

People and the PURSUIT of Truth

Vol. 4, No. 10

May 1979

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LYING AND EXCUSES

by Edmund C. Berkeley, Editor

On this occasion, I am sorry to disagree with Richard E. Sprague, Associate Editor of *People and the Pursuit of Truth*. His evidence, analysis, and views I have greatly respected over the years. But this time, in regard to Professor G. Robert Blakey, and the interpretation of his speech in January 1979 (reprinted in this issue of *Pursuit* because (a) it is important and (b) it is in the public domain), it is plain and clear that Blakey is a liar, a skillful and deceptive liar, but a liar just the same. So he is really not an enigma.

What is a liar?

A person (a) who does not tell the truth, and (b) who knows that he is not telling the truth. It is that simple.

I believe that there are some poor excuses for lies. A man who has decided that if he notices the truth and tells the truth, he will be promptly killed, has an excuse for telling lies. Also, many politicians — perhaps all politicians — quickly discover that there are many occasions where they cannot tell the truth, for if they tell the truth, they know they will be completely discredited and ruined. Such people also have a poor excuse for telling lies. But what they tell are lies just the same, and that deceives the

people who trusted them to tell the truth, and that is wrong.

For example, take Senator Ted Kennedy. I think he has told many lies in connection with the incident at Chappaquiddick some years ago. Also, I think he knows that his brothers, President John F. Kennedy and Senator Robert Kennedy, were both assassinated by a very powerful conspiracy. Also, I think that he has a tacit treaty with the Power Control Group never to run for President of the United States, on penalty of death and blackmail both. But most of the time, I believe he does not lie nearly as much as President Jimmy Carter does. When Carter went to Three Mile Island and declared nuclear power to be safe and necessary, he lied. It is neither safe nor necessary.

But Blakey did not have to tell as many lies as he did. For example: it was physically impossible, as shown by excellent scientific photographic and physical evidence, for Lee Harvey Oswald to have shot President John F. Kennedy. Blakey had to choose blindfolding to avoid seeing that. Even Blakey in the last few days of the hearings was forced to admit that there was a fourth shot, i.e., "conspiracy."

Blakey was a big-time liar. The verdict of history will classify him as such.

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This magazine is devoted to:

- facts, information, truth, and unanswered questions that are important to people, widely suppressed, and not adequately covered in the usual American press; and also to
- solutions to great problems that are functioning well in some countries or places, yet are almost never talked about in the usual American press.

Effective May 1, 1979, *People and the PURSUIT of Truth* will be published 8 issues to the volume, and volumes will continue not for 12 months but until 8 issues have been published.

Subscription rates: U.S.A., \$9.50 for one year, \$18.00 for two years — except for students (send evidence): \$6.00 for one year, \$11.00 for two years. In Canada add \$1.00 per year; elsewhere add \$3.00 per year.

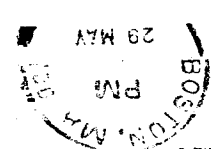
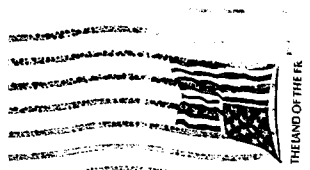
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Professor G. Robert Blakey: "Enigma"?

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"Professor Blakey's remarks in January are not all believable. Some are just plain rubbish. Here are some examples. . . ."

Professor G. Robert Blakey, chief counsel for the House Select Committee on Assassinations, gave a speech on the work of the committee to the Cornell University Law School alumni meeting on January 25, 1979./1/ A review of that speech leaves the knowledgeable JFK assassination research community as puzzled as ever about Professor Blakey. He is truly an enigma regarding his real motivations, beliefs, and intentions with respect to the assassination of President Kennedy.

Is Professor Blakey wittingly a tool of the PCG (Power Control Group), that pervasive collection of men who planned, executed, and covered up all of our political assassinations in the last fifteen years? Or is he a "brilliant" scientist, blinded by scientific analysis to the point of missing the obvious? Is he under the domination of the U.S. intelligence community? Is he a friend of the Mafia, as many have asserted? Or is he an isolated, independent thinker, so cautious and so fitted with blinders that he left critical areas of evidence unexplored?

His speech before the Cornell alumni provides few clues. His public statements during the hearings of the House Select Committee on Assassinations last autumn were representative of the enigma. He seemed to take both sides, theorizing about nearly all of the classes of conspiracies that researchers have presented since 1964.

At the same time, he seemed to believe in: (1) the single bullet theory; (2) Oswald firing shots from the sixth floor window; and (3) other theories that were long ago proven to be completely false by his own chosen method, scientific analysis.

How could such a man look at the photographic evidence of the sixth floor window and still advocate his trajectory expert's testimony that some of the shots came from that window? How could such a man give great credence and polite treatment to a government-biased medical panel, while at the same time he engineered an attack on the only truly knowledgeable and independent member of that panel, Dr. Cyril Wecht? How could he possibly go forward on the last day of the HSCA hearings with the testimony about the police tape recording and the analysis of the shots recorded on that tape, knowing full well that the photographic evidence had already proven that the initial assumptions were faulty?

This is the central enigma of Blakey. A scientist, noted for his "brilliant" detachment, proceeds (with

irrefutable scientific evidence to the contrary) to orchestrate testimony on the last public day of the HSCA's existence. And he attempts to show there was a motorcycle on Elm Street in a position where there was none. Why would he do that?

One answer is that he knew the acoustic evidence was scientific evidence that the committee members would believe, that gave proof of a shot from the front. He had by then decided it was absolutely essential to reach a possible conspiracy conclusion. No other single piece of evidence, simple enough and seemingly scientific enough, had developed to be used at the last minute.

If Blakey had done the proper homework a year before with good researchers working on the photographic evidence, he would have had his conspiracy nailed down. His main problem with over 500 photographs available was that they proved a different kind of conspiracy than the one Blakey had decided to "sell" to the Committee. The photos proved that no one fired any shots at all from the sixth floor window. They proved that Oswald was a patsy. They proved that there existed a conspiracy of a sophisticated nature. They proved a strong hypothesis of well trained, well equipped people being involved with planning far in advance. The photographs would inevitably lead to intelligence involvement, either CIA or FBI or both. Blakey knew that this avenue was dangerous, whether or not he was a tool of the Power Control Group or not. The committee members were already frightened by too many dead bodies, left literally on their doorstep. Blakey's New Orleans, Mexico City, Florida, and Dallas field investigators had produced some really frightening results. So Blakey opted for a compromise as a way out: (1) a conspiracy involving Oswald and one or two other "lone nuts"; (2) a conspiracy that eventually will be proven to be impossible if a truly honest investigation is ever conducted. Such an investigation would focus on the pictures of the sixth floor window both inside and outside the building during and after the shots.

How do we know that Blakey cheated the committee and the public on the acoustic evidence? I became directly involved with him and his investigative staff during that last fateful week. Earlier it had been pointed out to the staff and to the acoustic experts, Dr. James Barger of Bolt, Beranek and Newman and Professors Mark Weiss and Ernest Aschkenasy of Queens College in New York, that their conclusions about the police motorcycle carrying the open

microphone that picked up the sounds of the shots, were provably wrong. Burger, Weiss and Aschkenasy had placed the particular motorcycle 120 to 140 feet behind the presidential limousine, trailing it down Elm Street at the time of the shots. Their analysis was based on matching the sounds on the tape with test shots fired from ONLY TWO locations, the grassy knoll and the sixth floor window of the Texas School Book Depository Building. No other firing locations were ever used.

The motorcycle location was determined after finding matches of about 2/3 of the test shots with the tape sounds. Dr. Barger stated to me that if no motorcycle was found in the photographs, the original assumptions about the source of the shots being the TSBD window would have to be re-examined. The analysis was not faulty: the original assumptions must be. It is the old computer story of Garbage In, Garbage Out. A perfect analytical technique will almost always produce wrong results, given wrong initial data.

Three films show the area 120-140 feet behind the limousine at the time of the shots, the David Weigman, Malcolm Couch, and Elsie Dorman films. No motorcycle is present in this area in any of those films. In fact, the motorcycle closest to the area in question at shot times is over 200 feet behind the limousine. It is the one driven by officer McCain, the officer put on the grill before the HSCA in an attempt to establish his microphone as being the one picking up the sounds of the shots.

The photos and films of the limousine show four motorcycles immediately behind the president. The open microphone was undoubtedly on one of them. If Robert Blakey had been objective, he would have conducted a test in Dealey Plaza firing from several other locations such as the Dal Tex building and the other end of the TSBD. If he had, the matches between test shots and tape sounds would no doubt have gone up to 100% and the motorcycle location would have been correctly established.

At any rate, the Blakey staff acquired the Couch and Weigman films a second time from me, during that last week of the committee's life, with the explicit comment that there was no motorcycle in the required spot. They examined the films and decided to go ahead anyway on the last day with the Weiss, Aschkenasy, and Barger testimony. To this day, they have never mentioned the fact that the motorcycle is not where they said it was. If they did, they would have to admit that Oswald might have been a patsy and that the single bullet theory, the trajectory analysis, and the rest of their house of cards might collapse.

Professor Blakey's remarks in January are not all believable. Some are just plain rubbish. Here are some examples.

He says the committee staff ranged wide and deep in the files of the FBI and the CIA. It is a well known fact that prior to Blakey's arrival, Richard A. Sprague, Bob Tanenbaum, Ken Klein and Cliff Fenton, the JFK investigative team, received almost total opposition and stonewalling from those two agencies. The media and the National Archives also were stonewalling. The reason was very obvious to students of the assassination and of the Power Control Group. Richard A. Sprague had made it clear

that he would go into every aspect of the potential involvement of the CIA and the FBI in both assassinations and the coverups. He considered them as suspects, not as allies.

Blakey's statements in mid-1977, on the other hand, made it obvious that he would not be pressing them very hard. Access to files is one thing; investigating the agencies' complicity is something else again. If indeed the CIA and the FBI were co-operative, this would only serve to raise questions about Blakey himself. If Blakey were honest about it, we should read all about the meetings in Guy Gabaldin's apartment, the involvement of all those CIA agents, contractors and informers in the planning meetings in New Orleans, Mexico City and Dallas, the identity of the CIA sharpshooters in Dealey Plaza, the facts uncovered during the Garrison investigation, the knowledge kept by Richard Helms and E. Howard Hunt, Oswald's role as a double agent for the CIA and FBI, and all the rest of the facts most of the researchers have established for over ten years.

If Blakey is a PCG man, we will never hear about the results of the Cliff Fenton investigative team's efforts in New Orleans, Dallas, Mexico and Florida, or hear about Gaeton Fonzi's important discoveries in the Caribbean and Florida.

Blakey says they found out from the Zapruder film that the first shot was fired from the Depository Building and that it missed. There are two things wrong with this statement. First, the Zapruder film does not show the actions ascribed to it by Blakey, the photographic panel, and the committee, on the part of Governor Connally, President Kennedy, Jackie, and Mrs. Connally. Their contention is that all occupants of the car were turning and reacting to a shot from the rear, fired 7.9 seconds prior to Zapruder frame 313. That would be Z frame 169. This is not true. Any physical movement in reaction to that would not show up for at least 2 seconds, allowing at least 1/2 second for sound travel. That would be Zapruder frame 206. By then Kennedy has been hit, and the limousine bearing him is partially disappearing behind the Stemmons Freeway sign. The other occupants are also behind the sign. No one turned prior to disappearing behind the sign. The film does not show what Blakey says it does.

A second main point about Blakey's statement is that there is no way the Zapruder film could possibly indicate the source of a shot that missed. Even if the occupants did turn to the rear, which they didn't, it would not prove where to the rear the shot came from.

If Blakey had done his homework, or if he were honest about the homework his staff and Sprague's staff had done as early as November 1976, he would have had to admit that solid photographic evidence exists to show that the shot that missed was fired from the Dal Tex building. He would also have had to admit that the acoustic evidence is very important, because we know when the shot that missed was fired.

Blakey says the committee scientifically proved the single bullet theory. That is just plain bunk. Any knowledgeable researcher attending the hearings saw quite clearly how the medical panel, photographic panel and trajectory panel were carefully segre-

gated from each other, in such a manner as to come up with single bullet conclusions. The trajectory expert did not use the medical panel's locations for JFK's wounds. He invented his own. He also ignored the photographs themselves and the photographic panel's placements of JFK and Connally in the limousine. He invented his own placements, moving both men laterally and vertically just the right amount to satisfy the single bullet theory. Perhaps this was convincing to the public and to amateurs. But it certainly could not have deceived an "expert" like Blakey. He has to know the testimony was completely dishonest.

Blakey says the bullet fired from the knoll did not hit the President, and that the medical evidence was unequivocal that no shot came from the front. He completely ignores Cyril Wecht's testimony on this. Wecht has always maintained that there is a possibility the medical evidence indicates a shot from the right side or right front. He stated this in the hearings. Wecht says the brain would reveal this. Unfortunately, the brain is missing from the Archives.

Blakey also does not mention the back-and-to-the-left motion of the President's head following the fatal shot. No one in the hearings tried to explain away that phenomenon.

There is one absolutely correct statement in Blakey's speech before the Cornell law school alumni. It is the following: "The next time this happens -- and it will happen: one in four of our presidents has been shot at ..."

References

/1/ "Clandestine America" for March-April-May-June, 1979, Assassination Information Bureau, Washington, DC, p. 13 ff.

A Preliminary Report on Three Mile Island

Based on a report by Eliot Marshall, in
"Science," April 20, 1979

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*"The NRC learns of negligence, mechanical failure, and
48 hours of confusion in the control room."*

The accident at the Three Mile Island nuclear power plant was dangerously out of control for at least 48 hours, according to a preliminary staff report given to the Nuclear Regulatory Commission (NRC) on 4 April. That is how long it took the technicians to figure out with any certainty what had gone amiss. During the first 13-1/2 hours after the accident began, the reactor core overheated and then began to disintegrate. Technicians stopped this process by a fortuitous action whose significance they did not fully grasp until much later.

A mistaken move during this early period — such as a prolonged attempt to depressurize the reactor vessel, which is actually what the plant operators

had in mind on the first day — would have caused serious damage to the control machinery and possibly produced a disaster in Pennsylvania. While this explosive and extremely hazardous situation developed, the people of Harrisburg were given bland assurances that the reactor was under control and that they had nothing to fear. It was not until the third day of the accident, after the full extent of the danger became known, that Governor Richard Thornburgh announced that it might be a good idea for women and children to leave the immediate area, if they were so inclined. Many were.

The NRC staff report of 4 April reveals that good luck had as much to do with averting a catastrophe as good engineering. For 13-1/2 hours, it appears, the reactor core was left partially exposed above the cooling water, while temperatures inside the reactor vessel climbed off the recording chart. Engineers in the control room realized that something inventive had to be done. As one NRC staffer said, "There was some speculation ... that there were voids or perhaps bubbles in the system." Fortunately for Harrisburg, in trying to collapse those imagined voids, the technicians repressurized the system and raised the water level to cover the reactor core. Had this decision not been made when it was, gas would have continued to fill the reactor vessel, ultimately reaching the pumps and threatening the only viable cooling mechanism. As it was, the damage was extensive, although not enough to trigger an irreversible meltdown.

Chance appears to have played an important part in ending the crisis; negligence was important in causing it. According to the NRC report, a key element in the cooling system — three auxiliary feedwater pumps — had been taken out of commission 2 weeks before the accident and left out. This was done in violation of federal regulations. NRC's director of nuclear reactor regulation, Harold Denton, said on 4 April: "The auxiliary feedwater pumps should have been operational. Had they been, we would have had a completely different outcome." Negligence joined with mechanical failure and sheer folly (a technician confusedly turned off the emergency cooling system at the peak of the crisis) to eliminate all the planned safety systems intended to keep the reactor from overheating. When the core overheated, it produced a new and unexpected problem, a 1000-cubic-foot bubble of hydrogen gas, an eventuality for which the local utility and the federal regulators were utterly unprepared.

It took 2 days to analyze the situation and another 3 days to get it under control. ...

In its preliminary report to the commissioners, the NRC staff listed six major errors that contributed to the accident:

— The first was the failure to keep spare auxiliary feedwater pumps on-line as required by the NRC. Only one of four was operational on 28 March, leaving no margin of safety when the accident began at 4 a.m.

— Second, a relief valve in the primary coolant loop opened during the accident, as it should have, to let out overheated water. Then it failed to close. This caused a dangerous drop in pressure.

(please turn to page 8)

Speech of Prof. G. Robert Blakey

Prof. G. Robert Blakey
Chief Counsel
House Select Committee on Assassinations

"There were 171 people interviewed out of the people in Dealey Plaza, that testified . . . that there were from two to four shots fired. Of that 171 that said there were two to four shots fired, 46 people said they were fired from the Depository; 20 people said they were fired from the grassy knoll."

Mr. Justice Holmes once observed that the first requirement of a theory is that it fit the facts. He didn't add it, but I suppose he would not object if I said what he really meant was, the first requirement of a good theory was that it fit all the facts, and not just some of the facts. One of the great problems with the Kennedy case is that people have taken some of the facts and fit them to a particular theory and suggested that it was the truth.

What really happened in Dealey Plaza on November 22, 1963, is a very troublesome question, because what happened there not only happened in Dallas, it happened in Washington. I dare say that there are very few of you who could not tell me if I asked you where you were that day. Some of you that are a little older could probably tell me where you were December 7, too. Those two days we remember.

My problem when I got down to the committee some 18 months ago was how to figure out what, if anything, a congressional committee, not a grand jury, not an executive police agency, could add to the tragedy, except complicate it. I recognize, as I'm sure many of you do, that fact-finding 15 years after an event is difficult if not impossible. As I am sure you would remember or at least think you remember where you were on November 22, ask yourself honestly, are you telling me where you were or are you now telling me the story that you tell about where you were? Now that story is not false. It normally has a meaning to it and that simple meaning is true, but over time the details change. So one of the first things we faced in an effort to try to find out what happened in Dealey Plaza is that the witnesses' testimony was no longer valid. Frankly, it offered little hope of settling very difficult questions. Consequently, we hit on a strategy of looking not to people but to science and files.

Let me speak for a moment about files first. There is a myth, I suppose actually promulgated by the investigative agencies, that they know everything. It is widely believed that the truth about the Kennedy assassination is somehow locked up in the FBI, or more particularly in the CIA's files. One of the first things we found, my friends at the CIA will forgive me if I say it publicly, is that the reason they classify information is not to hide it from you, but rather to hide how little they know both from us and the Russians. The answer to the Kennedy case is

Speech before the Cornell University Law School Alumni meeting, Plaza Hotel, New York, Jan. 25, 1979; reprinted from "Clandestine America" published by the Assassination Information Bureau, 1322 18th St. NW, No. 21, Washington, DC 20036.

not in the CIA files. We ranged wide and deep in those files. The agency gave the Select Committee on Assassinations unprecedented access to their materials and to their people. We had a similar access with the Federal Bureau of Investigation and a number of other agencies.

Let me talk to you a little bit about the science and what is involved. The official explanation for Dealey Plaza was that the president was shot at, perhaps three times, certainly two times, in a space of 7.9 seconds. All of the shots were fired by a man named Lee Harvey Oswald. Two of the shots hit President Kennedy; one shot actually hit both President Kennedy and Governor Connally. There was no evidence of a conspiracy. Now the phrase "no evidence of a conspiracy" was obviously written by a Philadelphia lawyer, because the phrase before "no evidence" was "no credible evidence," which would clue most of you to the fact that there was some evidence, which the commission for one reason or another rejected.

What did we find? We found that there were four, not three shots fired. That the first shot was fired from the Depository and that it missed. The evidence for that, and I will speak today primarily, if not exclusively, in terms of scientific evidence, is a film made by a man named Abraham Zapruder who ironically actually filmed the assassination as it occurred. In Zapruder's film you can see John Connally sitting in the car and he turns slightly to his right and then he turned very quickly, again. Connally's testimony to the Warren Commission and to the Select Committee on Assassinations was that he heard the first shot. That testimony, that oral testimony, was rejected by the Warren Commission. It had been accepted by the Select Committee on Assassinations, in part because the film sees John Connally turning, but more significantly, as I am sure many of you know, the Select Committee on Assassinations subjected a tape made by the Dallas Police Department, inadvertently, of the sounds of the assassination to some sophisticated acoustics analysis, and we can tell you that there were 7.9 seconds from the first to the fourth shot and you can count back in the film the correct number of frames and indeed see the shot go off in the sense that you can see in the film reactions to the first shot.

The second shot did, as the Warren Commission suggested, hit the president in the back of the neck, exit his throat, go into John Connally's back, exit his chest, hit his wrist, and then hit his thigh. The same bullet inflicted both wounds. This is the

so-called "single bullet" theory. The Warren Commission suggested this. It has and had been widely objected to by the critics. If there is anything that flows from the Select Committee's work, it is that the reality of the "single bullet" has been established beyond all reasonable doubts on the following grounds:

You can align Governor Connally and the president up using sophisticated techniques of interpreting the film. We located exactly where they were, I mean literally to the centimeter in Dealey Plaza. We located the two bodies. Using the forensic pathologists, we located where on the bodies the wounds were. We then had a NASA engineer trace out from Governor Connally's back through the president's neck and out the back of his neck, aligned based on the possible trajectory of the bullet and it intersects ... in a circle about like this ... on the sixth floor Depository window. The plus or minus of the trajectory is about 14 feet. Nevertheless, it established the reality of the possibility of the single bullet having come from the Depository.

In addition, ballistics tests show that the bullet found on the stretcher, probably Governor Connally's stretcher in Parkland Hospital, came from Oswald's rifle. Neutron activation analysis establishes that the bullet, in fact, hit Governor Connally's wrist. The bullet that hit Governor Connally's wrist was tumbling when it went through Governor Connally. You can tell that from the nature of the wound on the back of him. The only thing between President Kennedy and Governor Connally and the window from which the bullet was fired, was the president. The "single bullet" theory is correct.

The third bullet — and this is the area of some controversy — was not fired from the Depository, as the Warren Commission thought; it was fired from the so-called grassy knoll, an area off to the right of the president as he drove down Elm Street. This was a somewhat surprise finding by the committee — surprising, I suspect, to the public, who only became aware of it in December when it was announced. It is one of those things that, I suppose, will become a myth that the committee did this at the last moment. In point of fact, the committee had been wrestling with the implications of the acoustic study since sometime in July and August when we began to perceive that a careful study of the tape that we found would indicate that there were more than the required three shots, required in the sense of sustaining the Warren Commission's analysis.

Let me talk to you a little bit about the tape because it is an essential part of the analysis.

A policeman by the name of H.B. McLain — unknown to H.B. McLain — was traveling about 120 feet behind the presidential limousine on the left. The Harley-Davidson motorcycle that he had had a habit of having its microphone stuck. Indeed, it was stuck that day. He was also on the wrong channel, unknown to him. He was on Channel 1 when he should have been on Channel 2. And the microphone was stuck, as history would have it, during the period of the assassination. And consequently his microphone picked up not only the sound of his motorcycle but the sounds of the bullets being fired in Dealey Plaza.

For a long time the fact of that tape was known, and it was suggested by critics that someone in the

Dallas Police Department was involved somehow, in some way, with the assassination. An effort had been made to block the communication's channel by depressing the microphone button. This allegation led us to find the tape we did. It was in the possession of a former Assistant Chief in Dallas. We sent it to a firm in Massachusetts, named Bolt, Beranek & Newman, which counts among its endeavors working with sonar. They are able under water to locate and distinguish whales and submarines halfway across the Atlantic.

In addition, Dr. Barger says I shouldn't talk about this too much, but since it's not classified, as far as I'm concerned I'll share it with you. They apparently make a little black box that you put on a howitzer on a battlefield, and when the other side shoots at you the little black box tells you where the other howitzer is. So you shoot back exactly where they are. One of the things that led us to go to Dr. Barger's firm was the assumption that if he could find a howitzer on a battlefield, he ought to be able to find a rifle in Dealey Plaza.

In any event, Dr. Barger subjected the tape to very sophisticated analysis eliminating background noise throughout the whole tape. Ironically, however, the crucial sounds were sufficiently clear that the filter process turned out to be not necessary, although we spent about \$50,000 on the filtering process. Incidentally, he told us it was not necessary after we spent it and not before.

When Dr. Barger appeared before the committee on September 11th, his analysis of the product of a reconstruction of the shooting in Dealey Plaza that he had conducted in August had only been finished for approximately six to seven days. Consequently, at that time, he was only willing to estimate a probability about being mistaken on that third shot at 50-50.

Following his appearance in September, we had some separate consultants take a look at the basic data and do a mathematical extension of it. That mathematical extension can be fairly simply explained. Dealey Plaza is an urban environment, composed of large structures. If a sound is made by a rifle and there is a microphone in that environment, the first sound that comes from the rifle will reach the microphone directly. Indirect sound, or echoes, will bounce off all of the major structures in that environment and bounce back to the microphone. If you can visualize in your minds for a moment the first sound going to the rifle as one line of a triangle and the other two sides being created by the direct line to the building and then the direct line back to the microphone you have a triangle. Imagine if you will the sound that occurs in Dealey Plaza. It does not sound like a bang. It sounds like bang, bang, bang, bang [i.e., dying away] until all of the echoes have hit off the buildings. And we have constructed a number of triangles in Dealey Plaza. Each triangle is unique as to the distance between the rifle, the building and the microphone as a function of the temperature of the air. It is possible to plot each of those triangles. If you can imagine in your mind for a moment a very complicated doodle, that doodle, composed of one superimposed triangle after another, actually amounts to a fingerprint of the sound in that urban environment, unique to that urban environment. What Professors Weiss and Aschkenasy were able to do for us in the period after

September was to perfect that fingerprint of sound that was on the tape taken in 1963 by the Dallas PD inadvertently and match it to the fingerprint of the sound that we had reconstructed in Dealey Plaza in August of 1978. And when that match occurred, it occurred to a degree of certainty of 95% plus.

We asked them, obviously, somewhat in disbelief or at least incredulously, "How could this have been done, or could we have been mistaken here between what you say is a rifle shot and a backfire?" And their answer is, "Yes, but the motorcycle would have to have been up on the grassy knoll behind the wooden fence to the left." We asked them, "Could this sound have come from another place?" There is another sound on this tape, for example, the sound of a carillon bell. And there is no bell in Dealey Plaza. "Could this sound have come from another source?" And the answer is yes. And Professor Aschkenasy put it very well, he said, "But tell me where it came from, and I will go there and I will find someplace else that looks precisely like Dealey Plaza."

What they told us in effect was that the construction of triangles that they found on the tape in 1963 is identical, 95% plus, to the construction of sound on the 1978 tape. In addition, there is more than what could be a loud noise. There is preceding the loud noise what is called an N-wave. When a supersonic rifle or pistol is fired, the first sound is that of a muzzle blast that you can observe, preceding that muzzle blast is the supersonic missile. Much like an airplane flying at the speed of sound, has a sonic boom with it, there is an audible sonic boom. So actually a rifle goes ... (snap, snap) ... and then it hits. You can see that initial snap on this tape. So whoever fired at the president from the grassy knoll fired a supersonic gun. I don't say rifle or pistol, because in fact any number of pistols available to the general public in 1963 could have been used. Clint Eastwood shoots a .44 Magnum. I don't suggest that he shot at the president; nevertheless, had he fired a .44 Magnum at the president it would have made the same sort of trail. Once we learned that it could have been a pistol and not a rifle, we quickly asked is it possible that a policeman in that area could have accidentally discharged his pistol. And the answer is that the nature of the N-wave and the muzzle blast that follows behind it permits you to determine the general direction of the shot. We know, for example, that it was not fired away from the grassy knoll back towards the railroad. We know that it was not fired directly up in the air. It was indeed fired at the general area of the presidential limousine. And that would lead one to suppose that this was not fired accidentally and the fact that he would have been a policeman would have been irrelevant to determining a number of things.

There is ironically a photograph taken by a woman standing across the street at the moment, within a second, of when the shot was fired. And it includes the presidential car, President Kennedy is leaning forward, and it includes the relevant area of the fence where the second assassin had to have been standing. We knew this. We looked very carefully at that film, and I have to report to you unfortunately that film was taken with a Polaroid camera, and in the 15 years following the assassination the film has deteriorated to the point now where some of the kinds of sophisticated computer enhancement that we

were able to do with the other films is, our experts tell us, not a profitable venture, and we did not make it. Nevertheless, ironically, at the very point on the film of the fence, where our acoustics people tell us the assassin had to be standing, there is an irregularity, which if you take a conspiratorial Rorschach test you will identify as an assassin. If you don't take the test that way you will say it's an irregularity in the film. The committee made no judgment on what it was. In fact I think it feels its presence is more significant in the sense in which it is not absent. If that fence had looked awfully regular at that point, and had not had an irregularity there, it would have been one little piece of evidence that would have perhaps been inconsistent with the acoustics.

When the acoustics came in we also asked ourselves, "Wait a minute, you've got a gunman firing from the grassy knoll? There were hundreds of people in that plaza that day. Who among them heard it? Who among them saw it? What evidence beyond science gives it support?" Most of us were skeptical lawyers and not trained scientists, therefore we don't believe scientists much more easily than others.

There were 171 people interviewed out of the people in Dealey Plaza, that testified either to the FBI or to the Warren Commission that there were from two to four shots fired. Of that 171 that said there were two to four shots fired, 46 people said they were fired from the Depository. Twenty people said they were fired from the grassy knoll. The rest said either that they didn't know or that they were fired from someplace else. You can see what you have here. The Warren Commission, faced with that kind of testimony, decided, I think, in the absence of scientific collaboration for the oral testimony of shots coming from two different directions, that they would believe only the shots fired from the Depository.

Among the people who heard shots fired from the front as well as from the back, include a policeman riding to the left of Mrs. Kennedy. His testimony is unequivocal. "I heard a shot come over my shoulder. I heard a shot from up front and to the right of me." Another witness was a Secret Service agent riding on the car immediately behind the president.

On the grassy area, from which the grassy knoll name is taken, there were two people. Abraham Zapruder, you will recall that I mentioned that he took the film. His testimony is difficult to read or to understand, partly because of the obvious emotion that he expressed during his deposition. Nevertheless, from his testimony you can determine that he differentiated shots based on sound. One shot was not so loud, another "reverberated all around me." As indeed it would have if it had come over his shoulder.

A man named Newman, with his family, was literally standing on the grassy knoll between where the president was and where the other gunman shot. He dropped his family to the ground — and there is photographic evidence to corroborate this. And he said very clearly, "I knew that I was in the line of fire. It came from the garden area directly behind me."

Another man, named Holland, standing on the railroad pass under which the president was shortly

to drive, said he heard four shots. Two from up the street, two from down the street — by down the street he meant the grassy knoll — and he also said that he saw a puff of smoke coming from the grassy knoll. I was somewhat skeptical of that testimony the first time I read it, since I thought that they really didn't have smoking guns since they got rid of flintlocks. That tells you how little I know about ammunition. Apparently a rifle made today, if not cleaned properly (which would leave oil in the barrel), would indeed produce smoke. And consequently, seeing a puff of smoke over there may be difficult to believe but it's not impossible to believe.

The bullet that was fired from the grassy knoll did not hit the president. The medical testimony is unequivocal. There is no evidence of any bullet hitting the president from the front.

The fourth shot, fired this time again from the Depository, hit the president in the back of the head and came out the front. And the doctors tell me that the cause of death is two gunshot wounds. And I believe them from a medical point of view, but having seen the films and having also seen the autopsy films, my judgment at the moment is that the third shot fired by Lee Harvey Oswald from the Depository killed the president.

Let me comment to you and with you a little bit about the meaning of all this. It has been one of the most soul shattering experiences that I've ever had. I was, ironically, with Attorney General Kennedy on November the 22nd, 1963, in an organized crime section meeting. We all went home for lunch. He went with Bob Morgenthau out to Hickory Hill, and the president was killed, and the meeting never got back together again.

Consequently, going back to Washington to investigate this was, in a sense, coming back to where I started. Seeing the president in the Zapruder film, for example, with Mrs. Kennedy, you're immediately struck with what a beautiful person he was. So alive. So vibrant. So symbolic of a time and place in the 1960's. And then seeing him dead, as I have, laid out on a slab — and I don't suggest that any of you do — very troublesome.

In a personal sense that is some of what happened to me, but there ought to be broader things that we can say about what happened in Dallas.

We can't rewrite history. We can't bring John Kennedy back. But I can tell you that not one institution of my society served me well in 1963. And I'll be honest with you, the Select Committee on Assassinations ought to underline its report and say, "None were covered with glory, including this committee." As committees of Congress go, its early history is hardly one to be offered as a model. The FBI did not adequately investigate the case. Not as to who shot the president. The basic shooter investigation is superb. They did not investigate adequately the conspiracy. The CIA, what did they do for us? They did not adequately gather information before the assassination. The information they had after the assassination they did not share with the Warren Commission. The Warren Commission itself represented in many ways the best of our society. The Chief Justice was its chairman, lawyers who are today in all of the major firms in the United States

served on that commission, all of them served ably and well. They studied the case as best they could, arrived at their judgments in good faith, and were fundamentally wrong on the conspiracy question. And they made what in my judgment was a serious mistake, they stated their judgment in such a way as they mistrusted the American people. They should have said, "We've done the best we could, we know who shot the president, we're not sure whether others were involved." And then trusted it to the maturity of the American people to accept it as such. They didn't, and let enter into our society a kind of poison that has run through the body politic ever since. We call it Watergate today — a lack of credibility in governmental institutions. There are a lot of young people who have thought this case through who will never trust the government again and feel that they have been lied to.

If there is any message to take out of this case, it ought to be that. Not a hope that somehow we will be able to identify the other assassin on the grassy knoll. After 15 years that's probably unlikely. That there were two assassins there, I believe it, based on science, and I think you will too if you see the evidence I saw. And you can see it. It's not something you have to accept on faith. You can go redo what they did. We'll publish the charts and you can sit down with a hand calculator and refigure it. This is not something that is beyond anyone who has a high school or certainly a freshman college understanding of physics.

But the message we ought to carry away from it can be summed up in two words, "Never again." The next time this happens — and it will happen: one in four of our presidents has been shot at — I hope indeed people will have the courage and integrity to stand up and say, "I will pursue this as far as I can, and if I can't go all the way, because I am human, I will tell people of that." So the lesson I think you should take from it is Santayana's lesson, "Those who will not study the past are doomed to repeat it." I know Shaw comments on that, "That the only thing we learn from history is that we don't learn from history." I have to hope that Shaw is wrong. Thank you. □

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— Third, at least one water level indicator on the pressurizing system appears to have given a faulty reading, causing the technician to think the system was full of water when it was not. This made him think wrongly that the system was under control.

— Fourth, when the emergency core cooling system came on automatically, which only happens when things are seriously amiss, another automatic system designed to contain radioactive leaks failed to come into play. The NRC rules say that this leak containment system should switch on simultaneously with the emergency cooling system.

— Fifth and sixth, technicians in the control room turned off the emergency and the primary cooling pumps. They should have been left on. No one knows why they were stopped.

The NRC staff describes these and other technical blunders in considerable detail, but they did not explain why the public was not warned of the danger sooner. ... □