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BEFORE THE

ASSASSINATION RECORDS REVIEW BOARD

In Re:
PRESIDENT JOHN F. KENNEDY

College Park, Maryland
Tuesday, February 13, 1996

The deposition of DR. JAMES JOSEPH HUMES, called for examination by counsel for the Board in the above-entitled matter, pursuant to notice, at 8601 Adelphi Road, College Park, Maryland, convened at 10:12 a.m., before Robert H. Haines, a notary public in and for the State of Maryland, when were present on behalf of the parties:

APPEARANCES:

JEREMY GUNN, ESQ., General Counsel Assassination Records Review Board 600 E Street, N.W. 2nd Floor Washington, D.C. 20530

DAVID G. MARWELL, Executive Director

DOUGLAS P. HORNE, Senior Analyst

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EXAMINATION BY COUNSEL FOR:

WITNESS

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Dr. James J. Humes

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PROCEEEDINGS

MR. GUNN: We are assembled for the deposition of Dr. James Joseph Humes to be conducted by the Assassination Records Review Board, which is an independent agency of the Federal Government. We are located now in the National Archives Annex in College Park, Maryland. My name is Jeremy Gunn. I am the general counsel of the Review Board.

Seated next to me is Douglas Horne, who works with me on medical evidence in the case. The next person seated next to Mr. Horne is Dennis Quinn, who also has worked with medical evidence in this case. The person at the end of the table is Dr. David Marwell, who is the Executive Director of the Assassination Records Review Board. Also in the room is Colonel Tim Wray.

During the course of the deposition today, some people from the National Archives will presumably be coming in the room, and I will introduce them at the time.

Approximately three years ago, Drs. Humes, J Boswell, and Peter Finck agreed to be interviewed in depth by the Journal of the American Medical Association regarding their autopsy of President John F. Kennedy. The Assassination Records Review Board applauds the willingness of the doctors to speak out

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publicly about the autopsy of President Kennedy and to help dispel the appearance of secrecy that has surrounded the assassination and the autopsy. In that same spirit, the Review Board will now be conducting the deposition of Dr. Humes under oath.

In the conclusion of the JAMA article that I mentioned, it quoted the distinguished Dallas Medical Examiner Dr. Earl Rose. Incidentally, had the autopsy been performed in Dallas, it would have been performed by Dr. Rose. In the JAMA article, Dr. Rose said, "If we have learned anything in the 29 years since the President was shot, it is that silence and concealment breed theories of conspiracy and the only answer is to open up the records, without self-serving rules of secrecy, and let the American people judge for themselves."

Dr. Humes, we appreciate your having gone on the record in the JAMA article that I mentioned, and we appreciate your being here today. It's our understanding that you drove here from Florida, which is a long trip, and we appreciate the effort that you've made.

 $\label{eq:At this point, I would like to ask the reporter to $$ swear the witness.$

Whereupon,

DR. JAMES JOSEPH HUMES

was called as a witness and, having been first duly sworn, was
examined and testified as follows:

EXAMINATION BY COUNSEL FOR THE

ASSASSINATION RECORDS REVIEW BOARD

BY MR. GUNN:

- Q Dr. Humes, I'd like to show you two documents and ask you whether you have seen them before. I will note for the record that they are designated as MD 100 and MD 101, the MD standing for medical document.
 - A Yes, I've seen them both.
- Q MD 100 is a cover letter and a notice of subpoena to Dr. Humes. MD 101 is a letter to Dr. Humes rearranging the date and specifying the place of the deposition.

Have you seen those two documents before, Dr. Humes?

- A Yes, I have.
- Q Is it your understanding that you're appearing here today pursuant to your having received these documents?
 - A That's correct.
- Q Dr. Humes, in Exhibit 101, I mentioned to you--and I believe also by phone--that you had the right to have an attorney here today if you wish. Was it your understanding

that you did have the opportunity to have an attorney?

- A Yes. I couldn't imagine what I would do with an attorney, but I understood it clearly.
- Q If you wish, you will be given the opportunity to see a copy of the transcript that is being prepared today.

 You will be able to review the transcript to see if there are any errors. There will be a tape recording made of the deposition, and there will also be a new document created to record any of the errors that you may have identified in the transcript.
 - A I would welcome that.
- Q I'm going to attempt to ask clear questions.

 Whenever I do that, sometimes I succeed and sometimes I don't.

 If there's any time that I'm asking a question that you don't understand, please ask me to either rephrase it or state it again. You also may wish to have the court reporter read back the same question again, but you shouldn't hesitate if there is anything that is unclear.

During the deposition, we're going to be working with a numbered exhibit list which is going to be given to the reporter to be included as part of the record. We are not going to be referring to all documents in the order in which the numbers

are designated, but a person would be able to identify the document by making reference to the exhibit list.

Dr. Humes, I'd like to ask you to oblige us with one further request. We would appreciate your not disclosing to anyone the content of the discussions that we are having today until the Assassination Records Review Board has been able to conclude its work on the medical aspect of the case. It's my best estimate that that would be completed probably within this calendar year.

Is that agreeable to you?

- A Yes, sure.
- Q It's our understanding that you have testified on the record three times before government commissions. Is that correct?
- A Yes, I guess so: the Warren Commission and twice in the Congress.
- Q Did you have an opportunity to review the transcripts of those statements before they were published?
- A I'm not sure, to tell you the truth. I don't remember.
- Q Did you ever have an opportunity to review the statements at all?

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A It seems to me that in one--well, certainly nothing from the Warren Commission. In one or another of the House, I may have seen my portion of the testimony. But I'm not absolutely certain about that, but I think I did.

- Q Do you recall whether in your reading the testimony that you just made reference to that you identified any mistakes, transcriptions, or errors in the words that were attributed to you?
 - A I really can't recall. It was a long time ago.
- Q As I mentioned to you shortly before we went on the record, we will be asking questions to help clarify some of the issues that are in the record related to the assassination and to the autopsy of the President. Certainly at the end of the deposition, and before, if you think that that would be appropriate, you should feel free to explain any area that you think has not been--any questions or explain any statements that you have that you think would help clarify the record.

Dr. Humes, did you bring any records with you today pursuant to the subpoena that was marked as Exhibit 100 to this deposition?

- A Yes, I did.
- Q Could you tell me briefly what it is that you brought

to the deposition?

A I brought a videotape of an interview that I granted to a local television station in Jacksonville in 1988 on the 25th anniversary of the assassination. I brought the tape and the cover letter from the producer who sent it to me. I brought a brief CV of my own to maybe assist the committee. I brought a copy of a reprint of the Journal of the American Medical Association article of May 1992, which records the interview that Dr. Boswell and I gave to personnel from the Journal.

I brought a letter to me from Congressman Louis

Stokes, who was the chairman of the House Select Committee.

It's dated in October of 1978, and he's just thanking me for appearing there and trying to help them in their work.

I brought a letter from Carl Eardley, an Acting
Assistant Attorney General, dated May 1967, prior to my agreeing
to appear on a CBS interview program with Mr. Dan Rather, saying
that the Justice Department had no objection to my doing that.

I brought a list of--a copy of our--Dr. Boswell, Dr. Finck and I--our review of all the various photographs that are present in the Archives that we reviewed on November 1, 1966, the details of various photographs numbered and identified by that.

Q If I can ask you one question about that document.

- A Yes.
- Q On the document that you brought, are there original handwritten notes in blue ink?
 - A Yes.
- Q And does the document contain the actual signatures of the three doctors whom you mentioned?
 - A Yes, it does.

I brought, for interest, a newspaper recording of the demise of Dr. John Ebersole, who was the radiologist on duty at Bethesda the night the President was killed, and he was very helpful to us in our work.

I brought a copy of a newspaper clipping describing the demise of Dr. George Burkley, who was the President's physician at that time.

I brought two receipts signed by Dr. Burkley. The first is dated November 24th when he acknowledges the receipt of the original and six copies of the autopsy report which we had prepared, one having been retained in the office of the commanding officer of the Naval Medical Center. And then on the 25th of November, I delivered that final copy to Dr. Burkley, and he signed acknowledging the receipt of that.

Q With regard to the two receipts that you mentioned, would it be fair to say that those documents are themselves photocopies?

- A That's correct.
- Q So neither of those is an original.
- A Right.
- Q Did you bring any other documents with you today?
- A I brought two letters from Dr. Judd Pearson dated in 1967, in July and October, in which he describes the interest of a number of people in the Congress, mentioning specifically Senator Russell, who had served on the Warren Commission, stating that they were concerned about some of the problems the Warren Commission perceived and the various things related to it and wondering if we could get together and discuss what some of those problems were and what action might be taken to avoid them in the future.

And in a similar vein, a letter from then District Attorney of Philadelphia, Mr. Arlen Specter, basically on the same point of view, in which Senator Specter described some of the things that he thought had been problems and that steps should be taken to try and avoid those kinds of problems should we have such a future tragic occurrence.

Q Now, I understand from a statement that you made prior to the deposition that you have concern that you are worried about release of this particular letter without Senator Specter having had the opportunity to examine it first.

- A Yes, I do have some concern about that.
- Q And that reason is based simply on issues related to privacy and--
 - A Right.
 - Q --confidentiality of communication?
- A The letter was addressed to me. It doesn't say don't do anything with it, but this is long before this Commission was established, and so I just feel it would be appropriate if, before it's officially entered in the record, to get the acquiescence of Senator Specter.
- Q We'll be happy to send a letter to Senator Specter requesting his permission--
 - A Thank you.
 - Q --to release that record.

What we will do is take the copies of the documents that you brought here today, plus the videotape. We'll arrange to have copies made and then return them to you, if that's acceptable.

- A That's fine.
- Q Thank you very much.

Are there any other kinds of records that you have in your possession, custody, or control that relate to the assassination of President Kennedy?

A Well, I have a number of letters from private citizens, who are generically known as "assassination buffs" around the country, who express all kinds of points of view, and I receive them frequently, usually two or three times a month, sometimes two in a week. I never answer any of them. I don't understand what keeps these people going. I did bring one such letter, but I really don't think it's mundane to what you're doing. I guess this will go along for time immemorial while I'm still this side of the grass.

- Q Would it be fair to say or to recapitulate what you say that, although you have received these letters from the public, you have not engaged in any correspondence with those people?
 - A Absolutely.
- Q Dr. Humes, other than with your family, have you discussed the subject matter of the deposition today with any other people?

A Oh, I've told people I'm coming, my golfing partners that I'm going to be missing this week and I was coming to give a deposition, and they all expressed dismay. That's all I can say about that. I said nothing about what I--I had no idea what you were going to ask me, so I couldn't very hardly tell them what was going to transpire.

So it's no secret that I'm here, if that's what--

- Q Sure.
- A I was not instructed to remain silent about this affair, particularly when I understand you're trying to get it all ultimately out in the open.
- Q Would it be fair to say, then, that you have not spoken with any officials of the United States Government other than the Assassination Records Review Board regarding the subject of the deposition?
 - A Absolutely.
- Q Dr. Humes, I would like to show you some records, many or all of which you may have seen before, and I would just like to ask you if you can identify them for the record.
 - A Okay.
- Q Or I will read a description, and you tell me whether that's accurate. The first document is MD 3, which on its face

appears to be the autopsy protocol, signed by Drs. Humes, Boswell, and Finck.

- A Yes, that's what it is.
- Q I'd like to show you the next document, which is identified as Exhibit No. 2, and ask you if you can recognize what that document is.
- A Yes, this is my longhand notes from which the previous document was put together. I did this by myself over the weekend after the assassination, and then on Sunday morning, we three met in the office of the commanding officer of the Naval Medical Center, Admiral Galloway, and made certain editorial changes that we mutually agreed were preferable. Somebody had to do the writeup, and since I was the senior person responsible, I did it. And we revised it by mutual consent.
- Q The next document is marked Exhibit 1. Would you identify that document?
- A Yes. This is a form which we used in the morgue routinely, more or less, to make certain notations about the findings at the autopsy. There's a place for the weights of certain organs and so forth and sketched diagrams of a human body on which certain notes have been made. These notes were made almost exclusively by Dr. Boswell.

Q Would it be fair to say that Exhibit No. 1 is the autopsy face sheet for President Kennedy?

- A This?
- O Yes.
- A No. It's not the face sheet. It's just an aide-memoire that we use routinely. It never appears like that in an autopsy report, no.
- Q Is there any other name that this document would go by other than face sheet that you're aware of?
- A I never heard it called a face sheet, to tell you the truth. I never heard it referred to in that way. I can't tell you, no.
 - Q And Exhibit No. 1 is two pages long; is that correct?
 - A This is the second page?
 - Q Yes.
- A Yes, well, this--the first page that you showed me was a schematic portrayal of the human body and certain other information--was a routine that we used day to day. The second page is not a pre-prepared form. This is a sketch made by, I presume, Dr. Boswell, because I didn't make it--I presume by Dr. Boswell--showing schematically the head injuries to the President.

Q I'd like to show you Exhibit 4, which appears to be the Supplementary Report of Autopsy, No. A63-272, of President John F. Kennedy. Do you recognize that document?

- A Yes.
- Q Is that, in fact, a supplementary report--
- A That's the supplementary report, right.
- Q And that's your signature at the bottom of that page?
- A That's correct. I haven't seen it for about 40 years, but outside of that...
- Q I'd like to show you Exhibit No. 11, which appears to be your testimony before the Warren Commission on Monday, March 16, 1964. Do you recognize that document as being--
- A Yes, I do. I don't think I ever saw it before, incidentally, but I recognize what it is, certainly.
- Q The next document is MD 20, which appears to be the transcript of the medical panel meeting in which you were interviewed with Dr. Boswell from the House Select Committee on Assassinations on September 16, 1977. Have you seen that document previously?
- A No. I have not. I recall that experience with some misgivings as to what people thought they saw or didn't see in photographs and drawings and whatever. It was somewhat

confusing. But I never saw the document, no.

- Q The next document appears to be the testimony that you provided to the House Select Committee on Assassinations. It is marked Exhibit 21. Have you seen that document previously?
- A No. If I have, I totally forget it. But I doubt very seriously I ever saw it.
- Q The next document, marked Exhibit 14, appears to be a review of autopsy materials with a handwritten date of 1/26/67.

 I assume you have seen that document previously.
- A Yes, I have seen this paper. I don't know if I ever saw that last page.
 - Q The last page is a National Archives reference page.
 - A Yes.
 - Q You would not have--
 - A Yes, I've seen that document.
- Q And the final document I'd like to show you at this point is an article from the Journal of the American Medical Association on May 27, 1992. I assume that you have seen this.
 - A That's the same article that I brought along today.
- Q Dr. Humes, for the most part, I am not going to ask questions about your background or education, but there is one

question that I had that I did want to ask about, and that is, in the document marked Exhibit 22, on page 2795, it reports that you "performed several autopsies on military personnel killed by gunshot wounds."

- A Yes.
- Q Is that statement correct?
- A That's correct.
- O When did--
- A Usually they're accidents or homicides or whatever.
- Q When did you conduct the autopsies for gunshot wounds?
- A Well, ones that stand out in my mind, two were in Tripler Army Hospital in Hawaii. The truth of it, I can't recall, specifically recall where else. In San Diego, we did 800 autopsies a year. It's really kind of hard for me to specifically recall the details of many of those. I never held myself forth as an expert in gunshot wounds. That's why I called Peter Finck, who was an expert.
- Q Had you had experience with gunshot wounds prior to 1963?
 - A Yes.
- Q And those were, as best you recall now, at Tripler Hospital in Hawaii?

- A Yes.
- Q And in San Diego?
- A Possibly San Diego.
- Q Dr. Humes, did you at any time receive any orders instructing you not to talk about the autopsy or restricting what you could say about the autopsy?
 - A Yes.
 - Q Could you tell me about the orders that you received?

 How many were there, I guess to begin with?
- A Oh, I don't know. They were all verbal. I never had a written order of any kind in this regard. When I was summoned to the Naval Medical Center--and, truthfully, I didn't know why I was being summoned there on the evening of the President's death--I met with the Surgeon General of the Navy, Admiral Kenny, and the commanding officer of the Naval Medical Center, Admiral Galloway. And Admiral Kenny basically gave me my marching orders, informing me that the President's body was being brought there, that I was to be responsible for determining the cause of his death, that I should keep the number of people that were going to work with me or assist me to the minimum that I might require. He was giving no restriction as to who these people might be other than to--you know, let's

not have the whole country in the morgue; keep it to as many people as you think you really need to make a reasonable examination.

And then I guess it was more like a tacit understanding that I was not going to have public disclosure of this. I never received any such written order from anybody that I can recall.

In fact, I know I didn't. It didn't seem to me to be an appropriate thing to discuss in the public anyway, period.

- Q Did any officer instruct you orally not to say anything about the autopsy?
- A I really can't recall such, no. Just common sense,

 I think, pertained more than anything else.
- Q If Dr. Finck were on the record as saying that he received instructions from the Surgeon General not to say anything about the autopsy, would you have any reason to question the accuracy of such an observation?
- A Well, certainly the Navy Surgeon General never told him that, unless it happened after the autopsy, you know, sometime. I have no knowledge of that. Pierre was working in a totally different institution from me, and I can't say whether--was he talking about the Army Surgeon General or the Navy Surgeon General?

- Q Navy Surgeon General.
- A I doubt that very seriously. I don't think he even met the Navy Surgeon General that night. I don't know. I mean, I can't account for all of Pierre's movements or people he talked to. I have no way of knowing that.
- Q Do you know of any orders having been issued to anyone who participated in the autopsy regarding discussion of the autopsy?
 - A Not really.
- Q When you say not really, does that mean not at all, or could there have been some instance that you're thinking of?
- A Yes, there could be, and I'd hate to talk about people who are deceased, you know. Admiral Burkley had certain personal concerns about just one aspect of the autopsy, and I understood his concerns, and I abided by them. They had nothing to do with the assassination of the President. Zero.
 - Q Was the concern about the President's adrenals?
 - A Yes.
- Q Other than with respect to the President's adrenals, was there any other concern that you heard expressed by Admiral Burkley at any time regarding the autopsy?

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- A Absolutely not.
- Q Did you ever tell any person that you would not speak about the autopsy? For example, did you promise--
- A That's a rather broad question. I don't--I can't recall any such.
- Q For example, did you tell Admiral Burkley, even if he didn't give an order directly or indirectly--
- A No, no. We had no discussion about it at all. He had more things to worry about than that.
- Q Is there any promise, agreement, or understanding that would affect your ability to talk freely and fully about the autopsy today?
- In this milieu, no. The one disturbing thing that I would not like to see widely publicized any more today than I would in 1963 were the photographs that we made, which were very, very repulsive. It caused me problems because we didn't have the photographs at the Warren Commission. We didn't have the X-rays, even. And that did cause us problems. But I agreed with the reason for not doing it, because as you already know, I'm sure, some of those photographs somehow or other have gotten into the hands of people that I don't think should have ever had them in the first place.

That's my only reservation about any aspect of it.

- Q Were you ever told, directly or indirectly, that the Kennedy family did not want people to speak about the autopsy?
- A No, other than the photographs. I was told that the members of the Kennedy family objected to the photographs being made. I had no--personally, I had no personal contact with any member of the Kennedy family, either that night or before or since.
- Q In your testimony to the House Select Committee on Assassinations—and I can show you a document, if you wish—you were quoted as having said, "I have strong personal reasons and certain other obligations that suggest to me that it might not be preferable." And that was referring to the adrenal glands.

When you said "certain other obligations," could you explain to me what you meant by that?

- A My conversation with Admiral Burkley, strictly. And the nature of that conversation I don't think I should discuss with you people.
- Q Just so it's clear here, that discussion pertains solely to the question of the adrenal glands?
 - A Precisely.

Q As you no doubt know, there have been allegations made about who was in control of the autopsy. I'd like to ask some questions about that. As best I understand, you're quite firm on the record that you were the person in charge of the autopsy; is that correct?

- A Regrettably, yes. There's no doubt about it, as a matter of fact, unfortunately.
- Q One of the problems that exists in the record is statements from other people who were participating in the autopsy who said that others were in charge or others were giving orders. So I'd like to find out what your response would be to the quotations that I'm going to show you--
 - A Go right ahead.
- Q The first one I'd like to make reference to is in Exhibit 26, and I can show you this, if you wish. This is in the report from the House Select Committee on Assassinations, dated August 17, 1977, by Andy Purdy, where he conducted an interview with Dr. Boswell. And I'm now going to quote from Mr. Purdy's words: "He"--and that's referring to Dr. Boswell--"indicated that Dr. Burkley was basically supervising everything that went on in the autopsy room and that the commanding officer was also responding to Burkley's wishes."

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That's on page 2 of--

A Well, I think that's a misinterpretation by J of what was going on. You see, Mrs. Kennedy and the Attorney General were upstairs in the hospital. She had stated she wasn't going to leave there until she could accompany the President's body to the White House. And Admiral Burkley was anxious that that period be shortened to as much--you know, as much as possible. And he did from time to time suggest--but as far as telling me what to do or how to do it, absolutely, irrevocably no. He's not a pathologist, to start with. He wouldn't presume to do such a thing. You'll have to talk to J about this.

George Burkley, his main concern was let's get it over with as fast as we could, and we had big problems, and we couldn't get it over with as fast as he would have liked it to have been completed. That's my reaction to that.

- Q Let me show you a second document, Exhibit No. 19.
- A Part of the reason why we avoided talking about this thing, because every time you say something, somebody misinterprets what you say.
- Q Document 19 is a memo written by Andy Purdy, who was on the House Select Committee staff, and I'd like to show you from page 13 of the document where it's referring to statements

made by Mr. Stringer. First, do you know who Mr. Stringer--

- A Yes, John Stringer was the chief of our Medical Photography Department, a very excellent performer. He had won several awards for various photographs in competitions and so forth, and he was responsible, under my direction, for taking the picture.
- Q Could you look at the second full paragraph of that page 13? And I'll ask you one specific question from it.
 - A Go ahead.
- Q The last sentence of that paragraph says, "He"--this is referring to Mr. Stringer--"believed the President's physician (Admiral Burkley) was at the center of these discussions," the discussions relating to not doing the complete autopsy.
- A That's a misinterpretation, too. I don't know where he got that idea.
- Q Were there discussions with Admiral Burkley about doing something less than a complete autopsy?
 - A With regard to the adrenal glands, yes.
 - Q With respect to anything else?
 - A Absolutely not.
 - Q For example, with respect to the neck, did Admiral

Burkley say anything about --

- A No.
- Q -- the full autopsy?

A No. Admiral Burkley's role has really been greatly accentuated here, as far as I can see. I'd like to blame him for everything if anything's wrong, but I can't.

Part of my problem is I've never seen most of these documents. It's hard for me to discuss too much about them when I've never seen them.

Q I'd like to show you a document marked Exhibit 67, and I caution you about the staple. Don't puncture your finger.

Document 67 is an oral interview with Admiral George Burkley conducted on October 17, 1967.

A Yes.

Q And I'd like to draw your attention to the bottom of page 16 and the top of page 17, if you could read that to yourself. You can read any other portion you wish, but that's where I will be asking you the question.

I'll just state for the record this is an oral history from the John F. Kennedy Library of George G. Burkley conducted by William McHugh.

A Well, his memory is a little foggy here. I ordered

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every X-ray that was taken. He didn't have a thing to do with the ordering of X-rays. I X-rayed the President's body from head to toe for the simple reason that missiles do very funny things occasionally in the human body. And George Burkley had absolutely nothing to do with it, period.

- Q Would you say that--
- A He says he supervised the autopsy. He was in the room. As far as supervising the autopsy, he didn't. Nobody supervised. I'm, unfortunately, responsible for it. Maybe he thought he was supervising it. If that made him feel better, that's okay with me, too. But I could not have put up with that. You know, just--it was not in my nature to be that retiring. I'm afraid I haven't changed a great deal.

I never saw this document before, of course.

- Q Did you ever receive any orders or instructions about limiting the scope of the examination of the brain?
 - A Never.
- Q Did you receive any instructions or orders regarding limitations on dissection of the organs of the neck?
 - A No.
 - Q During the course of the autopsy--
 - A Let me interrupt there. May I?

Q Sure.

A My problem is, very simply stated, we had an entrance wound high in the posterior back above the scapula. We didn't know where the exit wound was at that point. I'd be the first one to admit it. We knew in general in the past that we should have been more prescient than we were, I must confess, because when we removed the breast plate and examined the thoracic cavity, we saw a contusion on the upper lobe of the lung. There was no defect in the pleura anyplace. So it's obvious that the missile had gone over that top of the lung.

of course, the more I thought about it, the more I realized it had to go out from the neck. It was the only place it could go, after it was not found anywhere in the X-rays. So early the next morning, I called Parkland Hospital and talked with Malcolm Perry, I guess it was. And he said, Oh, yeah, there was a wound right in the middle of the neck by the tie, and we used that for the tracheotomy. Well, they obliterated, literally obliterated—when we went back to the photographs, we thought we might have seen some indication of the edge of that wound in the gaping skin where the—but it wouldn't make a great deal of sense to go slashing open the neck. What would we learn? Nothing, you know. So I didn't—I don't know if

anybody said don't do this or don't do that. I wouldn't have done it no matter what anybody said. That was not important. I mean, that's--

- Q Do you know what the standard autopsy protocol is for gunshot wounds and autopsy of the neck?
- A Well, no. I haven't seen that in--what you say, standard, I mean, many times if you have a track of a missile, it's helpful to take a long probe and put it in the position. It can tell you a lot of things. If you know where the point of entrance and the point of exit are, it's duck soup. But for me to start probing around in this man's neck, all I would make was false passages. There wouldn't be any track that I could put a probe through or anything of that nature. It just doesn't work that way.
 - Q Was any probe used at all to track the path--
- A I don't recall that there was. There might have been some abortive efforts superficially in the back of the neck, but no.

And if there's a standard protocol, I don't know where you'd find it, to tell you the truth.

Q Dr. Humes, did you request at any time during the autopsy to see the clothing which President Kennedy had been

wearing at the time of the assassination?

- A No, I didn't. I should have, probably, but didn't.
- Q Do you know where the clothing was during the--
- A No, I don't. I did see the clothing ultimately in the Archives, but I didn't know where it was.
- Q Other than from Dr. Burkley, did you receive or understand any requests for the autopsy to be expedited?
 - A No.
 - Q So Burkley was the only source of--
 - A Right.
- Q Other than for the adrenals and for the autopsy photographs, was it ever conveyed to you any requests or preferences of the Kennedy family for anything to do with the autopsy?
- A No, not at all--well, with one exception: with the brain. And I don't have the date, and I don't--if I had a receipt, which I wish I had, I don't have now. Sometime in the next several days--and I can't tell you when it was--George Burkley came to see me and said that Robert Kennedy wished to inter the President's brain with the body. And that was the desire of the family, and Robert Kennedy was the spokesperson. So he asked me would I give him the brain, which I promptly

handed it to him in a pail. And then the mystery really begins, because what happened after that, I don't know.

- Q Did you give Dr. Burkley the brain prior to the time
 President Kennedy was interred on November--
 - A No, no, no, no. No. It was afterwards.
 - Q Approximately when?
- A I couldn't tell you. I can't remember. I would say it was within 10 days, probably. But I just don't know. I can't remember. It seemed like a logical request, as far as I was concerned. You know, I didn't have any mystery as to what happened to the man.
- Q There are statements on record, which I can show to you, if you wish, that suggest that Dr. Finck believed that there were restrictions on the scope of the autopsy with respect to the neck. Does that help refresh any recollection--
- A No, not with--I don't know where Pierre got that information, but he--as far as I'm concerned, I don't understand that.

Pierre had a terrible time, incidentally, getting into the place because the Marines were not about to let this Army guy come in that night.

Q Did anyone ever suggest to you, directly or

indirectly, that there should not be a sectioning of the brain?

- A No. Absolutely not.
- Q Dr. Humes, are you aware of any rules, regulations, or manuals that would have governed performance of military autopsies as of 1963?
- A Not really. We had a manual, an autopsy manual that was a guide that we used to train residents. It wasn't something we frequently referred to, to tell you the truth, because you changed your technique and what you did depending on the nature of the problem.
 - Q Let me show you--
 - A At least I did.
- Q Let me show you a document that's marked as Exhibit 7 and ask you if this is the autopsy manual you were referring to.
- I'll state for the record that Exhibit 7 appears on its face to be an autopsy manual produced by the Department of the Army Technical--excuse me, Departments of the Army, the Navy, and the Air Force, dated July 1960.
- A I never saw this specific -- I never saw this specific document ever. I presume it was circulated primarily in Army circles. I don't know. If it was in our department, I never

saw it.

Q When you received training--let me try that question again. Did you take any courses in forensic pathology prior to the time of the autopsy?

The only specific course I took was a one-week course Α at the Armed Forces Institute of Pathology in November of 1953. I remember it because it was held at the AFIP in the old building downtown at 7th and Independence where the Hirshhorn Museum And I remember it vividly because the course was very is now. A number of nationwide experts were there. well done. Ford from Boston was the medical examiner of the State of Massachusetts, and several others I could conjure up if it was anybody's interest. But the reason I remember it so vividly, it was over at noon on Friday. I was stationed at the Philadelphia Naval Hospital, and I was going to drive back to Philadelphia. But I decided to go by Bethesda and visit some of my friends, some of my former trainees and one thing or another. So I went out there, and we got embroiled in conversation, and around 5 o'clock, somebody said, Jim, you'd better get started because it's snowing. November the 10th, 1953.

So I look out the window, and there's about a foot

I had just come back from Panama, and somebody in of snow. Panama had advised you disconnect the heater in your car while you're in Panama. I can't recall what the rationale behind that was. But I had -- it was now fall, and I had not reconnected So I start up old Route 1 to Philadelphia in this the heater. It was a Plymouth coupe. And, of course, the snow is car. immediately blocking my vision. I had to stop about every five miles or ten miles between Washington and Baltimore to get the snow off the roof. By the time I got to Baltimore, the city There was snow all over the place, and nobody was deserted. I pulled up in front of the Lord Baltimore Hotel. was moving. I said, Do you have any rooms? The guy said, We got rooms like they're going out of style. So I stayed--I said, well, I'm going to stay right here. I called my wife in Philadelphia. She said, Hey, if you want to spend an extra night down there, don't give me this snow business. I said, Ann, it's snowing like mad.

So, anyhow, she was joshing with me, but it was not snowing in Wilmington or Philadelphia or any place. So I started out the next morning, and you never saw such a trip, because I spent--I heard the whole Notre Dame-Penn football game in one spot in Havre de Grace. Never moved. By the time

I got to Wilmington, there was no snow.

So if you ask me do I remember that course, I'll never forget it. It was a good course, too, by the way.

- Q Did they have any kinds of written manuals, documentation, regulations that you used for reference or for instruction in that course?
- A Not really. There were some handouts that were provided by--the AFIP runs a number of courses. I was involved in them later on myself. And the instructor would provide whatever he thought would be helpful to the people taking the course. I don't recall. There was no particular--for instance, that manual might have been good to have, but it was not a part of the documents of the course.
- Q Did the Naval Medical Hospital have any rules or regulations at the time that you were there that would govern conduct of autopsies?
- A Well, I was responsible for them if there were, and I can't recall that there were, you know. I've trained young doctors to do autopsies all my life, and I didn't often use manuals.
- Q Were there any manuals or references at all that you used during the actual course of the autopsy of President

Kennedy?

- A No. No.
- Q Dr. Humes, I'd like to go through the events as they occurred, as best you can recollect them, on November 26th, starting from--
 - A 26th?
- Q Excuse me. November 22nd, starting in the afternoon. The first question I'd have for you would be whether you heard from anyone prior to the time the autopsy began about the nature of the wounds that President Kennedy had suffered.
 - A Not at all.
- Q Are you familiar with the name of Robert Livingston, Dr. Robert Livingston?
- A Is this him? No, that's Harry Livingston. No, I'm not.
- Q I'd like to show you a transcript of some testimony that he offered in the case of Crenshaw v. Sutherland?
 - A May I ask who is Dr. Livingston?
 - Q Yes.
 - A Not the guy in the jungle.
- Q According to "Who's Who in America," Robert
 Livingston is a neuroscientist who received his undergraduate

and medical degrees from Stanford University, and he was a resident at Stanford Hospital in San Francisco. In 1963, he was the chief of the Neurobiology Lab at the National Institute of Mental Health.

- A Okay.
- ${\tt Q}\,$ Does that help refresh your recollection of who Dr. Livingston is?
- A I don't know him from Adam, personally. I never heard of him before this minute, but I don't doubt his qualifications or whatever.
- Q I'd like you to take a moment, if you would, and read the deposition from page 23, line 1, to page 26, line 16.

You should also feel free to read any other part of the deposition that you'd like.

- A Now, where?
- Q Page 23, line 1. This is in microscript.
- A Page 22--okay. I see it now. Okay.

[Pause.]

BY MR. GUNN:

- Q For the record, the exhibit number is No. 24.
- A Well, this is ridiculous. I was at home at this time. He never talked to me, period. Absolutely never did talk to

me. I don't need to read any further, to tell you the truth. I mean, I don't know what he's talking about. I was at home helping my wife prepare for a social event that night, and our first knowledge of the death of the President was when our children came home from school on the school bus, came in running, yelling, all screaming, of course, "The President was shot." And I couldn't even remember where the President was, to tell you the truth, at that time. But I never talked to this person.

- Q Could you complete through page 26, line 16, please?
- A I get confused. It stops and goes over to another...
- Q 24, 25, 26.
- A It doesn't follow, sir. It doesn't follow.
- 0 23.
- A I see.
- Q 24.
- A Well, this doesn't follow this. It makes no sense.

 It's a nonsense. I don't mean it frivolously.
- Q At this point it says--there is an objection, calls for speculation, then there's some colloquy, and it's back to--
- A What? All I see is the word "speculation"--oh, somebody objects--

- Q "Objection, calls for speculation."
- A Oh, okay.
- Q The passage between the two pages.
- A Okay. I didn't understand that.

This is fantasy. Pure fantasy. I don't know where this guy was or where he's coming from. He was concerned about the autopsy, he called me and talked to me about it? He never talked to me. I mean, I'll read it, but I don't know what good it's going to do you.

Never happened. That's all I can tell you. If I did, I mean, I developed amnesia of some kind or other. But a long conversation like this at 4 o'clock in the afternoon, absolutely, categorically did not occur.

Q Just so the record is clear here, you are saying that—would it be fair to say that you're saying that Dr. Livingston never called you on the 22nd—

A To my recollection, he never called me. The only person, outside of the people right there on the scene, I spoke to was Bruce Smith. Bruce Smith, a very dear friend, close friend of mine, was the Deputy Director-Navy at the AFIP at that time. He called and offered the services of the AFIP,

anybody I needed, which was very logical. I had been stationed at the AFIP. You know, it was home to me. It was a very cordial conversation. "Bruce," I said, "Thanks a lot. Let me see what the problem is, and if I need any help, I'll call you back." When I saw what the problem was, I needed a ballistics person. And I called Bruce back. I said, "Who do you have that's in ballistics?" He said, well, Colonel Finck just got back from Panama, where he'd been unscrambling some who-shot-whom between the Americans and the Panamanians, one of the typical--which was familiar to me because I served for a couple years in Panama during a revolution. So I was very familiar with that. I said, "Well, that sounds great."

I welcomed the assistance of Dr. Finck. That is absolutely the only person that I spoke to outside of that building that day. Now, whether he talked to somebody else, I can't--it could be. He could have talked to J or he could have talked to any number of people in our department. We had a big department, you know, but I did not speak with him.

- Q When on November 22nd is the first time that you came into contact with officials from either the FBI or the Secret Service?
 - A Well, contact, I never really had any dialogue with

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any of them. Some of them were present in the morgue when the President's body was brought there. I was not introduced to any of them. I didn't need to know any of them. I had to occasionally tell them to keep their conversation down. There was a lot of conversation going on. But I never personally was--can I recall, being specifically introduced to any of them, which I didn't need to be introduced to them, because I knew who they were and they...

Q Prior to the arrival of President Kennedy's body, did you see any Secret Service or FBI officials?

A No. I had one interesting encounter in that regard.

When I found out what the problem was, I went downstairs and got into a scrub suit which I was going to wear to conduct the autopsy. And it was a brand-new morgue. We had just moved into it a couple of months before. And it had a loading dock outside, and that's where they were going to bring the President's body. So I walked outside to see what was going on. A lot of people--oh, I saw a guy with a speed graphic camera in the building and didn't feel like running after him myself. So I went out to this loading dock, and several people were milling around. And I said, "Who's in charge here?" And some general said, "I am." Well, it turns out he was in charge of

the military district of Washington. That was his role. And I said, "General, sorry to bother you, but there's some clown in there running around with a speed graphic camera."

Well, he dispatched somebody to corral this guy.

That's the only other person that I had any conversation with at all. He responded very quickly when I asked who was in charge. He left no doubt in my mind. But he was in charge of the loading dock. He was not in charge of anything else. I never saw him again in my life.

- Q When is the first time you had a conversation with anyone outside of people in the autopsy room regarding the nature of the President's wounds?
 - A The next morning when I called Malcolm Perry.
 - Q Approximately--
- A I'm pretty sure that's who I spoke to. I know it is.
 - Q Approximately what time did you speak to Dr. Perry?
 - A I think 8 or 9 o'clock on Saturday morning.
- Q Were you aware of any telephone calls being made from the autopsy room during the time of the autopsy?
- A Well, you see, that's possible. Certainly not by me, but we had a large defect in the side of--in the right side

of the President's skull, and there was dialogue back and forth between somebody—I don't know whether the FBI or Secret Service—that fragments of bone had been picked up on the street. And there was conversation back and forth between—I guess they were Secret Service people. I had no idea, to tell you the truth. And they were going to be sent to us, which was fine because we needed to close the defect if we could. It didn't turn out to be enough to totally close the defect. We did other things to accomplish that. But your specific question, if these phone conversations were going on, I was not directing them, I was not involved in them, and really it wasn't my problem.

- Q Was there a telephone in the autopsy room?
- A Yes.
- Q Do you recall whether anyone was stationed at the telephone during the course--
- A No, no. If there was, I didn't have anything to do with it.
- Q Did you make any attempts to call anyone in Dallas prior to the completion of the autopsy?
 - A No.
 - Q Were you aware of any other kinds of communications,

in addition to telephone calls, between Bethesda Hospital and Dallas regarding wounds of the body?

- A No.
- Q In addition to the call that you had with Dr. Perry, did you speak with any other person who had been in Dallas on the day of the assassination regarding the nature of the President's wounds?
 - A Contemporaneously at that time?
- Q Thank you. Let me try the question again. Prior to the time that you had completed the autopsy protocol, did you speak with any other doctor--
 - A No.
- Q --or law enforcement official about the nature of the wounds on President Kennedy's body?
 - A I did not.
- Q Dr. Perry is the only one, then, prior to the completion--
 - A Right.
 - Q -- of the autopsy protocol?
 - A Yes.
- Q Did you see any written materials prior to the time that you completed the autopsy protocol that discussed or

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described events in Dallas?

- A No.
- Q In the autopsy protocol, there is reference to information that happened in Dallas. Do you recall how you came to have that information?
 - A I'd have to know--
 - Q I'll show you the autopsy protocol.
 - A Yes. I can't recall.
- ${\tt Q}$ $\,$ Just start with the first two paragraphs of the autopsy protocol.

MR. GUNN: Dr. Humes is now examining Exhibit 3.
[Pause.]

newspapers, which is the source, plus I may have had the television on sometime on Saturday. I'm not sure. I was busy doing a lot of things. I can't tell you for sure. I had no personal knowledge. I had to get it secondhand, whatever it was. It was not my job. It was not my responsibility in the first place.

BY MR. GUNN:

Q At the beginning of the second paragraph, it makes reference to the President fell forward. Do you recall now

where you obtained that information? Again, the beginning of the first paragraph—the first sentence of the second paragraph on page 2?

- A I presume from this Washington Post article. I'd have to look at it and see. I had no other source of information that I can recall.
- Q So, for example, did an FBI or Secret Service agent tell you that--
- A No, absolutely. I had no dialogue with them at all.

 Zero. Maybe it would have been helpful. It may have been harmful. I have no idea. But I did not have dialogue with those people.
- Q Could you describe in a general way what the autopsy room looked like? You mentioned a few minutes ago that it was new. Could you just describe the room?
- A Well, it's about the size of the room in which we're seated, which looks to me like it's 30 by 25 or something of that nature. We had a permanently fixed autopsy table in the center of the room. We had a viewing stand, a two-place viewing stand, along one wall. I think it had two steps. It would accommodate maybe 20 or 30 people, because we used to have conferences in there. Routinely, at the end of a week, we would

retain the organs from the autopsies of the week. In fact, not only did we review them there, but there was a closed-circuit television. They went to Andrews Air Force Base, NIH, and it was a closed-circuit instruction program. That platform, a two-step platform, was for observers.

And in an adjacent area, we had a refrigerated storage place with either four or six--I forget the number--places for retention of bodies. And we had a shower and restroom adjacent.

- ${\tt Q}\,$ Was there any kind of gallery in the room other than the two steps that you--
- A That's what I'm speaking of. It might have three steps. I couldn't--you know, I don't recall how many steps it had. We used to get a fairly decent number of people. Maybe it had three steps.
 - Q Was there any closed-circuit broadcasting-
 - A No.
 - Q --during the night of the autopsy?
- A No, absolutely not. I wish there was, retrospectively.
 - Q Had you ever performed an autopsy in that room before?
- A Yes. But let me correct that to some extent. The residents did most of the autopsies, and we rotated the

supervision of that activity. It varies. That's the way the residents learned their trade, you know. But, yes, we had--I don't know how many autopsies we've had in that room. It would be easy to find out from the record, of course.

- Q Approximately how many people were in the autopsy room at the time President Kennedy was--
- A Geez, that's a good question. That's one of my--I should have thrown them all out. That was one of my biggest problems.

There were, I guess--there was an Air Force aide, the Naval aide, an Army aide to the President. They were the most shook-up people you ever saw in your life. And I guess it was around 15 people there off and on, maybe 20.

- Q During the autopsy, was the room quiet and hushed or noisy and bustling? How would you describe the scene?
- A It varied. We were there for a long time. We were there from about 6:00 or 6:30 in the evening until 5 o'clock the next morning. It was very hushed around 5 o'clock in the morning. But in the early evening, it was--I mean, we had X-ray technicians coming in and photographers and photographers' assistants there, the kind of thing that you would expect under any circumstances, plus these other people, the Secret Service

and the FBI, who wouldn't normally be present. But I had to concentrate on what I was doing. I mean, I really couldn't get too worried about these other people, as long as they didn't get in my way, which they didn't.

- Q In the JAMA article, if they quoted you correctly, you said that the scene in the autopsy room was somewhat like trying to do delicate neurosurgery in a three-ring circus.
- A At times it was. Not always, but at times when there was a lot of people around. You had to stage stuff. I mean, you couldn't be taking X-rays of the whole body and photographs simultaneously. You know, somebody had to decide who was going to do what when, and I had to do that. George Burkley sure as hell didn't, you know.
- Q Did anyone make suggestions to you other than Drs. Boswell and Finck, regarding any procedures--
 - A No.
 - Q --during the autopsy?
 - A No.
 - Q None whatsoever?
- A None. I don't know who it would have been or who would have the...
 - Q Was your commanding officer there?

I had a separate commanding officer, and he was there, it seems to me, part of the time. John Stover was his name. Everybody called him Smoky Stover. At that time, we had a separate command called the Naval Medical School. The Naval Hospital did not have any laboratories. The Naval Medical School had laboratories, and we provided the laboratory service to the hospital. So the guy that was really my commanding officer by rules and regulations was John Stover. But he had—we had a very cordial, pleasant relationship, but he never commanded me to do anything in my life, period. He was off in a different area. We conducted training courses for technologists and technicians and occupational thera—all kind of training courses, and that was his main role, to run the training aspects of the, quote-unquote, medical school.

At one time, when my uncle was a Navy doctor, every new doctor coming into the Navy first was assigned to this Naval Medical School for, I think, six or nine months, and they taught some tropical medicine and they taught shipboard sanitation--you know, the kind of things that you'd need to know in the Navy. But if Smoky was there--and I think he was for part of the time--we had no dialogue at all. He would never have presumed to tell me anything, I don't believe. He was

a general practitioner, is what he was. He was a field--he spent a lot of time in the Marine Corps. He was a field medical officer, and a very good one, very much respected.

- Q Who was Captain Stover's commanding officer?
- A Admiral Galloway.
- Q Was he present at the autopsy?
- A I don't think so. I don't think Cal came down there at all. I mean, I can't swear that he was or wasn't there.

 But if he was, he played no role in it whatever.

Really, other than more than look in the room, I don't think Admiral Galloway was there at all.

- Q Was the Surgeon General of the Navy present--
- A No.
- Q --during the autopsy? That's Rear Admiral Kenny?
- A Kenny.
- Q And he was not present at all in the autopsy room?
- A I can't recall that he was. You know, he might have, again, looked in, stuck his head in the door or something.

 But I don't recall him being in the room. If he was, it was very fleetingly.
- Q Previously, you made reference to the President's Air Force aide. Was that reference to General McHugh?

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A I didn't know who they were, to tell you the truth. Still don't know who they were. And they didn't stay long. They came about the time the body was delivered, and they didn't--I mean, I didn't concentrate on what these people were doing. It really didn't interest me. I was empathetic with their concern, but as far as otherwise, I didn't have anything to do with them, or they with me.

- Q Previously, you made reference to the commanding general for the military district of Washington.
 - A Yes.
 - Q Was that General Wheely?
- A You got me. You know, he told me, he said he was in charge, and I heard later that that was his role. I said to somebody else, "Who's that guy?" And that's what they said; he's the CO of the military district of Washington. I never saw him before or since, didn't know who he was then.
 - Q Was he present at all during the autopsy?
- A No, he was not. Or if he was, I didn't know he was there. Let's put it that way. I don't think he was at all.
- Q Would you have recognized Joint Chiefs of Staff as of 1963?
 - A No.

Q For example, Curtis LeMay, would you have recognized him?

- A Oh, I'd recognize him if he was there, but he was not.
- Q Did you ever hear any speculation about whether any members of the Joint Chiefs of Staff were present at the autopsy?

A No, never heard, but if they were, it was unknown to me totally. I doubt very seriously that they were.

You asked me, would I recognize them? Sure, you know, from newspapers and television, one thing or another. I probably knew them all by sight. But they weren't there.

MR. GUNN: Let's take a short break, a couple minutes to get a drink of water.

[Recess.]

 $$\operatorname{MR.}$$ GUNN: We're back on the record following the first recess.

BY MR. GUNN:

- Q Dr. Humes, when did you first see the body of President Kennedy?
- A I didn't look at my watch, if I even had a watch on, but I would guess it was 6:45 or 7 o'clock, something like that, approximately.

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Q Was the body in the casket when you first saw it?

- A Yes, it was in a casket.
- Q Could you describe the casket in just very general terms?
- A Yes. It was a wooden casket with long handles on both sides like you usually see for the use of pallbearers and so forth. One of the handles was broken. I forget which side it was on. But it was a handsome--the standard of those things. It was a good-looking casket.
 - Q Where did you first see the casket?
- A As the people--I think they were sailors that were--it was a Navy ambulance, a Navy ambulance crew who had picked up the body at the airport, and they brought it into the morgue and promptly left.
 - Q Do you remember what color the ambulance was?
- A No--oh, gray. I saw it on television later. And all our ambulances were gray in those days.
- Q Were you with the casket from the time it was unloaded from the gray ambulance until you opened the lid of the casket?
- A I didn't go out on the loading dock. I was there from the time it came through the door of the morgue until the President left the next morning.

 ${\tt Q}$ $\,$ How many rooms or hallways are there between the loading dock and the morgue where you first saw--

A Just a very brief hallway. I guess maybe 15, 20 feet, something like that. No rooms.

- Q And was the casket opened in the morque?
- A Yes.
- Q Who else was in the room when the casket was opened?
- A Oh, I can't tell you that. Dr. Boswell and I removed the body from the casket, and I--I don't know who. There were some enlisted helpers, technicians from our department there, and I don't know who else was there. I can't tell you. I was too intent on what I was doing and too, to tell you the truth, a little bit shook by the whole procedure, initially at least. It was disturbing to have a deceased President there in your arms, you know. It's not an unemotional experience. But I was not worrying about who was around or whatever. It was the least of my worries.
- Q Who else in addition to Dr. Boswell, if anyone, helped you remove the body from the casket?
- A I don't recall that anyone did, but I don't gainsay the possibility that one of the enlisted men may have helped.

 But nobody else.

- Q How was the President's body wrapped?
- A It was wrapped in white sheets and the head was--head wound, massive head wound, was covered with gauze sponges and gauze dressing.
- Q Was there any plastic or rubber sheeting at all near the President's head?
- A No. Well, I'm not sure what finally tied down the gauze bandage over the skull wound. It might have been plastic or something, but, you know, I don't know. Adhesive tape or God knows what. It was easily removed. It wasn't tight at all.
- $\,$ Q $\,$ Was there any plastic sheeting or rubber sheeting of any kind that you saw in the casket--
 - A No.
 - Q --with the exception of possibly with the head?
 - A No.
- Q From the time that you first saw the body of President Kennedy, were you in the same room with the body until it left Bethesda?
 - A One hundred percent of the time.
- Q Other than the trip down the hallway, did the body ever leave the morque room?

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- A No.
- Q Were you involved with the process of unwrapping the body?
 - A Yes. Yes.
- Q During that, did any skull fragments fall out from the wrapping?
 - A Not that I recall.
- Q Did any bullets or bullet fragments fall out from the wrapping?
 - A No.
- Q Could you describe how the President's head looked at the very first time that you saw it after it had been unwrapped?
- A Well, the most obvious thing was a large defect in the right parietal area. The measurements are in the autopsy protocol, and the hair was matted in that area and bloody and so forth. And there was a suggestion like a contusion in the right frontal area over the right eyebrow. The skin was a little bit discolored in that area, but it wasn't very remarkable. The most striking thing was this large defect. His face was, for all intents and purposes, normal. Normal as anybody can be in death, I guess. It was not significantly injured in any

way.

Q Were any portions of the brain extruding from any wounds in the head?

A Well, the wound was so big that--I don't know what you mean by extruding. It wasn't really--it was just a gaping hole and the brain was right there. It wasn't really being extruded, no.

- Q So you could see it, but it was not as if it were coming out--
 - A No.
 - Q --sort of just seeing inside a hole--
 - A It was a big hole, yeah.
- Q Did you notice any surgical incisions anywhere on the body of President Kennedy when you first saw him?
- A Yeah, there was a gaping defect that was obviously a tracheotomy incision in the anterior neck, and there were a couple of small--you never heard much about this, either. A couple of small incised wounds on the chest, and I forget--I wrote down, wherever I wrote it down, that it looked to me like somebody was going to think of putting in a chest tube. But they never did, because all they did was go through the skin. They obviously--I imagine they decided the President was

deceased before they were going to pursue it. But somebody started, apparently, to insert chest tubes, which would not be an unreasonable thing to do. They were, you know, maybe two centimeters long, something like that, and between the ribs, low in the anterior chest.

I'm sure I described them in the protocol someplace.

- Q Were there any cutdowns on any of the--
- A I think there was in one of the ankles. There was a cutdown wound. I forget whether it was the right or left ankle now, to tell you the truth. If I had to guess, I'd say it was right, but I'm not sure.
- Q Did you see any other surgical incisions or incisions that you thought might have been surgically performed?
 - A No.
 - Q Anything in the head area at all?
 - A No.
 - Q Did you see any sutures?
- A No--well, there might have been of the cutdown on the ankle. There may have been some black silk sutures there.

 I'm not absolutely certain, but I think there might have been.
 - Q Anywhere else that you remember a suture?
 - A No.

Q I'd like to show you the document that's been marked Exhibit 1, which is the first page of the diagram, and the second page is the drawing of the skull.

- A Yes.
- Q I'd like to ask you some questions about this. First, was this document, Exhibit 1, in your possession at any point during which you were writing the autopsy protocol?
 - A Probably. Probably was. Over the weekend, yeah.
- Q I'd like to draw your attention to a few items on the first page of this document. Right next to the marking for brain, there's no entry of a weight there. Do you see that on the document?
 - A Yes, I see that it's blank, yeah.
 - Q Why is there no weight for the brain there?
- A I don't know. I don't really--can't really recall why.
 - Q Was the fresh brain weighed?
- A I don't recall. I don't recall. It's as simple as that.
- Q Would it be standard practice for a gunshot wound in the head to have the brain weighed?
 - A Yeah, we weigh it with gunshot wound or no. Normally

we weigh the brain when we remove it. I can't recall why--I don't know, one, whether it was weighed or not, or, two, why it doesn't show here. I have no explanation for that.

- $\ensuremath{\mathtt{Q}}$ The same would be true also for the thymus. Do you see that?
- A Yes, well, the thymus in an adult, you can't find--99 percent of the time it's not there. It involutes after the age of about 12, and so this--for 99 percent of adult autopsies, you'd never find the thymus.
 - Q Okay. For the thyroid over on the right column.
 - A Yeah.
 - Q There's no weight there. Do you know--
 - A It probably wasn't removed. I don't know.
- Let me go back for one minute. I was told find out what killed the man. My focus was on his wounds. I didn't approach this like it was a medical death due to some disease or whatever. I was focusing primarily and almost exclusively on the wounds. So I don't know. I don't know if I weighed the thyroid or not.
- Q Did you consider the autopsy to be a medical-legal autopsy?
 - A Yes. Oh, sure.

Q And there was a gunshot wound to the neck, wasn't there?

A Well, you'd better clarify that. There was a big gaping tracheotomy wound in the anterior neck. I learned later that there had been a gunshot wound in that location, but I didn't know it. That was 99 percent of my problem. There was a bullet wound in the back above the scapula, like I mentioned earlier, and there was a wound of entrance in the back of the skull and a wound of exit in the skull. Those were the wounds.

- Q Could you look at the diagram on the right side?
- A Yeah.
- Q Please, do you see in the head there is a circle with an arrow pointing up and to the left?
 - A Yes.
- $\ensuremath{\mathtt{Q}}$ Do you know what the arrow pointing up and to the left signifies?
 - A I have no idea.
- Q On the face sheet right next to the head, it appears as if the words "ragged slanting" are there. Do you see those words?
 - A Yeah.
 - Q Does that look correct to you, those words?

A No, I don't think it was very ragged at all. It was oval, oblong, and I don't recall particularly ragged. Maybe the edges were a little bit serrated, but I don't think I would have used the term "ragged."

- Q Do you know what slanting means in that context?
- A Well, I guess because it was oblong, it might have been interpreted as slanting; whereas, if it had entered at 90 degrees to the surface, it wouldn't have been quite as slanting. Do you know what I mean?
 - O Yes.
- A It would indicate to me that the wound--the missile did not hit at a 90-degree angle with the surface.
 - Q So it would be an oblong wound?
 - A Exactly.
 - Q That's the sense of what you--
- A Right. That's how I would interpret slanting. I think these are J's comments. I didn't--I don't think I've written anything on this piece of paper.
- Q Okay. Do you see on the diagram--it's actually true both for the left and the right diagram--that there are two lines dividing what roughly is at the neck?
 - A Yeah.

- Q I assume that those are standard lines--
- A They're on the form before anything else is put on it, yes.
 - Q And what do those two lines signify?
- A I don't know. I don't know who dreamed this up, to tell you the truth. They don't signify anything to me. In case you don't know where the head and the torso join, I guess it would help to show you. But, really, it's not very helpful. Those lines are not helpful.
- Q Okay. Down in the bottom left-hand corner, do you see the handwriting?
- A Yeah. Verified, George Burkley. That was interesting that he verified it. I don't know why he did that, who asked him to, or whether he volunteered and he did. I have no idea.
- Q You don't recollect having seen Dr. Burkley sign this--
 - A No, I do not.
 - Q --at all?
- A I do not. I guess there's the cutdown, now that you tell me about it. It was, I guess, drawn. It was on the left.
 - Q Could you turn to the second page, please?

A Sure.

Q I'd like you to help see if you can explain to me what some of these things mean, and I understand that you did not do this drawing yourself. First, there is a line right in the middle of the skull that says "10" with an arrow going in either direction. Do you have any idea what that means?

A I would think it's the width of the defect that's portrayed--as you look at it, it's on your left--the right side of the skull. I know, but this is the same 10 as in there, and he puts arrows back and forth that it was 10 centimeters wide.

Q Okay. And do you see right below that--

A Now, let me tell you. That couldn't be too precise because it was not a nice, clean whatever. It might have been 10 centimeters at one point and 12 at another, or God knows what, you know.

Q Okay.

A I was relying, through all of this, to my photographs and my X-rays. I wasn't really worried about these notes that J was making. It didn't--I didn't tell him not to make them, and I didn't tell him to make them. I didn't tell him anything. I'm not displeased that he made them. That's fine. But I

was relying upon the photographs and the X-rays to tell the story. I wish I had had a video camera. Now, of course, I wish a lot of things. But--

- Q Were you anticipating at the time you were performing the autopsy that you would have the photographs and X-rays available for your inspection at the time you were writing the autopsy report?
- A No, I never expected to have them when I was writing the autopsy--he wanted the autopsy report in, what, 36 to 48 hours. No, I didn't anticipate I'd have them at that time.
- Q When did he--he being Dr. Burkley, I assume--when you said he wanted them in 36 to 48 hours?
 - A Autopsy report.
 - O Yes.
- A Before he left the morgue. Before he left the morgue that night, he said he would like to have the report, if we could, by 6:00 p.m. on Sunday night.
 - Q And that was Dr. Burkley?
 - A That was Dr. Burkley.
- Q Right below the middle of the skull, there is the number 17 with, again, arrows pointing, at least on the paper, up and down. Do you see that?

A Yeah. I would presume that this is the antero-posterior maximum measurement of this defect. Okay?

- Q Okay.
- A So it was 17 centimeters, fore and aft, if you will, and 10 wide. I got some slightly different measurement, I think, in my written report, but ball park, you know.
- Q Right below the 17 and the arrow, there's the word, it looks as if it's "missing." Do you see that?
- A That much bone is missing. That was a big defect, you see.
- $\,$ Q $\,$ Now, when this 10 by 17 centimeters of bone is missing, does that mean that it was present nowhere in the autopsy room during the autopsy?
- A Not until later when part of it was brought to me, which I described, I believe, in the written report.
 - Q So would it--
- A The pieces that were brought to me, it was either two or three, I think three: one pretty sizable one and two smaller ones. Again, I'm talking off the top of my head. When they were repositioned to where they should have been, there was still a defect. We didn't have sufficient bone to totally close the defect.

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Q So then from the first time that you saw the President's head without the pieces of skull fragment that came in later, the approximate measurements of the missing scalp would be roughly 10 centimeters to 17 centimeters?

- A By 17, right.
- Q In the autopsy protocol, you referred to the amount as being 10 centimeters by 13 centimeters, and let me show you the protocol.

A I'm not going to debate it. I mean, it would depend on how you were measuring it, because it wasn't a--like this room is 25 by 35. It's got walls and extreme--this was irregular, so you could make any kind of measurement you want, smaller than that--you couldn't make it any bigger than we made it, but you could make it smaller if you measured it more anteriorally or more posteriorally, whatever.

Q Sure.

[Pause.]

BY MR. GUNN:

- Q Let me first show you page 3 of the autopsy protocol.
- A Right.
- Q The first paragraph. In that paragraph it refers to 13 centimeters as being the greatest diameter. The question

for you would be whether any pieces of the skull fragments were put back into place in order to reach the measurement of 13 centimeters.

- A I can't--I have no explanation for that. I don't know whether J's note is right or my measurement is right. I don't know.
 - Q In this--
- A Certainly I'm talking about--when I say the wounds, I'm talking about the wounds before anything was done to them, in other words, primarily before anything happened.
- Q When you say before anything was done to them, that means before any skull pieces were--
 - A Yeah, before anything was put back--
 - O --put back in or taken out?
 - A Exactly.
- Q So it would be your understanding that the 13 centimeters in the numbered paragraph 1 would refer to the skull as first seen after being removed from the casket?
 - A That's correct.
- Q Could you help me with some of the other descriptions on the second page of Exhibit 1? And, again, I understand that these were not written by you. Can you read the writing over

on the right side of the document, the first word of which appears to be "Falx"?

- A "Falx"--I don't know whether that's "bone" or what. Looks like "parasagittal." I can't--don't know what that is.
- Q Let me try what I read it and tell me whether that makes sense to you or whether something else--"Falx bone from sagittal sinus from the coronal suture back."
- A It could be. You'd better get J to tell you what this is.
 - Q "Falx loose from sagittal sinus," is that--
- A That's more likely. Yeah, the falx cerebri, you know, it's one of the membranes, and it was detached as part of the wound. I think that makes more sense, yes.
- Q So "falx loose," does that describe what you saw during the autopsy?
- A Yeah, I suppose so. I'm not going to debate it now. It's kind of incidental to the whole affair, as far as I'm concerned, but...
- Q So would it be fair to say, then, that the falx was loose from the coronal suture back--
 - A Right.
 - Q Okay.

A Coronal suture is the one that goes across the middle, the top of the head.

- Q On the diagram, over on the left side of the skull, there is 10 with not an arrow but a dash on either side of that.

 Do you have any recollection of what that would mean?
- A I think it's the same 10 that's present with the arrows on either side of it, but your guess is as good as mine, to tell you the truth.
- Q Up at the top of the skull, there is a 3 cm, I assume 3 centimeters. Do you see that?
 - A Yes.
 - Q Do you have any knowledge about what that would mean?
 - A I certainly don't.
- Q And over on more towards the right, right below where it says "globe right eye," there is a circle with a line or maybe a hook through it. Do you see that?
 - A Yeah.
 - Q Do you know what that signifies?
- A No. Well, it says something about fractures through the floor of the--I would presume of the anterior cranial fossa.

 There were all kind of fracture lines, you see, in the skull from this massive wound, and I presume that's one of the fracture

lines. I didn't detail all those for the reasons that I stated in the protocol. They're going this way and they're going that way, and, you know, that's the way it goes.

- Q Okay. If we go down to the bottom of the skull, there are numbers written at the bottom, a 4, a 3, over a 6. Do you see those?
 - A Yeah.
 - Q Do you know what those signify?
 - A No.
- ${\tt Q}$ $\,$ Were there any injuries or fractures in that portion of the skull?
- A Well, yeah, I guess. Yes. Because the wound was below there, you see. You're looking at it from above, and the wound, the entrance wound you wouldn't see on a view from the top. But there were fractures in the posterior cranial fossa radiating from the wound.
- Q Okay. Do you see the very small, what looks like a drawing down at the bottom of the page that looks something like a half circle perhaps?
 - A Yeah.
 - Q Do you know what that is?
 - A I think it's just a gross depiction of the

configuration of the largest fragment that we got from Dallas.

I think that's what that is.

- Q One last question on the drawing. There are some dotted lines that go roughly around the right perimeter, extending around to the left. Again, do you have any idea what those dotted lines signify?
- A I'd have to guess they may be fractures, but it's an educated guess.
- Q Okay. At the time that you first saw the body of President Kennedy, saw the skull, would it be fair to say, based upon your prior testimony, that there was a skull fragment or fragments missing that would have been in the approximate measurements of 10 centimeters by 13 centimeters or 10 by 17, approximately?
 - A Yes. That's right.
- $\ensuremath{\mathtt{Q}}$ Was scalp missing from that same--from those same measurements?
- A Not as much scalp. There was some scalp missing, but we were able to pretty much close the scalp, skin, when we finished everything. So I can't tell you how much was--but it was not that much skin missing, no.
 - Q So mostly skull fragments--

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- A Right.
- Q --but not the scalp itself?
- A Right. Right.
- Q Was there any scalp on any of the fragments that you received later in the evening--
 - A No.
 - Q --that you referred to?
 - A No.
 - Q So there was no scalp that came to the autopsy room--
 - A No.
 - Q --during the course of the autopsy?
 - A There was none.
- Q When the embalming process was completed, approximately how much scalp was missing?
- A Oh, I don't know. Maybe three or four centimeters, something like that. Not much. We were able to--you can undermine the skin, you know, and we pretty much closed it. We didn't have enough bone to completely close that part of the defect, and we had--one of the people who was around and very helpful was our chief of surgery, Dr. David Osborne. And we went to--he went to the operating room and brought back some rubber dam, which is material that is used in surgery not

infrequently to cover a variety of different kinds of defects.

And we used a rubber dam to help us close the skull bone.

But I don't think we had to add anything to the scalp.

- Q Approximately where was the missing scalp as of the time that the embalming process was completed?
- A You got me--I don't think there was--I mean, we were able to close it by undermining and stretching and so forth.

 I don't recall that we didn't completely close--I think we completely closed the skin and the scalp.
- Q Without stretching the scalp, just, you know, basically how much scalp was actually missing at the time that the body arrived at Bethesda?
- A You know, I couldn't--it would be a rough guess.

 Maybe four or five centi--three or four centimeters, something like that. Probably, because it was all torn, you see, with serrated--and there were--it wasn't like a punch that was punched out. It was torn apart, you know. So I have a hard time estimating that.
- ${\tt Q}$ $\,$ Do you have any knowledge as to where the missing skull--or missing scalp was?
- A No. It wasn't that much, I'm telling you. It was more torn than missing.

Q The next question I wanted to ask you would be where, as best you recall, the lacerations were on just the scalp.

- A They went in every direction. They were--I think

 I described them as stellate. So they went down this way and

 back, and the whole area was lacerated.
 - Q For the scalp?
 - A Yes.
 - Q In towards the back of the head, so in the occipital--
- A Not really. Not really. The parietal region primarily. Parietal and to some extent occipital, but primarily parietal.
- Q Okay. Just for any scalp lacerations, were there any tears over the occipital bone?
 - A No. No.
 - Q None whatsoever?
 - A No.
 - Q There were tears, however, over the temporal--
 - A Temporal and parietal.
 - Q And the parietal.
 - A Yes.
 - Q And were there any tears over the coronal area?
 - A Well, now you're talking about a line that goes across

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like this. Whether or not any of these tears extended to the coronal suture area, I can't recall specifically. I wouldn't be surprised, but I wouldn't also swear to it.

- Q You mentioned that there was a rubber dam in the embalming process. Where was that located?
- A Well, it was not in the embalming process. When they got finished embalming, we had to put--we didn't have to, but we helped them put the scalp back together and the skull. And the defect that remained in the skull--I can't now measure it specifically--was three or four or five centimeters, something like that. And we used a rubber dam to cover that part of the skull defect.
 - Q And where was that located?
- A Well, I can't--it was part of this large defect, and I can't tell you now exactly where it was.
- Q When you say part of this large defect, you mean in the parietal area?
 - A Right.
- Q Did you notice any wounds that appeared to be incisions--
 - A No.
 - Q --in the scalp at all?

- A No. None.
- Q Or any in the skull below?
- A No.
- Q After the body was placed on the table, having been brought out of the casket, what was the general order of procedures that you followed?
 - A Take photographs, first off, and X-rays.
- Q Did you take photos and X-rays before you did any cleaning of the head?
 - A Yes.
- Q Did you replace or remove or rearrange any fragments of bones at all before taking photographs?
 - A No.
- Q Did you make any incisions at any place before taking the photographs?
- A Well, depending on which photographs you're talking about. We didn't photograph the wound in the occiput until the brain was removed, you know. Sure, we had to make an incision to remove the brain and so forth, but no, generally speaking, no, we didn't make any incisions at all.
- Q You previously have seen the photographs that were taken at the autopsy; is that correct?

- A Only once--1966.
- Q Didn't you see some of the photographs during the time that you met with the HSCA panel?
- A Well, I guess they had some of them there. That was kind of a confused affair, and I--did I have the photographs in my hands to look at? No. They had some blow-ups that they were trying to use to demonstrate to the panel, I guess, and I found them very difficult to interpret, to be perfectly candid with you. I had problems with them.
- Q There is one photograph, or one series of photographs that shows what looks to be a gaping wound in the head with the scalp reflected.
 - A Yeah.
- Q Other than that series of photographs, were the remainder of the photographs all taken at the beginning of the autopsy, do you recall?
 - A Virtually all of them were, yeah.
 - Q Do you remember--
- A There's only basically two that weren't. One was the inside of the occipital region, which we interpreted as the wound of entrance, for obvious reasons, and one that never came--whatever happened to it, I was very disturbed by it.

We took one of the interior of the right side of the thorax because there was a contusion of the right upper lobe of the lung. So the missile had passed across the dome of the parietal pleura and contused the right lobe. I wanted to have a picture of that, and I never saw it. It never—whether it was under—exposed or over—exposed or what happened to it, I don't know. And it's three years later when we were looking at it, of course. But we didn't see that photograph. So that was taken later, and the one of the inside of the skull was taken later. But all the rest of them were taken at the onset of examination.

- Q Okay. With regard to X-rays, when were they taken in relationship to the photographs?
- A I would guess that most of the X-rays were taken prior to any of the photographs. But, I mean, I just don't have that crystal clear in my mind. But I think so. I think most of them were taken before.
- ${\tt Q}$ $\,$ Were any skull fragments rearranged or put into place or removed prior to the time that the first X-rays were taken?
 - A No.
- Q Were any skull fragments rearranged or moved at any time during any time that there was an X-ray of the cranium?

- A No. No.
- Q So there was no reconstruction whatsoever?
- A No. There was nothing to reconstruct. No.
- Q During the course of the autopsy, did you have any X-rays available for your inspection?
 - A Yes.
 - Q Developed X-rays?
 - A Yes. We had them all.
- ${\tt Q}\,$ Did you use all of the X-rays that you were aware of--
 - A Sure.
 - Q --during the course of the autopsy?
- A Yes. Weren't particularly helpful, but we used them, yeah.
- Q Do you have any recollection now about radio-opaque objects being in or appearing in the X-rays?
- A Yes, in the skull. There were some little tiny fragments of radio-opaque material, which we thought to be bullet fragments, traversing from--well, I don't know. It looked like it was going from posterior to anterior. Very fine, sort of granular-looking material, went almost as far forward as the frontal bone, but not quite that far.

- Q Those are dust-like fragments?
- A Yes, right.
- Q Were there any--
- A A couple of them were--we did retrieve a couple that were maybe a couple millimeters, as I recall, from that path, you know. But that was about all.
 - Q Do you recall where you retrieved those fragments?
 - A I think from the frontal lobe of the brain.
- Q Were there any X-rays taken between the time that you--or after the time that you removed the small fragments?
 - A No.
- $\ensuremath{\mathtt{Q}}$ So all of the X-rays of the cranium were taken before any--
 - A Exactly.
 - Q --metal fragments were removed?
 - A Exactly, exactly.
- Q Do you have any recollection now about the shapes of the fragments that were removed?
- A They were small and irregular. That's all I can tell you.
- Q Long and sliver-like or roundish or--any recollection?

- A Flat, irregular, two or three millimeters.
- Q When was the first incision made at Bethesda, as best you recall?
 - A Well--
- Q Let me withdraw that question. My question is not so much what time it was, as whether it's 8 o'clock or 8:15 or 8:30.
 - A Yes, okay.
- Q But just let me start out first: Where was the first incision made?
- A I believe, of course, the top of the skull to remove the skull plate of the brain. To remove what remained of the calvarium and to approach the removal of the brain.
- ${\tt Q}$ $\,$ And was that incision simply of the scalp, or did you need to cut--
 - A No, we had to cut some bone as well.
 - Q Where did you make the incision on the scalp?
- A Where we usually--in the coronal plane, over the coronal suture. Of course, half of it was already--I mean, you know, it wasn't a neat incision because part of it was over the large defect that was already present.
 - Q So did you make any incisions in the scalp other than

the one that would be roughly from either right to left or left to right, roughly over the coronal--

- A No, we didn't make any others.
- Q So there were none front to back along--
- A No. There were lacerations of the scalp in several different directions, but, no, we didn't make any other incision.
 - Q Where did you cut the bone?
- A I find that—it's hard to recall. Once we got the scalp laid back, some of those pieces could just be removed, you know, by picking them up, picking them up because they were just not held together very well, other than by the dura, I suppose. So other than that, we probably made it like we normally do, in a circumferential fashion from books, like right above the ear around. But it was a real problem because it was all falling apart, the skull. And I can't recall the details of exactly how we managed to maneuver that, because it was a problem.
- Q Who was involved in the process of removal of the brain?
 - A I was.
 - Q Did anyone else assist you with that?

A Maybe J. I'm not sure now. I mean, it's not a two-man job particularly. You have to cut across the top of the spinal cord, of the medulla to--you know, you just make one incision. I mean, it's not a major thing for a lot of people to be involved with.

- $\ensuremath{\mathtt{Q}}$. Were there any lacerations in the area of the mid-brain?
 - A Yes.
 - O What kinds of lacerations?
- A They were length-wise. There was one length-wise in the mid-brain, and--it's hard to describe, you know. From my memory now, there were--and there weren't a lot--there weren't too many very extensive ones, but they were very extensive--very serious location, is what the problem was. They were right in the mid-brain. And they were probably due to disruption by the force of the blow rather than by the particular passage of any missile, I would guess.

The photographs, again, depict these problems.

Q I'd like to hand you a drawing that we will number Exhibit No. 71, which is labeled the brain and the cranial nerves.

My question for you first will be: Is this a

reasonably fair description of the brain and cranial nerves?

- A Yes, well, it's a lateral view, sagittal view.
- Q When you say that there were lacerations, if I understood correctly, in the mid-brain, could you point to where that is on the diagram? Not where the diagram says that there was a mid-brain, but where the lacerations were.
- A Well, first of all, they weren't laterally. They were posteriorally. They weren't laterally. So you don't have the right plane to do it, okay? But they, as I recall, were--I can't show them because this would have to be sideways, you see.
 - Q Okay.
- A I can't do it. I don't know how well I'm going to do it when you give me the other one from memory, to be quite candid with you about it.
 - Q Would this diagram help you?
- A Well, it's better, but it's...well, the problem with this diagram is that it's, roughly speaking, cut along the coronal suture, because you have the large ventricles open, and back here in the back of the brain where this was, you don't have that picture, but basically they were in this vicinity. I'm not going to mark up this book, but they were in this

vicinity here. See, this is supposed to be the skull, I presume, and you transect the--whether it's the spinal cord or the brain stem, whatever you want to call it, you do it at the foramen magnum, which is this space here, and you transect it at that point, and so then you're left with this. But you don't have this big fourth ventricle. So it's really hard to--they were in this vicinity here.

- Q Okay.
- A Just above where we transected the brain stem.
- Q Okay. Back to Exhibit 71, would it be fair to say that it is roughly in the portion right below the cerebellum?
- A Yes. The cerebellum was somewhat disrupted, as I recall, as well. But the photographs of the brain show it to you very clearly.
- Q Would you mind making a mark on this document? It can just be a point or a circle, if that's more accurate, and I can make a photocopy of the other diagram, if you would prefer, of just where you're understanding the laceration to be in the mid-brain.
- A It's really hard to do it from--very difficult to do from these kind of drawings. It's just they don't lend themselves to what you're trying to do, I'm sorry to tell you.

Q Would you be able to do a drawing yourself that would be--

- A No. I'm the world's worst artist. I tell you, if you'll forgive me for saying so, we're doing a lot of nitpicking here that I'm having difficulty with, you know. It doesn't lend itself to what you're trying to have me do.
- Q I'm just trying to understand where the laceration was or where the disruption was or--
- A Well, you're asking me to recall from memory, and I'm having a very difficult time with that, and I'm referring you to the photographs which we took of this part of the brain.

 I can't do that very well. I'm sorry. It's just I'm not that clever.
- Q What did you do with the brain when it was removed from the cranium?
- A Placed it in formalin. The blood vessels were somewhat disrupted. Normally we would inject the brain with formalin through the basal artery or some place. But some of these arteries were disrupted, and I can't recall--don't ask me exactly where the disruptions were. But the brain was damaged, and it didn't lend itself well to infusing it like we normally do. So we placed it in a very generous quantity

of 10 percent formalin in a, you know, specimen container.

- Q Was that a sealed container or some other--
- A It has a lid, but it's not sealed in the way a jar is sealed. It's like a pail, really, that you have a lid put on it. For the brain, for that, we use it routinely for that purpose. I don't think we were able to inject it. I don't believe that we were.
 - Q But a standard container --
 - A For brains, right.
 - Q For brains.
- A Sort of like a three-quarter gallon can. I don't know what the volume of it is, but you can put the brain in and totally immerse it in formalin.
 - Q Were any sections taken at all from the brain?
- A Not at that time. Some place else I showed you, the report you showed, we did take certain sections a day or two later, whatever it was, from the location--we didn't divide the brain like we often do. You know, we often make a so-called bread loaf-type incision. Some people do it fore and aft. Some people do it different ways. But we didn't do that with this brain, because the next thing you know George Burkley wanted it. We might have gone on to do that, but when he came and

said that they wanted the brain, fine, you know. I'm not going to argue about it.

- Q After the brain was removed, what was the next thing that you did in the autopsy?
- A The next thing we did was look at this wound that was in the back of the skull. It was obvious from both the point of entrance and inside the skull, and we examined that very carefully, measured it, took pictures of it.
- Q Did you identify a hole that you thought to be either an entrance or exit wound in the back of the cranium?
- A Definitely. Definitely. Entrance, there wasn't any question in our mind about it.
- Q Did the wound appear as something like a puncture in the bone, or was there a fragment of the bone that was missing and that there was an indentation?
- A No. It was directly beneath the scalp wound back there, directly beneath it. It was almost round, but a little bit more ovoid, and the inner margins of it were shelved. If we put a BB through that glass over there on the side where it went in, you'd see a little round hole, depending on the size of the missile. On the other side, you'd see shelved out, and that's exactly what we had.

Q And the whole circumference of the entry wound was visible without any reconstruction of the skull?

- A Oh, yeah, sure.
- O In which bone was the entrance wound?
- A Occipital bone.
- Q After you examined the occipital bone, what did you next do in the autopsy?
- A Well, we looked with care at the margins of the defect in the skull, and we found a similar situation where the bone fragments that were placed—that remained in place, halfway in place, were shelved on that outer table of the skull. And when we got the fragments from Dallas, they were similarly—we almost could complete the circle of what appeared to be the actual exit wound because it was shelved on the outer table, and we almost could put it all together, that wound. Not the defect, but the wound.
- Q So unlike the wound in the occipital bone, the wound towards the front, there was a nick or a half-circle or some such thing showing what you understood to be the exit, and you were able then to complete that wound when the fragments came?
- A When the fragments came, almost, because they're all flying around, you know. These fragments are--it's like, you

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know, working with clouds, because they were--you had to put them together with great care to make that out.

- Q Approximately how much time did you spend examining the cranium after the brain was removed?
- A Oh, you know, that's really hard to estimate. I would guess maybe 30, 45 minutes, something like that.
- Q Was there any other examination that you made of the cranium at that time?
- A Well, we looked with care at the whole interior surface of the skull to see if there were any other defects or what have you. There were no others. Of course, the one that was hard to evaluate, of course, was the exit, because it was all disrupted.
- Q Were there any fragments or breaks in the left hemisphere of the cranium, looking from the inside?
- A I can't recall how far over some of these fractures--whether they crossed the midline or not. I really can't recall.
- Q When you finished--or did you return to examine the cranium at any subsequent point during the autopsy?
 - A No.
 - Q What did you do next?

A Well, we looked at this wound in the upper part of his neck, and we made a customary Y-shaped incision to do the rest of the autopsy and removed the breast plate, which was standard operating procedure, and examined the inside of the thorax. And that's when we saw the contusion of the dome of the upper lobe of the right lung, and we wondered, Where's the bullet? You know. Should have called Dallas right then and there. It would have saved me a lot of worry and grief for several hours, because X-rays hadn't found it for us. Like it could have been in his thigh or it could have been in his buttock. It could have been any damn place. We don't know where it went. It was obvious after we talked to the doctors the next morning where it went. It went out. That's why we couldn't find it. And we weren't going to spend the rest of the night there, you know.

Meantime, George Burkley is telling me, you know, the family wants to get out of here sometime tonight. Then we proceeded with the dissection of the lungs, heart, and abdominal contents and so forth.

- Q Do you recall approximately where in the procedures that Dr. Finck arrived?
 - A Oh, pretty early. As soon as I saw the nature of

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the thing, before we did anything, I called Dr. Smith back and said, you know, send us this chap. I didn't know him. I had never laid eyes on him before. And so I would say around the time we were taking X-rays, photographs, or both.

- $\ensuremath{\mathtt{Q}}$ Was he--Dr. Finck--there at the time the cranium was being examined?
- A Oh, sure. He was there through the whole examination, basically. If he missed anything, it was when we were taking the preliminary photographs and stuff.
- Q Approximately how far through the examination did you first locate the wound on the posterior thorax?
- A Oh, right away. It was obvious. It was no secret. It was right there. But we directed our attention first to the wound that we were certain was the fatal wound, of course, the head wound.
- Q Were you aware of the posterior thorax wound at the time you lifted the body out, or was that--did you turn the body over?
- A We weren't aware of anything when we lifted the body out, but we understand in Dallas they never did turn him over.
- Q So when did you first turn the body over to see that wound?

A Oh, I can't--probably right away. As soon as we got him on the table, we probably--part of the external examination right away before we did anything.

- Q During the time that you were performing the autopsy, did you ever identify what you took to be the margin of a wound in the area of the trach incision?
 - A No.
- Q Approximately when during the autopsy did the fragments arrive, the skull fragments?
- A Oh, quite late. I couldn't tell you exactly what time, you know.
 - Q Was that after the Y incision had been performed?
- A Oh, yeah. It was quite late. I couldn't say. Maybe it was 10, 11 o'clock, 12 o'clock. I don't know what time it was.
- Q I believe you said earlier today that it was your recollection that there were three fragments that arrived.
- A I think so. The one quite sizable, and the other two a little smaller, considerably smaller. I think. I mean, I'd have to go back. You know, you're asking me something--you realize how long ago this was.
 - Q We appreciate that these are more than 30 years ago,

so we understand that.

A My wife tells me I can't remember what happened last week sometimes. Or this morning, as far as that goes.

MR. GUNN: Let's go off the record for a moment.

[Recess.]

MR. GUNN: We can go back on the record.

BY MR. GUNN:

Q Dr. Humes, I'd like to ask you some questions now about records that were created during the course of the autopsy and at any point through the time that the autopsy protocol was completed.

First, did you yourself take any notes during the autopsy?

- A Yes, I took some. And--yes. That's the answer to your question.
 - Q How many pages of notes did you take, approximately?
 - A Oh, I can't tell you now. Maybe two or three.
- Q Did you see anyone else taking notes during the autopsy?
 - A Dr. Boswell.
 - Q Do you recall anyone else having written anything?
 - A No.

Q Specifically, do you remember Dr. Finck having written any notes?

- A No, I do not. I don't say he didn't, but I don't recall that he did.
- Q Were autopsies tape-recorded at Bethesda in your experience?
- A Intermittently. We didn't record any of the session on this case.
 - Q On the case of President Kennedy?
 - A No.
 - Q Was the decision made not to record the autopsy?
- A I don't think any real thought was given to it, to tell you the truth.
 - Q Do you know how frequently autopsies were recorded?
- A No, I don't. We were just getting into the business of doing that. It's awkward to have equipment around the autopsy table and so forth, and we were really just starting to experiment with foot controls, devices, and so forth and so on. And so not often.
 - Q Were there any minutes taken of the autopsy?
- A I don't know what you mean by minutes, but other than the notes that I or Dr. Boswell made, I don't believe there

were any such, no.

- Q There wasn't any person responsible for--
- A No.
- Q --taking down minutes of the autopsy?
- A No.
- Q What other kinds of records were typically created in the course of an autopsy? For example, would there be any log that would have recorded the receipt of the body?
 - A Yes.
- Q With that example in mind, what other written records were created that would relate to the autopsy of President Kennedy?
- A That's about it. Everybody that came into the morgue was logged in and logged out when they left, and who picked it up, you know, the funeral home, most usually.
 - Q Were there logs for photos or X-rays?
 - A No. Not in the morgue, no.
- Q Were there any kinds of logs or record-keeping of what kinds of tests or sections were made?
- A Well, not really. You know, we made sections of most of the organs and put them in cassettes and turned them over to the technical people, and they processed them from there.

Q Is there any record-keeping process that's used to help identify which tests have been sent where and when they've been returned?

A Well, we didn't send many things anywhere, so far as that goes. I don't believe so, no.

We had a very elaborate laboratory. We had very little need to send anything anywheres.

- Q But would there be any paper that would keep track of where things were even within the laboratory at Bethesda?
- A Well, every--talking about autopsies, every autopsy was identified by a number, and every cassette that contained tissue specimens was labeled with that autopsy number. And there was a log in the histology laboratory that kept a record of all those things, sure.
- Q Would there be other similar logs for radiology or toxicology?
- A Toxicology was part of our lab, and yes, it would be. I can't speak for radiology. I'm sure they kept very good records of where their films were. Their biggest problem is people taking out films and failing to bring them back and so forth. It's a chronic problem in radiology departments around the world.

Q At the time in the ordinary course when you would prepare an autopsy protocol--and I'm not speaking now of President Kennedy--would you receive written reports back that analyzed the results of any examinations that had been performed?

A Yeah. Again, let me tell you that for most of the latter part of my career, I didn't personally do these kinds of things. The younger doctors did them under our supervision, and then they would write a report, and then we would critique the report with them and so forth. The name of one of the staff pathologists would be on the final report, but 99 percent of the effort was done by other people than the person who actually signed the report.

- Q How would those records be filed or kept in the ordinary course? I mean, for example, would there be a folder with the autopsy number on it with the serology report and the histology report--
 - A Right.
 - Q -- and other things --
- A Well, what you would do, you see, it was rare cases that you had to do toxicology at the autopsy room. The hospital was not a forensic science center. So we would abstract--most

of the patients that we autopsied died as a result of illness while they were hospitalized. So the person who did the autopsy would make what's called a clinical summary. He would abstract from the person's clinical record how long he was in the hospital, what was the main problem, what were the complications, what were the results of significant laboratory tests. And we used to try and teach them to have a diarrhea of thought and a constipation of words. That was one of my phrases that all my residents used to always kid about. Excess words were not helpful. That's what we--and the final report, different people do it--I worked in a hospital in Detroit for There we bound in a book by year every autopsy 19 vears. protocol. We weren't doing that at Bethesda when I was there. We'd just keep them in files, you know.

There's all kind of ways different people devise to keep records.

- Q What other kinds of records would you expect to find in a typical Bethesda autopsy protocol from 1963? If you pulled out a folder, what records would you expect to find in it?
- A The autopsy report, period, and this other information would be included. You wouldn't have other--you wouldn't have copies of the tests that were done, for instance.

That would have been abstracted and included in one final document.

- Q What would be done with the results of the tests if they're not kept in the folder?
 - A They'd go in the patient's file, in the clinical file.
- Q Do you know whether there was any other sort of file for President Kennedy at Bethesda?
 - A Not that I'm aware of.
- Q Now, I'm thinking back from memory and I may be wrong on this, but maybe you can help with this. Was President Kennedy ever treated at Bethesda while he was alive?
 - A I'm not sure. I just don't know.
- Q Do you know whether if he was treated there when he was alive, as well as while President, would any of the records from his autopsy conceivably have been sent to his patient file?
- A No. I don't believe so. Those records were all--you know where they are. They weren't sent anywhere, because they were all sent to the White House, within three days. Nothing was retained.
- Q Well, were there any histology reports at all that you ever physically held in your hand from President Kennedy's autopsy?

A The ones that are recorded in that supplemental autopsy report.

- Q There are references to that, but I'm now referring to any documents themselves. Did you ever see any documents?
- A No. I mean, we dictated them, and then the results were put in the file--in the supplementary report.
- Q What were you looking at at the time that you made the dictation of the results?
 - A The microscopic slides for the various--
 - O The slide tissue cells?
- A Oh, sure. All of which we turned over to the Secret Service. I presume they're in the Archives some place. I never saw them again.
- Q Could you explain or describe briefly the process that you went through in drafting the autopsy protocol? So explain the number of drafts that you wrote, for example.
- The decision was made somebody had to take responsibility to write it. We couldn't do it as a troika. So I took the notes home with me, these, I presume, and the notes that I had made, some of which I had made were stained with the President's blood. I wrote a little bit about this in that AMA article.

Around that time, we had in the government what was called the People to People Program, and the Navy Medical Department's part of that was to bring medical officers from foreign countries to the United States to teach them how the Navy Medical Department functions with the Marine Corps, with the submarines and so forth. These people would be in Washington for 10 weeks. Five weeks they would visit activities in the metropolitan Washington area, and five weeks they would go on field trips. They would go to New London, Connecticut. They'd go to Camp Lejeune, North Carolina. They'd go to Pensacola, Florida, all kind of places, Great Lakes Naval Training Center.

I occasionally was asked to be an escort for these people. There'd be 18 to 20, 25 doctors from foreign countries. Sometimes we had Greeks and Turks at the same time, for instance. They weren't always the greatest plans in the world, I tell you. But you would escort these guys around. You'd get them on airplanes. You'd get them in buses. It was a real—it was real interesting.

On one trip, we took them to Pittsburgh to show them industrial medicine at steel mills and the medical department of a steel mill. We took them to Detroit and took them to the

Ford Motor Company so they could see how the medical department of a large car company functioned.

While there this particular trip, we took them to Greenfield Village. I don't know if any of you have been to Greenfield Village. It's a very fascinating place where Henry Ford acquired all sorts of buildings and structures from around the United States, and in Europe, to some extent, and had them physically moved to Detroit. For instance, Edison's Menlo Park Laboratory was totally taken apart and brought to Greenfield Village, including the trash pile that was in the back yard.

Also in Greenfield Village, there is an old Illinois courthouse where Lincoln used to preside when he was circuit-riding judge. And in that courthouse was a chair that was alleged to be the chair in which Lincoln sat when he was assassinated in Ford's Theater. And the docent, in describing this chair, proudly spoke that here on the back of the chair is the stain of the President's blood. The bullet went through his head. I thought this was the most macabre thing I ever saw in my life. It just made a terrible impression on me.

And when I noticed that these bloodstains were on this document that I had prepared, I said nobody's going to ever get these documents. I'm not going to keep them, and nobody

else is ever going to get them.

So I copied them--and you probably have a copy in my longhand of what I wrote. It's made from the original.

And I then burned the original notes in the fireplace of my family room to prevent them from ever falling into the hands of what I consider inappropriate people.

And there's been a lot of flack about this, that they're all part of a big conspiracy that I did this because I was involved in I don't know what I was involved. Ludicrous.

That is what I did.

- Q When you made reference to the notes that you copied out, were you referring to the document that's marked Exhibit 2, or is that something different?
- A Now, this is the product of--yeah. It's the product of those notes.
- Q The question would be whether there were notes that you copied down as one document and then you used the notes in order to draft the document that's in your hand.
 - A The only thing that was retained was this.
 - O Exhibit 2?
 - A Right.
 - Q Now, I presume that the notes that you took during

the autopsy did not resemble in any way the document that you have in your hand now, Exhibit 2.

- A Well, they did, yes. I mean, I didn't dream this up out of whole cloth.
- Q Certainly I understand the content, but I'm just referring to the text that is written in Exhibit 2 tracks reasonably closely the language of the final report. And what I'm interested in is what the two to three pages of notes looked like.
- A I can't recall. I mean, I--they would have been my shorthand version of what you're looking at here, basically, in my own shorthand manner, whatever it may have been.
- Q You would agree, I assume, that the document you're holding in your hand, Exhibit 2, is a basically completed autopsy protocol that tracks the language of the final autopsy protocol that's Exhibit 1?
 - A Yes.
- ${\tt Q}$ $\,$ And I assume that the notes that you made while you were at Bethesda during the autopsy were not written in sentence and paragraph form.
 - A No. They were shorthand.
 - Q So what kinds of things, then, were written on it?

Measurements?

A Measurements, yeah, sure. Primarily measurements.

That's where these measurements came from.

- Q So when you drafted--well, first, was there any other draft of the autopsy protocol other than the one that you're holding in your hand now--
 - A No.
 - Q = -Exhibit 2?
 - A No. There was not.
- Q So when you wrote down the information--well, when you were drafting what is now Exhibit 2, would it be fair to say that you had in your hand two or three pages, approximately--
 - A Right.
 - O -- of handwritten notes --
- A $\,$ And I converted the shorthand information there to that document.
- Q When you say "that document," you're referring to Exhibit 2?
 - A Yes, exactly.
- Q Was there any information that was contained on the handwritten notes that was not included in the document that's now Exhibit 2--

- A I don't believe so.
- Q Did you ever make a copy that—a copy of the notes that contained the same information as was on the original handwritten notes that was in any form other than the form that appears in Exhibit 2?
 - A No.
- Q Have you ever observed that the document now marked Exhibit 1 in the original appears to have bloodstains on it as well?
- A Yes, I do notice it now. These were J's. I'm sure I gave these back to J. I presume I did. I don't know where they came from.
- Q Did you ever have any concern about the President's blood being on the document that's now marked Exhibit 1?
 - A I can't recall, to tell you the truth.
- Q Do you see any inconsistency at all between destroying some handwritten notes that contained blood on them but preserving other handwritten notes that also had blood on them?
- A Well, only that the others were of my own making.

 I didn't--wouldn't have the habit of destroying something

 someone else prepared. That's the only difference that I can

 conceive of. I don't know where these went. I don't know if

they went back to J or where they went. I have no idea. I certainly didn't keep them. I kept nothing, as a matter of fact.

- Q I'd like to show you the testimony that you offered before the Warren Commission. This is in Exhibit 11 to this deposition. I'd like you to take a look at pages 372 to the top of 373, and then I'll ask you a question.
 - A All right.
- Q I'll read that into that record while you're reading it yourself. Mr. Specter asked the question: "And what do those consist of?" The question is referring to some notes.

 "Answer: In privacy of my own home, early in the morning of Sunday, November 24, I made a draft of this report, which I later revised and of which this represents the revision. That draft I personally burned in the fireplace of my recreation room."

Do you see Mr. Specter's question and your answer?

- A Yes.
- Q Does that help refresh your recollection of what was burned in your home?
- A Whatever I had, as far as I know, that was burned was everything exclusive of the finished draft that you have

as Exhibit -- whatever it is.

Q My question will go to the issue of whether it was a draft of the report that was burned or whether it was--

- A I think it was--
- O --handwritten notes--
- Q Do you mean to use the expression handwritten notes as being the equivalent of draft of the report?
- A I don't know. Again, it's a hair-splitting affair that I can't understand. Everything that I personally prepared until I got to the status of the handwritten document that later was transcribed was destroyed. You can call it anything you want, whether it was the notes or what, I don't know. But whatever I had, I didn't want anything else to remain, period.

This business, I don't know when J got that back or what.

- Q When you say "this business," you're referring to Exhibit 1?
 - A Exhibit 1, right.
- Q Dr. Humes, let me show you part of your testimony to the HSCA. Question by Mr. Cornwell--I'll read this into

the record. It's from page 330, and it is Exhibit 21 to this deposition.

"Mr. Cornwell: And you finally began to write the autopsy report at what time?"

"Dr. Humes: It was decided that three people couldn't write the report simultaneously, so I assumed the responsibility for writing the report, which I began about 11 o'clock in the evening of Saturday November 23rd, having wrestled with it for four or five, six hours in the afternoon, and worked on it until 3 or 4 o'clock in the morning of Sunday, the 24th."

"Mr. Cornwell: Did you have any notes or records at that point as to the exact location of the--"

"Dr. Humes: I had the draft notes which we had prepared in the autopsy room, which I copied."

Now, again, the question would be: Did you copy the notes so that you would have a version of the notes without the blood on them but still notes rather than a draft report?

- A Yes, precisely. Yes. And from that I made a first draft, and then I destroyed the first draft and the notes.
- Q So there were, then, two sorts of documents that were burned: one, the draft notes, and, two, a draft report?

- A Right.
- Q Is that correct?

A That's right. So that the only thing remaining was the one that you have.

Q Why did you burn the draft report as opposed to the draft notes?

A I don't recall. I don't know. There was no reason--see, we're splitting hairs here, and I'll tell you, it's getting to me a little bit, as you may be able to detect. The only thing I wanted to finish to hand over to whomever, in this case Admiral Burkley, was my completed version. So I burned everything else. Now, why I didn't burn the thing that J wrote, I have no way of knowing. But whether it was a draft or whether it was the notes or what, I don't know. There was nothing left when I got finished with it, in any event, but the thing that you now have, period.

Q Well, the concern, of course, is if there is a record related to the autopsy that is destroyed, we're interested in finding out what the exact circumstances--

A I've told you what the circumstances were. I used it only as an aide-memoire to do what I was doing and then destroyed it. Is that hard to understand?

Q When I first asked the question, you explained that the reason that you had destroyed it was that it had the blood of the President on it.

- A Right.
- $\ensuremath{\mathtt{Q}}$ The draft report, of course, would not have had the blood of--
- A Well, it may have had errors in spelling or I don't know what was the matter with it, or whether I even ever did that. I don't know. I can't recall. I absolutely can't recall, and I apologize for that. But that's the way the cookie crumbles. I didn't want anything to remain that some squirrel would grab on and make whatever use that they might. Now, whether you felt that was reasonable or not, I don't know. But it doesn't make any difference because that was my decision and mine alone. Nobody else's.
 - Q Did you talk to anyone about your decision to--
- A No, absolutely not. No. It was my own materials. Why--I don't feel a need to talk to anybody about it.
- Q Did the original notes that you created have any information with respect to the estimated angle in which the bullet struck the President?
 - A Nothing different than what's in the final version.

Q Did the original notes that you took identify the location of the posterior thorax entrance wound with respect to which of the vertebra of the President the wound was closest to?

- A No. The measurements were taken from bony landmarks.

 As I recall, one was a mastoid process, the bottom of the-behind the ear, and the other was a midline of the vertebral column, not how many vertebrae down it was. So the up-and-down measurement would be the distance from the mastoid process down.
- Q When you recorded it a being from the right mastoid process, was it your understanding that the right mastoid process was a fixed body landmark?
 - A Oh, sure. It doesn't move around in most people. You're really in trouble if it does.
- Q Well, is it a fixed landmark, fixed body landmark with respect to the thoracic cavity?
- A It's fixed with regard to respect anything you want it respected to.
- Q Well, if your head turns to the right or to the left, does the mastoid process distance vary with relationship to--
 - A Well, maybe a millimeter or two. Not significantly.

 Are we getting into a big debate as to whether I did

anything properly here or not? It's not a debate I want to get involved in.

- Q I'd like to show you a document that's marked Exhibit 6, which appears on its face to be a death certificate for President John F. Kennedy, signed by George Gregory Burkley on November 23, 1963?
 - A Right. Never saw it before.
 - Q You've never seen Exhibit 6 before?
 - A No, sir.
- Q I'd like to draw your attention to the first sentence of text on the second page and ask if you would read that, please.

[Pause.]

THE WITNESS: He's sort of mixing his metaphors.

He's mixing the wounds up in here, but I presume when he says

the wound was shattering type, it's the wound of the skull.

BY MR. GUNN:

- Q You're welcome to read as much as you would prefer.
- A Whatever.
- $\ensuremath{\mathtt{Q}}$ It's just I have a question for you on the first sentence only.
 - A Okay.
 - Q You see that Dr. Burkley identifies the posterior

back at about the level of the third thoracic vertebra. Do you see that?

- A Yes.
- Q Was that correct?
- I don't know. I didn't measure from which vertebra it was. It's sometimes hard to decide which vertebra, to tell you the truth, by palpation. Maybe you can do it accurately because the first and second—did I say the third? Oh, he says third thoracic. I think that's much lower than it actually was. I think it's much lower than it actually—you have seven cervical vertebrae. I don't know. I mean, he's got a right to say anything he wants, but I never saw it before, and I don't have an opinion about it.
 - Q Did you ever discuss which vertebra--
- A I never discussed anything about it with George Burkley, period, or anybody else.

I mean, with all due respect, you seem to have come to me from left field. You know, I just--they're not things of which I'm aware.

The measurements I made, as far as I'm concerned, were accurate. You could debate whether they were wise choices to be made or not, but they were accurate.

Q When did you sign the autopsy protocol that is now marked Exhibit 3?

- A Late Sunday afternoon.
- Q Where was it that you signed it?
- A In Admiral Galloway's office. His personal--it was decided his secretary was an appropriate person to--she normally wouldn't do this work for me at all because I had my own people.

 But I guess he felt that it was--she was a good person to do it. That's all. It didn't make a difference to me who did it. It was a mechanical chore, as far as I was concerned.
- ${\tt Q}$ $\,$ Who else was in the office at the time that you signed the protocol?
 - A Pierre and J.
 - Q And they were the only two others there?
 - A Mm-hmm.
- $\ensuremath{\mathtt{Q}}$ Was anyone in the room immediately next to where you were?
- A Admiral Galloway was in and out that afternoon. I don't know if he was there or not at that point, to tell you the truth.
- Q Was he waiting for you to sign the document, or you were just in his office?

A I can't tell you what he was doing there. When we were working on it, we made some minor changes in it. He came in and told us that Ruby shot Oswald, which was the shock of the day, of course. And I don't know how long he stayed, to tell you the truth. I don't know if he was there when I left or not.

- Q Did anyone at any point, other than Drs. Finck and Boswell, make any suggestions to you about the content of the autopsy report?
- A It seems to me that Admiral Galloway made some comments, but I don't recall precisely what they were, because he was there while we were doing it.
- Q Did he ask you to make any changes in the autopsy protocol?
 - A I don't think so.
- Q Did he ask you to make any changes that would be of any substantive importance?
- A Certainly not. I think he made a suggestion--and it wasn't a bad one--to insert the word "presumably" a couple of times, because they were presumptions. We didn't know who shot who or anything about it, you know. But our conclusions were that this was probably the entrance wound, this was probably

the exit wound. I think he thought—he said it would be wise to use that verbiage, and I didn't have any problem. That's the only suggestion I recall he made.

- Q After you signed the autopsy protocol, what did you do with it physically yourself?
- A $\mbox{Physically, got a staff car and carried it to the }$ White $\mbox{House.}$
 - Q How many did you take to the White House?
- A I think the original and six, it says. I mean, I don't keep that number in my mind, but whatever it was.
 - Q Original and a few copies?
- A Leaving one in Admiral Galloway's office, which was subsequently taken there.
 - Q Okay. And was there more than one signed original?
 - A No.
- Q Was there any draft protocol that you had written prior to that time that had been signed?
 - A Nothing other than what you have.
 - Q So the one we have is the only signed protocol?
 - A Yes, sir.
- Q After you signed the protocol and delivered it to Admiral Burkley in the White House, what was the next thing

that you did that had connection with the autopsy or supplemental reports of the--

- A I presume when we got the micro slides processed, which was, I don't know, Monday or Tuesday, or some day at the beginning of the week. Reviewing those and writing the report that was the supplementary report.
- Q Earlier in the deposition today, you made reference to a sectioning of the brain, if I understood correctly, that took place one or two days afterwards.
 - A Yeah.
 - Q Did that happen within one or two days after?
 - A Yes. Shortly after. I can't tell you what day now.
- Q If Dr. Boswell and Mr. Stringer said that it took place two or two to three days afterwards, would that make sense to you?
 - A I have no--yeah, could well be.
- Q What did you do in the course of the examination of the brain that took place shortly after?
- A We took photographs of the separated--now we have the brain in a pail, and removed it from there, took photographs from both above and below, and took these representative sections that we mentioned there.

- Q Was the brain fixed by that time?
- A Yes. Pretty well fixed.
- Q Approximately how much time did you spend on that examination of the brain?
- A Oh, I don't know. I would say an hour or two, something like that.
 - Q Where did that examination take place?
- A In the laboratory, the main laboratories of the hospital, medical school.
- Q Are you able to connect in time the difference in time between the time that you delivered the autopsy protocol to Admiral Burkley and the time that you examined the brain?
- A I just said earlier it took, you know--I don't know--a couple of days, two or three days. I don't know exactly how long.
- $\ensuremath{\mathtt{Q}}$ Was that a couple of days after the November 22nd autopsy?
- A A couple of days after Sunday, after they were delivered. I don't know. In that week some day. I don't really know. It didn't seem to be important to me at the time, and still doesn't, quite candidly.
 - You suggested earlier that--and this is also true

that it also appears in the JAMA article--that Dr. Burkley suggested to you that the Kennedy family wanted to inter the brain with the President.

A He wasn't suggesting. He told me flat out that the decision has been made and that Robert Kennedy was their emissary and he was going to take the brain and deliver it to Robert Kennedy.

- Q Did you ask or wonder how they would be able to inter the brain if the President had already been buried?
 - A No. I didn't worry about it one way or the other.

I would presume that they could devise a method of doing that without too much difficulty, however.

Q I'll show you a document that I believe you have seen before, earlier in the deposition, No. 19, which is a memorandum by Andy Purdy to the file dated August 17, 1977, which contains his notes from interviewing Dr. Burkley. I'd like you to take a look at the paragraph in the center of page 5.

Let me read it for the record, and then I'd like to get your response to it. Within the paragraph, Mr. Purdy, reporting on his conversation with Dr. Burkley, says, "Says he"--referring to Dr. Burkley--"was responsible for saving the brain after it was fixed in formalin. Burkley decided to keep

the brain rather than put it back in the body, as $\mbox{Dr. Humes}$ wanted to do."

Is that accurate?

A That's absolutely false. I don't know where he got these ideas. I never put a brain back in a body in my life. Hundreds and hundreds of autopsies that I've done, and I certainly wouldn't put this one back in the body. It's ridiculous. And he had nothing to do with it. Not a thing.

God, that really--I can't believe some of this stuff.

George is a fine man. I have great respect for him as a physician. But this must have spun his wheels or something.

I don't know what happened, but he--this absolutely did not happen. I wouldn't dream of it.

It's just annoying as the devil--forgive me, but it is. And I say, I've never seen this document before. Just as well, because I'd just have been annoyed for longer if I had. It makes no sense.

Q At the time the interview was conducted, the House Select Committee on Assassinations was attempting to determine the location of the President's brain, and there was evidence that Admiral Burkley had been in possession of the brain at one point.

- A Yes.
- Q And so they were pursuing that question with him, and so the context is they are trying to find out where it is.
- A They're not going to find any help from me. I handed it to George Burkley, and that was the end of that.
- Q In this statement, he does not make reference to wanting to inter it with the body of the President.
- A All I can tell you is that's what he told me. Now, whether that was true or not, I have no way of knowing. That's what he told me, and I'm reporting it factually, period. It didn't bother me one way or the other. It seemed to me that that was perfectly appropriate. And how they were going to do it, you know, that was no big problem, I don't think.

And there's a mention in that thing of two bullets.

I don't know what he's talking about. I mean, it's--makes
no sense. The whole thing makes no sense. This was what, '77
you say?

- Q Yes.
- A That was then 14 years after the event. I don't know how old George was at that point. I'm not sure.
- Q After the examination of the brain and the review of the sections, what was the next thing that you did in

preparation for the supplementary autopsy report?

A I presume I examined the sections of the various organs that we had had caused then to be made.

- Q Do you have a recollection as to approximately how long after the autopsy that was done?
- A It was just two or three days. The technicians worked very assiduously and got them to us relatively quickly.

What's the date on the delivery of the supplementary report?

Q There's no date originally on the report. It's not dated. There's a handwritten date that's written elsewhere on it.

What's your best recollection as to when the supplementary--

- A Before the end of the week, I would guess.
- Q So if the assassination was on the 22nd, on a Friday, does that mean approximately—and I understand we're dealing approximately here—
- A By the end of the following week, the 29th, or whatever, the 30th.
- Q Did you personally deliver to Admiral Burkley the brain?

- A Yes.
- Q Did you receive a receipt for that?

A If I did, I no longer have it. I don't recall, quite candidly. I do not have it. I've been through all the papers that I have. I do not have it. So I can't tell you whether I did or didn't.

- Q We have not been able to locate any receipt of that sort through all of the records. Do you have any idea where a copy of that receipt might be?
- A I don't think there ever was one. I don't think there ever was one.
- Q In addition to the brain and the sections, was there any other biological matter that was given to Dr. Burkley--
 - A No.
 - Q --by you?
- A No. Well, the blocks, the paraffin blocks from which the sections were made, yeah.
- Q Did you deliver those to Admiral Burkley in the White House, or did he come--
- A No, I think he came out. I did not take them to the White House. That I do know.
 - Q Do you have a recollection of the approximate timing

of when he came out to pick up those?

A I can't recall. I don't know when.

Q Do you know whether it was before or after the supplementary report was completed?

A Oh, it had to be after that, but I don't recall when.

Q What we would like to do at this point is bring in some of the autopsy photos, and I'd like to ask you some questions about those.

A Sure.

MR. GUNN: We'll take a short break.

[Recess].

MR. GUNN: We can go back on the record. I will state that we have now been joined by Steve Tilly and Martha Murphy of the National Archives, and we are now examining the original autopsy photos.

I will state for the record that the first set of photos that Dr. Humes is looking at are in the series that are described in the November 10, 1966, inspection as "left side of head and shoulders," and they are photos number--black and white photo Nos. 1, 2, 3, and 4, and color photos Nos. 29, 30, and 31.

BY MR. GUNN:

Q The first question for you, Dr. Humes: Are these the photos that you previously have identified as being the autopsy photos of President Kennedy?

- A Yes, sir.
- Q Earlier in the deposition, I asked you about whether there were any procedures that were taken on President Kennedy before the photos were taken, and it was my understanding that you said that there had been no cleaning and no incisions made.
 - A Correct.
- Q Would that be true for the photos that you're looking at right now?
 - A Yes.
 - Q Dr. Humes--
- A Other than as you remove the dressing from the head, it's possible that coming off with some of the gauze that was there, some of the blood might have been removed. But it wasn't a deliberate attempt to clean it up.
- Q Sure. No cleaning, no combing of the hair or anything of that sort?
 - A No. No, no, no, no.
- Q The side that you're looking at is the left profile; is that correct?

- A Correct.
- Q Do you see or do you recall having seen any lacerations on the left side of the skull?
 - A No.
- Q Did you at any point during the autopsy, presumably after these photos were taken, make any incisions on the left side of the--
- A Other than when we went to remove the brain, the coronal incision would have come down to above the left ear.
- Q Okay. Could we now look at what we're identifying as the second view, which was identified as the "right side of head and right shoulder"? And for the record, those are black and white Nos. 5 and 6. and color Nos. 26, 27, and 28.
- Dr. Humes, do you recognize these as being the original and authentic autopsy photos of President Kennedy?
 - A Yes, sir.
- Q I'd like you to look at the object that looks somewhat triangular right over the right eye of President Kennedy. Do you see that triangular mark?
 - A Yes.
- Q Was that triangular mark made by any incision that was caused at Bethesda?

- A No.
- Q Can you identify or explain whether anything on that triangle appears to have been a surgical incision?
- A No. I think it's a result of the disruptive missile that left the President's skull in that vicinity.
- Q Immediately above the right ear is a somewhat triangular but not exactly triangular-shaped object. Can you explain what that object is?
 - A That's a flap of skin that's turned back.
- ${\tt Q}\,$ $\,$ And is it turned back from the front towards the back of the head--
- A Towards the bottom of the hair. It would approximate here if you put the two of them together, if it comes down like that, I would think.
- ${\tt Q}$ $\,$ So a flap that is coming down towards the ear; is that correct?
 - A Yes. With the hair behind it, you see.
- Q In the area above the left eye--and this is back to the triangle that I mentioned before--there is a white object that is, appears to be perpendicular on two sides and somewhat rounded on the other side. Do you see that?
 - A A piece of skull.

Q Is that broken skull or is that--are you able to tell?

- A Am I able to tell what?
- Q Is that skull intact within the cranium, or is that a piece that has broken out?
 - A No, I think it's still fixed at its base.
- ${\tt Q}$ Okay. And right opposite that to the left, there is a sharp line almost creating another ${\tt V}.$
 - A Right.
- Q Can you identify what that object is immediately to the left?
- A Another piece of skull. I don't think there's any question about it.
- Q And is that piece of skull intact, or is that piece broken off?
 - A No, I think it's fixed inferiorally.
- Q Near the top of the President's head, there is matter that is extruding. What is that matter?
 - A That's scalp reflected that way.
- Q Does that consist of any brain tissue, or is that entirely scalp, as best you can tell?
 - A I think it's just scalp.
 - Q Do you see in this photograph or these photographs

any brain tissue at all?

- A Not that I can identify, no.
- Q If we could go now to the next view, which we will call No. 3, No. 3 consists of photographs described as "superior view of head," which correspond to black and white photo Nos. 7, 8, 9, and 10, and to color photographs 32, 33, 34, 35, 36, and 37.

Dr. Humes, do those photographs appear to be authentic autopsy photos--

- A Yes, sir.
- Q --of President Kennedy?
- A Mm-hmm.
- Q Do you have any reason to doubt their authenticity?
- A None whatever.
- Q Dr. Humes, do you see any brain tissue extruding from the wounds of President Kennedy in those photos?
 - A I regret that they're not more sharp than they are.
- Q When you're saying "sharp," you're referring to the focus?
- A Yeah. I can't be absolutely certain whether there's brain at the base of this or it's just all scalp that we've reflected off, because the superior surface of the brain, other

than off to the one side, was pretty much intact, as you see--you got the brain pictures some place? Because you'll see that.

So I don't really think that that's brain, no. I don't think so.

- Q I note along the left of the midline there appears to be a rather sharp or straight--not exactly straight--line. Can you--
 - A Scalp folded back.
 - Q Is that the result of a surgical incision?
 - A No. Heavens, no.
- Q Did you pull the scalp back at all in order to be able to have a better view of the injury?
 - A Yes, I probably did.
 - Q Was the hair combed in any way to help make--
 - A No. The hair was not disturbed in any way.
- Q Would it be fair to say that this photograph was taken before the Y incision was performed?
 - A Oh, sure.
- Q And you can see on the chest that the Y incision has not been performed--
 - A Right.
 - Q --is that correct?

A Like I told you, we directed our attention to the head wound first before we did it.

- Q Previously, I showed to you a line that goes what appears to be along the edge of the scalp. I'd like you to look at another lines that appears to go right down the middle almost of the parasagittal sinus. Do you see that line?
- A Yeah, but I think you're making more of it than there is. I think that's just where the skin fold was laid back.
 - Q Is there a break in the skull at that point?
- A I'm not sure. I would guess that it well may be, but I can't see it in the scalp at this point.
- Q I'd like you to look at the object that appears very roughly over where the right ear would be. Do you see that?
 - A Are you talking about this dark-colored material?
 - Q It is a--
- A That's a piece of bone there. That's a piece of bone,

 I think. That's the edge of one of the--that's the edge of

 the wound. It corresponds with that V-shaped thing you saw

 in the picture before where you had those fragments. That's

 one of them.
 - Q Okay. And you're pointing now at a line that goes--
 - A Not the whole line. Just this piece right here.

This is bone.

- Q Sure. The margin of--the left margin of the bone?
- A Yeah, right.
- Q And that corresponds with the V in the--
- A I think so, with part of those two pieces that you saw from the lateral view.
- Q And the two pieces that you're referring to have to do with the bone and not the V that was over the forehead in the scalp?
- A Vover the forehead? I don't know what you're talking about now. This is a piece of the skull, I do believe, you see. In that picture, you had two pieces. You only see one of them well here.
- Q I just want to make sure that we can identify this. If a person were looking at photo, looking at it from the right of the photo, it would be probably the first piece of skull that one would see coming from the right.
 - A Yeah. I think this--
- Q We need to make this clear on the record when you're pointing to this. So when you say "this," you're referring to View No. 3.
 - A Right.

Q Corresponding--and the piece of bone that is in the far right on View No. 3 corresponding to the piece that is approximately in the very center of the photograph in View 2.

- A Correct.
- O Is that correct?
- A That's correct, in my opinion.
- Q If we could turn to View 4, please? View 4 has been described as "the posterior view of wound of entrance of missile high in shoulder," and it corresponds to black and white photo Nos. 11 and 12 and color photos Nos. 38 and 39.

Dr. Humes, do those photographs appear to be the original and authentic photographs from the autopsy of President Kennedy?

- A Yes.
- Q Prior to the time that the photographs in View 5 were taken, was there any cleaning of the hair or scalp of President Kennedy?
- A It looks like there might have been. I can't recall specifically. There was probably still some blood involved there. We may have cleaned that off slightly. I don't recall.
- Q When you said "there," you were pointing at the bottom of the hairline; is that correct?

- A Yes.
- Q Dr. Humes, could you explain why the ruler or the measuring device is in that photograph?
 - A Just to record visually the size of the wound.
- Q Is the measuring device designed in this particular photograph to show the relationship to any other landmark in the body?
- A It looks like it may be down the middle of the spinal column, but I can't be sure that that was the intent. It may well have been, and it looks like it might--I don't know. It's a little crooked. It seems to go like so, so I can't say. It may have been lined up along the vertebral--the spine of the vertebrae, but I can't be sure.
- Q Were there any other injuries on the back of President Kennedy other than those that are exposed to--
- A Well, you say those. I don't know what this little dot down below is.
- Q Let's take them one at a time. There is one mark that appears to be high at approximately the second-centimeter line.
 - A Yes.
 - Q Is that the wound that you were identifying as the

wound of entry?

- A Yes, sir.
- Q And when you were referring to the mark somewhat below, you were referring to something at approximately the six-centimeter mark?
- A Yeah, I don't know what that is. A little drop of blood or what, I have no idea.
 - Q Was there more than one wound of entry--
 - A No, there was not.
- Q And you're reasonably confident that the wound of entry is the one that is at the higher--
 - A Yes, sir, I am.
 - Q Is that correct?
 - A Yes, sir.
- Q I'd like to show you a photographic enlargement of one portion of this photograph that was reprinted by the House Select Committee on Assassinations as Figure 5. It is marked as Exhibit MI 3. It comes from Volume 7 of the HSCA report at page 86. I'd like to ask you whether you can independently correlate the wound as enlarged on Exhibit MI 3 with the wound that you have described as the entry wound on photograph--
 - A I really can't. I don't have any way of knowing what

this would look like when magnified to that extent. I don't know. Could be, but I have no firm opinion about it.

It seems distorted to me, that particular view.

- Q When you're saying "distorted," you're referring to Exhibit MI 3?
 - A Yes.
- Q Can you identify an abrasion collar on the wound on View 5?
 - A Not with certainty.
- ${\tt Q}\,$ Did you ever identify an abrasion collar on the wound on the posterior thorax?
 - A I don't remember, to be perfectly candid.
 - Q Was a section taken of the posterior thorax wound?
 - A I believe so.
- Q Dr. Humes, I've put before you a drawing from Grant's Anatomy that shows the posterior portion of a human skull.

 Do you see that?
 - A Yes.
 - Q Where the occipital bone is identified?
 - A Mm-hmm.
- Q I'd like to mark this document as Exhibit 72. I'd like to ask you now, Dr. Humes, if you can tell me where there

were any missing pieces of skull on the back of President

Kennedy's head, if there were any, that can be seen within the--

- A I'm confused by this drawing. What is this? Is that the teeth?
 - Q Yes. That's from the--
- A This is a funny--it's a strange way to depict the posterior portion of the skull, is all I can tell you. There was no significance. It was just a hole. But it was further down, you see. It wasn't way up here.
 - Q I note here is the external occipital protuberance.
 - A Yes.
- Q Sir, could you show me first on Exhibit 72 where the wound was, approximately, in relationship to--
- A Not without referring to my notes. I don't have that number in my mind. Or referring to the report that you have, the autopsy report.
- Q Okay. Let me try another question. Can you describe generally where there was any missing bone from the posterior portion, to the best of your recollection?
- A There basically wasn't any. It was just a hole. Not a significant missing bone.
 - Q So a puncture hole--

- A Puncture hole.
- Q And no bone missing--
- A No.
- Q --anywhere in the occipital--
- A No, no. Unless maybe--you know, these drawings are always strange. Unless the part of this wound extended that far back. I don't think it did, really. Most of it was parietal temporal.
- Q So on the scalp of President Kennedy here, still in View No. 5, that underneath the scalp the bone was all intact with the exception of the puncture wound--
 - A Yeah.
 - Q --and perhaps some fragment--
 - A In the back of the skull, back, yes, sir.
- Q Okay. So all of the skull that is within the range in Photograph 5 would have been in place, though there may be fractures in it and there would be a puncture hole? Other than that, that view shows--
- A But it's a guessing game, you see. The head seems to be retroflexed a little bit. You know, it's--to get me to say what's under here or under here, I can't do that.
 - Q Could we now look at the sixth view? Excuse me, the

fifth view.

[Pause.]

MR. GUNN: The photographs that Dr. Humes is now being shown have been described as "wound of entrance in right posterior"--let me withdraw that. Off the record for a moment.

[Discussion off the record.]

MR. GUNN: Okay. We are now on the fifth view, which corresponds to black and white Nos. 13 and 14 and color Nos. 40 and 41, with the description being the "right anterior view of head and upper torso, including tracheotomy wound."

BY MR. GUNN:

- Q Dr. Humes, do those photographs appear to be the original and authentic photographs from the autopsy of President Kennedy?
 - A Yes, sir.
- Q Do the eyes of President Kennedy appear to be open in these photographs?
 - A Yes.
- Q Were the eyes, in fact, open during the autopsy, do you recall?
 - A The picture shows me that they were.
 - Q If other photographs did not have the eyes open, would

you be able to explain the difference in that appearance?

- A I don't know. I might, I guess. I don't know.
- Q Does that help at all explain the timing in which the photographs may have been taken?
 - A No. It may have been, but the timing...
- Q In the second view, we were looking at a triangle that was slightly above the left eye. Do you see that triangle in this same photo?
 - A Yeah, I see it in the--yeah, I see it in both of them.
- Q As far as you can tell, that would be the same triangle that was identified previously?
 - A I think so.
- Q And there is what appears to be a flap that is immediately above the left--or above the right ear?
 - A Yes.
- $\ensuremath{\mathtt{Q}}$. Is that flap the same flap that you noted in View No. 2?
 - A I think so.
- Q Do you see the tracheotomy wound in President Kennedy's neck?
 - A Yes, sir.
 - Q Did you take any action at Bethesda that increased

the size of the tracheotomy?

A I don't think so. I don't believe so. We didn't need to. It was wide open.

- Q Is that how the wound appeared to you when you saw the body of President Kennedy?
 - A Yes, sir.
 - Q You don't notice any difference in size?
- A No. The thing is that when we first——I think we noticed this when we first saw these pictures. There's a suggestion at the inferior margin of this wound that might be a portion of the actual missile exit, a little notch, what looks like a notch there.
 - Q So you're referring to a notch at the bottom of--
 - A Of the incision.
 - Q Of the incision.
 - A Mm-hmm.
- Q I'm showing you a document now that's marked MI Exhibit 6, which also is taken from a reproduction of the House Select Committee on Assassinations. Are you able to correlate the blow-ups in MI 6 with the photographs in View No. 5?
- A Well, I guess so. My problem is they get distorted when they blow up like this, you know. But it's certainly not

unlikely that that's a--you know.

Q In the bottom photograph in MI 6, there's something labeled Figure 9, and I see at the bottom of that photograph there is a somewhat niched figure.

- A Right.
- Q Does that seem to correspond to some extent with the niche that you had noted?
 - A Yes, I think it does. Yes.
- Q Okay. Could we go to the sixth view, please? View 6 was described as "wound of entrance in right posterior occipital region," and it corresponds to black and white Nos. 15 and 16 and color Nos. 42 and 43.

Dr. Humes, do you recognize the photos before you now as being original and authentic photographs from the autopsy of President Kennedy?

- A I presume they are.
- Q Is there any question in your mind?
- A No, not really. No. They are.
- Q I'd like to show you documents marked MI 5, MI 1, and MI 2 and ask you whether those photographs which were reproduced by the House Select Committee on Assassinations appear to correspond to the photograph in your hand, noting

that MI 5 is a drawing and not a photograph. My question is just whether this seems to be a general correspondence.

- A Yeah, I think--these two, I can't make anything of these blow-ups. I really have great difficulty with those.
- Q With the blow-ups, you're referring to Nos. MI 1 and MI 2?
 - A Yeah. I really can't make anything of those.
- Q Dr. Humes, are you able to identify what you have described previously as an entrance wound in the posterior skull of President Kennedy on photographs in View 6?
- A This is the same problem I had at the committee hearings.
- Q Referring to the House Select Committee on Assassinations?
- A Yeah. I had big difficulty trying to see which was which among these things, between here and here.
- Q When you say "here and here," the first one you were pointing to something that appears roughly slightly below the ruler, and the second "here" was referring to the object that is quite near the bottom of the frame?
- A Right. I mean, they threw these up on a great big screen and said which is what, and I really had difficulty.

I couldn't be sure. I'm disappointed. I was disappointed in that regard. I still have trouble with it.

- Q Are you able to identify on View 6 the entrance wound?
- A Not with certainty, I'm sorry to tell you.
- Q Are you aware of where the House Select Committee on Assassinations panel of experts identified what they believed to be the entrance wound?
 - A No. No.
 - Q Do you see the gloved hand?
 - A Mm-hmm.
- Q Are you able to identify whose arm that is holding the President's head?
 - A No.
- Q When that photograph was taken, was the scalp being pulled forward, that is, towards the eyes of the President, in order for that photograph to be taken?
- A It's possible. I'm not sure. It looks like that's what's happening. The edge of the defect is up there. The edge of the defect is adjacent to where the fingers and thumb of the person appear on the photograph.
- Q Dr. Humes, I would like to show you a document that's been marked as Exhibit MD 14, which you previously have seen,

and I'd like to show you a portion of that document, on the bottom paragraph on page 3, going to the top of page 4, and ask you if that helps you orient the photograph.

A See, they're talking about the scalp shown in the photograph, and I'm not sure which one it is that they're referring to.

I suppose that's what they're talking about there.

I have to presume that's what they're talking about.

- Q When you say "they're talking about," do you mean the House Select Committee--
 - A Yes.
- Q --on Assassinations? And the point that you're pointing to is the apparent spot that is slightly below the top of the measuring device?
 - A Yes.
- Q And based upon your recollection and examination of the photos, is that where you now would identify what you believe to be the entrance wound in the skull?
- A I cannot flat-footedly say that. I have trouble with it. The head is turned toward one side. I don't know. It's very difficult. Very difficult. It's an educated guess, to be perfectly honest.

Q For that marking that is towards the bottom near the hairline, what is your best understanding of what that designates?

- A I don't have the foggiest idea. See, what's important is where is the wound in the bone. You can't tell that from these pictures.
- Q What was your understanding of the correlation, if any, between a puncture wound in the scalp and the puncture wound in the bone?
 - A They're directly over align--directly aligned.
- Q So there was not a penetration of the scalp with the bullet going along the cranium and then going in at some--
- A My impression was it went right through from the site of the skin wound, when you looked at the wound from the inside and matched them up with the scalp wound.
- Q Did you have any difficulty identifying the scalp entry wound during the time of the autopsy?
- A No, I didn't at the time of the autopsy, but the photographs I think create ambiguity. For me they do, much to my displeasure and dismay. I thought they would erase ambiguity rather than create it.
 - Q Would you have expected the marking that you took

to be the entry wound in the scalp to have been better represented in the photos than what you were seeing--

A Yes, I would have hoped that it would have been. Yes, \sin .

- Q I'd like to point out to you the flap that appears to be above the right ear.
 - A Right.
- $\ensuremath{\mathtt{Q}}$ And ask you if you can identify now what that flap is.
- A Not with certainty. Not with certainty. It looks like the inner surface of the scalp, you know, viewing here.

 And how it got to be in that position, I'm not sure. The distances are hard to judge, for me, from this. I don't know.

MR. GUNN: Steve, could we look at the other photographs from this same series just to see if there's anything more than can be shown? So 15, 16, 42, and 43.

For the record, Dr. Humes now has all the photographs just identified above available for his inspection.

THE WITNESS: In this particular one, which is No. 43, this object down near the hairline seems more obviously to be an artifact of some kind. I don't know what it is. I have no idea what it is. And this does seem to be the wound.

BY MR. GUNN:

Q When you say "this," you're referring to the portion that is up near the--

- A Near the top of the ruler, yeah.
- Q Could you examine the black and white photos and see if they help?
- A They don't help me. You can't even see any wound in the upper area of this.
- Q When you say that, you're referring to photograph number--
 - A Whatever this is--15.
 - Q And photograph 16?
- A This is 16. This looks like dura now, this piece of material.
- Q You're referring to the flap now that's above the ear?
- A Yeah, it does look like dura, but I'm not absolutely certain. And the wound is really--I don't know. Not discernible, I guess.
- Q I asked you a similar question with another view, but I'd just like to try the same question again. Looking at the posterior skull here, the portion that is below the ear--so

if we were to draw a line from between the top of the ear and the top of the ruler down, is it your understanding that the skull behind that scalp would be intact?

- A Reasonably intact.
- Q We'll go to the seventh view, which is described as "missile wound of entrance in posterior skull, following reflection of scalp," Nos. 17, 18, 44, and 45.

Again, the descriptions that I am reading come from the numbering system supplied by the November 10, 1966, inspection.

Could you turn these so they're all the same? Just so the rulers are in the same relative position.

The first question for you, Dr. Humes, is: Can you identify these photographs as being true and authentic photographs taken at the autopsy of President Kennedy?

- A They certainly appear to be as such.
- Q The first question for you would be whether you can orient those photos so as to describe what is being represented in the photographs.
 - A Boy, it's difficult.

I can't. I just can't put them together.

I can't tell you what--

Q Can you identify whether that is even posterior or frontal or parietal?

- A Not with any certainty, no. Very disappointed.

 No, I can't.
- Q Previously in your deposition today, you said, if I recall correctly, that you had photographs taken with the scalp reflected that showed the entrance wound. Is that correct?
 - A I thought that I had, yes.
- ${\tt Q}$ $\,$ Is it your understanding that these are photographs that--
- A They could well be, but they're disappointingly confusing to me.
- Q I'd like to show you the description that you made in 1967 and have you review that and see if that helps.
- A Now, this is the wound of exit that you're talking about. This is certainly not the wound of exit that we're talking about here.
- Q I'm referring to what the testimony was that you said earlier today when I said entrance.
 - A I'm sorry, sir. You've lost me.
 - Q Okay. In my last question, I was referring to your

prior testimony today where you referred to the scalp being reflected and photographs being taken of the entry wound in the posterior of the skull.

- A Yeah.
- Q Okay. Now we're on a different question, and I'm showing you a description from another thing to see if this helps at all.
- A No. It doesn't help at all. This is the wound of exit from the skull, the big gaping hole in the right side of the temporo-parietal area. This doesn't help me. I don't know how it could be expected to help me.
- Q In the seventh view of the photographs, what you're looking at today, do you see any notches in any of the bones that could be identified either a wound of entrance or exit?
- A There's what appears to be a notch in a major portion of bone here centrally located, but I'm not at all sure about it. I don't know where it is or--I can't get oriented at all. I just can't. It shows up in the black and white thing here.
- Q Was any photograph taken during the autopsy with scalp reflected of the frontal bone or the parietal bone?
- A Certainly not specifically of the frontal bone, but, yes, I presume of the parietal bone. I presume there was.

Q What I want to see if we can get clear, as best we possibly can, is when--is what photographs were taken when the scalp was reflected--

- A Sir, you're asking me to tell you something that happened too long ago for me to be able to respond intelligently.
- Q What I would like to see if we can do the best that we can with is to understand whether there was a photograph taken with the scalp reflected of the posterior portion of the head. Now, I understood from the testimony earlier today that you had thought that there was such a photograph taken. Whether the photograph you're now looking at or not, whether that is that photograph or not isn't the question, but whether there was such a photograph taken.
 - A I cannot recall specifically.
- Q Dr. Humes, I'd like to show you a document marked Exhibit 13, which appears to be a November 1, 1966, inventory which has your signature on it. Is that correct?
 - A Right.
- Q And this inventory was prepared approximately three years after the autopsy; is that correct?
 - A Yes. That was one of the problems. Yes.
 - Q Could you identify for me roughly the procedure that

you followed in preparing the document that's now marked Exhibit

13? Just if you could explain the circumstances of how you

came to prepare the document.

- A We came--we were told that it was necessary to have the photographs identified. We proceeded to the old building downtown, Archives building, where we met with Mr. Rhoads, I believe was the Archivist. And J and I--Pierre wasn't there, was he?--Jack Ebersole--no, Pierre was not there. J and I and Jack Ebersole and John Stringer, who actually took all the photographs, and they were brought out to us one at a time, and we wrote a description of what we thought we were seeing.
- Q Okay. Could you look at the description that you created in 1966 that corresponds with the photos that we're looking at now?
 - A 44, for instance, this one.
- Q Does that document reference No. 17? That would be to one of the black and white photos. Does your description from 1966, three years after the autopsy, help you today identify or orient the photographs in View 7?
- A Well, now, I guess now that I look at it, perhaps it does. The black and white one, down here opposite the edge of the rule, I presume that is what we're talking about right

there.

Q Okay. You're referring to something that is very near the point of the--

- A Right, right there.
- Q --ruler where the centimeter marks are?
- A Right. It's not anywheres near as clear as I would have hoped it were to be. But that I have to presume is what we're talking about right there, because that's about the size of the location, as I can see where it is. The scalp is reflected downward, as you can see here.
 - Q So would it be fair to say that--
- A This here again would be it, you see; there, there, and--you lose it here with all this business. I don't know.

 I have trouble with this. I can't really recognize it there.
- Q So this is a portion that, if the ruler were on the bottom of the--if the ruler were placed at the bottom of the drawing, this would be slightly above the corner of the uppermost part of the ruler?
 - A That's my belief, yes, sir.
- Q And that is what you believe to be, as best you can tell now--
 - A Yes.

- Q --to have been the entrance wound--
- A Yes, sir.
- Q --in the posterior skull?
- A Yes, sir. Without major conviction, but I believe that's the case.
- Q Dr. Humes, I'd like to show you part of your testimony to the Warren Commission, particularly on pages 352 and 353, and I'd like to ask if this testimony that you provided helps refresh your recollection as to whether there were any photographs taken of the posterior skull with the scalp reflected. So at the bottom of pages 32--excuse me, 352, to the top of page 353.
 - A He goes on to a motion picture here.
 - O Pardon?
 - A He goes on to a motion picture.
 - Q You're referring to the testimony.
- A Yeah, I see it, but it says photographs illustrating the phenomenon from both the external surface of the skull and the internal surface were prepared. We conclude that the large space on the upper right side--and so forth. I don't--I have not yet been shown what I would construe to be the photograph of the wound of entrance from the internal surface.

Q And at least it was your understanding as of March 1964 that a photograph of that sort had been taken?

- A Yes. Yes.
- Q Let's move to the bottom of the final paragraph of Exhibit 13, which is your report of November 1, 1966, signed November 10th.
- A May I say what it says? We thought that we hadn't seen them all.
- Q As of November 1966, were you of the opinion that there were any photographs of the autopsy that had been taken in addition to those that you were able to see at the Archives?
- A The only one I recall specifically in that connection is the one I spoke to you about later, was the interior of the thorax. I thought we had seen all the others. Maybe we hadn't. I don't know. You got to remember, this was three years after the fact. That's part of the problem with all of this, temporal distortion of memory and what have you, accentuated when you get 35 years away.
- Q I'd like to show you another statement from your Warren Commission testimony on page 360. This is from Exhibit MD 11. Dr. Humes, could you read the portion from the point where Mr. Dulles is saying, "Just one other question," and then

your answer to that?

- A Yeah, sure.
- Q While you're reading it to yourself, I will read it for the record.

"Mr. Dulles: Just one other question. Am I correct in assuming from what you have said that this wound is entirely inconsistent with a wound that might have been administered if the shot were fired from in front or the side of the President?

It had to be fired from behind the President?"

"Commander Humes: Scientifically, sir, it is impossible for it to have been fired from other than behind or to have exited from other than behind."

- A I don't know where that phrase got in there, "to have exited from other than behind," other than--it's a peculiar use of words, that it came in from behind and exited from behind.

 I presume going forward. I don't--that's kind of a bad sentence. I don't know how to interpret that.
 - Q Did you mean--
- A There was no exit from behind as far as I'm concerned, period.
- Q So anyone who would--let me rephrase this. Would it be fair to say that when you intended to say to the Warren

Commission would not have been that the exit wound also came from the posterior portion of the President?

A Yeah. The exit wound did not--was not in the posterior portion of the head. I don't know how that verbiage got in there. A bad statement if I actually made it.

Am I led to believe that we have not found the photograph from inside of the posterior portion of the skull?

 $\ensuremath{\mathtt{Q}}$ You have now seen today all of the photographs of the skull we had.

A I don't know how to explain it, because we didn't--I don't think we described in anywheres here that photograph.

I'd have to go through the whole list of the photographs to see, but my recollection is that we took it from both the outside and from the inside after the brain was removed.

Q When you were referring to that photograph in your previous answer, were you referring to the photographs from View 7 that are in front of you now? You can hold off on the answer. Maybe if you can--if you could just--

A Well, these are quite obviously from the outside of the skull. They're not from the inside. That's perfectly obvious. So I don't see one from the inside of the posterior cranial fossa where the defect was. And I'm disappointed

because I thought we had such a photograph.

- Q Okay. Did you go back to the Archives in January of 1967--this would be a couple of months later--and draft another statement or description of the autopsy materials?
- A If you've got such a statement, I presume we did.

 I don't remember the details of it.
- Q I'd like to show this Exhibit No. 14. Do you recall that document?
- A I recall it, but I don't recall what caused it to be produced. I do not recall what caused this to be produced.
 - Q Do you see who the people are who signed Exhibit 14?
 - A Yes.
 - Q Do you see that Dr. Finck is involved with that?
 - A Yes.
- Q Does that help refresh your recollection at all as to the circumstances for signing that document or preparing that document?
 - A No. Doesn't help a bit.
 - Q Do you have any idea who wrote Exhibit 14?
 - A No. I don't think so.
- I don't know who wrote this, and reading it, it doesn't seem like I wrote it, just because of the phraseology and some

of the comments. I don't know who wrote it.

Q Do you recall what the purpose was for your going to the Archives in November of 1966 to prepare the inventory?

What circumstance led to that?

- A Well, the photographs were there. Nobody knew exactly what they depicted, so they asked us to attempt to resolve that problem, and that's what we tried to do.
- Q And do you know whether what is now Exhibit 14 is continuing in that process at all?
- A It would appear that that was the purpose. But I have no--as I say, I don't recall anything about it. I really don't. I don't recall it. Other than--other than the earlier, longer report that takes the photographs number by number--
 - O That's Exhibit 13?
- A Yeah. It didn't really draw any conclusions. That was strictly a narration and a--
 - Q Catalogue?
- A A catalogue of the pictures. And I would guess then we were asked to try and put it together in a form that made it more expository. That's what I have to presume is what we did.
 - Q But as of today, you're not able to recollect what

the procedure was for that document having been created?

A I certainly am not. The statement I just made would have to be my presumption of what occurred, because as you know, this is just a catalogue. It comes to no conclusion. It doesn't attempt to correlate these pictures with the autopsy, really.

- Q And by that, you're referring to Exhibit 13?
- A 13, yes, sir. So to your just previous question, was it part of the same process, I would have to say yes, it must have been.
- Q Let me try one last question for View 7, the four photographs that you have in front of you. You have suggested that you think that there is some evidence or some possibility that photographs depict an entrance wound. Is there a possibility that those four photographs portray the exit wound?
- A I would think that's possible that this large notched thing here may be part of the exit wound of that missile. It could be. But I'm not sure. I'd have to go back--because after we got the pieces of bone from Dallas, we attempted to--if this is what I'm saying it may be, we estimated what the actual margin of that was with a little gimme factor because we didn't have the whole. But we thought we had more of--if this is the exit

wound, more of the circumference of it, because it seems--this wound seems to be somewhat--if that is a wound, I don't know. It seems to be beveled from the outside.

- Q If View 7, in fact, shows the exit wound, would it then be fair to say that you now would recall three photos that you believe were taken that are not now in the collection, one of them being a photograph of the back entry wound with the scalp reflect--
 - A At least not recognizable as such.
 - Q Sure.
 - A It may be here, but not, to me, recognizable as such.
 - Q The second one being the interior of the scalp--
- A Yeah. And that should have been sharp and clear because there was no blood by that time, you see. The brain had been removed, and it was a through-and-through hole, and I had every anticipation that you had no problem--you could tell the contour of the internal--you know, the internal portion of the posterior fossa, a child could recognize that. And we don't have that to see. And the chest.
 - Q The chest being the third?
 - A Yes.
 - Q Okay. Thank you.

Could we go to the eighth view, which is the basilar view of the brain?

MR. GUNN: Off the record.

[Discussion off the record.]

THE WITNESS: What George Burkley did with that brain is the mystery of the century. And why I so easily acceded to his wishes, I don't know, other than he's talking about Bobby and the family and what they want.

BY MR. GUNN:

- Q The next view is the eighth called in the 1966 inventory the "basilar view of brain," and it's color photos Nos. 46, 47, 48, and 49.
 - A Okay.
- Q Dr. Humes, can you identify those photographs as photographs of the brain of President Kennedy?
 - A Yes.
- Q And previously you spoke about this issue, but just to clarify it at this point: Were these photographs taken within a few days of the autopsy?
 - A That's correct.
- Q And these were after they had been thoroughly set in formalin; is that correct?

- A That's correct.
- Q Can you describe briefly what the photographs portray?
- A Well, really the black one is somewhat—excuse me, the black and white one is somewhat more graphic and easy to describe because it shows you a view of the brain from above, with the cerebellum below, and the more or less intact left cerebral hemisphere.
- Q I'm sorry. If I could interrupt you for a minute, the one that you're referring to now is a superior view of the brain, and I'd just like to see if we can get the--
- A Right. A superior view of the brain looking down on the cerebellum, which is below and behind the cerebrum.
- Q The numbers that I gave identified this as the basilar which--I just want to make sure that we're all on the same page here for the record.
 - A This can't be basilar.
- Q That's correct. I didn't know this one was going to be handed to you.
 - A You want me to do something different?
- Q Sure. If you can just look at the basilar view of the brain, if you could describe what that view shows. That

is View No. 8 corresponding to color photographs 46, 47, 48, and 49.

A Boy, I have trouble with this. I don't know which end is up.

I don't know what happened here. Looking at this photograph, which is labeled No. 46, the structure which is on the right side of the brain appears to be intact, the cerebrum intact. And that's not right, because it was not. And the structure, which is all distorted—let me see. Well, well, I guess this—this is the left side of the brain more or less intact. This I guess is the brain stem down here somewhere, but I can't make it out.

- Q Is the cerebellum visible in the basilar view?
- A Well, yeah. Here's the one that I now take to be the right lobe of the cerebellum is in view and discernible. The structures in the picture to the right of that were very difficult to--there's more cerebellum. Yeah, this is a--this is the cerebellum and brain stem in through here.
- Q In the photograph that you're looking at of the basilar view, is the left cerebellum disrupted?
 - A No--well, I guess so. Yeah, probably.
 - Q It's on the right of the photograph that you're

looking at, but that would be--

A Yeah, that would be the left cerebellum. It seems to be to some extent disrupted.

- Q Do you know how the left cerebellum came to be disrupted?
- A I would have to presume by the explosive force of the missile as it entered near there. There seems to be a laceration in the mid-brain here, see?
- Q Can you point out where the laceration in the mid-brain is?
 - A Right there.
 - O Is the mid-brain above or below the cerebral cortex?
 - A Oh, below the cerebral cortex.
 - O Was the--
 - A This is basically probably the lesion that was fatal.
 - Q The one to the mid-brain?
 - A Yes. Presumably.
- Q I'd like to show you page 4 of the autopsy protocol, Exhibit 3, and ask you to read to yourself the first full paragraph.
 - A Yeah.
 - Q Does that paragraph, which I'll read for the record

in just a moment, accurately describe the injury to the brain?

Let me read it for the record; then you can answer the question.

"Clearly visible in the above-described large skull defect and exuding from it is lacerated brain tissue, which on close inspection proves to represent the major portion of the right cerebral hemisphere. At this point it is noted that the falx cerebri is extensively lacerated with disruption of the superior sagittal sinus."

- A There might be one word that you changed in there.

 Instead of "the major" to "a major portion" of the right lobe of the brain.
- Q Now I'd like to show you Exhibit No. 4, which is the supplementary report, and ask you to read the first paragraph of the supplementary report which refers to injury to the brain.
- A Yeah, I think it rather accurately describes what you see here.
- Q Okay. Now, there is reference in that paragraph to a longitudinal laceration of the right hemisphere, and it then goes on to say that the base of the laceration is situated approximately 4.5 centimeters below the vertex. Is that laceration visible on the photographs of the basilar view of the brain?

- A Well, not very clearly. Not very clearly.
- Q Would you expect--
- A I presume it's in through here.
- Q Would you expect that laceration to be visible on the superior view of the brain?
 - A I don't know. I can't tell from this.

MR. GUNN: Could we have the photographs of the superior view, colors 50, 51, and 52?

THE WITNESS: Okay.

BY MR. GUNN:

- Q Is that laceration which is 4.5 centimeters below the vertex visible on the photograph of the superior view of the brain?
- A You know, laceration is a bad way to describe it.

 It's a big disruption. I guess we called it a laceration because that seemed like as good a word as any. But it significantly destroys much of that right cerebral hemisphere.
- Q So I'm clear, is there a laceration that comes down, that goes from what you're describing as back to front that is 4.5 centimeters below the top of the skull and a separate laceration that goes down near the mid-brain?
 - A Yeah, I guess so.

- Q Do those two lacerations connect to each other?
- A I don't know. You can't tell from here.
- Q "From here," you're referring to this--
- A From the photographs.
- Q Dr. Humes, did you take a section from the right cerebellar cortex?
 - A According to the supplementary report, I did.
- Q Why did you take a section from the right cerebellar cortex?
- A Just to be more all inclusive. For no particular reason.
- Q Did you take a section from the left cerebellar cortex?
 - A It doesn't appear that I did.
- Q Is there a reason for not taking one from the left cerebellar cortex?
- A No. No. If there is, I certainly can't recall what it would have been.
- Q When you removed the brain, which part of the brain did you cut in order to remove it?
 - A The brain stem.
 - Q Was the brain--were you able to ascertain whether

the brain stem had received any damage prior to the time that you made the incision?

- A It was my impression that it had, yes.
- $\ensuremath{\mathtt{Q}}$. Was the brain stem already disconnected at the time that you--
 - A No, it was not disconnected.
- Q How was it that you had the impression that it was--that it had received some kind of laceration or injury?
- A Well, one of these photographs shows you, as I tried to point out earlier, the one that was here a few minutes ago-
 - Q The basilar view?
- A Yeah, the basilar view shows this disrupted-looking area right there. That's the brain stem.
- Q Looking at the basilar view, are you able to ascertain whether either the left or the right cerebellum has been disrupted? We touched on this issue before, but I just wanted to return to that.
- A In this photograph, it would appear the right cerebellum has been partially disrupted, yes.
 - Q But not the left cerebellum?
 - A Not the left. The left seems pretty intact.
 - Q From the superior view of the brain, are you able

to identify any disruption of either left or right hemisphere of the cerebellum?

- A They both look pretty good from above. You can see both sides. That shows you why pictures don't always tell the whole story.
- Q What this seems to be pointing to is two separate lacerations of the brain, one going through the right cerebrum and the other one high along the--or 4.5 centimeters from the vertex, the other one going low and hitting the brain stem.

 Is that--
- A I object to the two separate. I think they're all extensions of one another.
 - Q So it is one projectile going through that's causing--
- A Partially the projectile and partially the explosive force of the missile, and I can't evaluate with any certainty which is which.

If you ever saw a high-speed photograph of a missile going through a block of wax--many times people use this to demonstrate speeds of missiles--you'd see that the explosive force is much larger and destructive, really, than the single path--the path of the bullet is like an ice pick, relatively narrow in its effect, but it's the force that's expended as

it goes through that is much more dangerous and disruptive.

- Q Was there a non-disrupted portion of the brain between the portion that was 4.5 centimeters below the vertex and the portion that goes through the brain stem? Or was it all--
- A I think there's very little of the right cerebral hemisphere that was not in some way damaged by this. Very little. Maybe the tip of the temporal lobe, possibly, was not particularly involved, but as you can see from the photographs, most of the right cerebral was very seriously injured.
- Q Other than the left cerebellum, did you notice any disruption of the left hemisphere of the brain?
- A No. But there was some contusion, I think, over the surface. There's some suggestion that the brain bounced off the interior of the skull, and there was some bruising like thing. Contrecoup injury, they call it.
 - Q All right. If we can go to the X-rays.

MR. GUNN: Off the record.

[Discussion off the record.]

BY MR. GUNN:

- Q Dr. Humes, you're now looking at X-ray 5-B No. 1.

 I'd like to ask you whether you have previously seen that X-ray.
 - A I probably have. It's antero-posterior view of the

skull and the jaw. It shows the large bony defect in the right side of the skull, and some white material, which I presume may be metallic fragments, in the right side of the photograph.

- Q The left side of the photograph but the right side of the skull?
 - A Right side of the skull, yeah.
- Q And that appears to be, at least in height, in the orbital range?
 - A Yes, somewheres. Yeah, I would guess.
- Q Did you notice that what at least appears to be a radio-opaque fragment during the autopsy?
- A Well, I told you we received one--we retrieved one or two, and--of course, you get distortion in the X-ray as far as size goes. The ones we retrieved I didn't think were of the same size as this would lead you to believe.
 - Q Did you think they were larger or smaller?
- A Smaller. Smaller, considerably smaller. I mean, these other little things would be about the size of what--I'm not sure what that is or whether that's a defect. I'm not enough of a radiologist to be able to tell you. But I don't remember retrieving anything of that size.
 - Q Well, that was going to be a question, whether you

had identified that as a possible fragment and then removed it.

- A Truthfully, I don't remember anything that size when I looked at these films. They all were more of the size of these others.
- Q What we're referring to is a fragment that appears to be semicircular.
 - A Yeah. I don't know.
- Q Looking at that X-ray, 5-B No. 1, could you correlate any damage that you see on the right hemisphere of the skull with the photograph that's to your left now, which is color photograph--
- A Oh, sure. The skull defect is obvious. Now, not the brain. You can't tell much about the brain from here.

 The brain doesn't--in plain films it doesn't, you know--it's not well imaged at all.
- Q To the lay eye--and I mean this to not have any presumption of being accurate--there is a large gap in the top right quadrant of the skull. That's on the left side of the X-ray, the right quadrant.
 - A Right.
 - Q What does that signify, as best you recall, having

been present at the autopsy?

A That's the bone that was removed by the path of the missile.

- Q Was the frontal bone present on--was the frontal bone still intact on the President?
- A It was intact, yes. I can't even make it out here, really.
 - Q You can't see it there, but it was present?
 - A No. It was present, yes, sir.
- Q Could we look at the second X-ray, please? This will be a right lateral view of the skull, 5-B No. 2. Dr. Humes, can you identify 5-B No. 2 as being an autopsy X-ray taken on November 22, 1963?
- A I guess so. That's really--it's got some very--it's a peculiar exposure. These are the spines of the vertebrae here, of course, and these are the bodies of the vertebrae.

 And these lines are some of the fractures that were present in the skull.
- Q You're referring to the lines that are in the top of the parietal bone--
 - A Right.
 - Q --and into the occipital bone; would that be correct?

A Right. Those were the fracture lines, and it's difficult--I don't know why this is so radio-opaque, this whole area.

- Q You're referring to the right frontal area.
- A What seems to be the frontal portion of it. I don't understand why that is. You'd have to have some radiologist tell me about that. I can't make that out.
- Q I'd like you to see if you could identify where you understand the entrance wound to have been on the skull, looking at this lateral X-ray.
 - A Well, back in this area.
 - Q You're referring to the very low back of the cranium--
 - A Cranium.
 - Q --very near to the vertebra; is that correct?
- A Well, fairly near, yeah. You can't see it here. I can't see it.
- Q Do you see any fragments, stellate or otherwise, that would be consistent with an entry wound in that point?
- A Well, there's no fragments there. There's fragments or what appear to be fragments up higher towards the vertex in this picture. Maybe one right in the middle of the picture.

 And this may be--do you see where this increased density is

here? There may be two pieces--it may be overlapped. This piece of bone may overlap that one so it looks more dense there.

- Q Okay.
- A That's about as much as I can make of that.
- Q What I'd like you to do is look at Exhibit No. 73, which is a drawing from Grant's Anatomy, and see if you could make a marking on Grant's Anatomy--these are both laterals with the posterior portion of the cranium on the left of the drawings.

 If you could make a mark with the pen at approximately where you understand the entry wound to have been?
- A No, because it would be down here and you wouldn't be able to see it on this lateral view, I don't think.
 - You're referring to the Grant's Anatomy--
 - A Whatever it is.
 - Q --drawing?
- A Yeah. See, but it was not that far from the midline, and this is really somewhat lateral to the midline, this depiction. But, in general, it would be back in this area some place.
 - Q You're making a blue marking approximately--
 - A Right.
 - Q --where the entry wound was. Of course, that's not

showing it in relationship to the midline.

A No, it does not show it. No.

I don't understand this great big void there. I don't know what that's all about.

MR. GUNN: Excuse me for a moment.

[Pause.]

BY MR. GUNN:

 ${\tt Q}\,$ Dr. Humes, I had another question for you about the lateral X-ray.

A Mm-hmm.

Q And that is whether you can identify the particles that you made reference to before and where they appear in this photograph.

A Well, you see, there's nothing in this projection that appears to be of the size of the one that appeared to be above and behind the eye on the other one. But that could be positional or the other thing is an artifact. I don't know what. But here, above where I talk about this double density that you see here, there's a fragment. There seems to be one up here in the frontal region and a couple further up by the vertex.

Q Do those metal fragments--or do those radio-opaque

objects help you in any way identify entrance or exit wounds?

- A No. No, they really don't.
- Q Is there any relationship or correlation between those metal fragments and the bullet wound?
- A Not that I can make out at all, no. They seem to be random.
- Q Okay. Dr. Humes, I'd like to show you Exhibit 3, which, again, for the record, is the autopsy protocol, and ask you if you could read the paragraph on page 4 that I'm referring to, the paragraph that starts with "Received."
- A This would reinforce my opinion that that one photograph was part of the margin of the exit wound.
- Q You're referring to View 7 that showed the inside of the cranium? Is that--
- A Well, it didn't really--I don't know what it showed, my problem is, but in one of the bone fragments there was a semicircular defect that was not complete, only part of it.

 And then when we got these fragments, at one margin of it there's something that seemed to match up with that fragment that was still in the skull. My memory's pretty good. I said we had three. That's what we have, I guess.

I described several metallic fragments along the line

corresponding to a line joining the occipital wound with the right supraorbital ridge.

- ${\tt Q}$ $\,$ The above-described small occipital wound and the right supraorbital ridge.
- A Two small irregularly-shaped fragments of metal are recovered. They measure 7 by 2 and 3 by 1. Well, that large one that you saw in that first AP view of the skull could be the 7-by-2 millimeter one that we handed over to the FBI.
- Q Could you point out for me on X-ray No. 2 where the minute particles of metal in the bone are in relationship to the small occipital wound and the right supraorbital ridge?
- A Well, they don't relate at all in this picture, as far as I'm concerned.
 - Q "This picture" being X-ray No. 2?
- A Yeah. They don't. I don't know where I got that, but there's--the occipital wound would never be up that high anywheres up there. There's nothing up there.
- Q You're pointing to the top left portion of the brain slightly above--
- A Well, I don't know whether it's left or right. You can't tell that from this. Don't say that because there's no way of telling that it's left. An X-ray doesn't tell you whether

it's left or right. These fragments here.

Q Do you see any fragments that correspond with a small occipital wound?

A No.

Q Do you recall having seen an X-ray previously that had fragments corresponding to a small occipital wound?

A Well, I reported that I did, so I must have. But I don't see it now.

Q Did you have X-rays available for your use while you were preparing the autopsy protocol?

A No.

Q Are you reasonable certain that there was an X-ray that showed metallic fragments going from a small occipital wound?

A All I know is I wrote it down. I didn't write it down out of whole cloth. I wrote down what I saw.

Q Does that raise any question in your mind about the authenticity of the X-ray that you're looking at now in terms of being an X-ray of President Kennedy?

A Well, there's aspects of it I don't understand. I don't understand this big void up--maybe a radiologist could explain it. I don't know what this big--

- Q You're referring to--
- A $\,$ --non-opaque area that takes up half of the skull here, I don't understand that.
- $\ensuremath{\mathtt{Q}}$ Do you remember seeing that on the night of the autopsy?
- A No, I don't. That doesn't mean it wasn't there, but I don't remember it.

MR. GUNN: Okay. Off the record for a minute.

[Discussion off the record.]

BY MR. GUNN:

Q During the course of the deposition, we have talked three photographs that you had had some understanding existed and that you did not see here today. I'd like to ask you a question about another possible photograph or X-ray to see if you have any recollection of it.

Do you recall any photograph or X-ray that was taken with a probe inserted into the posterior thorax?

- A No, absolutely not. I do not have a recollection of such.
- Q Do you recall any X-rays that were taken that would have the extremities, including the hands and feet?
 - A Yes, we had them. I thought we did, at least. Or

maybe--whether we went as far as the feet and hands--we simply went down the arms. Whether or not the hands and feet were there or not, I can't remember.

- Q Why did you take X-rays of the arms?
- A Because as I mentioned earlier, missiles that enter one portion of the body have a very strange proclivity of going to the most unexpected locations, and that's why we did that, to be sure that there wasn't such a missile any place.
- Q Are you familiar with the term "whole-body radiographic survey"?
- A Well, I can conjure up what it means. I don't--it's not a phrase that I would frequently use.
- Q Is there a term for understanding in radiography that would refer to an X-ray of the entire body?
 - A I would guess that would be it, yeah.
- Q And do you remember something of that sort having been ordered by Dr. Finck on the night of the autopsy?
- A Truthfully, I don't know. Pierre was really laid back through the whole thing, and I can't recall him really ordering anything. Maybe he did. But 99 percent of any kind of orders that were given, I gave. And I don't know. Maybe Pierre did make such a--I wanted to do that kind of thing for

the reason I already gave you, with or without Pierre. And I don't know whether he commented about it or was the one that actually told Jack that's what we wanted. I don't know. I don't remember that.

- Q When you're referring to Jack, that's Jack Ebersole?
- A Jack Ebersole, right. He's no longer here to defend himself, unfortunately.
 - Q When did you first meet Arlen Specter?
 - A That's a good question.
 - Q I hope that's not my first good question.
- A Shortly after the Warren Commission was established, whenever that was. It happened fairly quickly. President Johnson was anxious to have this whole matter, obviously, investigated. And I truthfully can't recall exactly when it was.
- Q Did you meet him at any point before the Warren Commission was established?
 - A Oh, yes--oh, before--
 - Q Before the Warren--
 - A Oh, no. I'd never met him before. No.
- ${\tt Q}$ $\,$ So your meeting with him was entirely in conjunction with the Warren Commission?

- A Exactly.
- Q Approximately how many times did you meet with him during the time that the Warren Commission was in existence?

A Oh, Lord, several times, and for different purposes. We went to view the Zapruder film, Zapruder, the amateur photographer who made this famous movie. We went with him to look at the President's clothing. These were all in that downtown Archives building. We met with him to discuss in the absence of the photographs and the X-rays how we were going to present our materials when I decided to employ one of our medical illustrators, a young sailor who was, I thought, quite capable, and he, acting under my direction, performed pictures which have been published, I think in the Warren Commission.

- Q That's Mr. Ryberg?
- A Yeah, right. Ryberg. He later went to--went on as a medical illustrator at Chapel Hill at the University of North Carolina. I think now he's down in Texas. He decided to change careers and become an EMT, of all things. I was very surprised at that.

So we met to discuss--not how this was going to be depicted, but would that be an appropriate device to use in the absence of the photographs and X-rays.

Q When you say several times, can you give me a very rough estimate of whether we're talking in the area of three to four or eight to ten?

- A I would say more likely in the eight to ten range.

 Again, that's really off the top of my head.
- Q How many times, if you recall, did you meet with Mr. Specter prior to the time you gave your testimony to the Warren Commission?
- A All the meetings I ever had with him were in that time frame. So I would say that many times, whatever I told you, about eight. Don't hold me to that number because I couldn't swear to that at all.
- Q That's fine. Did you not meet with him at all after the testimony?
- A No, other than socially quite a while later when he was by now the district attorney in Philadelphia, and we didn't even discuss the Warren Commission or any aspect of it. We seemed to develop a cordial relationship when we were doing this thing. I haven't talked to him in recent years.
- Q During the time that you were preparing for the testimony of the Warren Commission, did you ask to be shown the photographs?

A No, because I had already stated that I didn't want them to become public information, so, therefore, I never asked for them.

- Q Did Mr. Specter--I keep wanting to say "Senator Specter." Did Mr. Specter ever suggest to you that he thought it would be appropriate for him to examine the autopsy photos?
 - A I don't recall that he ever did, no.
- Q Were you ever pressured or encouraged in any way to have the drawings, the Ryberg drawings, depict wounds in one place versus another?
- A No. No. Nobody but me and Ryberg had anything to do with the preparation of those drawings, and nobody gave me any instructions. See, it's really funny--whatever. I just don't even understand the question. I was not operating under anybody's direction at any time, before, during, or after this horrible event.
- Q Did you meet with any medical consultants on the Warren Commission staff?
- A On the Warren Commission staff? No. No. I don't even know who they were, if there were.
- Q Did you meet with any forensics consultants on the Warren Commission staff?

- A Not that I recall.
- Q Other than Mr. Specter, do you recall having met with anyone else on the Warren Commission staff other than at the time you testified?
- A No. I can't swear that I didn't, but I certainly don't remember it.
- Q During the time that the Warren Commission was in existence, did you meet at all with any FBI agent or FBI personnel?
 - A No.
- Q Did you meet during the time the Warren Commission was in existence with anyone from the Secret Service, other than during the night of the autopsy?
 - A No.
- Q Did you meet with anyone who was affiliated with the Edgewood facility?
 - A Edgewood Arsenal?
 - Q Yes. During the time of the Warren Commission.
 - A No, I don't think so.
 - Q Does Mr. Olivier, does that name sound familiar?
- A I have some vague recollection of the name, but I can't go beyond that.

Q Did you ever go to Edgewood Arsenal during the time the Warren--

- A No, no, no.
- Q --Commission was in existence?
- A No, no. No.
- Q Earlier in the deposition, you made reference to your interview with Dan Rather. Do you recall that?
 - A Yes.
- Q Can you tell me what the circumstances were that led up to your doing that interview for CBS?

A Only in the vaguest kind of terms. CBS apparently announced that they were going to put on a three--I think it was a three-hour or a three-night report on the Kennedy assassination, and they apparently approached the Surgeon General of the Navy to get his permission to speak to me. And he apparently acceded to that. And then either I or the Surgeon General or some combination of us approached the Justice Department, and Eardley then sent that letter.

It was a relatively brief affair. He and I met--CBS has a studio downtown, not too far from the White House, actually. I forget exactly where it is now. Pennsylvania Avenue maybe some place. And I got there about 45 minutes before

I was to tape this interview. I was very impressed. He just asked me a few questions over a period of maybe 10 or 15 minutes, and then I was very impressed at how he was able to synthesize that into something that seemed to make sense, you know. And that was the end of it right then and there. I've met Dan Rather a couple of time since, but it had nothing to do with the Warren Commission.

- Q Did you speak personally with anyone in the Justice Department about the interview with CBS?
 - A No. Not that I recall.
 - Q Did you ever meet Mr. Eardley?
- A Oh, yes. We met him on several occasions. He came down with us when we went to look at the photographs and so forth. So I met with him on several--I can't remember how many times, but not real often. Three or four times, probably.
- Q What was your understanding of his role at the Justice Department in conjunction with the assassination?
- A I don't know. He was put forth as a person responsible for some correlative activities of, I thought, the Warren Commission. I really can't--didn't delve into it particularly. He seemed to be the Justice Department person that had some responsibility for the Warren Commission. That

responsibility, of course, was divided up among a lot of people, and I don't know that he was supposed to just relate to the medical evidence or--I can't recall.

- Q Did you ever receive any suggestions from him, either directly or indirectly, about what you should say in the interview with Dan Rather?
- A Not at all. Zero. If you ask me now what I said, I couldn't tell you. I never got a tape of it or anything.
- Q Moving right along, Dr. Humes, did you have any role with respect to the Jim Garrison investigation and prosecution of Clay Shaw?
 - A None.
- Q Were you ever contacted during the time of the Shaw investigation and trial in regard to possibly offering testimony?
 - A No.
- Q Did you ever communicate directly or indirectly with any of the following people I'm going to name regarding the autopsy or the assassination? First, Robert McNamara?
 - A No.
 - Q With Robert Kennedy?
 - A No.

- Q With Jacqueline Kennedy?
- A No.
- Q With Admiral Burkley?
- A Oh, yes. I mean, in the course of the--as we discussed earlier in the deposition today several times.
- Q Did you discuss anything with him that you now recall in addition to what we have previously discussed?
 - A No.
- Q Do you remember when the last time was you spoke to him about anything related to the assassination or the autopsy?
 - A Within a week or two after the autopsy.
 - Q That was the last time?
- A Now, I've seen him socially a couple times. There was no conversation about it at all. I saw him--I forget when he died. He probably died about eight or ten years ago, and I saw him a year or two before that at a social affair. No discussion about it at all.
 - Q Continuing the list, President Johnson?
- A I met with President Johnson, but not in any way connected with this. In fact, I'm wearing a pair of cuff links that he gave me today. I was able to report to him that the nodule we took out of his larynx was benign, and he was very

happy.

Q I can imagine. I would be, too. You don't wish your cuff links to be part of the exhibit--

A Oh, I think we ought to just take that out of the report, if you don't mind. I shouldn't have mentioned it, I suppose. But not everybody has a pair of these presidential cuff links.

Q Let me try a last question for you, and that is whether you can yourself think of any additional information that would be useful to know about the autopsy that would help provide a better understanding of either what occurred during the autopsy or the wounds that were inflicted on President Kennedy.

A I have trouble conjuring up--I wish that the photographs were more graphic and more specifically helpful than they are. I'm disappointed by that, and I didn't find that out with certainty, really, until I got to that House Select Committee hearing. I had difficulty. There was a lot of people around, and they were showing and throwing these up, and I really didn't have the time that I had here even today. And I'm somewhat confused today, as you heard. I was even more confused at that point. But, you know, that's spilled milk. There was nothing I could do about those photographs and X-rays, and I

just wish they had been more graphic.

But would I have done anything otherwise differently retrospectively? Not particularly, you know. I could have had any number of additional people, friends of mine in special fields like neuropathology and—I didn't need a neuropathologist to see that the man's brain was blown—you know, to me the critical thing was to have somebody that had some experience with ballistics, and that's when Pierre Finck arrived on the scene. We didn't have anybody like that in the Navy that I was aware of, to tell you the truth. We since have had several people very highly trained in forensic pathology, but we didn't at that time.

So, no, it was a very long night that didn't get over until about 5 o'clock in the morning, just by everybody's urging that we be expeditious in our efforts. It was not an experience I'd wish to relive, I'll tell you that.

- Q Are there any additional comments that you would like to make? I told you I'd give you that opportunity.
- A No. I'm still somewhat vague on the precise bottom line of your all efforts to do these things, and I hope that they're helpful. But if you ask a person enough questions often enough, you're going to confuse themselves sooner or later and

not say the same thing twice. Probably minor variations, but--so I'm concerned that we've got so much information put together that we--well, there's an expression in golf. You get paralysis of analysis. You know, you get more information than you can usefully put together. But that's for your--I mean, that's for you to decide, not me. I can't tell.

I continue to be dismayed by the large number of these so-called assassination buffs. In fact, they seem to proliferate. I was also very displeased with the Oliver Stone film, which my children urged me to go see because they said, "They got some guy that looks like he's 89 years old playing your role, and you were 39." So I did go to see it, and it just seemed to me to be a disservice to the American people. There were so many vague and cloudy implications that were mentioned during it. I just found it mind-boggling. It just disturbed me.

The other people who--they got an Academy Award for film editing, which they deserved because they took contemporaneous film and blended it with their film, and it really made it look like it was contemporaneous. So I think young people who weren't even born or were in their infancy when this event occurred can be just totally confused by it,

such things as that. That really has nothing to do with anything. Apparently, that's artistic license. That's what I understand. But I didn't think it was very helpful to anybody.

- Q Okay. Thank you very much, Dr. Humes. We appreciate it.
- A Thank you for the opportunity to be here, and I hope I have not appeared to be evasive, because I had no intention of being evasive. But when I came upon questions that I really couldn't specifically remember, I know of nothing else to say but I don't specifically remember.

MR. GUNN: Thank you very much.

[Whereupon, at $5:10~\mathrm{p.m.}$, the deposition was concluded.]

[Signature not waived.]