were roughly at the time that you caught up with them after hearing Chief Curry's radio signal?

Mr. McLAIN. They were approximately—well, in front of what is now, where they have the Hyatt House, would be the overpass over Continental.

Mr. CORNWELL. So, in other words, although you speeded up your motorcycle and attempted to catch up to the Presidential and Vice Presidential limousines, it took you until some point up on Stemmons Freeway before you could catch them; is that right?

Mr. McLAIN. Yes, sir.

PROPERTY OF
ASSASSINATION

Mr. CORNWELL. The motorcycles that were in use in Dallas by the police department at that time, were they in any way unique? Can you identify one from another?

Mr. McLAIN. Well, some of them you can; some of the officers put their own personal stuff on them that would be different from other people's; some of them would mount them different.

Mr. CORNWELL. So you could both tell by the way they rode them and by sometimes distinct characteristics of the motorcycles, who owned them?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. Did your motorcycle have any unique characteristics?

Mr. McLAIN. Yes, sir; it did. For one thing, it had a chrome disk on the right side of the front wheel.

Mr. CORNWELL. As I looked at some of the pictures with you last night, it appeared that you could see a chrome breakdrum from the left side on all the motorcycles, correct?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. But the unique feature was on yours it had a similar appearing chrome disk when viewed from the right?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. Were there any other unique characteristics of yours?

Mr. McLAIN. Well, one thing, my flashlight holder was set up different from the rest of them.

Mr. CORNWELL. How was it mounted?

Mr. McLAIN. It was mounted crossways of the handlebars, instead of up and down.

Mr. CORNWELL. Anything else?

Mr. McLAIN. I also had two clip holders up on the windshield that I kept my paperwork in.

Mr. CORNWELL. All right. Where was your microphone mounted?

Mr. McLAIN. It was mounted onto the left, between the center and the left handlebar.

Mr. CORNWELL. Now, you had an opportunity to view a very large number of photographs taken both during the motorcade and in Parkland Hospital yesterday evening; is that correct?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. Mr. Chairman, if I might, I would like to have admitted into the record exhibits F-675, F-674, F-676, F-677, and F-678, and ask, if I might, that they be shown to the witness.

Chairman STOKES. Without objection, they may be so marked and shown to the witness.

[The information follows:]

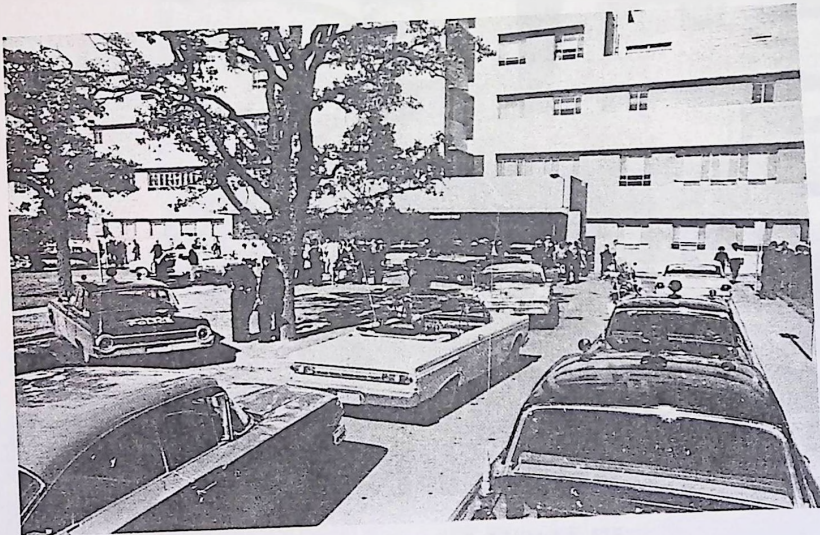


JFK EXHIBIT F-675

PROPERTY OF
AGSAC INATION



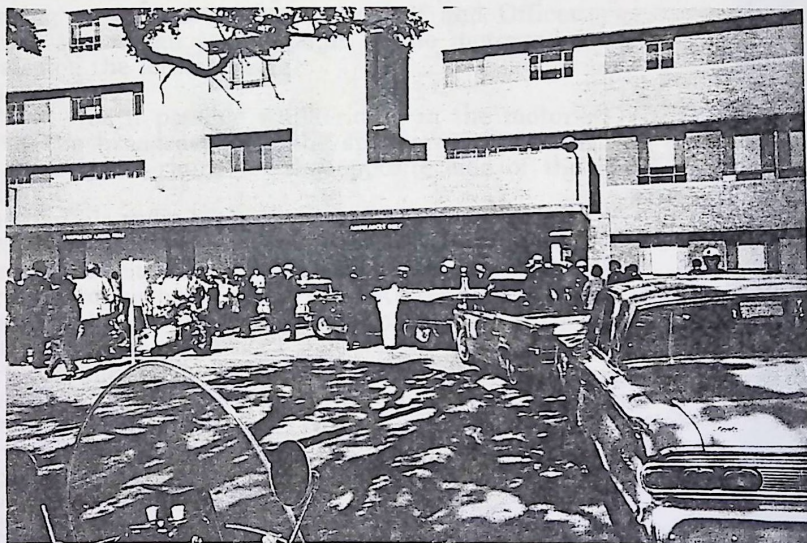
JFK EXHIBIT F-674



JFK EXHIBIT F-676



JFK EXHIBIT F-677



JFK EXHIBIT F-678

Mr. CORNWELL. Did you choose those photographs as both representing in the first instance, in F-675, yourself riding down Elm Street—the number is on the back, incidentally—and in the other cases as representing a motorcycle at the hospital, which at least had the general physical characteristics of yours, particularly unique characteristics that you described?

Mr. McLAIN. Yes, sir. Here is one here with the clip holders on the windshield, and it's got the same kind of bag that I had on mine, that I carry my books and stuff in.

Chairman STOKES. Will you tell us the number on the back of them? Can you give us the number?

Mr. McLAIN. It's F-674.

Chairman STOKES. Thank you.

Mr. McLAIN. And F-676, you can see the little chrome disc on the right front wheel, sitting out behind the emergency room; and F-678 also shows a little closer view of it, sitting in the same position, behind the emergency room; 677 shows the general view of the crowd and the other cars that are parked out there, and the "No Parking" sign; and the bus is also shown on F-674.

Mr. CORNWELL. And with respect to F-675, did you identify that as representing you and another officer on Elm Street?

Mr. McLAIN. Yes; that's myself and Sergeant Courson. Well, he is now sergeant; he was J. W. Courson at the time.

Mr. CORNWELL. So that last picture we just described, F-675, you identified as appearing to you to represent yourself and Officer Courson, and Courson was at an earlier point in the motorcade, riding behind you, also on the lefthand side?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. Now, was it possible while riding in the motorcade for you to hear the broadcast from the speaker of a fellow officer who, for instance, was riding on the opposite side of the motorcade from you?

Mr. McLAIN. If he had his radio turned up, yes.

Mr. CORNWELL. All right. Looking again at F-675, that shows you and Officer Courson on Elm Street in approximately the vicinity of the grassy knoll, riding somewhat side by side. At that distance, would it have been possible for you to hear the speaker of Officer Courson's radio if it was broadcasting?

Mr. McLAIN. Very possible.

Mr. CORNWELL. And at the point in time that you heard Chief Curry state that he was going to Parkland Hospital, would it have then been possible that what you heard was the transmission from the speaker of Officer Courson and not in fact your own?

Mr. McLAIN. It could be possible.

Mr. CORNWELL. Mr. Chairman, I would like to suggest that at least temporarily the committee may wish to consider the photographs, particularly F-674, F-676, F-677, and F-678, before the Parkland Hospital, for a very limited purpose. They do, as the officer has described, apparently contain the characteristics which were relatively unique to his motorcycle.

And, incidentally, I might clarify, you did park your motorcycle at the Parkland Hospital after arriving there with the motorcade; is that correct?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. However, Mr. Chairman, the staff has not yet had an opportunity to check the number which we can see in one of the photographs with perhaps available—I don't know if they even are available—records of the Dallas Police Department. The records that we do have reflect Officer McLain's call number, which he used in transmitting, but we do not have records that we have yet been able to locate showing what his bike number was, and until we have had an opportunity to check that out, we might tentatively say we are not sure that those pictures do in fact represent Officer McLain's motorcycle at Parkland Hospital; but at least they represent the characteristics of it, and we might suggest that the committee may wish to consider them only for that limited purpose.

Second, Mr. Chairman, I would like to suggest to you that in one of the photographs taken at Parkland Hospital it can be interpreted as having the microphone button—or at least it can to novices such as your staff—can possibly be interpreted as having its button pushed to the left. However, we have not had any photographic expertise applied to that, and the distortion in the picture, or the angle from which it was taken, may lead us to an erroneous conclusion, so we would again—

Chairman STOKES. Is the witness able to offer any assistance on that?

Mr. CORNWELL. Well, I believe, Officer, you do have a memory of which direction you believe would be channel 1 and channel 2 on the switch; is that correct?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. And what is that?

Mr. McLAIN. Channel 1 would be to the left; channel 2 would be to the right.

Mr. CORNWELL. So, Mr. Chairman, if our view of it were proven to be correct, if it is in fact tilted to the left, it would be on channel 1. On the other hand, if the angle from which it was taken distorts that, then it would be the opposite, on channel 2.

Another reason I would like to suggest we might be cautious in evaluating that is that the significance of it may not be overly great.

Chairman STOKES. You have not been moving for admission of these exhibits into the record?

Mr. CORNWELL. I am simply suggesting the committee may wish to consider them for a limited purpose until we have had time to do further analysis on them, namely, being representations of the type of motorcycle that Officer McLain drove and possibly being identical with his.

Officer McLain, are you able to tell us with any certainty which channel your motorcycle was set to during that motorcade?

Mr. McLAIN. I don't know for sure which way it was set.

Mr. CORNWELL. And are you also able to tell us whether or not it may have been changed, whatever it was initially set to, at some point, either during the motorcade or after arriving at Parkland Hospital?

Mr. McLAIN. It could have been.

Mr. CORNWELL. So then, Mr. Chairman, again we might simply note that whatever the ultimate photographic interpretation is of

PROPERTY OF
ADJUTANT GENERAL

the way that button is set, it may not be determinative, because it could have been changed at some point prior to the time the photograph was taken.

Did you, to your memory, have a stuck microphone on that day?

Mr. McLAIN. Not that I know of.

Mr. CORNWELL. Do you know whether or not it would have been possible for your microphone to have been stuck in the open position without your knowledge?

Mr. McLAIN. Yes, sir; it has been before.

Mr. CORNWELL. Under how many different circumstances in your particular case?

Mr. McLAIN. I'm scared to say.

Mr. CORNWELL. We have been told—and I want to ask you if this is at all consistent with your experience—that it is possible that in fact some gasket material in the mike, if it were worn or old, might cause the button once depressed not to return to its open position. Do you know whether that is possible?

Mr. McLAIN. That's possible. It is also possible that the points in that relay in there will stick when you push it in.

Mr. CORNWELL. Mr. Chairman, I have no further questions.

Chairman STOKES. Let me ask counsel if counsel was able to establish the chain of evidence as it relates to the tape from the witness' motorcycle?

Mr. BLAKEY. Mr. Chairman, as I am sure you will recall—and it is appropriate to repeat it at this time, since those who may be watching our hearings to date will not recall—that in September we introduced the police officer from whom the tape was obtained. I might summarize for the record what his testimony was:

He was—and I think his name is Paul McCaghren—he was an officer in the Dallas Police Department, and he had custody of a large number of records relating to the Kennedy assassination, and he retained that custody in a large trunk, and when the material was turned over to one of our investigators, Jack Moriarty, it was taken from that same trunk.

I might also indicate that an effort was made to match the transcript that we have of channels 1 and 2 to the material appearing on both the Dictabelt and the tape belt that we have. Consequently, the authenticity of the tape appears to be adequate, appears to have been adequately established.

Chairman STOKES. But for purposes of my question, in terms of the chain of evidence, we have no record or testimony that transfers back to the motorcycle of the witness appearing in this room?

Mr. BLAKEY. The tape was taken at the police department of a radio transmission from the bike to the police department, and the tapes were kept at the central office of the police department.

The recorder that the officer had was a radio transmitter and not a recorder on his bike.

Mr. DODD. Mr. Chairman, would you yield at that point?

Chairman STOKES. I yield to the gentleman.

Mr. DODD. Just to pursue this line of questioning, for instance, was any effort made by the staff to compare the brand of the tape disc—and I am led to believe it was—with the type of discs that the Dallas Police Department were using at that time?

Mr. BLAKEY. The Dallas Police Department at that time were not recording—again, my memory is going to correct me if I am wrong—were not recording on tape; they were recording on Dictabelt.

Mr. DODD. That is what I mean, a Dictabelt.

Mr. BLAKEY. And the Dictabelt that was found among this material is the same kind of Dictabelt that the Dallas Police Department was using at that time.

Mr. DODD. Second, were there any other transmissions on the tape that would correspond to activity that would have lodged in the Dallas Police Department that day?

Mr. BLAKEY. Oh, yes, that is what I tried to indicate before, Mr. Dodd. What appears on the Dictabelt and the tape recording of the Dictabelt are indeed the same sounds, the same information that we have based on the transcripts that we had of channel 1 and channel 2 that go back to 1963-64.

Mr. DODD. Was any effort made to identify other voices on the tape, to confirm that?

Mr. BLAKEY. No.

I'm sorry. Mr. Cornwell, you wanted to add something?

Mr. CORNWELL. The transmissions on the tapes do correspond with the Warren Commission testimony of various officers who described doing certain things and then reporting it over the radio, and therefore there is substantial corroboration of that nature, that the kinds of transmissions we have on these tapes were of the events that were actually happening on November 22.

Mr. DODD. Thank you.

Thank you, Mr. Chairman, for yielding.

Chairman STOKES. Certainly.

Are there other members of the committee seeking recognition?

Mr. DEVINE. Mr. Chairman, I have a question, if I may.

Chairman STOKES. The gentleman from Ohio, Mr. Devine.

Mr. DEVINE. Officer McLain, when your microphone is open, inadvertently even, are you able to receive broadcasts?

Mr. McLAIN. No, sir.

Mr. DEVINE. That would preclude anyone from broadcasting into your receiver, is that right?

Mr. McLAIN. Yes, sir.

Mr. DEVINE. Then the message you heard about going to Parkland Hospital, you say it is possible you heard that from the other motorbike?

Mr. McLAIN. Yes, sir. It is also possible that Chief Curry put it out on both channels at the same time.

Mr. DEVINE. If your mike was open, would that receive it on the other channel?

Mr. McLAIN. No, sir; I would not hear that.

Mr. DEVINE. What kind of a bike were you riding, a Harley Davidson?

Mr. McLAIN. Yes, sir.

Mr. DEVINE. A Harley Davidson. Do you recall during the time you were in the motorcade of monitoring any broadcasts from headquarters or other officers on your receiver?

Mr. McLAIN. Not offhand, but quite often we do do that.

Mr. DEVINE. But if your mike was locked open, you couldn't, could you?

Mr. McLAIN. No.

Chairman STOKES. Mr. Edgar?

Mr. EDGAR. Thank you Mr. Chairman. Officer, in riding in a parade situation, where you are doing not only ceremonial duty but protective responsibilities, would it have been common for you not to have wanted to listen to the commands of the chief or other officers along the route?

Mr. McLAIN. No, sir. We need to listen to them to know in case something does happen what alternative route to take.

Mr. EDGAR. While you were riding along, let's just suppose for a moment that your switch was not on transmit, but was on receive, listening to what you would normally listen to over that radio, wouldn't you hear static?

Mr. McLAIN. No, not necessarily.

Mr. EDGAR. Not necessarily. So that you were riding your motorcycle and you would not necessarily be aware whether or not you were on receive or transmit?

Mr. McLAIN. No, sir. It would be dead to you. The radio would be dead to you. You would not hear anything.

Mr. EDGAR. Whether or not you were transmitting or receiving? What I am saying is that suppose you were receiving but no one was talking; OK, you are receiving from the chief of the Dallas Police Department. If you were on receive, you would hear that sound, you would hear his voice.

Mr. McLAIN. Yes, sir.

Mr. EDGAR. Suppose he is not talking, and no one else is talking, but your radio is still on receive. Are you indicating that there would be no sound at all?

Mr. McLAIN. No, sir, there would be no sound. There is a knob on the control up there that you can turn your squelch up or down. If you turn it off, then it makes no sound.

Mr. EDGAR. Thank you.

Chairman STOKES. The time of the gentleman has expired. The gentleman from Indiana, Mr. Fithian.

Mr. FITHIAN. Mr. Chairman, I must clarify one thing here. Officer, you said that as far as your memory is concerned, you only heard one shot?

Mr. McLAIN. Yes, sir, that is all that I can recall. It was a loud one but that was the only one.

Mr. FITHIAN. You were on Houston Street at that time?

Mr. McLAIN. Yes, sir, somewhere between Main and Elm Street.

Mr. FITHIAN. Then it is your testimony that after you turned on Elm Street, you heard no further shots?

Mr. McLAIN. No, sir.

Mr. FITHIAN. Did you see anything in the area of the grassy knoll up and to the right which would be of any interest to this committee?

Mr. McLAIN. I did see Officer Hargis going up the grassy knoll.

Mr. FITHIAN. Going up the grassy knoll toward the fence, toward the clearing?

Mr. McLAIN. Yes, sir.

Mr. FITHIAN. Thank you, Mr. Chairman.

Chairman STOKES. The time of the gentleman has expired.

The gentleman from Connecticut, Mr. Dodd.

Mr. DODD. I just wanted to get clarification on these photographs and your identification. In the first photograph here on the left, you identified the motorcycle closest to us in the picture as being your motorcycle, and you are on it. How do you identify yourself there?

Mr. McLAIN. The way I am sitting on it. Just the way I ride it.

Mr. DODD. When was the last time you saw yourself sitting on a motorcycle?

Mr. McLAIN. It has been a while.

Mr. DODD. But is there anything that distinguishes you or the bike, itself, that you are able to identify?

Mr. McLAIN. No, sir.

Mr. FAUNTROY. Will the gentleman yield? How do you ride it? I mean when you say by the way you ride, do you ride off to the side? What is it about the picture that distinguishes you?

Mr. McLAIN. I don't know how to explain that. It's just the way I am sitting on it.

Mr. FAUNTROY. Look at the last picture, if the gentleman will continue to yield, how do you know that is you?

Mr. McLAIN. Just the way that I am sitting.

Mr. FAUNTROY. I wonder if you would care to describe how you are sitting?

Mr. McLAIN. It just comes natural to you.

Mr. DODD. As only it should, I think.

You don't identify any other mark on that last photograph as being yourself, either, on the motorcycle?

Mr. McLAIN. No, sir, I can't tell.

Mr. DODD. Let me ask you this: I had asked the acoustical people earlier, you may have heard the question, with regard to the ability for a receiver at the police department to accept transmitters from two or more motorcycles or transmitters at the same time. Is that your understanding as well? In other words, if you were in the Dallas Police Department receiving calls, if one person were on that channel transmitting, would it be possible for other people to transmit on that same channel at the same time and also be received by the headquarters?

Mr. McLAIN. Yes.

Mr. DODD. That would accept on the same channel more than one transmittal?

Mr. McLAIN. It would be hard to determine what they were saying because they would be overlapping, but the voice would come through. A lot of times we have the dispatcher come back and say there is too many of you talking at one time.

Mr. DODD. Were you ever familiar with any carillon bells or church bells in the vicinity of Dealey Plaza?

Mr. McLAIN. No, sir.

Mr. DODD. Has there ever been, to your knowledge, any of that kind of sound or noise?

Mr. McLAIN. No, sir.

Mr. DODD. I thank you.

Thank you, Mr. Chairman.

PROPERTY OF

Chairman STOKES. The time of the gentleman has expired. Are there any other members seeking recognition?

Mr. Cornwell?

Mr. CORNWELL. If I might, Mr. Chairman, I would like to ask a clarifying question with respect to one which one of the committee members just asked. Officer McLain, when you were asked by the committee a moment ago about how you identify yourself in those two photographs, directing your attention first to the last photograph, F-668, would it be fair to state that the motorcycle you identified as yourself is the first one behind the two that were right next to the Presidential limousine?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. And was that the position in which you were riding in the motorcade?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. Then I direct your attention to JFK F-671 on the right, when you entered Dealey Plaza from Main onto Houston Street, did you look up ahead to see where the Presidential and Vice Presidential limousines were?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. What did you see?

Mr. McLAIN. They were just turning the corner onto Elm Street as I came around the corner off Main Street.

Mr. CORNWELL. So if the photographs here show that the officer in the photograph enters Houston Street from Main at the time the Presidential limousine is turning from Main onto Elm, that again would be you, because of the position in the motorcade?

Mr. McLAIN. Yes, sir.

Mr. CORNWELL. Thank you. No further questions.

Chairman STOKES. Officer McLain, at the conclusion of the witnesses testimony before this committee, the witness is entitled to 5 minutes. During the 5-minute period he can explain or amplify or in any way comment in any way upon his testimony before this committee. I would extend to you 5 minutes for that purpose if you so desire.

Mr. McLAIN. No, sir, I believe he pretty well covered most of it.

Chairman STOKES. On behalf of the committee we certainly want to thank you for both your cooperation with the staff and with this committee and for the testimony you have given us here today. Thank you very much. You are excused.

In light of the fact that there are several additional witnesses to be heard from by the committee, the Chair suggests that we recess for lunch until 2:30 p.m., and we will begin promptly at that time. Accordingly, we will recess until 2:30 p.m.

[Whereupon, at 1:36 p.m., the committee recessed until 2:30 p.m.]

AFTERNOON SESSION

Chairman STOKES. The committee will come to order.

The Chair recognizes Professor Blakey.

Mr. BLAKEY. Mr. Chairman, I might initially note for the record that the temperature that was employed in the acoustics project was obtained from the Environmental Data and Information Service at the National Climatic Center, Asheville, N.C. The tempera-

ture at Love Field, Dallas, Tex., on November 22, 1963, was 63 degrees at noon and 67 degrees at 1 p.m. The skies were clear. This is, of course, the weather service data which would be the most accurate. In addition, Mr. Chairman, I would like to have marked as JFK exhibit F-683 and F-682 two photographs taken in Dealey Plaza. JFK exhibit F-683 is a photograph that includes the Texas Book Depository, which had on the top of it a time and temperature sign and the time shown on the sign is 12:40. You can see from the picture, itself, that JFK exhibit F-682 was taken moments thereafter. The same people are in the picture. That indicates that the temperature in Dealey Plaza at approximately 12:40 was 66. It was in this context that the staff recommended to the acoustics people that they take the temperature of 65, which would seem to be approximately within the range of what would be appropriate. Mr. Chairman, I would ask that JFK exhibits F-682 and F-683 be incorporated in the record at this point.

Chairman STOKES. Without objection, they may be entered into the record at this point.

[The information follows:]

PROPERTY OF
FEDERAL BUREAU OF INVESTIGATION



JFK EXHIBIT F-682



JFK EXHIBIT F-683

Mr. BLAKEY. As previously noted, the committee originally retained the services of Bolt, Beranek, and Newman to conduct its acoustics project. Dr. James Barger, the firm's chief scientist, and a man in charge of acoustical analysis at Bolt, Beranek, and Newman, conducted the tests for the committee.

Dr. Barger received a B.S. in mechanical engineering from the University of Michigan in 1957, an M.S. in mechanical engineering from the University of Connecticut in 1960, and an A.M. in applied physics from Harvard University in 1962. In 1964, he received a Ph. D. in applied physics from Harvard University. He has been a sonar project officer at the U.S. Navy Underwater Sound Laboratory, a research assistant at Harvard University's Acoustics Research Laboratory, and senior scientist and director of the physical science division at Bolt, Beranek, and Newman, Inc.

Dr. Barger is the author of many scientific papers. He has lectured in the field of applied acoustics in the United States and Canada, and he is currently a lecturer on sound scattering and reverberations with Bolt, Beranek and Newman's antisubmarine warfare course. He has been a National Science Foundation fellow, and he currently is a fellow of the Acoustical Society of America. He is also a member of the U.S. Navy Advisory Board for Underwater Sound Reference Services.

In recent years, Dr. Barger has worked as an analyst of sound recordings in two quite celebrated cases—the shooting episode at Kent State University, for which he studied recorded sounds of gunfire, and the White House tapes in the Watergate case. He helped analyze the mysterious 18-minute gap as a member of the

panel headed by Dr. Richard Bolt, who is, himself, the head of Bolt, Beranek, and Newman.

It would be appropriate at this time, Mr. Chairman, to recall Dr. Barger.

Chairman STOKES. The committee recalls Dr. Barger.

FURTHER TESTIMONY OF DR. JAMES BARGER

Chairman STOKES. Doctor, you have previously been sworn in these hearings, and I would at this time admonish you that you are still under that oath. You understand that, of course.

Dr. BARGER. Yes, I do.

Chairman STOKES. Thank you. The Chair recognizes counsel for the committee, Mr. Jim Wolf.

Mr. WOLF. Welcome back, Dr. Barger. You last testified in great detail before this committee in public session on September 11, 1978. Today, I would like to review briefly some of the points you made during that testimony and then ask you to comment upon the testimony that we heard this morning from Professors Weiss and Aschkenasy. Prior to that, however, in reference to the work that you did on the Kent State tapes that Professor Blakey made reference to in his narration, is it correct that in your work on that tape recording you determined both the location of the shooters and the timing of the shots from an acoustical analysis and that your determination of both location of the shooters and timing of the shots was subsequently stipulated by the defense to be correct and admitted into evidence in a court case?

Dr. BARGER. That is correct.

Mr. WOLF. When were you first approached by this committee with the Dallas Police dispatch tape?

Dr. BARGER. I believe it was in May of 1978.

Mr. WOLF. Am I correct that after a review of that tape, filtering of the tape, and your performance of a series of tests upon that tape, you eventually recommended to the committee that it conduct a reenactment in Dallas which would entail shooting at target locations while you recorded those sounds on microphones?

Dr. BARGER. Yes, that is correct.

Mr. WOLF. When was that reenactment conducted for the committee?

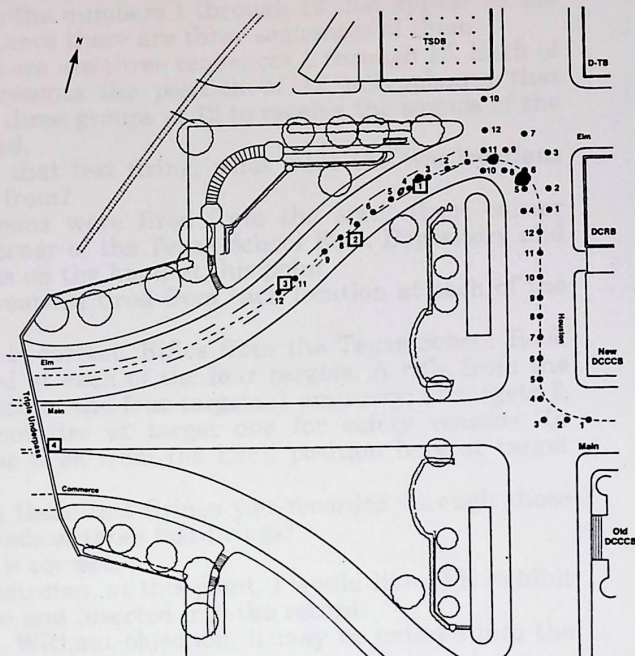
Dr. BARGER. August 20.

Mr. WOLF. I would ask, Mr. Chairman, that JFK exhibit F-337 be displayed and inserted into the record at this time.

Chairman STOKES. Without objection, it may be entered into the record at this point.

[The information follows:]

Microphone Locations at Dealey Plaza



JFK EXHIBIT F-337

Mr. WOLF. This exhibit is a diagram of Dealey Plaza and the microphone locations that were used during the reenactment test. Dr. Barger, I will ask you to briefly explain what the No.'s 1, 2, 3, and 4 are on that exhibit.

Dr. BARGER. Numbers 1, 2, 3 and 4, which appear in the box here, represent the location of the sandbag targets that were placed on the street as targets for the gunfire.

Mr. WOLF. What do the numbers 1 through 12 that appear on the street represent? I believe there are three sequences of them.

Dr. BARGER. Yes; there are three sequences 1 through 12. Each of these sequences represents the position of 12 microphones that were placed in those three groups of 12 to receive the sounds of the gunfire that were fired.

Mr. WOLF. During that test firing, what were the two locations used to fire weapons from?

Dr. BARGER. Weapons were fired from the sixth floor, corner window, southeast corner of the Texas School Book Depository and from behind the fence on the knoll at this point.

Mr. WOLF. Were weapons fired from each location at each of the targets?

Dr. BARGER. That is correct. Rifles from the Texas School Book Depository were fired at each of the four targets. A rifle from the knoll was fired at each of the four targets. I am sorry; at targets 2, 3, and 5. We did not fire at target one for safety reasons. In addition, a pistol was fired from the knoll position here at target location No. 3.

Mr. WOLF. During those test firings you recorded through those microphones the sounds of those test firings?

Dr. BARGER. That is correct.

Mr. WOLF. Mr. Chairman, at this point, I would like JFK exhibit F-367 to be displayed and inserted into the record.

Chairman STOKES. Without objection, it may be entered into the record.

[The information follows:]

**List of All 15 Correlations Between Impulse Patterns
Occurring in 6 Segments of the DPD Record and Echo Patterns
from 432 Test Shots (2592 Separate Correlations)
Having a Correlation Coefficient Higher than 0.5**

Beginning Time of First Impulse on Tape Segment	Microphone Array and (Channel Number)	Rifle Location	Target Location	Correlation Coefficient**
136.20 sec	No Correlations Higher Than			0.5
① [137.70 sec	2 (5)	TSBD*	1	0.8
	2 (5)	TSBD*	3	0.7
	2 (6)	TSBD	3	0.8
	2 (6)	KNOLL	4	0.7
② [139.27 sec	2 (6)	TSBD*	3	0.8
	2 (6)	TSBD	3	0.6
	2 (10)	TSBD	3	0.6
	2 (11)	TSBD*	3	0.6
140.32 sec	3 (5)	KNOLL	2	0.6
139.27 sec				
③ [145.15 sec	3 (4)	KNOLL	3	0.8
	3 (7)	TSBD*	2	0.7
	3 (8)	TSBD	3	0.7
④ [145.61 sec	3 (5)	TSBD	3	0.8
	3 (6)	TSBD	4	0.8
	3 (8)	TSBD*	2	0.7
146.30 sec	No Correlations Higher Than			0.5

*Indicates Muzzle Withdrawn 2 ft from Plane of Window.

$$\text{**Correlation Coefficient} = \frac{\text{Number of Echoes Matched with Impulses}}{\sqrt{\text{Number of Echoes} \times \text{Number of Impulses}}} \leq 1.0$$

JFK EXHIBIT F-367

Mr. WOLF. Does this exhibit represent those recordings made during the reenactment which matched the original Dallas Police dispatch tape with a correlation coefficient of at least .5?

Dr. BARGER. Yes, they do. I wish at this time I could say a few words about the stark simplicity of the matching procedure that was used.

Mr. WOLF. Surely.

Dr. BARGER. If I may briefly, to clarify this exhibit, since it came after three hours of explanation the last time, there were obtained at each of these microphones the series of echoes that were received by them when each of these rifles was fired, and it was suggested the last time that I spoke that these might be likened to fingerprints. That is not just a bad idea.

There is a pattern of sounds that emanate from each microphone when each rifle is fired that is unique and that pattern is as much a fingerprint that identifies two things uniquely, the location of the rifle and the location of the receiver. Now obtained on the Dallas Police recording that we discussed this morning were the sounds of impulses, segments of impulses that look like fingerprints, too.

PROPERTY OF

They were badly smudged by the presence of noise. We sought to match the fingerprints we measured in the reconstruction with the fingerprints that had been recorded, perhaps by Officer McLain in 1963. We did that matching. We did it in a numerical way. The numerical procedure allowed us to score each match.

Now we had 432 different combinations of rifle shots and microphones, so we had 432 fingerprints, as from 432 individuals, and we wished to see if any one of those individuals were on the tape recording as recorded by Officer McLain, perhaps. So we matched each of the 432 fingerprints with each of the microphones, that is, with each of six patterns of impulses that were on the Dallas tape to see if any of them matched at all. We had a scoring procedure. Every time the match was so good that the score was higher than .5, we said that is a very likely match. That individual may exist at that place on the tape. Now, I can explain what this is.

Mr. WOLF. When was that matching process completed?

Dr. BARGER. It turned out there were 2,592 matches to achieve, and each one was somewhat difficult because of the smudging of the fingerprints, and since the fingerprints were only obtained on the 20th of August, it was not until the 6th of September that each of the 2,592 comparisons had been made.

Now, that was 4 days before the hearing, given that it takes 1 day to prepare for 1 day's testimony; we had 3 days to wrestle with the fact that there were, in fact, four possible matches of fingerprints identified in the Dallas tape. And at the time that I spoke on the 20th of August, I indicated that of the six segments on the Dallas police recording that contained any impulse patterns at all, in other words, potential fingerprints, the first one began at this time. We found no scores matching with any of these test shots higher than .5. However, a short time later, about a second and a half later, there was a series of sound impulses on the Dallas tape which, in fact, scored above my threshold of .5 to be considered as a potential fingerprint. We found when the rifle was located in the Texas School Book Depository which is here and fired at the target 1, which is here, we passed our threshold, and we got a score, a matching fingerprint score that was higher than .5 for the microphone located in the second array, microphone 5, that one right there.

Mr. WOLF. Dr. Barger, on JFK exhibit F-337, I believe when you testified on September 11, you marked in colored pencil with blue, red, green, and black, the approximate correlations between the location of the microphone that picked up the impulse and the location of the motorcycle, if it were traveling in the motorcade. Is that correct?

Dr. BARGER. Yes; that is correct.

Mr. WOLF. How precise are your locations for the motorcycle as represented by those blue, green, red, and black dots?

Dr. BARGER. I will try not to belabor this point, but at the time that this experiment was designed, we did not know whether the motorcycle was in Dealey Plaza, and we didn't certainly know where along this entire path it was. So it was necessary to sample for fingerprints, as it were, at every 18-foot interval. The process thus designed turned out to be capable of locating, in fact, shots by the fingerprint method that I have been describing. However, it

could not do it in space any more accurately than the distance between two adjacent microphones. In other words, I could only locate the possible location of that motorcycle at each time the fingerprint was found on the Dallas tape to within 18 feet.

Mr. WOLF. So, for example, it is possible that that blue dot would be on the other side of the location of that microphone?

Dr. BARGER. The blue dot I put to show the approximate location of the motorcycle at the time on the Dallas tape that the first possible match was determined, I placed between microphones 5 and 6. It could equally have been placed between microphones 4 and 5, which would put it there.

Mr. WOLF. Those four groupings that you have are the four impulses on the Dallas Police dispatch tape that you identified during the hearing in September as possibly representative of gunfire in Dealey Plaza; is that correct?

Dr. BARGER. That is correct. I subsequently indicated there were four other times on the Dallas Police tape at which our matching process indicated the possibility of a shot; in other words, a match between the test shots and the impulses on the tape by the fingerprint process. The location of the microphone that was picking up these sounds on the Dallas Police tape, in other words, the location of presumably Officer McLain's motorcycle, could be positioned, then, as being within 18 feet of the microphone that indicated that is where the match occurred, and, of course, since the subsequent shots were fired later on in time, I was able to indicate that the motorcycle was approximately here at the time of the first shot and here at the time of the second, and here at the time of the third, if, in fact, it were to be proved to be a shot, and here at the time of the fourth.

Mr. WOLF. Does your prediction of the locations of the motorcycle correspond to the testimony given by Officer McLain this morning?

Dr. BARGER. Yes. In my judgment it certainly does. The officer was able to remember—I was very pleased to hear—that when he was around the corner from Main onto Houston, he could see the Presidential limousine disappearing around the corner here from Houston onto Elm. That distance would be on the order of 180 feet. So he would then be somewhere around 180 feet, perhaps a little less, from the Presidential limousine at that time. Now, the distance from where we think that he was at the time of the first shot, which is here, to the distance where the Presidential limousine was at the time of the first shot is about somewhere between 120 and 138 feet. Again, there is an 18-foot uncertainty. I just said that we have located with our acoustic analysis the result that the motorcycle was 120 to 138 feet behind the limousine at the time of the first shot, which is right about here. Officer McLain remembers having been about 160 to 180 feet behind at this time. He would have, therefore, had to close a little gap, had to gain a bit on the Presidential limousine as he came down Houston.

Mr. WOLF. That, I assume, should be expected if the limousine was slowing as it went around the turn.

Dr. BARGER. Yes; that would happen in the accordion procedure he described, as the Presidential limousine went around here, he would catch up. One of the first points I made as we were analyzing the tape was that the speed remained high until just before the

first shot was detected, and, of course, he would have to slow at that point to negotiate that corner.

Mr. WOLF. Thank you. You may return to the witness table, Dr. Barger.

At this point, Mr. Chairman, I would ask that we mark as "JFK Exhibit F-680" a report that has been submitted to the committee by Mr. Anthony Pellicano. Mr. Pellicano is an independent investigator who submitted a report to the committee after Dr. Barger's testimony in September. Mr. Pellicano has never worked for the committee or been affiliated with the committee in any capacity.

[JFK exhibit F-680 was marked for identification and follows:]

JFK EXHIBIT F-680



VOICE INTERPRETATION & ANALYSIS, LTD.

1107 SOUTH MANNING RD./SUITE 206/WESTCHESTER, PA. 19381/302-345-9100

VOICE IDENTIFICATION
 MAGNETIC TAPE ANALYSIS
 AUDIO TAPE REPRODUCTION
 EXPERT TESTIMONY

JFK Exhibit F-680

110000

ANALYSIS AND COMMENTS

RE: THE DALLAS POLICE TAPES ET AL

RESPECTFULLY SUBMITTED TO THE
 SELECT COMMITTEE ON ASSASSINATIONS
 U.S. HOUSE OF REPRESENTATIVES

3380 HOUSE OFFICE BUILDING, ANNEX 2

WASHINGTON, D.C.

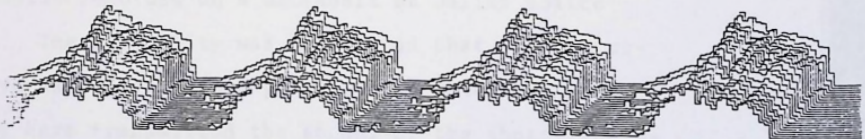
G. ROBERT BLAKEY, Chief Counsel and Director

LOUIS STOKES, OHIO, Chairman

RICHARDSON PREYER, N.C.
 WALTER E. FAUNTROY, D.C.
 YVONNE BRATHWAITE BURKE, CALIF.
 CHRISTOPHER J. DODD, CONN.
 HAROLD E. FORD, TENN.

SAMUEL L. DEVINE, OHIO
 STEWART B. MCKINNEY, CONN.
 CHARLES THONE, NEBR.
 HAROLD S. SAWYER, MICH.
 FLOYD J. FITHIAN, IND.

ROBERT W. EDGAR, PA.



PROPERTY OF



VOICE INTERPRETATION & ANALYSIS, LTD.

1107 SOUTH MANNHEIM RD./SUITE 206/WESTCHESTER, ILL. 60153/312-345-9100

VOICE IDENTIFICATION
MAGNETIC TAPE ANALYSIS
AUDIO TAPE RESTORATION
EXPERT TESTIMONY

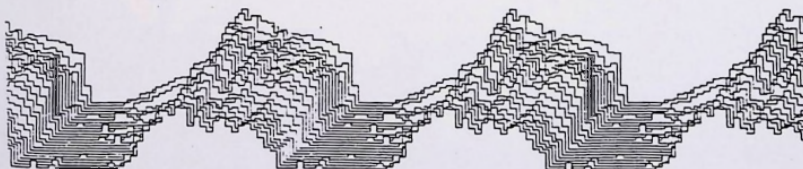
December 13, 1978

Mr. Gary Cornwell, et al
Select Committee on Assassinations
U. S. House of Representatives
3369 House Office Building, Annex 2
Washington, D. C. 20515

RE: ACOUSTICAL STUDY OF DALLAS POLICE TAPES

BACKGROUND

In the course of its investigation into the assassination of President John F. Kennedy, the Select Committee on Assassinations has determined that during a period of approximately five minutes on November 22, 1963 a Dallas, Texas, police motorcycle transmitter, operating on police Channel #1, had its transmitter keyed continuously on; that this five minute period was probably a coincident with the time of the assassination; and that Channel #1 transmissions were continuously recorded on a dictabelt at Dallas police headquarters. The possibility was considered that this motorcycle may have been part of the presidential motorcade and, if so, it may have transmitted the sounds of the shots, thereby allowing a resolution of the conflicting testimony concerning the number of shots which were fired.



It should be noted, however, that the motorcade was operating on Channel #2, which channel was implimented specifically for the motorcade on associated police vehicles. Channel #1 was maintained for normal Dallas police communications traffic. While it would appear unlikely that a vehicle that was a part of the motorcade would be on other than the motorcade channel, the possiblity of an error in channel selection apparently was sufficient to warrant further investigation.

PROPERTY OF

BASIS FOR MY INVESTIGATION

Upon learning by means of the news media of the possibility that the shots were recorded, I was desirous of determining at the earliest possible moment whether there had, in fact, been more than three shots, since I had never been completely satisfied with the Warren Commission Report in this regard. My company, Voice Interpretation & Analysis, Ltd., is equipped with the instrumentation and equipment which would probably have been required for such a determination. The following is a description of the equipment used:

A Hewlett-Packard 9845A Computer interfaced to the following electronic equipment:

An Analogic Computer Data Conversion System (analog to digital converter).

A Nicolet Scientific Corporation 444A Mini-ubiquitous FFT Computing Spectrum Analyzer.

A 9872A Digital Plotter.

(Software for adaptive filtering, FFT, and additional necessary algorithms also programmed.)

Brueel and Kjaer Frequency Spectrum Shaper Type 5587 (analog).

A Rockwell International Automatic Digital Audio Processor (Digital Adaptive Predictive Deconvolver and Adaptive Filter).

A Voice Identification Incorporated Series 700 Analog Frequency Spectrograph.

Along with a laboratory filled with additional supportive electronic, optical scientific testing equipment, and magnetic tape recording equipment, which can be additionally listed if necessary.

PREDICATION

I obtained from Mary Ferrell of Dallas, Texas, a taped copy of the Channel #1 dictabelt (which was formerly in the hands of The Committee and subsequently returned to Mary Ferrell). My initial approach was similar to that being followed by Bolt, Beranek & Newman (BB&N) in their initial test, in that I subjected the tape to various combinations of adapted filtering, analog filtering, and fast fourier transform spectrum analysis to attempt to detect events which could have been shots. This approach was unsuccessful. (This, apparently was unremarkable, since BB&N subsequently reported that they were unable to detect such events from this taped copy, although they report the presence of events which could be shots on another taped copy.)

My second approach was that of studying the taped contents for the purpose of applying deduction analysis. This approach ultimately involved investigation in addition to the analysis of this tape.

ANALYSIS

The first significant finding involved the sound of the motorcade sirens on the Channel #1 tape. If the motorcycle with the open microphone had been with the motorcade, it would be expected that the sirens' sound would have started at full volume and, if the motorcycle had continued with the motorcade, would have continued for the trip to

PROPERTY OF
FBI
JAN 11 1964

Parkland Hospital. On the other hand, if the motorcycle had remained at Dealey Plaza, the sounds would have started at full volume and the volume would have decreased as the motorcade pulled away. The sounds of the sirens on the tape, however, seem to increase, peak, and decrease, as if they were approaching, passing, and leaving the open microphone position. While this observation is admittedly somewhat subjective, if true it would indicate that the motorcycle was not with the motorcade, but was at some point along or near the route taken by the motorcade on its way to the Parkland Hospital.

The second significant finding also involved the sound of the sirens. In this case, the important factor was when they occurred. While it becomes obvious that the time designations provided by the Channel #1 dispatcher may not be completely accurate, an analysis of these time designations puts the beginning of the sounds of the sirens somewhere in the vicinity of 12:33; i.e., 2 or 3 minutes after the presumed time of the shots. Since it would be expected that the sirens would have been turned on as the motorcade began to rush away from the Dealey Plaza, or, in other words, a few seconds after the shots, the earliest acquisition of the siren sounds by the open microphone, two to three minutes later, again indicate that the motorcycle was along the route to Parkland Hospital, rather than a part of the motorcade.

PROPERTY OF

In order to resolve the question of when the sirens were turned on, I contacted Chief Curry, who was the senior police officer in charge of the motorcade. Chief Curry informed me that immediately after the shots were fired, he transmitted (on Channel #2, motorcade channel) the statement that they were proceeding to the hospital and that the sirens were turned on immediately. While there seems to be little reason to doubt Chief Curry's recollection, since it could be opined that in the excitement of the moment, none of the vehicles proceeding to Parkland Hospital had their sirens turned on until later, I procured the tape of the Channel #2 broadcasts to determine if the sirens could be heard during any of the motorcade broadcasts.

From this tape it was determined that Chief Curry broadcasted twice that they were proceeding to the hospital. The first transmission did not identify the hospital. A few seconds after the first transmission he rebroadcasted, identifying the hospital as Parkland. The sirens can be heard in both broadcasts and can be heard in subsequent broadcasts. (The sirens are more clearly discernable at the beginning of the the first broadcast. For this transmission Chief Curry keyed his microphone and paused for a moment before he talked. This allowed the sounds of the sirens to come through with significant volume. When he yelled into the microphone, the relative level of his voice

was higher at the microphone than was the sound of the sirens. The automatic gain control circuit in the transmitter then adjusted the audio gain in the accordance with the highest sound level received and, thereby, reduced the preceived level of the sirens. In the second transmission, the sirens are faint because Chief Curry vocalized immediately after keying the transmitter.)

At this point, I had determined that the sound of the sirens had begun within a few seconds of the shots, as stated by Chief Curry and confirmed by the sounds from the Channel #2 tape. If the motorcycle with the open microphone had been a part of the motorcade it would have transmitted the sounds of the sirens immediately. I had determined, further, that the sounds of the sirens were first audible in the open microphone transmission 2 or 3 minutes later than the presumed time of the shots, meaning, if the presumption of the time of the shots is correct, that the motorcycle with the open microphone on Channel #1 was located at or near the point where the motorcycle would be approximately 2 minutes after they had departed Dealey Plaza for Parkland Hospital. It is now necessary to deal with the presumption of the time the shots occurred.

From previous testimony, it has been established that the Channel #1 dispatcher read from one clock; that the Channel #2 dispatcher read from a second clock; that the clocks were analog (i.e., time is displayed by continous

PROPERTY OF

movement of hour and minute hands); that they are synchronized once a month; and that the two clocks may differ by as much as a minute. Channel #1 taping was continuous; Channel #2 taping was initiated by an incoming or outgoing transmission and terminated following the end of the transmission. Thus, events which are not timed designated can be timed from a timed designation on Channel #1, but similar undesignated events on Channel #2 cannot be timed from a timed designated event, unless it can be shown that the transmissions are sufficiently continuous that the recorder remains in continuous operation. Additionally it must be considered that different dispatchers may use a slightly different system for determining the minutes which will be designated. For example, one dispatcher may consider that 12:20 will not be called until the minute hand has reached 20 and at all times will be designated 12:20 until the minute hand reaches 21. Another dispatcher may consider that when the half minute has arrived, the call will be for the next whole minute. In this case the dispatcher would designate 12:20 from 12:19 and 30 seconds until 12:20 and 30 seconds.

In attempting to identify the relationship between the time of the shots and other significant events, it is necessary to determine the time of the events on Channel #1 by Channel #1 time, the time of the events on Channel #2 by Channel #2 time, and the correlation between Channel #1

time and Channel #2 time, since there are no events on Channel #1 which pin point the time of the shots. The most significant event on Channel #2 is Chief Currys' call that they are preceding to the hospital, since this is known to have occurred a few seconds after the shots. The beginning of the sounds of sirens on Channel #1 is a significant event, as previously discussed. Also significant is the sound of a carillon type bell on Channel #1, since this allows determination of the time interval between the 10 second period considered by BB&N to contain the impluses which may represent the sound of the shots and the beginning of the sound of the sirens. In order to establish a base time for Channel #1, time designations by Channel #1 dispatcher of 12:26, 12:27, a second 12:27, and 12:28 are used. Considering the two approaches, previously discussed, to designating the time and the intervals between the calls, the following matrix results:

SEE THE CHART DISPLAYED IN FIGURE 1 ON THE FOLLOWING PAGE.

The dispatcher reported time is designated on lines 1 through 4. The interval is at interval timed from the tape between the dispatcher reported times. Columns A and B assume that the dispatcher changes his designation on the half minute and columns C and D assume that the dispatcher changes his designation on the even minute.

Starting with line #1, the dispatchers called designation is 12:26. This causes column A to be 12:25::30 and

FIG# 1

DISPATCH REPORTED TIME	INTERVAL	A	B	C	D
#1 12:26 PM		12:25::30 PM	12:26::29 PM	12:26::00 PM	12:26::59 PM
	20 SECONDS				
#2 12:27 PM		12:25::50 PM	12:26::49 PM	12:26::20 PM	12:27::19 PM
	18 SECONDS				
#3 12:27 PM		12:26::08 PM	12:27::07 PM	12:26::38 PM	12:27::37 PM
	22 SECONDS				
#4 12:28 PM		12:26::30 PM	12:27::29 PM	12:27::00 PM	12:27::59 PM

and column B to be 12:26::29. For the designation change on the minute, column C is 12:26::00 and column D is 12:26::59. The subsequent entries in columns A through D are arrived at by adding the measured interval to the line one times. Thus, if the dispatcher called 12:26 at 12:25::30, as designated in column A as the earliest Channel #1 clock time when the designation could have been made, then the line #2 time, occurring 20 measured seconds later must be 12:25::50 and line #3, 18 seconds later, must be 12:26::08, and so forth.

In examining to see whether the three designated times could have been called times indicated in the four lettered columns, we can exclude column A times, since 12:27 (line #2) would not have been called at 12:25::50; 12:27 (line #3) would not have been called at 12:26::08; and 12:28 (line #4) would not have been called at 12:26::30.

Column B is marginally acceptable. 12:26::49 would be called 12:27 (line #2); 12:27::07 would be called 12:27 (line #3); and 12:27::29 could be called 12:28 (line #4).

Column C is not acceptable, since, under the system represented by column C and D, 12:26::20 would not be called 12:27 (line #2); 12:26::38 would not be called 12:27 (line #3); and 12:27::00 would not be called 12:28 (line #4).

Column D is marginally acceptable under this system, since 12:27::19 would be called 12:27 (line #2); 12:27::37 would be called 12:27 (line #3); and 12:27::59 could be

called 12:28 (line #4).

We can now locate either of these times within a 30 second period to Channel #1 clock time and can, and therefore, measure the time intervals from either of these 4 events to any other event on the Channel #1 tape and, thereby, locate these other events within 30 seconds of the Channel #1 clock time.

Using the 12:26 designation, we have determined that the transmission occurred between 12:26::29 and 12:26::59. The measured time for this event to the bell is 4 minutes and 15 seconds and to the beginning of the sirens is 6 minutes and 2 seconds.

According to BB&N, the first impluse, which they considered may represent a shot, occurred 16 seconds before the sound of the bell and the last impluse, which they considered may represent a shot, occurred 6 seconds before the sound of the bell.

The chart in Figure 2 on the following page lists these events in the time period in which they occurred.

It is interesting to note that BB&N, using Least Square Analysis, a refined averaging process, computed the time of the first possible shot impluse as occurring at 12:30::47, Channel #1 clock time. My range for the same point is 12:30::38 to 12:31::08, with a mean (average) of

FIG# 2

EVENTS	FROM	TO
12:26 PM TIME DESIGNATION	12:26::29 PM	12:26::59 PM
1ST POSSIBLE SHOT IMPULSE	12:30::28 PM	12:30::58 PM
LAST POSSIBLE SHOT IMPULSE	12:30::38 PM	12:31::08 PM
SOUND OF BELL	12:30::44 PM	12:31::14 PM
BEGINING SOUND OF SIRENS (CHANNEL #1)	12:32::31 PM	12:33::01 PM
ENDING SOUND OF SIRENS (CHANNEL #1)	12:33::11 PM	12:33::41 PM

12:30::53. Since we differ by only 6 seconds for our averages, our results are mutually supportive.

An interim conclusion may be made at this point:

- a. If the motorcycle with the open microphone were a part of the motorcade, it would have picked up the sounds of the sirens as soon as they began.
- b. The sirens began a few seconds after the shooting.
- c. The open microphone produced the taped sound of the siren at approximately 12:32::46 (plus or minus 15 seconds), Channel #1 clock time.
- d. Therefore, if the motorcycle were in the motorcade, the shots occurred a few seconds before 12:32::46. Since BB&N analyzed the 10 second section starting at approximately 12:30::53, Channel #1 clock time, almost 2 minutes before the shots would have been fired, it may be stated definitively that any impluses detected during that 10 second period were not the result of shots recorded by the open microphone. Of course, if the motorcycle were not within the motorcade, it did not record shots at any time.

I will return now to the primary problem of determining if the motorcycle open microphone could have transmitted the sound of the shots at any time (i.e., if the motorcycle were with the motorcade when it was in Dealey Plaza).

BB&N has determined by Least Square Analysis of transmissions giving time designations on Channel #2 that the approximate time of the assassination was 12:30 and 12 seconds, Channel #2 time. Since this conclusion was arrived at based upon essentially continuous running of the Channel #2 recorder, it would seem to be a reasonably accurate

estimate. Accepting it, for the moment, as accurate, and allowing a worst side error between Channel #1 and Channel #2 of 1 minute in either direction, the time of the assassination by the Channel #1 clock would be between 12:29::12 and 12:31::12. Allowing 10 seconds between the time of the assassination and the time the sirens were turned on and Chief Curry made his call, the latest the sirens could have started, by Channel #1 clock time would have been 12:31::22. If the motorcycle with the open microphone were with the motorcade, we would hear the sound of the sirens on the Channel #1 tape at that time, instead of between 12:32::31 and 12:33::01. In other words, the Channel #1 and Channel #2 clocks would have to be a full minute apart and the Least Square Analysis would have to be a minute to a minute and a half in error over a 6 minute analysis, and both events cumulative (in the same direction). Since this seems inconceivable, it is concluded that there is almost no possibility that the motorcycle was with the motorcade.

Since this conclusion cannot be stated quite as decisively, based upon the time elements, as the previous interim conclusion, the following supportive evidence is provided.

- a. The open microphone was on Channel #1, the normal police channel. The motorcade vehicles were on Channel #2, the special motorcade channel. If the motorcycle with the open microphone were with the motorcade, the transmission should have been on Channel #2.

- b. The sound of the sirens on the Channel #1 tape increases in volume and then fades out as would be expected if the motorcade were approaching, passing, and leaving the location of the open microphone.
- c. The sound of the bell on the Channel #1 tape requires that a bell be located with an acoustical range of the open microphone. There was no such bell in or near Dealey Plaza. While it has not been identified as the same bell, there was a bell in the tower of the Lucas Baptist Church, 4435 Rosewood (near the intersection of Lucas and Rosewood), Dallas, Texas, located 0.6 miles from the position of the designation of a three wheel motorcycle on traffic control duty on the Stemmons overpass over Industrial Boulevard.
- d. Several three wheel motorcycles were positioned in or around the Trade Mart and specifically in the area of the Stemmons Expressway and Industrial. One motorcycle officer has stated to me unequivocally that he was assigned and was specifically at the Stemmons and Industrial overpass and saw the motorcade traveling towards him, and away from him, going towards Hines Boulevard, as they were heading towards Parkland Hospital. He also stated to me that it is quite possible that it could have been his microphone keyed as he had several problems with his radio of the same nature in the past.
- e. The following transcript is of a transmission I located on Channel #2 and recorded on the tape recording included with this report for your review.

DISPATCH: 15 CAR 2.

15 CAR 2: 15 CAR 2.

DISPATCH: There is a motorcycle officer up on Stemmons with his mike stuck open on Channel #1. Could you send someone up there to tell him to shut it off?

15 CAR 2: 10-4

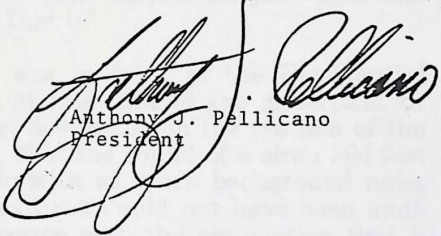
DISPATCH: 12:34

CONCLUSION

- A. It is concluded that the noise impluses detected during the period immediately preceding the sound of the bell were not shots.
- B. It is concluded that the motorcycle with the open microphone on Channel #1 was not a part of the motorcade, but was in fact, located along the route of the motorcade from Dealey Plaza to Parkland Hospital.

Additional information regarding my acoustical analysis, my investigative analysis, and my further investigation as to the location and identity of the keyed open microphone and spectrum analysis of the bell located at the Lucas Baptist Church, and questions for Dr. Barger (regarding his analysis et al), would be supplied upon an additional request.

Respectfully submitted to The Select
Committee on Assassinations,



Anthony J. Pellicano
President

AJP/jd

PROPERTY OF

Mr. WOLF. Dr. Barger, have you had an opportunity to review the report submitted by Mr. Pellicano?

Dr. BARGER. I have read it.

Mr. WOLF. I would like to read parts of this report to you and ask you to comment on it. Mr. Pellicano characterizes his work as a deduction from your testimony, in addition to some independent investigation of his own. The first portion I would like to read is on page 4. I will read the paragraph and ask you to comment. It says:

The first significant finding involved the sound of the motorcade sirens on the channel 1 tape. If the motorcycle with the open microphone had been with the motorcade, it would be expected that the sirens' sound would have started at full volume and, if the motorcycle had continued with the motorcade, would have continued for the trip to Parkland Hospital. On the other hand, if the motorcycle had remained at Dealey Plaza, the sounds would have started at full volume and the volume would have decreased as the motorcade pulled away. The sounds of the siren on the tape, however, seem to increase, peak, and decrease, as if they were approaching, passing, and leaving the open microphone position. While this observation is admittedly somewhat subjective, if true it could indicate that the motorcycle was not with the motorcade, but was at some point along or near the route taken by the motorcade on its way to the Parkland Hospital.

Can you comment on that, please?

Dr. BARGER. I can't remember all that, but while I was still focusing on what you were saying, the statement was made that it would be expected that the motorcycle radio that we have placed in the motorcade would pick up the sounds of the siren on the chief's car that would presumably have been turned on just after the shooting. I think I heard that. Is that it?

Mr. WOLF. That is correct.

Dr. BARGER. The chief's car was in front of the Presidential limousine and would have been at this time at the underpass, or just beyond, a distance of at least 300 feet from the position of the motorcycle as we have placed it. Now the sound of a siren 300 feet away from a running motorcycle with as much background noise as there was in the Plaza at that time would not have been audible. In other words, I would disagree with the assumption that it could be heard. A little simple arithmetic indicates since the source level of sirens is around 120 decibels and the transmission loss from that particular chief of police car to the motorcycle would have to be at least 40 decibels, the sound pressure level of the siren at the position of the motorcycle could not have exceeded about 80 decibels, but we have seen that insensitive direction of the motorcycle microphone, it being a directional microphone and not sensitive to sounds from the front, was pointed at the chief's car. So that received sound level of 80 decibels would be considerably less than the ambient noise level in the microphone at that time, which was 90 decibels, and also would have been coming in on the insensitive access of the microphone. So I don't believe that that assumption that you would hear this siren is true. That was not a very short answer.

Mr. WOLF. So, therefore, you would also disagree with Mr. Pellicano's deduction that since the sound of the sirens occurred somewhere in the vicinity of 12:33, 2 or 3 minutes after the presumed shots, the motorcycle could not have been in Dealey Plaza?

Dr. BARGER. Yes.

Mr. WOLF. I would like now to read from page 14 of the submission to the committee and ask you to comment upon this statement. It concerns a question I believe Congressman Dodd in part addressed this morning about the ringing of a bell that appears on the tape. The report states:

The sound of the bell on the channel 1 tape requires that a bell be located within an acoustical range of the open microphone. There was no such bell in or near Dealey Plaza. While it has not been identified as the same bell, there was a bell in the tower of the Lucas Baptist Church, 4435 Rosewood (near the intersection of Lucas and Rosewood), Dallas, Tex., located 0.6 miles from the position of the designation of a three-wheel motorcycle on traffic control duty on the Stemmons overpass over Industrial Boulevard.

Can you comment on that passage?

Dr. BARGER. The sound of the bell occurred a few seconds after the time of the fourth shot. I don't remember exactly when. It indicates that there was a transmitter on a motorcycle or perhaps in a squad car or possibly also a walkie-talkie, but a transmitter that was transmitting a little after the fourth shot that was within sound range, audible range, of a bell. I agree completely with Officer McLain's statement that more than one transmitter can share a receiver at one time. This is true whenever the strength of the carriers of all of the radios in question are within the capture ratio of the receiver in their intensity.

Mr. WOLF. Thank you, Dr. Barger. I would now like to address the testimony Professors Weiss and Aschkenasy gave this morning. Have you had an opportunity to review the work of Professors Weiss and Aschkenasy?

Dr. BARGER. Yes; I have.

Mr. WOLF. What did you do to review independently their work that was done for this committee?

Dr. BARGER. In the first place, shortly after my testimony at the previous hearing, I met with Professor Weiss and Mr. Aschkenasy and members of the committee staff, to discuss how best we might reduce the uncertainty in the results that we had obtained at that time, in particular relating to the possibility of a third shot, which is listed in green in that exhibit. We contributed in that discussion to the concept of an analytical extension of our work, which is, in fact, the analytical extension that they carried out. So we were familiar with the parameters that they would need to know and also with the procedure that they intended to follow. I asked them what parameters they were using and found in each case that I agreed with them. In other words, we checked their procedures and the parameters that they used.

In addition, and perhaps most importantly, at the stage where they had finished with all their strings—as they were illustrating this morning—and had identified the echo-producing objects in the plaza that caused the echoes at positions near microphone 4 there, where we found the shot may have occurred and where it may have been received, we looked at those echo-producing objects for that location that they found with their very accurate and diligent procedure and made a judgment about each one as to whether it would be able to produce an echo of sufficient strength to be heard in the motorcycle microphone, considering the direction from which it had to arrive at the motorcycle microphone, considering

what we now know the direction the microphone is pointing at that time. We found that the echo-producing objects that they identified were reasonable and would, in fact, produce echoes of sufficient strength to be seen, or heard, I should say.

Mr. WOLF. In your testimony on September 11, addressing particularly the third impulse in the Dallas Police dispatch tape, you stated that the probability of this being a shot from the grassy knoll was 50-50. Professor Weiss and Mr. Aschkenasy, today, whose testimony you heard, stated that the probability of this being a shot from the grassy knoll was 95 percent or better. You have reviewed the work of Professor Weiss and Mr. Aschkenasy. Do you agree with their assessment?

Dr. BARGER. Yes; once we checked their procedures, their parameters and their echo-producing objects, we received from them the results of their match. Drs. Kalikow, Rhyne, and Mr. Schmidt and I, at Bolt, Beranek, and Newman, reviewed their results, and we concluded that they had successfully achieved a match having a correlation coefficient of 77, and you remember that was the number I was using of goodness of match. We also found that they had done this with only a plus or minus one one-thousandth of a second error for each match, whereas we had used a plus or minus six one-thousandths of a second error, if you will, or acceptance window as Professor Weiss called it, in order to achieve our matches. Now, the reason that we used the large acceptance window of six one-thousandths of a second was because we didn't know, as I said, exactly where the motorcycle was. The reason they were able to lower theirs to one one-thousandth of a second was because they found exactly where it was by the procedure they described this morning. The effect of reducing this acceptance window is to greatly reduce the likelihood that noise bursts that occur could mimic the fingerprint of a shot from any place and received at that microphone. It reduces it very substantially. In other words, in the terminology that I used last time, their ability to achieve this match within plus or minus one one-thousandth of 1 second reduces the false alarm rate substantially. In other words, we had a large false alarm rate because we had a large acceptance window because we didn't know exactly where the motorcycle was. That gave us a large false alarm rate. They corrected that problem by lowering the acceptance window. There is another feature of that score besides the acceptance window. That is important. That is the value of the correlation coefficient achieved. As I said, we would not accept as a potential match any correlation coefficient that was less than one-half. But we didn't require it to be one, either, which is what it would be if there was no noise. Noise is the thing that causes the correlation coefficient to be less than one. Noise is on the Dallas Police recording. Professors Weiss and Aschkenasy did nothing to reduce the noise, so I would not have expected they would have increased the correlation coefficient. In fact, they accepted more noise than we did, and that could have affected the correlation coefficient, which should have gone down. So their correlation coefficient, while high, was not unity. On the other hand, the false alarm rate one would expect from their match, which was so tight, this would make the likelihood of random noise

bursts to fit all 10 of those to within plus or minus one one-thousandth very small. I think I forgot the question.

Mr. WOLF. Your ability to state with 95-percent certainty, now, what was only a 50-50-percent probability in September was, in essence, due to the narrowing of the match time from six one-thousandths of a second to one one-thousandth of a second. Is that, in essence, correct?

Dr. BARGER. Yes, sir. After looking at what they had done, and the fact they had maintained a high correlation coefficient while reducing the acceptance window, resulted in our independent calculation of the expectancy that they could have achieved the match they got only 5 percent of the time by random if it had just been noise on the tape and not a gunshot from that place. That is why we stated independently, although their number was quite similar to ours, that we felt that the likelihood of there having been a gun shot from that knoll and received at that point now to be about 95 percent or possibly better.

Mr. WOLF. Thank you very much, Dr. Barger. I have no further questions.

Mr. PREYER [presiding]. Dr. Barger, we appreciate your being here again. I was interested in Mr. Wolf's questions to you at the outset about the Kent State hearings and your work there. There has been a lot of discussion of the acoustics technique as a relatively new technique applying old principles and that the Kent State case was perhaps the first in which it was applied. Now, I understood you to say that in that case your analysis of the timing and location of the shots was stipulated as being correct and was admitted into evidence.

Dr. BARGER. That is correct.

Mr. PREYER. Was that a criminal case? What was the nature of the case?

Dr. BARGER. I should know the answer to that, of course; however, I am a physicist. It was an indictment brought by a Federal court, I believe. You know you might, if you would, ask that question of the Chief Counsel of this committee. He might be able to answer that better.

Mr. BLAKEY. I think Dr. Barger is correct. The matter was considered both in the State and Federal level. My memory is that there was a Federal indictment returned under the Civil Rights Act, and I think ultimately the jury found the guardsmen not guilty. The case has also been tried at the civil level in the State, and it is presently in litigation now.

Dr. BARGER. This was not the civil case.

Mr. PREYER. What I was getting at was how your acoustics testimony was used. Could you briefly outline to us what it showed? Were you able to locate individuals who could have fired shots from your acoustic study?

Dr. BARGER. What we did was locate the physical positions where rifles were fired from, where the first one was fired from, the second one, the third, and the fourth. Then it was quite a fusillade, and it got indistinct. But we located the physical positions and someone else with photographic evidence made the connections between individuals and physical locations. Exactly how they did that and in what way that was used, I don't know.

Mr. PREYER. Do you recall, and perhaps this is unfair to ask a scientist rather than a lawyer, but do you recall in what form the judge charged the jury concerning that acoustics testimony, as to how they could consider it?

Dr. BARGER. Well, in fact, Judge Pryer—I was there, assuming that I would be testifying. I had written my results into a record which had been examined by both sides. When it was time to call me, the defense stipulated the information in the report. So I went home. However, as I recall, I don't know what the judge said. I went home at that point.

Mr. PREYER. Well, it sounds as if your acoustics testimony actually located the direction of the shot and then the photographs simply put the name of the person located there.

Dr. BARGER. That is correct.

Mr. PREYER. In other words, that was—your testimony was key, I would think.

Mr. DEVINE. Will you yield?

Mr. PREYER. I will be glad to.

Mr. DEVINE. Dr. Barger, was the stipulation that your testimony would be so-and-so if you testified, or was the stipulation as to the accuracy of your testimony? There are two different kinds of stipulations. One would be if Dr. Barger testified, he would say thus and so. Another stipulation is one by agreement that it is agreed that your testimony which was supplied was accurate.

Dr. BARGER. I just don't feel that I can answer that question. I don't know that for sure.

Mr. DEVINE. Thank you.

Mr. PREYER. Thank you, Mr. Devine.

Mr. Fauntroy?

Mr. FAUNTROY. Thank you.

Dr. Barger, you found the fingerprints of four outbursts that you believe to have been supersonic shots, is that so?

Dr. BARGER. No; let me—that is a good question.

These echo patterns that I called, suggested might be called fingerprints, can contain a precursor which is an end wave or a shock wave caused by a supersonic bullet, or they might not. If the rifle was—did, in fact, fire a supersonic bullet, and if the trajectory of the bullet was at an angle from the receiver that was less than about 80 degrees, you would see that precursor, the end wave, the shock wave caused by the supersonic bullet. If the microphone, in effect, was behind the rifleman and the trajectory was away from the microphone, you would not see that precursor, even though it was a supersonic bullet.

Mr. FAUNTROY. All right. On the charts which Dr. Weiss set before us we saw the indication of a burst preceded by—

Dr. BARGER. Yes.

Mr. FAUNTROY [continuing]. What was described to us as shock waves.

Dr. BARGER. Yes.

Mr. FAUNTROY. Could those lines have been produced by noise other than that of shock waves?

Dr. BARGER. Yes.

Mr. FAUNTROY. What indication do you have from the patterns that you noticed in the four shots that would lead you to suggest to

us that in all probability those waves were shock waves or those lines were produced by shock waves?

Dr. BARGER. Yes; well, your question is right at the heart of the matter. In the fourth shot our findings indicate that that is in all probability a shot from the sixth floor of the Texas depository at the vicinity of the limousine, near frame 313.

Now, we know the muzzle velocity of that rifle, and so now we can look at our fingerprint smudged on the Dallas police tape, and we can see the indication of a shock wave that precurses those impulses, and we can calculate when, you know, when it should occur because we know everything about it, we know all of the geometry and the speed of the bullet and it calculates out just right. So we know what a shock wave looks like on that Dallas police tape recording, because we are virtually certain that we see it on the fourth shot, as we should.

Now, the precursor that Professor Weiss and Mr. Aschkenasy were looking at this morning looks just like that, looks like it could be, it looks like a shock wave. It occurs at a time before what appears to be a muzzle blast that is consistent with reasonable trajectories and muzzle velocities, so it is entirely consistent with the shock wave, with the impulse made by a supersonic bullet fired from a rifle.

Mr. FAUNTROY. So in short, your answer is that the shock waves which we have identified on the shots that we know about resemble sufficiently the shot No. 3 to conclude that that, too, was in all probability a shock wave?

Dr. BARGER. Yes. That is just what I said. You asked the question a little differently the first time.

Mr. FAUNTROY. I know it.

Dr. BARGER. And let me answer that, also.

You asked if there is anything else that could resemble the shock wave of a supersonic bullet, and my answer would have to be yes, it is possible that a burst of static would occur of that amplitude and at that time. And, therefore, it is conceivable that although that is consistent with being a shock wave in any way, it is conceivable also that that is a noise burst.

Having said all of that, I feel compelled to answer your next question, which is how likely is that to be a noise burst. Well, the best I can do here, and I think it is the best anyone could do, is to look at the record to find what is called the marking rate, in other words, the average number of such noise bursts that occur in a unit period of time. In other words, how many of those per second occur anyway?

Well, you answer that question by looking at someplace on the tape where there may be a few impulses, but they are clearly not the fingerprints of gunshots, and so you look there and you say how rapidly do things like this occur that resemble end waves. Well, I have done this, as this was going to be your next question, and I had to have an answer for it. It appears in a very conservative way that these are happening, you have this amplitude that Professor Weiss and Mr. Aschkenasy showed on that exhibit.

In fact, it probably would not hurt to have that exhibit up. I have no idea what the number is, but it is the one with all the wiggly lines, not to suggest that they only had one exhibit with

wiggly lines. But in any case, the precursor that we are talking about only, a similar precursor when they are obviously noise bursts certainly occur no more often than about every 120 one-thousandths of a second.

Now, the total time span over which a noise burst could mimic a shock wave, given any reasonable muzzle velocity and direction of the fire, is on the order of 25 to 30 one-thousandths of a second. And so by a fairly straightforward chain of logic, the odds that a noise burst of those characteristics falling into that time span so they could mimic a shock wave are less than one in four, probably one in five, and I get that simply from observing the marking rate or the rate at which random noise bursts occur. That is the one that might conceivably mimic a shock wave.

Mr. FAUNTROY. Thank you, Mr. Chairman. I know my time has expired.

Mr. PREYER. Thank you. Mr. Devine.

Mr. DEVINE. I just have a couple of short questions.

Doctor, when you had your reenactment on August 20, do you recall what the temperature was?

Dr. BARGER. It was very hot. It varied. At the beginning of the day when we were testing in the microphone right down near Main Street it was about 73°, I recall, the first time I looked. At the time we finished, we were over on Elm Street, it was noon, and it was 90° the last time I looked.

Mr. DEVINE. There was a lot of fuss made this morning about what the temperature was on November 22, and they concluded it was roughly 65°?

Dr. BARGER. Yes.

Mr. DEVINE. In your reenactment, would that make any difference in your conclusion, the fact that the temperature is measurably different?

Dr. BARGER. Yes; the speed of sound is important to my process, and, therefore, it has to be computed correctly. Now, of course, the relevant choice in this, what is the precision that one needs in order to achieve the purpose that we have set out to achieve? In the case of the reconstruction, as used by Professor Weiss and Mr. Aschkenasy, they needed to have that temperature accurate enough so that when they swung their strings around they would hit something at all, because the only thing that they used my data for other than the fact that I told them about where the motorcycle was, you know, within 18 feet, was what that one echo pattern looked like, that one fingerprint from microphone 4, and if they did, if I had known that it was 90° when I fired that shot, but told them it was 65°, their string would have come up short, and it would have missed that building, and so it was necessary to get it approximately correct.

Now, the question really is how correct does it have to be, how accurate?

Now, it is easy to show, since the speed of sound goes like the square root of the absolute temperature, that if you make a 5° error in the temperature, then your error in speed of sound will be one-half of 1 percent.

Now, Professor Blakey correctly described the process by which I determined that it was 65° during the assassination. Supposing

it were 70°. I think 5° is the outside of our uncertainty. Then the error in the sound speed would be one-half of 1 percent. Now, since my uncertainty in location was 18 feet, and since the difference in travel distance of sound over the paths we are talking about at the level of one-half of 1 percent is only 2½ inches, I cared not one whit about one-half-of-1-percent errors in the sound speed. On the other hand, the whole purpose of Professor Weiss and Mr. Aschkenasy's procedure was to add precision to the procedure that we developed, analytically to compute with great precision and in very narrow time windows where these echoes must fall if, in fact, fingerprint comparison is to be declared a valid match. And they achieved, as I recall, a location accuracy of something like plus or minus 6 to 10 inches. So the 2- or 3-inch error that could be induced by a 5° uncertainty is scarcely noticeable, even to them.

Mr. DEVINE. In another vein, Dr. Barger, I think the testimony originally was that Officer McLain was putting along at 11 or 12 miles an hour in the motorcade. After the shot was fired they took off for Parkland Hospital when it was necessary for them to rev up and had trouble catching the limousine. Did I understand you to say that even with the open mike that there was no measurable difference in motorcycle noise, that the decibels were such that it wouldn't make any difference if we are talking about that motorcycle having the open mike on it? It would seem to me as a layman that there would be considerably more motorcycle noise when he took off for Parkland Hospital.

Dr. BARGER. Well, there definitely was. I believe in my previous testimony I did not focus on what the motorcycle may or may not have done after the shooting on the basis of the sound that it made. On the other hand, you have just focused me on that.

The noise level of the motorcycle as perceived through the radio was rather high up until about 2, about 3 seconds before the first shot was fired. In other words, the motorcycles have greatly reduced speed 3 seconds before the first shot was fired, which was a very fortunate thing in the sense that it made it easier to see these smudged fingerprints of gunfire, because otherwise they would have been more obscured by the noise.

Now, that motorcycle noise stayed down in this reduced level, it did not go off, it stayed down, but it stayed down at this reduced level, and it was reduced by about 10 decibels, which we measured—the noise level was reduced by 10—decibels, and it stayed that way for about 30 seconds, 30 or 40 seconds, and then it rose again to as loud a level as it had previously been and even greater, and stayed that way for several minutes. In other words, the motorcycle stayed at a low speed for less than a minute, certainly, about a half a minute, after the shots, and then it speeded up again and it went even faster than it had before, and it continued to do that for at least 2 minutes.

Mr. DEVINE. Well, you do not have any trouble then in identifying Officer McLain's motorcycle as the one on which the open mike existed. Is that correct?

Dr. BARGER. Well, I have no way of knowing from the sounds that came through the radio what motorcycle it was that was making that noise, that is correct.

Mr. DEVINE. But you were here when Dr. Weiss testified this morning. Did you agree with his conclusions on that?

Dr. BARGER. I think I would be safe if I asked you to remind me what his conclusions were on that. My attention may have wandered.

Mr. DEVINE. If my recollection is correct, I think he said it was logical to assume that the motorcycle was in the position where Detective McLain was or Officer McLain was to show the results that appeared on their charts and findings. At least that is my assumption from having listened to him.

Dr. BARGER. I am sorry. I am not certain enough that I understand that question that I should attempt to answer it.

Mr. DEVINE. Well, the bottom line is this: we have established without much question that there was an open mike on a motorcycle someplace.

Dr. BARGER. Yes.

Mr. DEVINE. And it is important to identify what open mike was recording the shots from 1, 2 and 4 as well as the No. 3 shot which is alleged to have come from the grassy knoll.

Dr. BARGER. Yes.

Mr. DEVINE. Now, that is the receiver, that mike is the receiver.

Dr. BARGER. Yes.

Mr. DEVINE. It is important to identify it, and apparently Dr. Weiss and his colleague are satisfied that it was the motorcycle behind the limousine on the left side, and I was wondering if your findings would follow that same logic.

Dr. BARGER. Yes, yes, yes.

I thought that was what your question was. I just wanted to make sure.

The position that we had originally found for the motorcycle as a function of time, we do not feel our estimate of the motorcycle position, I do not believe is modified by Professor Weiss and Mr. Aschkenasy's testimony. In fact, perhaps corroborated. And I, in listening to Officer McLain, I find that his memory of where he was relative to the time of the shooting does, in fact, correspond with the position where we found a motorcycle was, and since he did not know of any, he did not report a motorcycle within 5 or 10 feet of him, it must have been him.

Mr. DEVINE. Right. Thank you very much.

Chairman STOKES. Time of the gentleman has expired.

The gentleman from Connecticut, Mr. Dodd.

Mr. DODD. Thank you, Mr. Chairman.

I was tempted to ask you now to translate everything you have just said for the last 20 minutes in layman's terms. I noticed your definition of a correlation coefficient is the number of echoes matched with impulses over the square root of the number of echoes times the number of impulses.

Dr. BARGER. Yes.

Mr. DODD. I thought that was what your answer would be.

Dr. BARGER. Oh.

Mr. DODD. I wanted to give you a chance to sound positive. One is the perfect match, that is when you would have between the Dallas Police Department tape and the predicted tape, if they matched absolutely exactly, you would end up with 1.

Dr. BARGER. Yes.

Mr. DODD. So we are talking 0.7's, 0.8's, 0.6's, and 0.5's; we are coming within that percentage of a perfect match.

Dr. BARGER. Yes.

Mr. DODD. OK. I would like to take first of all, if I could, on the very first shock wave that you record, there is no muzzle velocity that appears, or is it the shock wave that I am distinguishing? Anyway, there is on that first strong impulse that you identified originally as coming from the Texas School Book Depository, it lacks that shock wave.

Dr. BARGER. Yes.

Mr. DODD. You explained that as being the fact that the receiver, in this case the motorcycle, was probably not in proper enough position to pick up the cone.

Dr. BARGER. Yes.

Mr. DODD. Is that correct?

Dr. BARGER. That is correct.

Mr. DODD. How can you explain it within 1.6 seconds immediately thereafter we get that kind of an impulse?

Dr. BARGER. May I walk over there and—

Mr. DODD. Sure.

Dr. BARGER. The position that we estimate as the motorcycle position at the time of the first shot is about here. The first, the trajectory of the first shot would be about as indicated by this pointer because the limousine was over here at about, oh, in the vicinity somewhere around 160, I believe.

Now, this angle from the trajectory to the microphone, if it is greater than, in fact, 60 degrees for a Mach 2 bullet, you will not hear it, and that angle is just slightly greater. So you are right on the edge of hearing that shock wave. It would be very weak, since you are on the edge, so you undoubtedly would not see it.

After the 1.6 seconds that you have described, at a speed of 11 miles an hour, I believe that is—

Mr. DODD. Now he is slowing down, he is coming around the curve now.

Dr. BARGER. Correct, correct, and he has, according to our matching procedure, achieved a position somewhere between 2.6 and 2.10; 2.10 is over here, and 2.6 is here. So he has moved to somewhere around here where I indicated on the red dot. That is still, is just on the edge of the 60° angle, and so you would not expect to see it, and you do not. The first two do not show a precursor that could be considered to be an end wave from a supersonic trajectory.

Now, on the third one, however, the motorcycle had achieved a position which, in my—well, I mislabeled that last time, I should have been right here between 4 and 5, near 4, this is where the motorcycle was at the time of the third shot. That one appears to have emanated from here, and that is well within that angle, in other words that shock wave will come right back by and hit it. The fourth, by the time the fourth shot was fired, the motorcycle is here, and the shot came from the depository here, and you are almost right underneath the flight path of the bullet, and, boy, and that you would hear, and it is observed in the data.

Mr. DODD. All right. Unless you want to stay there, I do not know any reason why you have to, but let me ask you what I asked

Dr. Weiss this morning about the availability 15 years ago of the expertise that you have used to arrive at the conclusion you did in September and again today. Could the Warren Commission have conducted similar tests then with the available information they had in 1963-64 and have arrived at a similar conclusion that you and Dr. Weiss have arrived at?

Dr. BARGER. Yes.

Mr. DODD. There has not been any significant improvement in the science that would have prohibited them from utilizing this kind of testing?

Dr. BARGER. No.

Mr. DODD. OK.

We have heard and we keep on repeating it ourselves, and I asked the question of Dr. Weiss, and I will ask it again of you, we have talked about the probability of the third impulse, in fact, all four impulses that were talked about, but the third impulse particularly today, is a loud noise from the grassy knoll, and that is 95 percent sure, and I do not think I got an answer this morning, I may not have pursued it far enough, what is the probability that, that our noise from the grassy knoll was, in fact, a rifle shot?

Dr. BARGER. Yes. Well, Congressman Fauntroy was working on that one, too. Our independent estimate of the probability that an impulsive sound behind the fence on that knoll of loudness as great as that from a rifle that was, in fact, discharged and received where we have indicated, is 95 percent or better. Now I did not say a rifle, I said an impulse that is as loud as one. And now, you know that maybe—

Mr. DODD. We have kept on talking about 95-percent probability that a rifle shot is being fired. I am assuming the rifle shot, and I am wondering whether or not we can assume the same to be a probability.

Dr. BARGER. I am not sure I said that.

Mr. DODD. We have been, at least.

Dr. BARGER. We find that the likelihood that an impulsive noise came from that location and was received where we indicated or actually where Weiss and Aschkenasy indicated, you know, which is 5 feet away from where we had estimated, and that is as loud as a rifle, is 95 percent or better.

Now, I am not prepared to tell you how many cherry bombs in series it takes to simulate a rifle, because I have not experimented with those since the days of my youth. But the fact is it is conceivable that one could generate such a noise.

However, those cherry bombs would not emanate a supersonic trajectory which would cause a shock wave, which is indicated in the data. So when I asked Congressman—answered, I mean—when I answered Congressman Fauntroy's question about the likelihood that that impulse that seems to be a shock wave might, in fact, be a noise burst that's masquerading as a shock wave, I made an estimate of how likely that would be, and I came out about one chance in five, or an 80-percent probability that that is caused by a muzzle blast and only a 20-percent probability that it was caused by noise.

So, to answer your question, I think there is a 95-percent probability that a loud impulsive sound emanated from that point. But,

I have to multiply that by the probability that given there was a noise, it was also a rifle. The only evidence I have that it was likely to be is the presence of the shock wave.

Mr. DODD. All right, but now——

Dr. BARGER. And that is a point approximately, if I may perform that multiplication, I get something like 78 percent, so to answer your question literally, I have to say my estimate is about 78 percent likely to be a rifle.

Chairman STOKES. Time of the gentleman has expired.

Mr. DODD. May I proceed for an additional 2 minutes, Mr. Chairman?

Chairman STOKES. Without objection, the gentleman is recognized 2 additional minutes.

Mr. DODD. We have no end wave in 1 and 2.

Dr. BARGER. Right.

Mr. DODD. What does that do to the probability of that being a rifle?

Dr. BARGER. Nothing. We do not expect an end wave in 1 or 2 because the receiver is in the wrong position to hear it.

Mr. DODD. OK. But does that not increase the probability that there could be a like noise that would have created the same impulse, since there was no recorded end wave?

Dr. BARGER. If anything, it decreases it, because there was not any like noise that popped up and masqueraded as a shock wave in 1 and 2. If there had I would have said, would have said no, no, no, it should not be there, because the geometry is wrong. So if it was there I would have said this is a noise burst masquerading as a shock wave, but none did.

Mr. DODD. Let me try and just wrap up this way with you. The reason we are here today, in effect, is because back on September 11, when we finally got down to this third grouping that pointed to the possibility of a shot coming from the grassy knoll, I forget which member of the committee pursued you on this whole question of probabilities then, but you arrived at the 50-50.

Dr. BARGER. I think you took turns.

Mr. DODD. Could you now go back for us, if you would, and give us your assessment on all four of these impulses, with the degree of probability again, now including the assessments or reassessments of Dr. Weiss and associate.

Dr. BARGER. Yes; the first point is that their refinement of our technique that they applied to the third shot, which has indicated that it in all likelihood was a shot, does not affect materially my estimates of the likelihood on the other three.

Now, in case that answer boggles your mind—if it does not, I will not elaborate.

Mr. DODD. Oh, elaborate. If it does not mine, I am sure it does somebody's.

Dr. BARGER. OK. My reasoning had gone this way: I had achieved 15 correlations over my threshold level of .5, each of which was a potential shot. I do not mean to say that. Each one was a potential match with a test shot, and if several came at one incident time, as they did, they all together were just indicating the same shot.

Since I had used the plus or minus 6 millisecond time window—which might also be called, unelegantly I would say, a fudge factor—it allows the test patterns from two adjacent microphones to resemble one another, and, in fact, you do see that when we get more than one correlation coefficient passing my threshold, that they do tend to be from adjacent microphones.

In any case, 15 times our test for matches of fingerprints with or smudge fingerprints were successful.

Now I went through an argument then with red X's that indicated that 6 of those 15 were certainly false alarms, the word that I use to describe a situation when my matching process indicated a match, when, in fact, it should not have, and I was using independent evidence from pure acoustical evidence in order to make the judgment that those 6 were false alarms, as in fact, you may recall that if one of them had not been a false alarm and in fact had been true, the motorcycle would have had to go 55 miles an hour to get from one place to another in the time that was available, and it clearly did not do that.

So using that kind of reasoning, I found that 15 of those, 6 of those 15, were obviously disjoint and, therefore, clearly false alarms.

OK. I had 15, and 6 were obviously false. Therefore, I knew that my system, which was designed to catch motorcycles, had a propensity for false alarms. And what was that propensity, I had to make a judgment. I said of that remaining nine that were not of the six that I was sure were false alarms, some of those, too, must be false. I judged that probably about 3 or 4, which would give me, or 2 or 3, which would have given me 8 or 10 false alarms, and 6 or 7 correct detections. That was a judgment, and so I said it is close enough to be 50-50 that I will judge that the false alarm rate in this experiment is 50 percent.

Now, when I had a shot indicated by one single match of my fingerprint with the smudge print on the Dallas tape, the only one I could only put a 50-percent probability on was that one. On the other hand, the first shot had three that were not judged to be false alarms.

Mr. DODD. So what percentage would you give to that?

Chairman STOKES. Time of the gentleman has again expired. I will permit the answer.

Dr. BARGER. He will probably ask for more.

Mr. DODD. What percentage, I am just trying to get back, does this change all of the percentages you gave us?

Dr. BARGER. This is a long-winded answer, because as indicated it would be, but the answer is no, it does not change it and here is why. I had made the judgment, if my false alarm rate was 50 percent the first time because I had six that I knew were false, and I suspected there were a couple of others in there, and that made it half false, half true, 50 percent.

Now, all Professor Weiss and Mr. Aschkenasy have done is prove that one of those is not false. That does not materially change that situation, so I still think the false alarm rate is about 50 percent.

Now, when, if I make an assumption that each of the 15 events that we see on that board are independent, then I or anyone else can calculate the probabilities that each of those shots did occur. In

the case of the first one, where there were three indications of .5 each, that works out 87½ percent likely, and one-eighth unlikely. In the case of the second shot there were likewise three that were not, three correlations that passed the test that were not impeached as obvious false alarms and, therefore, the operative or probability on that one is also 87 percent. In the case of the last one, there were two that were unimpeached, so the probability works out to 75 percent, and in the case of the third one there was only one, so that was 50, it was 50 percent.

And did I make a mistake on the second one? OK.

Chairman STOKES. Time of the gentleman has expired.

Mr. DODD. I am not going to ask for any more time.

Chairman STOKES. Gentlemen, we are going to have to try to move along a little faster here. The gentleman from Indiana, Mr. Fithian.

Mr. FITHIAN. Thank you, Mr. Chairman.

We are sure, you are confident that the sounds, the shapes of the sounds that you measured are gunshots, in plain language, that is what you are telling us?

Dr. BARGER. Quite confident, yes.

Mr. FITHIAN. And that is to the exclusion of any other sounds short of a bunch of cherry bombs that would have set up that kind of impulse, but would still have been missing for shots 3 and 4 the shock wave, is that correct?

Dr. BARGER. That is correct.

Mr. FITHIAN. Now, I am concerned that we clarify one thing. You recall the Sunday evening preceding your testimony, before we met and went over all this, and I apparently did not explore as much as I should have with you the probability questions that came up the next day. And, therefore, I was a little bit dismayed that we dropped to 50-50.

Since we are closing out this investigation now, I do not mean to be harsh, but I want to quote back to you what you told this committee on September 11, and ask if you would like us to take away from here a different impression than what I see in this record. It is late in the day and you are being asked whether or not there is any test that we could take to reduce the uncertainty, because as you know, as you remember, the committee was disturbed with the 50-50 chance that there was a fourth shot. And at that point you had said, it is correct, there was a 50-50 chance that there was a fourth shot. Congressman Edgar then asks you this question: "Is there any test that we could make that could reduce the uncertainty?" To which you replied: "Congressman, the answer to that literally is yes. Now that the position of the motorcycle has been fixed with some confidence, one would not bother with microphones all over other parts of Dealey Plaza, for example."

Then you said: "However, I believe that the advantages to be gained from rectifying that problem are very marginal, and I doubt if they could reasonably be expected to improve the level of uncertainty in the test."

Now it is of great importance to this committee that we distinguish between a 50-50 probability of a fourth shot and a 95-percent certainty of the fourth shot. Could you clarify for me or harmonize your testimony here today that you agree with the 95-percent

probability of the third shot with what you told us in September, which was, in essence, that additional testing and whatever would not increase the marginality of the probability?

Dr. BARGER. Yes; first, that answer of mine sounds pretty good to me, if I may tell you why. I perceived that I had been asked if more shooting would be valuable. By that I mean, you know, we were talking about a test and I thought that the question was would more shooting be valuable and I said—I mean I intended to say no to that. Because even though the uncertainty in the location of the motorcycle had been greatly reduced by what we had done then, there was still quite a bit.

When I said, "Literally yes," I am glad I said that, because one could always do exactly what Profesor Weiss and Mr. Aschkenasy did. However, I had not conceived of that analytical extension of what we had done at that time, and when Mr. Edgar asked me that question I did not synthesize that procedure in my mind at that time. However, shortly after discussing it with Professor Weiss, and he did think up, I agree, readily that that was literally possible, but I was not too enthusiastic, because the motorcycle might have been over on near the curve, which would have put it 20 feet away at the least, it could have been as much as almost 30 feet from that microphone, and if he were to undertake his procedure, diligent as he is, and was, and it had, in fact, have been 30 feet away, he might still be looking.

Now it turns out it was only 5 feet away. I did not know that at that time. And I did not want to say, oh sure, you know, go ahead and try that, because the range of time it would take to succeed could vary between a few days and a few months. However, I do want to acknowledge very clearly that the particular extension of my procedure that Professor Weiss used was his own idea and I think a very good one, and as soon as I heard it I was very, very quick to realize its potential value. But even then I did not know how long it was going to take him to do it.

Mr. FITHIAN. Finally, this committee will soon have to decide what we are going to do with this rather startling evidence, and I am sure, given the nature of the world, that we will soon have our critics, within weeks, if not days, and certainly within months and years. Where will those critics be attacking this particular part of our work, that is you, as our consultant, and our conclusions, whatever they may be as a result of this testimony?

Dr. BARGER. Well, that is a very good question. I sure would not want to give anybody any ideas.

Mr. FITHIAN. Well, if I may just interject, I am just sure that the startling nature of this information will prompt the most careful scrutiny that has been yet applied to the Kennedy assassination.

Dr. BARGER. Of course it will, and it should. It will take me a little while to answer this question because I want to, you know, to try to think of the most important items.

The reason I have to think is because—this long—is because up till recently I felt that the major shortcoming of our work, and when I say "our," I mean Bolt, Beranek and Newman's and Queens College and the committee staff's in particular, was that there was no evidence that there was a motor vehicle where we had found it to be. And I must say that would have been I thought a very

obvious place from which to attack the analysis. I feel now that that particular issue is no longer at the top of my list.

I think the most serious problem, the most serious problem we have as analysts is determining these probabilities.

There are two kinds of assumptions you can make when you compute the probabilities that we have computed. One is that each event that occurs is statistically independent of all of the others, and the other assumption is quite the opposite, that they are not independent events, but they are all related. And if you make either of those two assumptions, you can get an answer and it is not always the same answer. And determining whether these events, and by events I am talking about the occurrence of noise spikes on the Dallas tape, in determining whether these are statistically dependent, in other words, do they resemble each other here and here and here or do they just come at random, is a question that can be answered mathematically only if you have enough of the data, and we do not have enough.

So, the hardest thing for us to do is to give accurate calculations—well, we can give accurate calculations, but we have to make assumptions, and the assumption of statistical independence, randomness in the noise, is an assumption that I have made when I analyzed my own results, and also those of Professor Weiss and Mr. Aschkenasy. People have been complaining that we did this. I do not think they can improve on it, because there is not enough data to answer the question. But literally, it is a problem.

Chairman STOKES. Time of the gentleman has expired.

Mr. FITHIAN. Thank you, Mr. Chairman.

Chairman STOKES. Gentleman from Pennsylvania, Mr. Edgar.

Mr. EDGAR. Thank you, Mr. Chairman.

Dr. Barger, it may be redundant, but you were just talking about the issue of probability. As I understand it, there were 2,592 separate correlations made, that is, there were 432 test shots times six segments of tape, is that correct? There were apparently 15 impulses that reached a correlation coefficient of more than 0.5. Is that correct?

Dr. BARGER. Yes.

Mr. EDGAR. Ten impulses, impulse matches of the Dallas Police Department tape, and the reconstructed tape are asserted for shot No. 3, is that not correct?

Dr. BARGER. I think you are referring to Professor Weiss and Mr. Aschkenasy, and in their analytical extension they achieved 10 matches. Is that what you are referring to?

Mr. EDGAR. Yes, on shot No. 3.

Dr. BARGER. Yes; in that, in their echo pattern which contained 12 echoes, they found that 10 of them matched with 10 of the 14 impulses that they observed in the Dallas tape.

Mr. EDGAR. That was different from your 15?

Dr. BARGER. Well, if we are—is what I said true? I mean, are you referring to their analysis?

Mr. EDGAR. I am referring to their 10 impulses that they found on the Dallas police tape.

Dr. BARGER. Yes. Well—

Mr. EDGAR [continuing]. Which matched up for the shot No. 3.

Dr. BARGER. Yes; that is correct. Now, when I described our correlations at the last testimony, we had different numbers than that. The number 15 is not related to that issue. The number 15 is the total number of correlation coefficients that exceeded the threshold; the number 10 is the total number of impulses that happen to match with echoes within one match, which, as I recall, they calculated for that a correlation coefficient of 0.77.

Mr. EDGAR. OK. We are at least agreed there are a lot of numbers floating around, and one of the numbers that are so difficult to zero in on is how someone takes a look at all of that data and all of those impulses and all of those shot patterns, and all of those pieces of tape and all of those squiggly lines and say, aha, it is clear to me that there is a 95-percent probability that this is a third shot. And I guess I am just not clear, and I would hope you could clarify for me what it is that you base that 95 percent on. What is the calculation or formula that it is based upon?

Dr. BARGER. All right. In the case of Professor Weiss and Mr. Aschkenasy's match, which I suspect is the one you are referring to, because the number 15—well, I am not sure. Is that it?

Mr. EDGAR. Let us just deal with the 95-percent probability.

Dr. BARGER. On the third shot?

Mr. EDGAR. That a third shot occurred from the grassy knoll. That is all. Throw away all of the other things.

Dr. BARGER. OK.

Mr. EDGAR. And you just focus in on the 95 percent. You came before us in September and said that possibility was 50-50. We gave your data to Dr. Weiss and his team, and they came back and said, now it is 95-percent chance. As I understand your testimony, you are agreeing with their analysis, that it is now 95 percent?

Dr. BARGER. Yes.

Mr. EDGAR. Probable.

Dr. BARGER. For the third.

Mr. EDGAR. The question I am asking basically is for the third shot, what is the bases, the calculation or formula upon which you reached the 95-percent number?

Dr. BARGER. OK. That question I understand and I will endeavor to answer it.

I used the hypergeometric probability function to calculate the probability that as many matches as he achieved could have occurred by chance, and on any one try. Then I observed that in his search for the correct location of the motorcycle that would be so precise as to give him a plus or minus 1/1,000 of a second error on each, he would have to look across the entire width of the street, which was 40 feet, and 9 feet on either side of the microphone No. 4, where our test had indicated he was, the motorcycle was, closest to at that time.

I made the judgment that when he moved his mathematical point, and mathematically extended with his echo calculations every 2 feet, he would get an independent pattern. In other words, the echoes would slide out of the bins that they might otherwise have been in, given that the bins were only twenty-one one-thousandths of a second wide. Therefore, I determined that he had the possibility of generating 180 independent patterns by his process. And so I took the probability that he could have achieved a match

on one, times the number of independent bins he would in principle have had to search in order to cover the area of uncertainty, and I got a value of 5.6 hundredths or approximately 5 percent, and so my estimate in that way was, if a person sat down with a bunch of noise spikes and was calculating new noise spikes by the procedure he used, he could, about 5 times in 100, by chance, find a match to that precision.

Chairman STOKES. Time of the gentleman has expired.

Mr. EDGAR. Mr. Chairman, I ask for 2 additional minutes.

Chairman STOKES. Without objection, the gentleman is recognized 2 additional minutes.

Mr. EDGAR. I think I understand a little bit better how you perceived that probability, and I guess it begs the second question, and that is the question of whether or not we should go back to Dealey Plaza and put up 100 sniper's nests shooting at a specific target and test out your probability of 95 percent, and if I understand what you are saying right, we would only have less than a 5-percent chance of duplicating the echo patterns that were found emanating from the grassy knoll. Is that correct?

Dr. BARGER. Well, if you shot from the wrong places, if you shot from the right places, I would assume 95 times in 100 you would get the same result.

Mr. EDGAR. You are saying if we went back to the—if we went back to the spot that Dr. Weiss says the shot took place——

Dr. BARGER. Yes.

Mr. EDGAR [continuing]. And reenacted that shot today——

Dr. BARGER. Yes.

Mr. EDGAR [continuing]. We have a 95-percent chance of getting the same echo patterns?

Dr. BARGER. Yes.

Mr. EDGAR. You indicated that this process is a little bit like fingerprinting, and the FBI and other law enforcement agencies that use fingerprinting in the process have a statistically determined base that is based on millions of uses. You have, I think, induced the analogy; it should not be further induced that you have looked at many different physical locations similar to Dealey Plaza and attempted to match up similar fingerprints. Is that correct?

Dr. BARGER. That is correct. In fact, what you are suggesting would be called a statistical validation of the test, and one could conduct this kind of test in other environments that were nominally similar and determine from a repeated set of those tests what the probabilities, in fact, are, and that would be called a statistical validation of the test, and that is a wonderful thing to do.

Mr. EDGAR. One final comment, and then I will quit. You were here this morning when I raised the question about the temperatures and the degrees, and we talked at length with Dr. Weiss over lunch about the value of looking at the temperature and the temperature as a factor of determining the echo patterns, and the validity of the data that was presented. I believe that that is one area that could be explored further in the future by some other body, taking a look at your tests in a careful and considered way. Would you agree that temperature and validity factors of factors like temperature and wind might be something that ought to be

looked at in evaluating the work you have done and the work Dr. Weiss has done?

Dr. BARGER. Yes; it is worth differentiating. The test that I did was insensitive both to the uncertainties that we had in temperature and wind. Professor Weiss and Mr. Aschkenasy were getting close to the point where uncertainties in temperature would cause them to, you know, make an error. I do not believe they were there yet, but they were getting close.

They were also getting close to the point where wind could have been a problem. In other words, if the Mach number of the wind had achieved a value of .05, wind projected along the line of sight of the sound, then that could have become a problem for them. I doubt very much if it did, because that would represent a projection along the line of sound of about a 40-mile-an-hour wind, and the wind was not, I do not believe, blowing in that direction that day, so it would have taken about an 80-mile-an-hour wind to have a projection in the direction of the sound screen that would have been significant. But in my test, where I have such a large acceptance window, you know, I was really insensitive to those things. I believe they were getting close to where temperature and wind have an effect. I do not believe that it was a detrimental effect.

Mr. EDGAR. Thank you. I yield back my time.

Chairman STOKES. Time of the gentleman has expired.

Any other members of the committee seeking further recognition?

Dr. Barger, at the conclusion of a witness' testimony before our committee, the witness is entitled to 5 minutes to either explain or amplify or in any way further comment upon his testimony before our committee. I would extend to you at this time 5 minutes for that purpose.

Dr. BARGER. Thank you. I found that this particular problem that was brought to us by your committee was a most difficult problem, and it was, it involved the activities of a good deal of people at BBN who brought to this their own special expertise. I could not have come close to knowing enough about all of these meteorological, acoustical, radial, motorcycle, reflections, recording, computing, everything that was reported in that report before, and, therefore, I asked others to do it. And since I have the 5 minutes, I would like to acknowledge the work of the colleagues on my research team at our laboratory in Cambridge. And they are Dr. Jared J. Wolf, Dr. Daniel N. Kalikow, Dr. Theodore L. Rhyne, Mr. Scott Robinson, Mr. Leo A. Sledjeski, Ms. Nancy C. McMahon, Mr. Joseph L. Coloruotolo, Mr. Edward C. Schmidt.

I would also like to acknowledge the moral support and the financial support given to me by the division director, Dr. Frank Jackson, and also the help given to me by Dr. Richard Bolt.

Finally, I would like to, I believe, it is important to acknowledge that there is a fundamental principle of some importance that we have been dealing with in this hearing. Professor Blakey conceived the strategy to focus on the scientific evaluation of hard evidence as opposed to recapitulation of eyewitness testimony. And your committee implemented that strategy when it contracted with Bolt, Beranek and Newman, and other research laboratories to conduct these studies.

I believe that our findings demonstrate the wisdom of Professor Blakey's strategy, and, furthermore, that they illustrate a potentially useful way to apply scientific procedures in forensic proceedings.

Thank you.

Chairman STOKES. Thank you very much, Dr. Barger, and I know you spent a great deal of time on this project, and a great deal of time with both the staff and committee, and we appreciate very much your testimony here today.

The Chair recognizes Professor Blakey.

FINAL COMMENTS BY PROF. G. ROBERT BLAKEY, CHIEF COUNSEL AND STAFF DIRECTOR

Mr. BLAKEY. Thank you, Mr. Chairman.

Mr. Chairman, it may be appropriate at this time to review for the committee and those who are following our proceedings the results of the committee's various scientific projects, making an effort to relate them to the acoustics results, and seeing what light, taken together, they shed on the events in Dealey Plaza on November 22, 1963.

According to the acoustical analysis conducted by the committee, four shots, over a total period of 7.91 seconds, were fired at the Presidential limousine. The first, second and fourth came from the depository; the third came from the grassy knoll. In evaluating the acoustics project, it is relevant to ask to what degree its results are consistent with data obtained in other scientific analyses. Similarly, other scientific disciplines may be evaluated comparing them with the acoustics results.

Following the Warren Commission's analysis that found only three shots, one of which missed, it had been generally assumed that the final shot fired at President Kennedy was the one that is vividly depicted at Zapruder frame 313, although the Commission itself acknowledged that the last shot might have missed. Using frame 312—when the bullet would actually have struck the President—as the point of reference, it can be determined that the four shots would have been heard by the limousine occupants at Zapruder frames 166, 196, 296, and 312.

A review of the Zapruder film indicates that a shot fired in the vicinity of frame 166 did not strike any limousine occupants, so it must have missed. The committee's photographic panel, while unable specifically to conclude that a shot was fired at this point, noted that Governor Connally's hand moved from left to right at a rate of 540° per second during frames 162 through 164 and 166 through 167, followed by a more gradual shift of his torso to the right. The panel concluded these movements may have been a reaction to a severe external stimulus. The panel considered these actions to be particularly significant because they were consistent with the Governor's Warren Commission testimony that he had turned in response to having heard the first shot and was struck almost immediately afterward. It is also consistent, of course, with the Governor's testimony before this committee and with the testimony of eyewitnesses.

Some of those statements were incorporated in the record this morning. The relationship between the panel's observations con-

cerning Governor Connally and the acoustics analysis is, however, unclear, because Governor Connally appears to have initiated his rapid body movement prior to frame 166, at the time when the acoustics data suggest that the first shot would have been heard in the limousine.

The relationship between the film and the recording is, however, only approximate. It reflects the adjusted real-time characteristics of the recording and the average running time of the film—18.3 frames per second. It was possible to determine the real-time characteristics of the recording because of the knowledge that the recorder was powered by a 60-cycle-per-second electrical current. Since prints of this 60-cycle-per-second current actually appear on the tape, the corrected running time can be determined by comparing these prints with a clocking of the running of the tape.

The 18.3-frame-per-second average rate of the Zapruder film was, on the other hand, determined by the FBI under laboratory conditions in which the camera was set and run in the manner that Zapruder described he had used it at the time of the assassination. In relating this film to the acoustics results, it is important to understand that given the 18.3-frame-per-second average running speed of the film, a differential, for example, of only six frames is actually a differential of less than a third of a second.

For this reason, absolute correlation between the acoustics recording and the film should not be expected. What is significant is that there is an approximate correlation in rough time between the events on the film and the tape. Each, therefore, corroborates or substantiates the other.

The photographic panel's observations were also relevant to acoustics data that indicated the second shot both impacted and was heard by the limousine occupants at Zapruder frame 196. Specifically, the panel noted that at Zapruder frame 192 the President's movements suddenly froze, as his right hand seemed to stop abruptly in the midst of a waving motion. Then during frames 200 to 202 his head moved rapidly to the left. The sudden interruption of the President's hand-waving motion, coupled with his rapid head movements, was considered by the photographic panel as evidence of President Kennedy's reaction to some "severe external stimulus."

Finally, the panel observed that Governor Connally's actions at frame 224, as he is seen emerging from behind the sign that obstructed Mr. Zapruder's view, indicated he was also reacting to some "severe external stimulus." Based upon this observation and upon the positions of President Kennedy and Governor Connally within the limousine, the panel concluded that the relative alignment of the two men was consistent with the theory that they had just been struck by the same bullet.

The committee's forensic pathology panel based its examination on duly authenticated Kennedy autopsy materials and its personal examination of Governor Connally. It concluded that the first bullet to hit President Kennedy entered his back at approximately 5 centimeters below the shoulder and three centimeters to the right of the midline of the back, and it exited by the front of his neck near the third tracheal cartilage.

The forensic pathological panel, with one member in dissent, stated that the medical evidence was consistent with the hypothesis that this same bullet proceeded to inflict Governor Connally's torso, wrist, and thigh wounds.

A trajectory analysis by the committee was based on the location of the limousine at Zapruder frame 197, the positions of President Kennedy and Governor Connally at that point, and the bullet's course as it could be determined from their wounds. When President Kennedy's entry and exit wounds were used as reference points for the trajectory line, it intersected the Texas School Book Depository within a 13-foot radius of a point approximately 14 feet west of the building's southeast corner and almost level with the sills of the sixth floor windows.

When President Kennedy's exit wound and Governor Connally's entrance wound were used as the reference points for the trajectory line, it intersected the Texas School Book Depository within a 7-foot radius of a point approximately 4 feet west of the southeast corner and 12 feet above the sixth floor windowsills.

Neutron activation analysis performed by the committee on bullet fragments that had been removed from Governor Connally's wrist indicated a high probability that they were from a bullet that had been recovered from a stretcher at Parkland Hospital.

Committee ballistics tests also indicated that this bullet had been fired from Oswald's Mannlicher-Carcano rifle, which had been found on the sixth floor of the Texas School Book Depository. In addition, ballistics tests established that three cartridges found on the sixth floor of the Texas School Book Depository had been fired in Oswald's rifle.

In contrast with evidence thus available for evaluating the acoustics data with respect to the first two shots, there is no other scientific evidence for a shot that would have been heard by the limousine occupants at Zapruder frame 296, that is, no scientific evidence other than the acoustics.

There is also no indication on the Zapruder film that a shot struck any of the limousine occupants at this point.

As for the shot that struck the President at Zapruder frame 312, there is again scientific evidence that may be used to evaluate the acoustics results.

With one panel member dissenting, the forensic pathological panel's view of the autopsy materials established that only one bullet, fired from behind, struck President Kennedy's head, entering near the cowlick portion of his hair part and exiting near the top front area of the right side of his skull. When these wound locations were used as the reference points for a trajectory analysis, given the President's body orientation and the location of the limousine at Zapruder frame 312, the trajectory intersected the TSBD within a 23-foot radius of a point 16 feet west of the southeast corner of the building approximately 15 feet above the sixth floor windowsills.

In addition, neutron activation analysis indicted a high probability that bullet fragments found on the limousine floor came from the same bullet as fragments that had been removed from President Kennedy's brain. According to neutron activation analysis, these fragments did not match the bullet found on the stretcher at

Parkland Hospital, indicating that two bullets struck either the limousine or its occupants.

Finally, ballistics tests confirmed that bullet fragments found in the limousine had been fired by Oswald's Mannlicher-Carcano. Neutron activation and ballistics evidence do not indicate that a third bullet struck the limousine or its occupants.

This summary of the scientific evidence is, of course, based upon the proposition that the fourth and final shot fired at the limousine struck President Kennedy at Zapruder frame 312. If Zapruder frame 312 actually reflects the time of the third shot rather than the fourth, the timing of the first, second and fourth shots would then correspond respectively with Zapruder frames 182, 212, and 327.

The possibility that the fourth shot occurred at Zapruder frame 327 would require a finding, in light of the neutron activation analysis, the ballistics test and the medical testimony, that both the third and the fourth shots hit President Kennedy in the head.

Taken together, both the neutron activation analysis and the ballistics test performed by the committee indicate that only two shots fired by Oswald's Mannlicher-Carcano struck the limousine and its occupants.

The findings of the forensic pathological panel and the results of the trajectory analysis establish that these two shots were fired from behind the Presidential limousine. While the evidence seemingly points to the fourth shot as the head shot, a possibility that the third shot may have hit President Kennedy in the head must nevertheless be closely examined.

After the acoustical data had been reviewed, the committee decided to synchronize the sounds recorded in the reconstruction in Dealey Plaza in August 1978, with the best copy of the Zapruder film available, one in the possession of the Secret Service.

With your permission, Mr. Chairman, I would like now to show to the committee each of two versions of that synchronization.

Will you hold the lights for a minute?

The second version synchronizes shot four from the Depository with Zapruder frame 312. The committee can determine for itself which version is visually more appropriate.

Let me refocus everyone's attention.

As the committee will recall, there has been considerable controversy over the source of the shot that hit the President's head. While it has been suggested that it came from the grassy knoll, medical testimony taken by the committee last September indicated the President was struck twice from behind and that no shots hit from the front. One member of the medical panel did insist, however, that it was possible for a shot to have come from the right front. These two alternatives are depicted by these two versions of the Zapruder film synchronized with the firing test recording.

In viewing each version, the committee should look for, in sequence, two things: First, the committee should watch Governor Connally to see if he turns in response to the first shot. When Governor Connally testified before the committee in September he said he did, in fact, hear the first shot, turn his head to look, and was then hit by the second shot.

Second, the committee should try to detect the point at which President Kennedy and Governor Connally are hit by the second bullet and determine if the reactions of each man are visually appropriate in each film or whether one version—the first or the second—seems to be visually more appropriate.

Let me repeat, this is not a sound film of the actual assassination. The sound that has been dubbed onto the Zapruder film is the sound that was recorded in August as part of Dr. Barger's recording in Dealey Plaza.

In the first version of the film, the hit to President Kennedy's head is keyed to the shot from the grassy knoll.

Let me repeat, in the first version of the film, the hit to President Kennedy's head is keyed to the shot from the grassy knoll. In the second version of the film, the second one you will see, the hit to the head is keyed to the shot from the Texas School Book Depository.

Mr. Chairman, before this film is shown—and I might say the staff considered and discussed with the committee at some length as to whether this film should be shown—I would remind the committee as well as those who are following these proceedings on television or are present in this room that certain segments of this film may be offensive to people of special sensitivity. They are, in fact, offensive to me. Those who might fit in this category might wish not to watch this film.

I would also like to indicate that the film was put together by Robert Groden, a consultant to the committee, and his help is gratefully acknowledged.

Could I have the lights off, please.

[Film presentation.]

Mr. BLAKEY. May I have the light please?

Mr. Chairman, may we have the film just shown entered as JFK F-666?

Chairman STOKES. Without objection, so ordered.

Mr. BLAKEY. Mr. Chairman, in light of the refined acoustics evidence, the committee obviously has weighed the possible implications of a fourth shot fired from the grassy knoll. It goes without saying that this shot would be of particular significance if it could be determined that it inflicted wounds to President Kennedy and contributed to, or actually caused, his death.

The committee has available to it this afternoon, for the purpose of lending an expert opinion to this endeavor, the moderator of its forensic pathological panel, Dr. Michael Baden, the Chief Medical Examiner of New York. In light of the time factor, however, I will summarize what his testimony would have been.

Dr. Baden reexamined the materials in light of the additional information given to him by the acoustics panel. He went back to the original film, to the original X-rays and to the other materials. His conclusion remains as it was: There is no medical evidence that President Kennedy was hit from the front and to the right. There is no medical evidence to indicate that he was not shot at from the front and to the right. The forensic pathological panel simply says that if he was shot at from the front and to the right, the shot missed.

The medical testimony apparently indicated that if the third shot occurred, it did not hit President Kennedy. There is no evidence that anyone else in Dealey Plaza was struck by a bullet from behind the picket fence on the grassy knoll.

Testimony already presented to the committee indicates that one or more persons reported seeing bullets hit in or around the Presidential limousine.

In an effort to complete its investigation of where the third shot, assuming it occurred, might have hit, the committee turned to the Presidential limousine itself, which is now in the possession of the Ford Motor Co. in Dearborn, Mich.

The committee contacted Major Louis Smith of the Michigan State Police and requested that an experienced crime-scene team examine the car to determine if there is any evidence that it was struck by a bullet fired from the picket fence on the grassy knoll.

Major Smith expressed a belief that such an examination would prove futile, since extensive refurbishing and rebuilding had been performed on the limousine since the assassination. He did, nonetheless, make his men available to the committee, and an examination was conducted in the past week.

The examination was conducted by laboratory specialist James Bergen and laboratory specialist Michael Arrowood. The committee expresses its appreciation to them for their effort.

Major Smith reports that there is no evidence that a bullet from the grassy knoll struck the Presidential limousine.

To look further at the question of the direction from which the wound-inflicting bullets came, the committee had available to it—again, this afternoon—its engineering analysis and consultant for the head-shot trajectory. The purpose of Mr. Canning's testimony was to determine if any conclusions of the committee's expert consultant might have been changed by the refinement of the acoustical data. He would have addressed this afternoon the question, Could the fourth shot have occurred at Zapruder frame 327 and have come, as it must have in light of the other evidence, from the depository? His conclusion, based on rough figures, is that it is highly unlikely that a bullet fired from the depository could have struck the President as number four at frame 327.

Mr. Chairman, this concludes the presentation of the staff to the committee.

At this point I wonder, though, if I might be permitted to make an observation?

Chairman STOKES. The Chair recognizes Professor Blakey.

Mr. BLAKEY. Mr. Chairman, I would like to express my appreciation, as I have not in a personal way previously, to the committee, on the public record, for the support that it has given this staff in pursuing its investigation.

May I be blunt and say that not every congressional committee acts without politics. This one did. This staff appreciates being free from that particular affliction.

In addition, let me say that it is not true of every investigation that it goes the last mile. As you may be aware, I went to Notre Dame where I at least learned one thing. Put in terms of football analogy, it would go something like this: When you are ahead, don't let up, and when you are behind, don't give up. Translated

into this investigation, it means that we should have made every effort we could as long as we could.

I want to thank you, particularly and personally, for extending to this committee staff the opportunity to continue to pursue this investigation for the last year.

As you know, and as I am sure some other people here present know, the staff has over the last several weeks begun going on vacations, well deserved, and to other jobs. Nevertheless, I hope history writes that this staff worked until the last possible minute.

Last, I would like to say what I have not said publicly to the staff as a whole, both those who are here now and those who may be watching this on the outside, that I deeply appreciate the professionalism that you showed, and the hard work, far in excess of what I had any reason to expect, that you gave me. Thank you.

Chairman STOKES. Thank you, Professor Blakey. I am sure that our entire committee would concur with me that you have done an outstanding job as the director of the staff and as chief counsel for this committee. You have done it with the highest form of professionalism, and we are indebted to you for that.

Additionally, we are very proud of the type of a staff that you did assemble—very bright young people, who served this country so well and in such a dedicated way.

I might acknowledge also that deputy chief counsel Ken Klein and our senior staff counsel, Michael Goldsmith, were prepared to examine fully the two other witnesses whom we are not going to call on in light of time constraints.

At this time I would like to announce the committee will meet in executive session immediately after we have adjourned the full session of this committee, and I have some closing remarks.

If anyone wants to be recognized before I give those remarks—

Mr. DODD. Mr. Chairman, I just wanted to raise a question that I would have asked of a couple of the witnesses coming, and possibly for the purpose of the record I could direct them to Mr. Blakey, to see if we can't shed some light on them at this point. One has to do with the question, in light of the implications of the acoustical evidence, with regard to a fragment found, a bullet fragment found in the limousine that for some time has not been easily identifiable as a result of neutron activation tests.

I wonder, Mr. Blakey, if you might just comment on that. There has been some question raised about that particular fragment and I wonder if there are others as well, or just that one that raised that question?

Mr. BLAKEY. I am not really prepared to respond to that, Mr. Dodd, and I probably have done in this record what I should not have on several occasions, and that is, speak from memory.

I think perhaps I will have to discuss that with you later, when I can get a briefing on the details of that and not misstate, or misstate myself.

Mr. DODD. In light of that, I won't ask the other ones then. I don't want to rely on people's memories. I will reserve the questions until afterward, Mr. Chairman.

Mr. EDGAR. Mr. Chairman—

Chairman STOKES. Mr. Edgar?

Mr. EDGAR. I just wanted to say, on behalf of this member, and I think I speak for the others, how deeply indebted we are to you for taking up the chairmanship of this particular committee over the last year and a half and providing the leadership that this committee so desperately needed. You came on at a tough time, and I think you deserve our deep gratitude for your efforts as chairman.

I just want to say thank you.

CLOSING REMARKS BY CHAIRMAN LOUIS STOKES

Chairman STOKES. Thank you very much. It has been for me a great experience.

I guess one of the things I am most proud of is that in the 10 years I have been in the Congress I have never seen a congressional committee work as harmoniously, in such a nonpartisan way, as this committee has, and it has been a real honor to have chaired this committee.

I am very proud of the type of support I have gotten from the ranking minority member, Mr. Sam Devine of Ohio, who has been staunch in his support of this committee in every respect and has been tireless in his efforts on behalf of this committee, along with the other members of the minority side; and, of course, our two distinguished subcommittee chairmen, Judge Richardson Preyer, who chaired the Kennedy investigation, and Congressman Fauntroy, who chaired the King investigation, and both of whom worked tirelessly, many, many hours in executive session and in the full sessions, and all of you gentlemen—Mr. Dodd, Mr. Edgar, Mr. Fithian—who I know attended those executive sessions and worked long hours while you tried to do your other congressional work, many times at a very personal sacrifice—I think the country is indebted to all of you. Thank you.

[Additional material included at the request of Congressman Richardson Preyer:]

LAW OFFICES

RALPH W. YARBOROUGH

721 BROWN BUILDING, COLORADO AT W. EIGHTH
AUSTIN, TEXAS 78701

512 478-2573

December 27, 1978

Congressman Richardson Preyer
Chairman
House Subcommittee on Assassination
of John F. Kennedy
2344 Rayburn House Office Building
Washington, D.C. 20515

DEC 29/78

Subject: Investigation of the assass-
ination of John F. Kennedy

Dear Chairman Preyer:

At the time of the assassination of President John F. Kennedy, I was serving as United States Senator from Texas, and was riding in the car with then Vice President and Mrs. Lyndon Johnson in the Dallas Presidential Motorcade.

Having used firearms since I was a small boy, and having qualified, while serving on the staff of the 97th Infantry Division in World War II, with rifle, carbine, pistol and bazooka, and having hunted since with rifles and shotguns, I have some familiarity with the noise made by the firing of such weapons.

In the Motorcade in Dallas, the first explosion was so distinct in its nature, that my mental processes immediately registered "rifle shot" - it was an immediate mental reaction without conscious thought process on my part.

On many occasions since, I have stated that there were definitely three explosions, or shots (this while the F.B.I. was expounding its two shot theory), but during all of these years I have been troubled by the fact that the two subsequent explosions did not sound like that first clear sound of indisputable rifle fire, clear as a signal. I assumed that the difference might have been caused by the

changed position of the car, or other movement.

The recent revelations of a possible fourth shot possibly clear up that doubt as to the reason for the difference in sound between the different explosions.

When I read of the scientific experiment through firing weapons at different positions in the parade route at Dallas, I attempted to telephone the Chairman of the Full Committee, the Chairman of the Sub-Committee, the Chief Counsel or Deputy Chief Counsel of the Assassinations Committee and Sub-Committee, but could reach none of you, but was relegated to someone so far down the line that they did not seem to understand my recommendation at that time.

I have been on hunting trips a number of times when two hunters, neither knowing that the other hunter was firing, fire simultaneously at game, each thinking that they had killed it, each hearing only one explosion. With those experiences in mind, what I recommended to some one of the Committee staff (whom I took from our telephone conversation to know nothing about gunfire) was that firing from the Text Book Depository window and the grassy knoll be synchronized and be made simultaneously, with proper sensitive listening devices at all proper points, in an effort to see if science, so applied, would throw any light on the doubts which increase with the years, as to the accuracy of the Warren Commission Report. My recommendation may never have gotten past the person on your staff to whom it was given, as that person seemed not to understand it.

After the first shot was fired, the Motorcade seemed to momentarily slow down; the resulting close proximity of the principal cars being shown on a photograph which I mailed to the Warren Commission (that Commission having declined to call me as a witness), taken from the Saturday Evening Post, a cropped version of which was printed in the Warren Commission report with my letter of transmittal to that Commission.

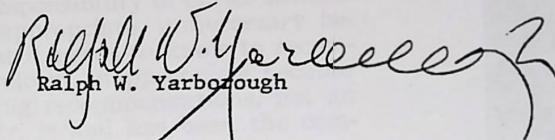
The Warren Commission report stated that the Motorcade speeded up, and took off, but it did not say when. The

Motorcade did not speed up and take off until all the three explosions had occurred.

In the interest of history, I request that this letter be printed with your report.

If your sub-committee will put aside preconceived ideas, if any, from reading the Warren Commission Report (which I do not charge you have), but pursue truth wherever it leads, you will render a service to history, and build a higher confidence among your countrymen for the integrity of public institutions.

Respectfully yours,


Ralph W. Yarborough

RWY/bc

Chairman STOKES. I would like at this time to make some additional closing remarks:

This concludes the public hearings of the Select Committee on Assassinations. As I previously noted, the committee will meet in executive session this evening, to discuss and vote on its ultimate findings and recommendations, which will be submitted on January 3, 1979, to the Clerk of the House. It will also be made public at that time.

The final report of the committee is now being edited for security declassification, and publication. The final report, a transcript of our public hearings and various appendices will be sent to the Government Printing Office by March 30. They will also be made public at that time.

As January 3 is the termination date of the select committee, all work on the editing of the report, the public hearings and other documents will be done under the auspices of the Clerk of the House.

It seems appropriate now, therefore, to reflect on some of the implications of what this committee has done.

The committee has presented evidence clearly pointing to the identity of the assassins in both cases.

The committee has developed evidence of the outlines of a likely conspiracy in the assassination of Dr. Martin Luther King, Jr., and if it is accepted, the evidence heard by the committee today could point to a conspiracy in the assassination of President Kennedy.

The committee has also carefully assessed the performance of the various Federal agencies and looked into each of the assassinations.

The committee has also looked at what recommendations should be made for the future.

The question, nonetheless, arises: What course of action should our society now take with the work of the select committee having come to an end?

As I have said repeatedly, this committee is not a judicial body. In its legislative hearings the committee has looked to the past in a search for facts that might enable it to make recommendations for the future. I emphasize what not all have realized: The committee did not set out to prove or disprove any theory; it did not set out to prove or disprove the existence of a conspiracy in either investigation.

Throughout the investigations of both assassinations, the committee addressed four questions:

Who was or were the assassin or assassins? Was there a conspiracy? How well did the Federal agencies perform their protective and investigative duties? And what, if any, recommendations should the committee make for the future?

Our legislative work is now done. For the committee to proceed to investigate the issue of individual responsibility in either assassination would be unnecessary and inappropriate, unnecessary because the committee has learned what it needs to know to recommend legislative and administrative reform, inappropriate because fact-finding for the purposes of making recommendations, not an assessment of individual responsibility, is and has been the committee's only mandate.

The assessment of personal guilt is something that the Constitution has rightfully allocated to the Executive branch to investigate and for the judicial process to weigh.

Now I recognize, of course, that there are still loose ends in both of these investigations that I had hoped our work might have tied down. I regret that these matters are still outstanding.

As I have observed before, life itself has loose ends. It may well be that those who continue the investigations also will not be able to resolve all of the troubling issues that this committee has exposed. It has been, after all, many years since these assassinations occurred. I wish them well and hope that they will assess our work and make use of it, just as this committee has assessed and made use of the results of the investigations that preceded it.

We have not been perfect, but we have tried to be conscientious and candid in our work. If history records we at least did that, I then will be satisfied.

There is at least one lesson that our society ought to draw from this committee's work, and I would like to leave that with you this afternoon: Never again should our society respond as it did in the aftermath of the deaths of these two great patriots. We did not give these men the type of investigations in death which were commensurate with the dignity of their lives. We cannot, of course, rewrite history. We cannot bring back President John F. Kennedy or Dr. Martin Luther King, Jr. The past can be a die for the future. We can and we must promise ourselves that this history will never be again repeated in this Nation.

I thank you.

If there is nothing further at this time, the committee is adjourned.

[Whereupon, at 5:03 p.m., the hearing was concluded.]

ADDITIONAL MATERIAL SUBMITTED BY MR. ROBERT GRODEN

The following letter, with accompanying photographs and captions, was received by the committee from Robert Groden after the termination of the public hearings, and after the committee had voted upon its findings and recommendations. Therefore the committee was not able to evaluate, and did not rely upon, the letter or its attachments, in reaching any conclusion in connection with its investigation. The materials, however, are set forth here for the benefit of those who may continue to study these subjects. The captions are those of Mr. Groden, and not the committee.

Robert J. Groden
385 Florida Grove Road
Hopelawn, N.J. 08861

Rep. Louis Stokes, Chairman
House Select Committee on Assassinations
Washington, D.C. 20515

Dear Chairman Stokes:

As Photographic Consultant to the Committee, I've been exposed to a question of central importance relating to the results of the acoustics tests that I feel I can shed some light upon.

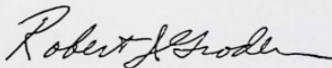
The question is 'was the open transmitter button that received the sounds of the gunshots, in the plaza'.

Professors Weiss and Aschkenasy have proven scientifically that the 'stuck mike' was in Dealey Plaza and further, that the motorcycle with the open microphone was 120 feet behind the President's car at the moment of the impact on the President's head.

I am enclosing several photographic exhibits which are the best evidence to corroborate the analysis by the acoustics panel.

The motorcycle seen in the enclosed photographs is Officer H.B. McLain's. This determination was made by the House Committee and was confirmed by McLain himself in his public testimony in December, 1978.

Officer McLain was riding on the left side of the motorcade at the level of the convertible press cars. This is where the police tape analysis places the open microphone.



Robert J. Groden
Photographic Consultant,
House Select Committee on Assassinations

In connection with Groden exhibit No. 1 above, which portrays a motorcycle riding on the left side of the motorcade as it approaches Dealey Plaza from Main Street, the committee secured, through the cooperation of the Dallas Police Department, a copy of the daily solo motorcycle assignment log sheet for the week of November 22, 1963.

The log sheet reflects that during that week officer McLain was assigned to ride motorcycle No. 352, as Mr. Groden states his exhibit No. 1 reflects.

GRODEN EXHIBIT # 1



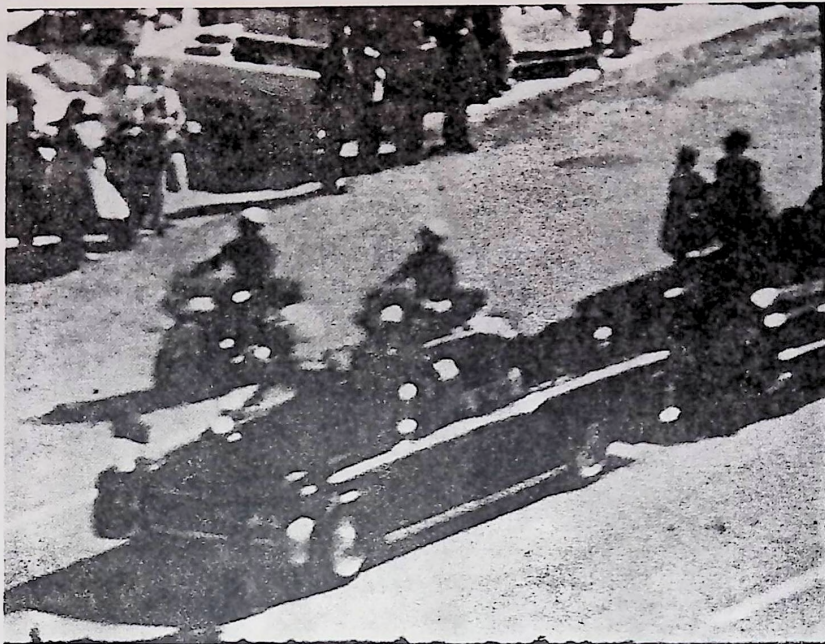
A frame from the Dallas Cinema Associates film showing the Presidential motorcade on Main St. a few blocks before Dealey Plaza which is the open area in the background. In the foreground is officer H. B. McLain riding his motorcycle, #352.

GRODEN EXHIBIT # 2



With the motorcade on Houston St. and the President at the corner of Houston and Elm, Officer McLain is now in the foreground making the turn from Main to Houston and starting to speed up to the corner of Elm. (From the Robert Hughes film).

GRODEN EXHIBIT # 3-1A



A film taken from the fourth floor of the Texas School Book Depository Building by Mrs. Elsie Dorman shows the President's car beginning the turn onto Elm St. from Houston St.

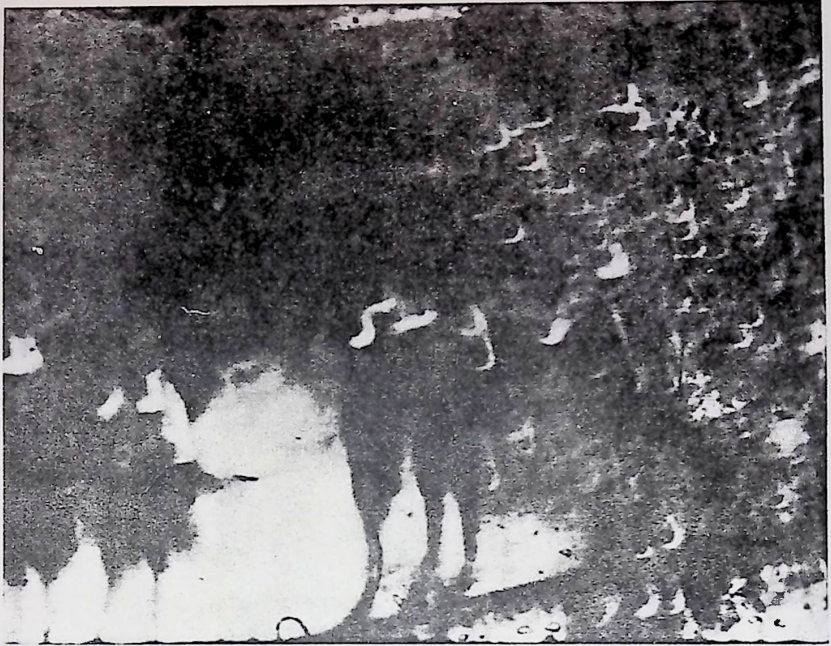
PROPERTY OF
TEXAS SCHOOL BOOK DEPOSITORY BUILDING

GRODEN EXHIBIT # 3-1B



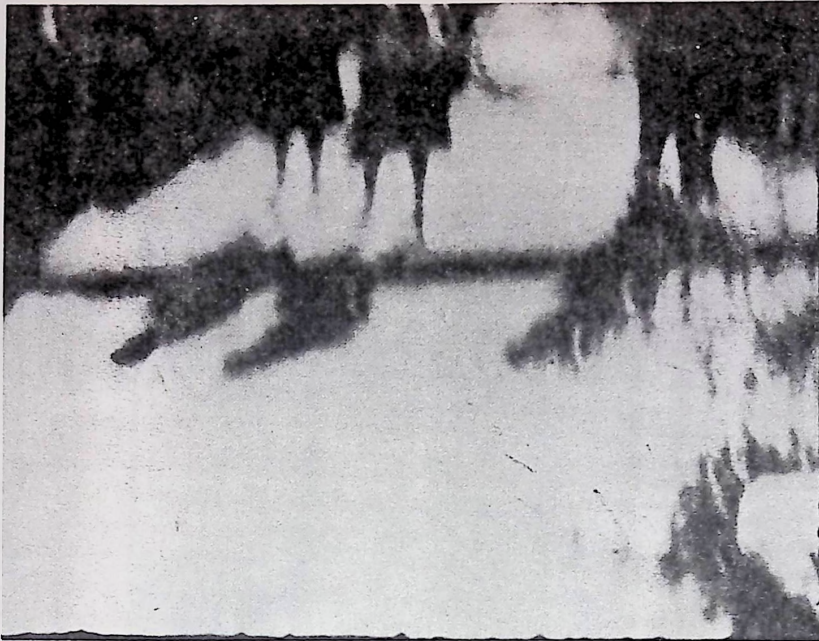
Mrs. Dorman pans the crowd as they watch the President pass directly in front of them and in front of the T.S.B.D.

GRODEN EXHIBIT # 3-1C



The crowd looks down Elm St. following the President with their eyes.

GRODEN EXHIBIT # 3-1D



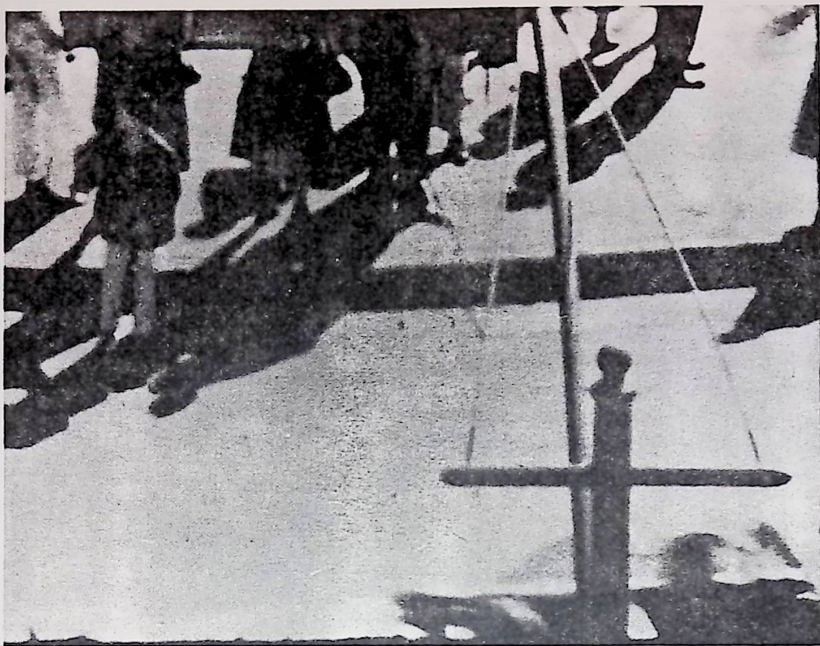
As Mrs. Dorman pans back, she catches the tail end of the Vice-Presidential car (lower right corner).

GRODEN EXHIBIT # 3-1E



Right behind the Vice President's car is its follow-up car . . .

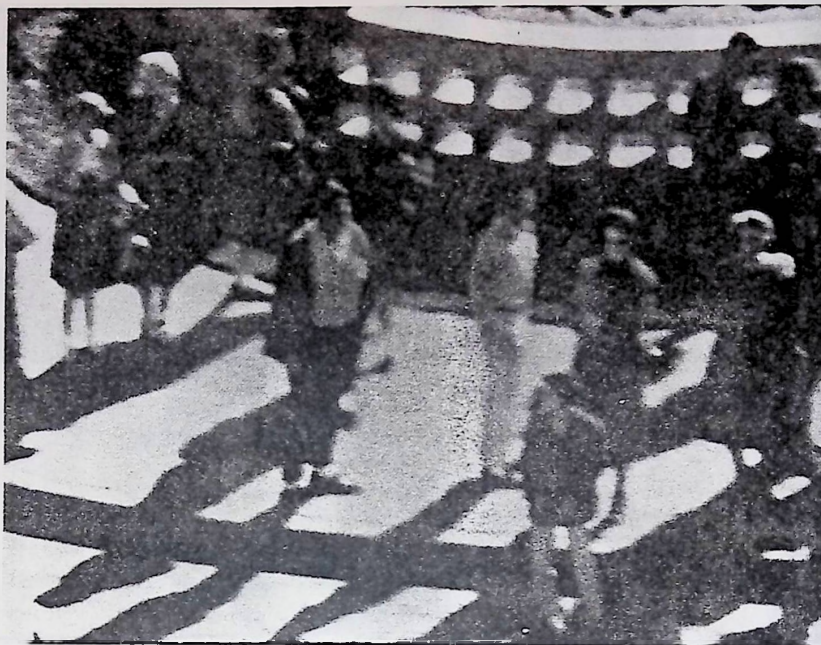
GRODEN EXHIBIT # 3-2A



Then Mayor Cabell's car appears beneath a light pole in front of the depository building.

This sequence is shot non-stop from this point on and acts as a clock. From this point until the point when Officer McLain reaches the Elm Street corner we have an accurate clock of six seconds. According to the account of the events on the Dallas police tape given by Professors Weiss and Aschkenasy, both Dallas Mayor Cabell's car and Officer McLain's motorcycle should have been exactly where these scenes from the Dorman film show them to be.

GRODEN EXHIBIT # 3-2B



Panning the crowd to the Elm-Houston corner.

GRODEN EXHIBIT # 3-2C



At the Elm-Houston corner.

GRODEN EXHIBIT # 3-2D



Panning up a few feet on Houston toward Main but still at the Elm St. corner.

GRODEN EXHIBIT # 3-2E

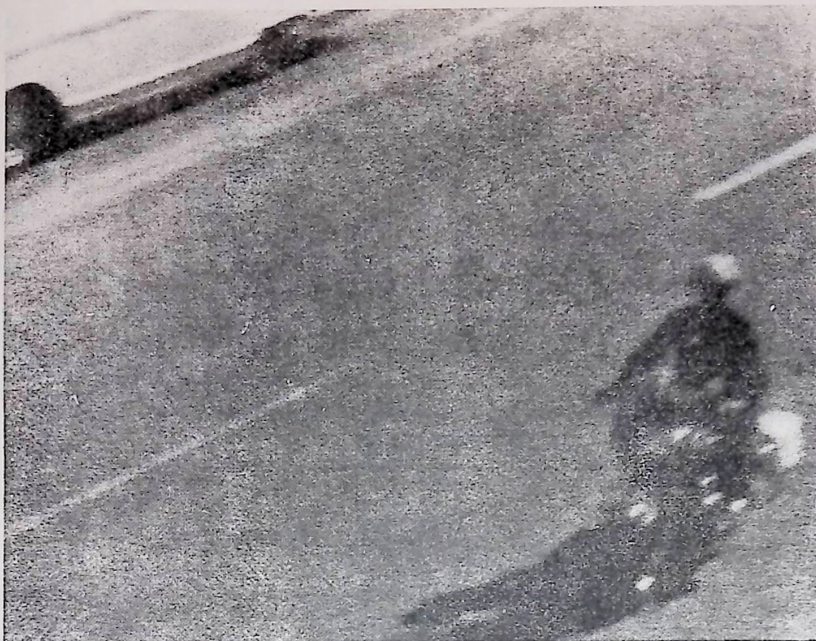


Officer McLain appears at the top of the picture as the shooting begins just around the corner on Elm St.



Officer McLain at the Elm-Houston corner beginning the turn. At this point he's leaning his bike into the turn. The shadow of a bystander can be seen in the street at the apex of the corner.

GRODEN EXHIBIT # 3-2G



Blow-up and detail from the Dorman 8mm original showing Officer H. B. McLain. Officer McLain is riding parallel to one of the press convertibles. He was the only officer riding on the left side of the motorcade anywhere near his position. This sequence of film is the best evidence that McLain was indeed in position to be the officer with the open microphone.

GRODEN EXHIBIT # 3-2H



Officer McLain actually in the Elm-Houston turn between the time of the first shots and the time of the last shots. He is looking down Elm Street at this point.

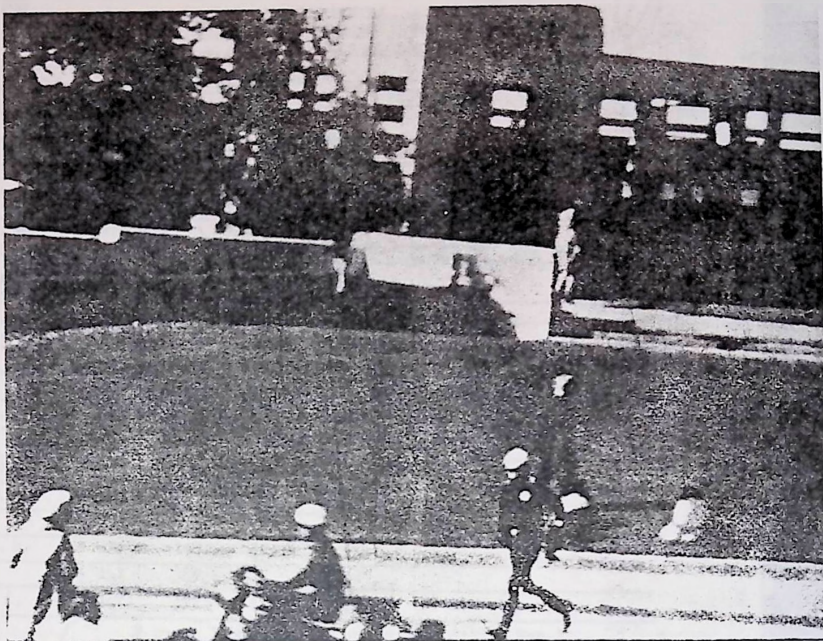
GRODEX EXHIBIT # 4

© 1979 by Jack Daniel All rights reserved.



Film by Jack Daniel shows Elm St. in Dealey Plaza in the background and the President's car racing toward the camera. The only visible motorcycle policeman on Elm St. is B. J. Martin. The other flanking cycles all stopped farther back up Elm. Officer McLain at this point was coasting down from the head of Elm St. and is too far back to appear in the sequence. This is consistent with the findings of the acoustics panel which found that the motorcycle with the depressed microphone transmitter button had waited approximately a half minute before accelerating to leave the plaza.

GRODEN EXHIBIT # 5



A frame from the film taken by Mark Bell shows a Motorcycle Officer (in all probability McLain) coasting down Elm St. This frame was exposed at least 28 seconds after the moment of the explosion of the President's head. The timing cannot be set any finer because Mr. Bell had to stop to rewind his camera. I have allowed 10 seconds to permit the rewinding of the camera. The police tape reveals that the motorcycle did not accelerate until a half minute after the last shot was fired. If Mr. Bell took approximately ten seconds to rewind the film, then this is McLain and this is yet additional proof that the police tape recording resulted from his microphone being open in Dealey Plaza. However, even if this is not McLain, the other exhibits provided are strong proof of the fact that it indeed was his microphone that picked up the sound of the shots.

DAILY ASSIGNMENTS FOR SOLO MOTORS
AND SELECTIVE ENFORCEMENT MEN

Sergeant W. H. Q. 130 in charge

Officer	Call #	Equipmt. #	Days off	Assignment
1. Collins, H. M.	171			✓
2. Britton, P. W.	172		AL	9-5
3. Glasgow, V.	173			
4. Brooks, J. W.	174			✓
5. Phillips, J. N.	175 158			✓

Sergeant W. H. Q. 170 in charge

Officer	Call #	Equipmt. #	Days off	Assignment
1. Martin, B. J.	131	344		✓
2. Garrick, J. B.	132	358		✓
3. McBride, G. C.	133	310		✓
4. Baker, M. L.	134	346		✓
5. Freeman, H. R.	135	345		✓
6. Hargis, B. W.	136	347		✓
7. Brewer, E. D.	137	348	AL	9-3
8. Jackson, D. L.	138	356		✓
9. Marshall, L. H.	139	338		✓
10. May, W. J.	141	349		✓
11. Haygood, C. A.	142	357		✓

Sergeant W. H. Q. 170 in charge

Officer	Call #	Equipmt. #	Days Off	Assignment
1. Garrison, B. C.	191		✓	
2. Wilson, B. E.	192		AL	9-3
3. Harmon, G. H.	193			
4. Williams, N. L.	194		AL	9-3
5. Roberts, H. E.	195			

Sergeant S. E. 111 in charge

Officer	Call #	Equipmt. #	Days off	Assignment
1. Charney, J. M.	151	337		
2. Lumpkin, V. G.	152	343		
3. Courson, J. W.	153	355		
4. Featherston, W. R.	154	353	AL	AL
5. McLain, H. B.	155	352		
6. Gray, L. E.	156	351		
7. Taylor, J. H.	157	341		
8. Roberts, H. E.	158	330		
9. Wafford, E. D.	159	342		AL
10. Dale, B. J.	161	350		
11. Williams, J. W.	162	354		

Days off Oct 1961

Finally, the following memorandum describes the process of correlating the acoustics analysis with the Zapruder film:

MEMORANDUM

TO: All Select Committee Members

FROM: G. Robert Blakey, Chief Counsel and Director

DATE: February 22, 1979

RE: Fine Points of Correlation of Tape to Film

As noted during the course of our public hearings, any attempt to derive the maximum knowledge from the available acoustical and photographic evidence requires that at least an approximate correlation be made between the timing of the shots as recorded on the Dallas Police Department tape and the visual record contained in the Zapruder film. One such correlation was presented during the hearings in the form of a copy of the Zapruder film with four shots dubbed onto it at the approximate times that the occupants of the limousine would have heard the sounds of the gun fire. In fact, two different versions of the film were shown on December 29th. In the first, the sound of the fourth shot (from the TSBD) coincided with the fatal head wound seen at Zapruder frame 313, and in the second, the third (grassy knoll shot) coincided with that wound.

Under the time constraints of preparing for the hearings on December 29th and with the recognition that neither the running speed of the DPD dictabelt nor of Zapruder's camera was known with absolute precision, the frames used on December 29th for such correlation purposes were based only on the actual spacing of shots on the DPD tape (totaling 7.9 seconds from the first to the last) and the "average" running speed of Zapruder's camera, which the FBI determined in 1964 to be 18.3 frames per second.

Nevertheless, so that the Committee's final report may be more exact and that you can understand the basis for the increased precision we have continued to refine our data and it may be helpful to note in this memorandum the results of our efforts to be more precise as well as what is set forth in the final reports of BB&N, Weiss and Aschkenasy, and what was contained in a letter from FBI Director Hoover to the Warren Commission of February 3, 1964.

In its final report, BB&N advises the Committee that its best estimate is that the DPD dictabelt was recording approximately 5% too slowly on November 22, 1963, a fact also noted in the hearing on the 29th. The FBI's letter of February 3, 1964, also stated as quoted in full below:

At the request of members of your staff the FBI Laboratory has made a further study of the film speed of the camera used by Mr. Abraham Zapruder in filming the eight millimeter motion picture of the President's assassination. You have previously been furnished the results of the Laboratory examination of this camera which places the film speed at 18 1/3 frames per second. The Laboratory was requested to establish, if possible, the variation between the film speed of the camera when the drive spring is fully wound and when the spring is almost run down.

This study has been made by checking the film speed of the Zapruder camera at ten second intervals throughout the full running time of a fully wound camera. Several checks were made on a full roll of film and it was found that the film speed of the camera when fully wound runs at an average speed of from 18.0 to 18.1 frames

2 - correlation of tape to film

per second (fps) for the first ten seconds. It gradually increases to 18.3 to 18.5 fps for the next twenty seconds, then gradually decreases slightly to 18.1 fps for ten seconds before the final twenty seconds that run at an average speed of 17.6 to 17.9 frames per second. Mr. Zapruder has stated that the camera was fully wound when he started filming the President's motorcade. Since all of Mr. Zapruder's assassination film was exposed well within the first half of time the camera will run on one winding, the rundown film speed should not be considered in the calculations. Therefore, the above figures result in our previous average frames per second speed for the assassination film of $18 \frac{1}{3}$ or 18.3 frames per second.

Shots 1, 2 and 4 were found by BB&N to begin on the DPD tape at 137.70, 139.27 and 145.61 seconds, respectively. Shot number three was found by Weiss and Aschkenasy to begin at 144.90 seconds. If the spacing between those shots is adjusted by the approximate 5% error in running speed of the dictabelt, the probable true timing of the shots, beginning with shot number one as zero, is 0.0, 1.65, 7.6 and 8.3 seconds.

Using those best estimates of the true timing of the shots, it is possible to calculate the frame number on Zapruder's film at which any event of interest occurred, and to do so for any assumed running speed of the camera. Nevertheless, it would not be accurate to simply multiply the corrected time spacing of the sounds as recorded, by the assumed number of frames per second running speed, unless, of course, you wanted to know only what frame was being exposed when the microphone picked up the sound of each shot.

If, for example, what you wished to know was which frame of the film was exposed when the bullet struck (or passed by) the limousine on the first shot, and you assumed the camera was running at 18.5 frames per second, and that the fatal head wound was caused by the fourth (TSBD) shot, your calculations would proceed as follows:

1. The distance from the motorcycle to the TSBD at the time of the first shot was approximately 124 feet.
2. Since sound traveled at approximately 1123 fps on 11/22/63 in Dealey Plaza (it being about 65° in the Plaza at that time), the sound took about .11 second to reach the microphone after the muzzle blast occurred. Stated conversely, the trigger was pulled .11 second before the 0.0 point in time on the tape.
3. If the fatal head shot is observable at frame 313, we can assume the bullet struck one frame earlier, at 312. A Mannlicher-Carcano bullet travels at approximately 2000 fps. Since the limousine was approximately 265 feet from the TSBD window at frame 312, the trigger was pulled .13 seconds before frame 312. ($\frac{265}{2000} = .13$) The motorcycle was only about 145 feet from the TSBD at this time. Consequently, dividing 145 by 1123, it is apparent that the microphone recorded that sound .13 seconds after the trigger pull, or at about the same time that the bullet impacted.
4. It is now possible to determine the frame at which the trigger pull on shot number one occurred. You simply take the total corrected tape time (8.3 seconds), add the

3 - correlation of tape to film

.11 second delay from shot number one trigger pull to recording time (step number 2), multiply by 18.5 frames per second ($8.41 \times 18.5 = 155.6$), and subtract from 312. The trigger was first pulled at frame 156.

5. Finally, by allowing for bullet travel time to the limousine (about 143 feet), it can be determined that the bullet struck at about frame 157 ($156 + \frac{143}{2000} \times 18.5 = 157$).

Similar calculations can be made for other events of interest. One example is the question of what frame was being exposed when Zapruder heard each shot. This information, of course, is useful for comparison with the blur analysis conducted by the photographic panel.

The following is a chart setting forth the results of such calculations, using three different estimates of camera speed, 18.0, 18.3, and 18.5 frames per seconds:

Shot No.	Tape Time	Trigger Pull Time	Hearing Shock Wave in Limo.	Hearing Muzzle Blast by Zapruder ³	Weapon to Limo ²	Motorcycle to Weapon ¹
1	0.11	0	161 177	165 181		
			0.07 159 175	0.24 162 178	143'	124'
			157 173	160 177		
2	1.76	1.66	191 208	194 210		
			1.74 189 206	1.90 192 209	165'	107'
			188 205	191 208		
3	7.69	7.49	296 312	296 312		
			7.55 296 312	7.55 296 312	111'	220'
			295 312	296 312		
4	8.44	8.31	312 328	314 330		
			8.44 312 328	8.55 314 330	266'	144'
			312 329	314 330		

¹Sound: 1123 fps

²Bullet: 2000 fps

³Zapruder to TSBD: 270'

Zapruder to Knoll: 60'

