

SPECTER: Thank you very much.

Let me start out by saying that I believe that the single bullet conclusion is the most probable conclusion from all the facts, but I do not think that it is an indispensable prerequisite to the conclusion that there was only one assassin. The Commission has stated in the Report that there is persuasive evidence from the experts to indicate that the same bullet which pierced the President's throat also caused Governor Connally's wounds. Whether or not that is so, the Commission goes on, the Commission has concluded that all of the shots came from the 6th floor of the Texas School Book Depository building, which would indicate that Lee Harvey Oswald was the sole assassin.

In discussing this subject, there is a great temptation, in focusing on individual frames, to believe that much longer has passed than 1/18 second as indicated by any of the frames. It is entirely consistent with the evidence that President Kennedy was shot early in the sequence before he went behind the live oak tree at frame 166. It is possible that he was shot at frame 186 when there was an opening in the live oak tree, so that there would have been adequate time for President Kennedy to have been shot through the neck by bullet 1, and for Governor Connally to have been shot by a second bullet, and then with the 3rd shot to have struck with the President's head. And that, in fact, was the original thinking of many of those who looked into the question including the tentative conclusion of the FBI on preliminary reports which they filed and tentative thinking of the Secret Service. I think the evidence indicates that the single bullet conclusion is correct.

Let me, before getting to the evidence itself, just touch on a facet of our procedures used here in terms of an investigation on the record. It is a highly unusual situation if not entirely unique in the history of investigative procedures to put everything on the record as the investigation is being conducted. But that is what the Warren Commission did in questioning the witnesses on individual matters. And in so doing we sought a wide variety of information from these witnesses asking them in part about findings of other individuals which would come back to shed light on work that they had done themselves. And let me illustrate that just briefly. And this goes to point up the existence of a great deal of contradictory evidence which I think points up the variety of the Commission's conclusions and the validity of the investigative techniques because there was no effort made to have a consistent pattern as you might have in the presentation of a case in court, it can be in a civil case or in a criminal prosecution where one side presents the evidence to indicate a consistent pattern. Here the Commission put all of the evidence ~~XXXXXXXXXX~~ before the public, and one illustration that I might point out to you is the questioning of Dr. Humes, the autopsy surgeon.

After the evidence is developed which is within his personal knowledge from the autopsy examination, Dr. Humes is questioned as to whether bullet 399, which he saw on that occasion for the first time, whether he believed that bullet could have gone through Governor Connally's wrist. And the only basis that Dr. Humes has to draw any conclusion at that stage is on the written record of Dr. Gregory's report which we made available to him and where Dr. Gregory describes flakes of metal at various layers in the Governor's wrist. And then Dr. Humes was asked whether he thinks that the whole ~~EX~~ bullet, 399, could have gone through the Governor's wrist. And he says no, I don't think so because of what Dr. Gregory has described as flakes of metal at various parts of the Governor's wrist. Now, the reason Dr. Humes was asked that question

was because ~~REXXXX~~ when he focuses in on what Dr. Gregory has found, that may stimulate his thinking on giving us some additional information working backwards on what he knows about.

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When we come to Dr. Gregory he tells us that the flakes of metal in the President's (sic) wrist are of postage stamp weight so that he rules out the reason given by Dr. Humes for questioning whether or not the bullet could go through the wrist.

Now this in shorthand is part of the large picture of evidence which indicates quite a number of conclusions. But I submit to you when taken as a whole with an overview and an overlay, the evidence comes out quite compelling in favor of the single bullet conclusion. Now, at the risk of oversimplification and without being able to take up all of the contradictory ah...ah theories and all of the evidence which would suggest a contrary conclusion, let me spell out in as much time as I have what is the essential evidence leading to the single bullet conclusion.

The autopsy surgeons testified that President Kennedy was struck by a bullet which entered the base of his neck in about the position that I am now pointing to. They further testified that there was a path through the President's neck where the bullet passed between 2 large strap muscles, bruised the top of his pleural cavity, bruised the top of his right lung, sliced his trachea and exited from the front of the throat. In fact, we know from the clothing, the President's tie, that there is a slight nick on the side of the tie in about this position. The President's clothing consistent with the course of the bullet with the fibers on the jacket pointing inward, the fibers on the shirt pointing inward, and the fibers on the front of the shirt pointing outward.

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We then sought to determine what would have been the velocity of a bullet entering the President's neck and exiting from the President's neck, and we sought to determine that by means of ballistics tests conducted by scientists from the US Army. Those tests show that the Oswald rifle had a muzzle velocity of 2,160 feet per second, and that at the approximate distance where the President was struck that there was an entrance velocity slightly in excess of 1,900 fps, and there would have been an exit velocity of about 1,775 fps. These determinations were made based on a reconstruction of the type of substance of the human neck--from goatmeat, horsemeat, and a 20% gelatin solution.

And the next question is, knowing from the autopsy report and from Dr. Humes testimony, that the bullet exited at a very high rate of speed, having struck no bony structure, what happened to the bullet?

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The alignment of the automobile and the people in the automobile as shown by the on-site tests indicated that when the bullet passed through President Kennedy's neck, it would have to have either struck the automobile itself or somebody else in the automobile. An examination was made by the FBI some 14 to 16 hours after the assassination, and it disclosed no marking which would account for a very high velocity bullet travelling at about 1,775fps. And there was no way that we could see that the bullet could possibly escape either hitting the car or someone in the car. And this is shown in one of the exhibits and was quite apparent as those of us who did so looked down the scope of the Oswald rifle, which we had on the scene, at a car very closely ~~approximating~~ approximating, as closely as we could, the position of the Presidential limousine.

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Governor Connally was seated immediately in front of President Kennedy on a jump seat. The bullet passed in a slightly left-right to left direction through President Kennedy's body, and Governor Connally was seated right in front of the President. Governor Connally, who disputes the single bullet conclusion for reasons we may touch upon later, believes that all of the wounds which were inflicted on him came from the same bullet. So that the ~~the~~ more difficult part of the single bullet conclusion, that is through the Governor's chest, through his wrist, and into his thigh, really evolved from the fact that the Governor himself, he and his 3 doctors all shared the conclusion that the same bullet inflicted all the wounds on Governor Connally.

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A bullet entered Governor Connally in about this position slightly to the left of the right armpit, passed in a downward direction of about 25 to 27 degrees, exited below his right nipple, and left a large hole of entry--exit, pardon me. That happened to the doctors too, by the way. He was seated in this position, and the bullet then passed through his wrist, backside, frontside, and into the thigh.

We performed tests on an anestitized goat and got one shot which did very similar damage to the rib of the goat as was done to the Governor. We tested the velocity going into the goat and coming out of the goat and concluded that there would have been a loss through the Governor of about 400fps. The bullet as it exited from the Governor, as we know it exited from the Goat, was tumbling. And our conclusion is clear--that it was tumbling when it exited from the Governor too causing a large wound of exit about 5 inches in diameter. And the bullet there was in a tumbling position so that it tumbled through the wrist. And the indicators on the evidence there are these. The fabric of the Governor's coat was not--was carried into the wound which would have been different had it been from a pristine shot passing through nothing else with the point forward only. Had the Oswald rifle struck the Governor's wrist at about 1,900 fps without having struck anything beforehand, it would have shattered the wrist much more so than was the Governor's wrist shattered, and it would have flattened the nose of the bullet which indicates that the bullet could not have come from Oswald's rifle and struck the Governor's wrist without having gone through anything in advance. It is our thinking that the bullet entered backwards, and it left a smaller hole of exit than hole of entry which is contradictory with the normal course of a bullet which ordinarily leaves a smaller hole of entry and a larger hole of exit. And with its velocity almost completely spent it lodged in the Governor's thigh.

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The question as to the total amount of the metallic substance is completely consistent with that which was lost by this bullet. This bullet in its concluding form weighed 108 and a half grams, 2 to 3 grms less than a whole bullet based on the weights that we obtained from other whole bullets. And the slight amount of metallic fragment left in the Governor's body are completely consistent with this very slight weight loss.

There are ~~many~~ many problems with any reconstruction of the ~~events~~ events of the assassination, and I submit to you that this leaves fewer than any other.

Let me touch on one other subject if I may Professor Thompson before concluding here, and that is the findings of the 3 ballistics experts. And let me next head on here, if I may, Professor Thompson's use of the record in some of the things which he has said that this concluding evidence ~~was~~ was brought to bear on the probability of the single bullet conclusion.

And I go to page 208, and I quote Professor Thompson as he quotes me. "To none of these doctors did Specter address the crucial question of whether CE (Commission Exhibit) 399 could have caused the Governor's wounds." A nice conclusion, but there's a footnote for those who seek to check footnotes--and there aren't many of you (Laughter). Footnote! Specter did ask Dr. Oliver (he's one of the wound ballistics experts) "Do you have an opinion as to whether in fact bullet EX 399 did cause the wound on the Governor's wrist, assuming if you will that it was the missile found on the Governor's stretcher at Parkland hospital?" Oliver replied, "I believe EX that it--that is was. That is my feeling--an answer that appears to refer more to the bullet's location of discovery than to its activities." Well, I'll leave for you the conclusion as to whether it describes the bullet's activities, which was the question, or whether it describes the latter part of the assumption as to the location of the bullet on the stretcher. And notice if you will the variance between that bit of evidence and the statement that "To none of these doctors did Specter address the crucial question of whether 399 could have caused the Governor's wound."

Now concluding here, also from 208, "Knowing too what a devastating effect EX either of these facts would have on his single bullet theory, he (that's Specter) carefully questioned Dr. Light only about the theoretical possibility that a single bullet had hit both Kennedy and Connally. He never raised the critical question whether that bullet could be Commission Exhibit 399. We don't even have a EX footnote there, but, since this may be a footnote to history--which I frankly doubt--let us turn to the record.

Volume 5, page 95. Dr. Light--"The most likely thing"--Well, I won't go into this; it'll take time. But it's right here. And Dr. Light says in emphatic terms that the most probable conclusion EX is the single bullet conclusion and one the factors considered is the bullet. "Mr. Specter: EX Identified as Commission Exhibit 399? Dr. Light: "Yes."

So I suggest to you, just for illustrative purposes and also because it happens to fit on the concluding portion of what I want to tell you about in terms of these wound ballistics experts who looked over the whole picture, that they, the Commission, and even Mr. Specter came to grips with the question of 399 as it could have inflicted all of these wounds and, as the doctors testified, the probabilities indicated that it did.

I guess I'll have a chance later.

THOMPSON SPEAKS FOR 25 MINUTES.

SPECTER'S REBUTIAL

SPECTER: Well, I'm gonna start off by not characterizing Professor Thompson as silly (Tink had called single bullet theory "silly"). I'm going to continue by not intaming his motive, and I'm going to go to an example of some of the evidence which is quite contradictory with what he has asserted with a very broad brush.

He has represented to you that he had portrayed all of the medical evidence, and I ask you whether that is conceivable in terms EX of a dozen doctors who worked on President Kennedy at Parkland Hospital, in terms of

3 doctors who conducted 3 major examinations and operations on Governor Connally, in terms of 3 autopsy surgeons who performed on President Kennedy, in terms of 3 wound ballistics experts who went over the entire picture, to say nothing of others who lent some material in addition. He has then sought to bring here in terms of the cold evidence--not the actual pictures themselves but drawings--has attempted to draw conclusions as to grimaces from artist's drawings which he has put before you.

Now the facts are these. Let's start off with say frame 230, if you will, which Professor Thompson used. Do you have that one ~~XXXX~~ available?

Frame 230 is in fact an important frame because it points up the basic conclusion that Governor Connally has to have been struck before this point. Professor Thompson makes a great deal of the fact that Governor Connally has been struck after this point and goes to the grimace as his illustration for this point. Now bear in mind that Governor Connally, who does disagree with the single bullet theory, has at all times been consistent in his approach that one bullet inflicted all of the wounds on Governor Connally. And bear in mind also, if you will, that the 3 doctors who worked on Governor Connally quoted by Professor Thompson also agreed that Governor Connally had all of his 3 wounds inflicted by the same ~~XXXXXXXX~~ bullet.

Now in frame 230 and all of the frames thereafter, you have Governor Connally's wrist plainly visible. In order for the bullet to have exited from below Governor Connally's ~~XXXXX~~ right nipple, it would have been absolutely required that Governor Connally's wrist be in his lap in order ~~XXXXXXXX~~ for the bullet to have gone from the area ~~XXXXXX~~ below his right nipple, through his wrist, and into his thigh. And I think that it is perfectly plain that Governor Connally had to have been struck prior to frame 230 based on the obvious position of Governor Connally's wrist.

Thank you very much for the slide.

With respect to the question on the grimaces, the photographs are published in Life Magazine about as well as they can be published. And it is for anybody to see, or from the slides, or from the film themselves, which we looked at under a microscope, and you simply cannot deal with the kind of certainty that Professor Thompson is representing here in terms of a grimace on Governor Connally's face.

There is one important point here which runs right through all of the evidence, and that is the question of reaction time. And nobody can say how fast Governor Connally reacted, and nobody can say how fast President Kennedy reacted. It is interesting that a critical part of Professor Thompson's presentation turns on a reaction in 1/18 second. Remember that? Reaction--(~~XXXXX~~ snaps finger) fast, from frame 237 to frame 238 where the jaw opens and there is a grimace on the face of the Governor. But that's quite at variance with what Professor Thompson has written in his book.

He has relied upon Dr. Gregory who estimated that the interval between impact and mouth opening to be on the order of $\frac{1}{4}$ to $\frac{1}{2}$ of a second. And if he is correct, that if you have a mouth opening at frame 238, which is what he says at this page 71 of his book, then that goes up to 9 frames earlier, which puts the strike on Governor Connally at frame 229. So when you come down to Professor Thompson's work on his after ~~XXX~~ the fact construction, that's where you are; a strike on Governor Connally earlier than frame 230,

consistent with what I've showed you on his slides, and in accordance with the single bullet conclusion.

Now, you've seen some interesting footwork in terms of slides, and in ~~KX~~ terms of Dr. Wecht, and in terms of a lot of people who've ~~EX~~ looked over this information second hand, but what do you really have in terms of the men who placed their hands on the Bible and testified as to what they observed as to location of the wounds. (Tink chuckles)

~~KX~~ Professor Thompson laughs there which is in accordance with his silly doctrine perhaps--

Tink-- I'm laughing Mr. Specter because--

Specter--(shouting) Now, would you not interrupt me--

Tink-- I'm--

Specter-- Would you not interrupt me? Would you not interrupt me.

Are we getting too warm for you, Professor Thompson?

Tink-- No, Mr. Specter.

(Audience Boo's)

Moderator-- I think it only fair for me to interrupt at this point and point out that the agreement was that each man would have the chance to make his presentation uninterrupted. I know if I were Mr. Specter, I would have been tempted to interrupt Mr. Thompson several times before, and I'm sure his was and didn't.

Specter-- No, No. I wasn't tempted. The evidence is all here and we can--we can take a look at it. I'm--I'm not tempted at all. All right.

The uh, the point that I was too was the question as to the location of the bullet holes on the back of President Kennedy. And you have Dr. Humes, and Dr. Boswell, and Dr. Finch ~~KE~~ testifying before the Commission under oath, which I submit to you is a serious matter in terms of their credibility and in terms of their veracity, and they are testifying at a time when they do not know whether or not the photographs and X-~~EX~~ rays are to be displayed. !

I think there will come a day, and it will come in relatively ~~EX~~ short order, when the photographs and X-rays are disclosed publically, which is something that many of us have always advocated, and when in one fell swoop, those photographs and X-rays will undercut everything that Professor Thompson and others have had to say.

But at any rate, they testified from measurements they made--14cm. from the right mastoid process and 14cm. from the right acromion process-- and measured on the body of the President Kennedy without regard to where it may enter clothing, because the clothing is obviously movable on a man's body, but on the body itself it is fixed in a precise position. And that position is entirely consistent with the downward trajectory from that point on the body of the man who was shot, in a downward trajectory, to the point where the hole was present on the front of the President's neck confirmed by the nick on the tie. And that is a downward trajectory. And you can say what you will about bullets reversing themselves in mid-air, and turning and twisting, and you can say anything that you choose in terms of the cuteness of the situation, but those doctors who ~~EX~~ measured it saw on the body have placed it there ~~EX~~ with precision which indicates a downward trajectory. ?

The entire picture is one which is extremely complicated. It runs through some 17,000 pages. It is not possible for me to give you all of the evidence, and I'm not about to represent that I can. It is not possible for anyone to give ~~EX~~ you all of the evidence in this kind of an approach.

Let me focus in, then, on a point which I think is illustrative and a point where Professor Thompson comes back hard, where he says debators only tell half the truth and wh...well, I forget what he said about debators and what he said about prosecutors. But let's pick up the point as a matter of illustration in terms of what he has given you in a very rapid fire, very carefully prepared approach, which you have not possibly had an opportunity to dissect, which you cannot possibly follow line for line with his 7 conclusions which as he states them, they're absurd obviously to accept the single bullet conclusion with all of the curly-cues that he has given them to you, but one that we can take our time with. That he has come to grips with....(Specter repeats what he closed his first comments with and he adds:)

Now, I ask you if that is a fair, if that is an honest--let's get down to basic and brass ~~XXXXXX~~ tacks--if that is an honest inference from a question "Do you have an opinion as to whether in fact bullet 399 did cause the wound on the Governor's wrist, assuming, if you will, that it was the missile found on the Governor's stretcher at Parkland Hospital?"

(Specter then goes on to respond to what Tink said about Dr. Light's testimony--nothing important.)

(In reference to goatskin holes, slides of them projected on wall, ~~EX~~ Tink speaks and Specter jump up)

Specter--Leave it there! You heard him say it. "The exit wounds aren't round and regular." Now, take a look at that, and you judge with your own eyes. If that isn't round and regular, I'll eat that goatskin. (audience laughter)

(Raised ~~EX~~ during audience questioning)

Q. A lot has been made about the trajectory of this bullet that entered President Kennedy's back, and I think crucial to all this about the bullet entering in the back and exiting from his throat is the measurements. Now, Professor Thompson brought up what he considered to be startling new evidence about the fact that when a man is lying down the distance is shorter than ~~EX~~ when he is erect. I guess that is the import of his evidence. Did the Warren Commission or did you ever do these measurements to see if they change, if the shoulders do compact and the distance does get shorter. I mean, regardless of what you say about the change in the clothing, I think that that's a crucial fact. I was wondering if you ever addressed yourself to that?

Specter. The best answer that I can give you on that was that the measurements were taken by the autopsy surgeons who were asked this question in relationship to the President ~~EX~~ seated, and they--well, they examined him, of course, when he was--he was lying down, and they gave us the

measurements when he was in the position where they examined him lying down. They then transposed those measurements onto a drawing because they did not have the photographs and X-rays available. The drawing was made by somebody from the Bethesda Naval, uh, from the Bethesda Hospital there, and was the best effort that they could make over a weekend. We saw them late one week and they testified on a Monday. But the point that I'm coming to is that the autopsy surgeons focused on the fact that they were giving us measurements on a man who was deceased and lying down when the measurements were taken when we were using these precisely when the man ~~NEE~~ had been alive and when he was sitting up. Now, I--I did not focus on it any beyond that, but the autopsy surgeons, experts in this field, are certainly ~~EX~~ aware of whatever ~~EXX~~ differences there are between a live person and one who is not.

Q. Have you seen the X-rays, Mr. Specter? Do they precisely locate the entry wound? Do they substantiate the depth of the back wound? And do the X-rays clearly show a path through the neck? And were these X-rays used by the Commission as a basis for their judgement about the path of the wound?

A. I did not see the photographs, and I did not see the X-rays except for 1 photograph which I saw on a field trip to Dallas which was unauthenticated so put that aside. I did not see any of the photographs or any of the X-rays.

I think that you are correct, that the photographs and the X-rays would undercut virtually everything that we have been saying here today when you take a look at what they show.

Now the Commission decided that they would not call for the production of the photographs and ~~XRAY~~ X-rays because as a matter of taste they wished to defer to the wishes of the Kennedy family, concerned that these obviously grotesque photos and X-rays might somehow get into the public domain and be published. The Kennedy family wished that the President's memory remain in terms of the handsome, vigorous young man that he was prior to this terrible wound.

Now, as an investigator, I would have vastly preferred to have all of the evidence, all of the relevant evidence even though it was only corroborative. By that I mean that we had the testimony under oath as I've said as to what the autopsy surgeons saw and what their examinations disclosed. But the X-rays and photographs would have been splendid to have.

Now, I am hopeful that we will have them soon. Professor Thompson prints an exchange of correspondence between Congressman Ruplerman and Burke Marshall which outlines a date of release sometime in 1971. Perhaps we should postpone the conclusions of the debate until that time.
