

Dr. DZIEMIAN. I couldn't say.

Mr. SPECTER. Is it a highly individual matter as to the reaction of an individual on that subject?

Dr. DZIEMIAN. I don't know.

Mr. DULLES. But take a wound like the wrist wound of Governor Connally. He couldn't get that without knowing it, could he?

Dr. DZIEMIAN. I think he said that he didn't know he had a wrist wound until much later.

(Discussion off the record.)

Mr. SPECTER. I have no further questions of Dr. Dziemian, Commissioner Dulles.

Mr. DULLES. Thank you very much.

TESTIMONY OF DR. FREDERICK W. LIGHT, JR.

Mr. DULLES. Doctor, would you give your full name?

Dr. LIGHT. Frederick W. Light, Jr.

Mr. DULLES. Would you raise your right hand? Do you swear that the testimony that you will give before this Commission is the truth, the whole truth, so help you God?

Dr. LIGHT. I do.

Mr. SPECTER. Dr. Light, the purpose of asking you to appear today is to question you concerning the results of tests taken at the Edgewood Arsenal. With that brief statement of purpose, I will ask you to state your full name for the record, please.

Dr. LIGHT. Frederick W. Light, Jr.

Mr. SPECTER. What is your business or profession, sir?

Dr. LIGHT. I am a physician specializing in pathology.

Mr. SPECTER. What is your educational background?

Dr. LIGHT. I have an A.B. from Lafayette in 1926, M.D. from Johns Hopkins Medical School in 1930, and Ph. D. from Hopkins in 1948.

Mr. SPECTER. Would you outline your experience since 1933 in a very general way, please?

Dr. LIGHT. Well, in 1933 I was still at the Reading Hospital, resident in pathology. Between then and 1940 I was pathologist in Clarksburg, W. Va., and later in Springfield, Ill. In 1940 I returned to Johns Hopkins University to study mathematics for a while.

Mr. DULLES. To study mathematics?

Dr. LIGHT. Yes. And then in 1952, or 1951, excuse me, I began working at Edgewood Arsenal where I am at the present time.

Mr. SPECTER. What have your duties consisted of while working at Edgewood Arsenal?

Dr. LIGHT. Primarily the study of pathology of wounding.

Mr. SPECTER. What is your formal title there now, Dr. Light?

Dr. LIGHT. I am chief of the Wound Assessment Branch and assistant chief of the Biophysics Division.

Mr. SPECTER. And what is your relationship to Dr. Olivier and Dr. Dziemian?

Dr. LIGHT. Dr. Dziemian is the chief of the division. Dr. Olivier is chief of one of the branches, and I am chief of one of the other branches.

Mr. SPECTER. Have you been present here today to hear the full testimony of Dr. Olivier?

Dr. LIGHT. Yes.

Mr. SPECTER. And were the tests which he described conducted under your joint supervision with Dr. Olivier?

Dr. LIGHT. Only a very general way. I wouldn't want to say I supervised him at all. We discussed what he was going to do.

Mr. SPECTER. Would it be more accurate to state that you coordinated with him in the tests which were under his general supervision?

Dr. LIGHT. Yes; that might be stretching it a bit even.

Mr. SPECTER. How would you characterize your participation?

Dr. LIGHT. Largely—originally Dr. Dziemian, as I recall, was ill, and by the

time we began to do these specific tests that you mention, Dr. Dziemian was back on the job again. So he took over whatever supervision was needed.

Mr. SPECTER. Were the tests which Dr. Olivier described made at the request of the President's Commission on the Assassination of President Kennedy?

Dr. LIGHT. Yes; they were.

Mr. SPECTER. Do you have anything to add by way of any detail to the findings reported by Dr. Olivier in his testimony here earlier today?

Dr. LIGHT. No; I think he covered it very thoroughly.

Mr. SPECTER. And as to the conclusions and opinions which he expressed, do you agree or disagree, to some extent, on his conclusions?

Dr. LIGHT. I agree in general at least. I am not quite so certain about some of the things, but generally I certainly agree with what he said.

Mr. DULLES. What are the things on which you are not quite so certain?

Dr. LIGHT. For example, I am not quite as sure in my mind as I believe he is that the bullet that struck the Governor was almost certainly one which had hit something else first. I believe it could have produced that wound even though it hadn't hit the President or any other person or object first.

Mr. DULLES. That is the wound, then, in the thigh?

Dr. LIGHT. No; in the chest.

Mr. DULLES. I was thinking that the wound in the thigh—let me start again. As I understand the previous testimony, Dr. Olivier would have expected the wound in the thigh to be more serious if it had not hit some object.

Dr. LIGHT. Yes.

Mr. DULLES. Prior to entering Governor Connally's body, but you feel that the wound in the thigh might be consistent?

Dr. LIGHT. The wound in the thigh is the terminal end, is the far end of the whole track. I don't believe that in passing through the tissue which was simulated by what Dr. Olivier described first, 13 or 14 centimeters of gelatin, I don't believe that the change in velocity introduced by the passage through that much tissue can be relied upon to make such a definite difference in the effect.

Mr. SPECTER. Do you believe that if the Governor had been struck by a pristine bullet which had gone through his chest, that it would have caused no more damage than which appeared on the Governor's chest?

Dr. LIGHT. I think that is possible; yes. I might say I think perhaps the best, the most likely thing is what everyone else has said so far, that the bullet did go through the President's neck and then through the chest and then through the wrist and then into the thigh.

Mr. SPECTER. You think that is the most likely possibility?

Dr. LIGHT. I think that is probably the most likely, but I base that not entirely on the anatomical findings but as much on the circumstances.

Mr. SPECTER. What are the circumstances which lead you to that conclusion?

Dr. LIGHT. The relative positions in the automobile of the President and the Governor.

Mr. SPECTER. Are there any other circumstances which contribute to that conclusion, other than the anatomical findings?

Dr. LIGHT. And the appearance of the bullet that was found and the place it was found, presumably, the bullet was the one which wounded the Governor.

Mr. SPECTER. The whole bullet?

Dr. LIGHT. The whole bullet.

Mr. SPECTER. Identified as Commission Exhibit No. 399?

Dr. LIGHT. Yes.

Mr. SPECTER. And what about that whole bullet leads you to believe that the one bullet caused the President's neck wound and all of the wounds on Governor Connally?

Dr. LIGHT. Nothing about that bullet. Mainly the position in which they are seated in the automobile.

Mr. SPECTER. So in addition to the—

Dr. LIGHT. And the fact that the bullet that passed through the President's body lost very little velocity since it passed through soft tissue, so that it would strike the Governor, if it did, with a velocity only, what was it, 100 feet per second, very little lower than it would have if it hadn't struck anything else

first. I am not sure, I didn't see, of course, none of us saw the wounds in the Governor in the fresh state or any other time, and I am not too convinced from the measurements and the descriptions that were given in the surgical reports and so on that the actual holes through the skin were unusually large.

Mr. SPECTER. Have you had access to the autopsy records?

Dr. LIGHT. Yes.

Mr. SPECTER. And have you had access to the reports of Parkland Hospital on the Governor's operations there?

Dr. LIGHT. Yes.

Mr. SPECTER. All three of them?

Dr. LIGHT. Yes.

Mr. SPECTER. And have you had an opportunity to view the films of the assassination commonly known as the Zapruder films?

Dr. LIGHT. Yes.

Mr. SPECTER. And the slides?

Dr. LIGHT. Yes.

Mr. SPECTER. And have you had an opportunity to talk to Dr. Shaw and Dr. Gregory who performed the thoracic and wrist operations on Governor Connally?

Dr. LIGHT. Yes.

Mr. SPECTER. And you heard Governor Connally's version yourself?

Dr. LIGHT. Yes; but not in—

Mr. SPECTER. Not in the Commission?

Dr. LIGHT. Not in the Commission session.

Mr. SPECTER. But at the time when the films were viewed by the Governor?

Dr. LIGHT. Yes; I did.

Mr. SPECTER. At the VFW building on the first floor?

Dr. LIGHT. Yes.

Mr. SPECTER. Focusing on a few of the specific considerations, do you believe that there would have been the same amount of damage done to the Governor's wrist had the pristine bullet only passed through the Governor's body without striking the President first?

Dr. LIGHT. I think that is possible; yes. It won't happen the same way twice in any case, so you have got a fairly wide range of things that can happen if a person is shot in more or less this way.

Mr. SPECTER. Do you think it is as likely that the damage would have been inflicted on the Governor's wrist as it was, with the bullet passing only through the Governor's chest as opposed to passing through the President's neck and the Governor's chest?

Dr. LIGHT. I think the difference in likelihood is negligible on that basis alone.

Mr. SPECTER. So the damage on the Governor's wrist would be equally consistent—

Dr. LIGHT. Equally consistent; yes.

Mr. SPECTER. With (A) passing only through the Governor's chest, or (B) passing through the President's neck and the Governor's chest?

Dr. LIGHT. Yes.

Mr. SPECTER. Now, as to the damage on the thigh, would the nature of that wound again be equally consistent with either going through (A) the President's neck, the Governor's chest, the Governor's wrist, and then into the thigh, or (B) only through the Governor's chest, the Governor's wrist and into the thigh?

Dr. LIGHT. I'd say equally consistent; yes.

Mr. SPECTER. And based on the descriptions which have been provided to you about the nature of the wound on the Governor's back, do you have an opinion as to whether the bullet was yawing or not at the time it struck the Governor's back?

Mr. LIGHT. No; I don't. That is really one of the points—

Mr. SPECTER. It would be either way?

Dr. LIGHT. Yes; I don't feel too certain that it was yawing. The measurements were not particularly precise as far as I could tell. You wouldn't expect them to be in an operating room. So I think it is difficult to be sure there that

the missile wasn't presenting nose on. It undoubtedly struck not at normal instance, that is to say it was a certain obliquity, just in the nature of the way the shoulder is built.

Mr. SPECTER. Then do you think based on only the anatomical findings and the results of the tests which Dr. Olivier has performed that the scales are in equipoise as to whether the bullet passed through the President first and then through the Governor or passed only through the Governor?

Dr. LIGHT. Yes; I would say I don't feel justified in drawing a conclusion one way or the other on that basis alone.

Mr. SPECTER. Do you have any preference of any sort?

Dr. LIGHT. Yes; I do, for other reasons.

Mr. SPECTER. But only for the other reasons?

Dr. LIGHT. As I mentioned, their positions in the automobile, the fact that if it wasn't the way—if one bullet didn't produce all of the wounds in both of the individuals, then that bullet ought to be somewhere, and hasn't been found. But those are not based on Dr. Olivier's tests nor are they based on the autopsy report or the surgeon's findings in my mind.

(Discussion off the record.)

Mr. DULLES. On the record.

Mr. SPECTER. Dr. Light, do you have an opinion as to whether or not the wound inflicted on Governor Connally's wrist could have been caused by a fragment which struck the President's head?

Dr. LIGHT. It is barely conceivable but I do not believe that that is the case.

Mr. SPECTER. You say barely?

Dr. LIGHT. Barely conceivable. I mean a fragment probably had enough velocity, it couldn't have produced that wound, in my mind, but it can't be ruled out with complete certainty.

Mr. SPECTER. Do you have anything to add which you think would be helpful to the Commission in any way?

Dr. LIGHT. I don't believe I do.

Mr. SPECTER. Those are all the questions I have, Commissioner Dulles.

Mr. DULLES. Thank you very much indeed. I express our appreciation. I didn't realize these tests were being carried out. I am very glad they have been. It is a very useful thing to do and very helpful to the Commission. Thank you very much. I want to thank all three of you doctors for having so fully cooperated in this matter, and I think that these tests that you have run have made a real contribution to the Commission's work.

(Whereupon, at 5:10 p.m., the President's Commission recessed.)

Thursday, May 14, 1964

**TESTIMONY OF J. EDGAR HOOVER, JOHN A. McCONE, AND
RICHARD M. HELMS**

The President's Commission met at 9:15 a.m., on May 14, 1964, at 200 Maryland Avenue NE., Washington, D.C.

Present were Chief Justice Earl Warren, Chairman; Senator John Sherman Cooper, Representative Hale Boggs, Representative Gerald R. Ford, and Allen W. Dulles, members.

Also present were J. Lee Rankin, General Counsel; Norman Redlich, assistant counsel; Charles Murray and Walter Craig, observers; and Waggoner Carr, attorney general of Texas.

TESTIMONY OF J. EDGAR HOOVER

The CHAIRMAN. The Commission will be in order.

Director Hoover, will you please raise your right hand to be sworn, please. You solemnly swear the testimony you are about to give before the Commission