DRAFT -- 12/18/95

DEPOSITION OF DR. JAMES HUMES TOPICS FOR QUESTIONS

Chronology/General Questions

- (1) In 2WH, 349 you stated that "certain X-Rays and other examinations were made before the actual beginning of the routine type autopsy examination." What did you mean by "other examinations"? Who conducted them? What was it about these "other examinations" that differentiated them in your statement from the "routine type autopsy examination?" In 1 HSCA, 324 you stated, in response to the question what time of day or night did the autopsy begin, "...the President's body, as I recall,
- arrived about 7:35, 7:40 in the evening and after some preliminary examinations, about 8 or 8:15."Once again, what do you mean here by "preliminary examinations," and who conducted them?
- (2) During the autopsy, were logs or lists kept of photographs and/or X-Rays taken? If so, who kept them, and to whom were they given after the autopsy?
- (3) Which prosectors made drawings during the autopsy? Which prosectors sketched on, or annotated face sheets? Which prosectors took handwritten notes? Where are all of these materials today?
- (4) Dr. Humes, did you prepare a typewritten draft of the autopsy protocol at home on or about November 23, 1963? If so, what became of it? (Rationale: In his December 1, 1995 letter to ARRB Roger Feinman recounts hearsay that Humes had prepared a typewritten draft at his home on Saturday, November 23, 1963. Since this alleged draft is not now in evidence, and since Dr. Humes told Arlen Specter under oath that he had destroyed a draft of the report, it is reasonable to ask this question.)
- just notes, or a draft of the autopsy protocol, or both? [Alternative: What specifically did you burn that night?] (Rationale: Humes has given differing accounts. In the first of two certificates he signed on November 24, 1963 he says "I...have destroyed by burning certain preliminary draft notes..."; and then in a second certificate from that same date, "Autopsy notes and the holographic draft of the final report were handed to Commanding Officer, U.S. Naval Medical School...", thus indicating that some kind of notes were actually retained, in addition to the holographic, long-hand draft. Second, in his March 16, 1964 sworn testimony in 2 WH, on pages 372-373, Humes said: "In privacy of my own home, early in the morning of Sunday, November 24th, 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." He thus clearly states to the Warren Commission that he burned a draft report, and

makes no mention of the President's bloodstains as being the reason for destroying the draft report, which makes sense, because he says he wrote the draft report on Sunday morning. He does not mention burning any notes to the Warren Commission, only a draft of the report. Third, when interviewed by the HSCA Forensic Pathology Panel on September 16, 1977, Dr. Humes says in unsworn testimony: "...I want to comment about it--some comments that I destroyed some notes related to this, by burning in the fireplace of my home, and that is true..."; and after describing that his motive was to prevent inappropriate or sensational or profiteering use by unauthorized persons of documents with the President's blood on them, he continued: "...having transcribed those notes onto the pieces of paper that are before you, I destroyed those pieces of paper." In discussing the bloodstains on the autopsy face sheet (which was not destroyed and still exists), Humes said: "Now, I didn't redraw Jay's, and don't ask me why... I guess it was because I didn't have another piece of paper and I didn't want to sit down and reproduce a drawing." Fourth, in sworn testimony on September 7, 1978 before the full House Committee on Assassinations, Dr. Humes said: "The original notes which were stained with the blood of our late President, I felt, were inappropriate to retain... I sat down and word for word copied what I had on fresh paper...destroyed the ones that were stained with the President's blood." Summarizing, on one occasion Dr. Humes said that he destroyed a draft, and on other occasions he said he destroyed notes with bloodstains on them. Since preventing the inappropriate or sensational use of the President's blood was given by Humes as the motive for burning papers, he should be asked why he burned this draft which he commenced preparing late Saturday evening (after having "wrestled" with it for 4 or 5 or 6 hours Saturday afternoon), and completed at 3 or 4 A.M. Sunday morning, since a draft report of the autopsy protocol which he commenced working on Saturday afternoon seemingly could not have the decedent's blood on it. All of the above should be clarified to the greatest extent possible.) If you destroyed a draft version of the autopsy protocol report, what was the motive for its destruction? (Speculation: Feinman informs ARRB in his December 1, 1995 letter that a Stover memo recounts that Canada told him Humes showed Canada, his C.O., a draft of the report. When? Was this draft changed by Capt. Canada? If so, was this the real reason that a draft was burned on Sunday morning as Dr. Humes told Specter, because higher authority had dictated changes?)

- (6) Did you witness (and/or recover) a bullet falling from either the President's body, or from his wrappings, at autopsy? If so, what became of it? (Rationale: Sibert and O'Neill executed and signed a receipt for a missile received from CDR James J. Humes on 11/22/63, and both X-Ray technician Jerrol Custer and CAPT David P. Osborne claim to have seen a bullet fall from either the body or the clothing at autopsy.)
- (7) Was it normal procedure for autopsies at Bethesda to be audiotaped in 1963? If so, was JFK's autopsy audiotaped? If not, why not?

The Rydberg Drawings

(1) Dr. Humes, what materials aside from your memory, if any, were used for the

preparation of the Rydberg drawings which became Commission Exhibits 385, 386 and 388?

The Military Review

- (1) Who prepared the draft of the Inventory List dated November 1, 1966 which reflects the materials you viewed in the National Archives on that date? Was there any outside assistance, other than typing, in the preparation of that list? Who decided upon what views were represented by each of the photographs?
- (2) Who wrote the draft of the January 26, 1967 "Military Review" which linked the Autopsy Protocol with the numbered photos and X-Rays from the November 1, 1966 Inventory?

People in Attendance

- (1) Did you know a Dr. George Bakeman, in the U.S. Navy Medical Corps? (Rationale: The Sibert-O'Neill report lists "Dr. George Bakeman, U.S. Navy" as present at the autopsy. Several persons in the research community have attempted to find out who Dr. Bakeman was; i.e., certify his bonafides, and determine what his job normally was, and what his function was at the autopsy, to no avail.) If so, what were his normal duties, and what functions, if any, did he perform at the autopsy?
- (2) Were any members of the Joint Chiefs of Staff present at the autopsy? (Rationale: clarification of hearsay allegations.)
- (3) Were any senior officers of 4-star rank present at the autopsy? (Rationale: clarification of hearsay allegations.)
- (4) Were there any Air Force Officers of Flag Rank, aside from General Godfrey McHugh (the President's Air Force Aide), present at the autopsy? (Rationale: clarification of hearsay allegations.)

Orders Received

before

(1) Prior to start of the autopsy, were orders or instructions relayed to you by anyone to either perform a complete autopsy, or to limit the scope of the autopsy? If so, which persons gave what instructions? Did they specify reasons? (RADM Calvin Galloway reportedly instructed Dr. Humes to conduct a complete autopsy, whereas it is often implied that RADM George Burkley reportedly instructed Humes to perform a limited autopsy, and to limit the autopsy to the head and the

chest, supposedly in accordance with the alleged wishes of the Kennedy family. This matter should be clarified, if possible.)

during

- (1) Do you recall who it was that denied Dr. Finck permission to see the President's clothing during the autopsy? (Rationale: Finck actually implies in his February 1, 1965 letter to Blumberg that this person may have been Dr. Humes, saying: "I was denied the opportunity to examine the clothing of Kennedy. One officer who outranked me told me that my request was only of academic interest. The same officer did not agree to state in the autopsy report that the autopsy was incomplete, as I had suggested to indicate"---Finck earlier makes clear that it was Humes who had disagreed with him over whether to call the autopsy complete or incomplete; see question #3 below, for details. On the other hand, casting some doubt on the identity of the person who denied Finck permission to see the President's clothing, Humes was a Navy Commander--(an 0-5 in rank)--and Finck was an Army Lt. Col.--(also an 0-5 in rank)--and under normal circumstances Humes would be considered to be equal in rank to Finck, not to outrank him...unless perhaps as the designated "Chief Prosector," at a Navy autopsy in a Navy hospital, Finck considered Humes to "outrank" him. This should be clarified.)
- (2) During the course of the autopsy, did any persons at any time attempt to stop or limit any procedures being performed by the prosectors? If so, what procedures were affected, and in what way, and who gave such orders or direction?

(Rationale: see Shaw trial transcript, specifically the testimony of Pierre Finck, who said under oath in 1969 that he was ordered not to dissect the neck wound, but does not remember by whom.)

<u>after</u>

(1) Did anyone in the Federal Government give you direct orders, or pressure you, or steer you to write the autopsy report in any particular way? If so, whom? If more than one person exerted influence upon how the autopsy report was written, please name all such persons, and if they indicated what their motivations were, please explain what those motivations were. (In his sworn testimony at the Shaw trial, Finck claimed that it was Admiral Galloway who inserted the word "presumably" into the text of the Autopsy Protocol twice, in reference to the wounds of entry, in the back, and exit, in the anterior neck. The Feinman letter to ARRB of December 1, 1995 indicates that a memo by Capt. Stove r summarizing a conversation with Capt. Canada relates that Humes had shown

Capt. Canada a draft of the autopsy protocol. Did Canada recommend or order changes? In his September 16, 1977 unsworn testimony before the HSCA Forensic Pathology Panel, Humes stated: "Now, there are corrections and comments and changes of language in here...and they are a result of meeting with Dr. Boswell and Dr. Finck on Sunday afternoon in the Naval Medical Center and going over them together...this document was signed by all 3 of us and, parenthetically in the middle of this preparation, other Naval officers were not--no one was telling us anything. We did this strictly on our own. But in an adjacent room and awaiting the results of our efforts were other senior Naval officers watching the television. And it was at that point, of course, that Mr. Oswald was...shot, and in fact, we interrupted our work to try and figure out what this meant to us." Humes' recollections that no one made any changes in the holograph but the 3 prosectors stands in disagreement with Dr. Finck's sworn testimony at the Shaw Trial that Admiral Galloway changed some of the wording. Furthermore, if as Humes recounts above there were senior Naval officers waiting in the next room while the prosectors were in an adjacent room working on a draft, the obvious implication is that the senior officers were going to review and pass judgement on the work of their juniors, the prosectors.) Did you show Captain Canada a draft of the autopsy protocol? When? If so, did he make changes? Did any senior officer review a draft prior to mid-day on Sunday the 24th at Bethesda? If so, whom, and did they make any changes? Were any changes dictated by the senior officers in the next room at Bethesda on November 24th after the hand-written draft was reviewed by you and Boswell and Finck? Who directed the insertion of the words "presumably" in the hand-written draft's descriptions of the entry wound in the upper right posterior thorax, and the exit wound you described in the anterior neck?

- (2) Did you receive a verbal "order not to talk" about the autopsy prior to receipt of your written order of silence? If so, who issued that verbal order? When was it given? Were the reasons explained? (Comment: In the Shaw Trial transcript, Dr. Finck states that Admiral Kenney, Surgeon General of the Navy, gave the verbal order not to talk about the autopsy in the morgue on November 22/23, 1963...but Dr. Finck did not indicate whether Admiral Kenney provided any reason.)
- (3) Why, Dr. Humes, did you disagree with Dr. Finck over his opinion that the autopsy should not be checked off in the indicated block on the protocol form as a "complete autopsy," and instead decide to call it a "full autopsy" on the protocol cover sheet? (Rationale: see both page 538 of the Warren Report, and the February 1, 1965 Blumberg Report written by Finck.)

Telephone Conversations to and from Dallas

(1) Did you call anyone or talk to anyone from the Parkland Hospital staff on November 22, 1963 before or during the course of the autopsy on President Kennedy? (Rationale: Dr. Ebersole, in his sworn testimony before the HSCA forensic pathology panel, is of a fairly firm opinion that Humes either made, or initiated telephone calls to Parkland during the autopsy for the purpose of discussing the throat wound. In addition, Roger Feinman, in his November 16, 1993 letter to the Conyers Subcommittee on Government Operations, states that Dr. Perry complained to a member of his staff

on the day after the autopsy that he had been awakened several times in the middle of the night by calls from Bethesda urging him to retract the opinion he gave the news media that the throat wound was a wound of entry. Researcher Livingstone quotes Nurse Audrey Bell as the source of that statement. If true, this could explain Perry's uncertainty over the years, both with the Warren Commission and the HSCA, over whether he was called Friday night or Saturday by Dr. Humes; perhaps he was called both Friday night and Saturday during daylight hours. He has always stated that he was called twice by Humes.) If so, to whom did you talk, and what was discussed?

- (2) Did you talk to anyone at Parkland Hospital between the end of the autopsy and the completion of the embalming process? (Rationale: Humes stated that he stayed in the Bethesda morgue from 7:30 P.M. on November 22, 1963 through the end of the embalming process, until about 5:30 A.M. on Saturday, November 23rd.)
 - (3) Did you initiate calls to Parkland by requesting or directing others to make those calls?
- (4) Were you aware of others who were present at the autopsy making calls to Parkland during the autopsy, or directing others to do so?
- (5) Before you spoke with Dr. Perry in Dallas, did anyone tell you that the Parkland physicians has stated at a news conference that the President had a small wound in the front of his neck, and that it appeared to them to be a wound of entrance? If so, when were you told and by whom?
- (6) When did your two phone calls with Dr. Perry at Parkland Hospital occur? How far apart from each other? Did you locate Dr. Perry yourself by asking who had performed the tracheotomy, or did someone give you his name as the point of contact you should call? If so, whom provided his name?
- (7) Why did you ask Dr. Malcolm Perry on November 23, 1963 why he had performed a tracheostomy? (See Perry's testimony in 6 WH, page 16. There is evidence in the record that President Kennedy's head wound was much larger when seen at Bethesda than when seen in Parkland; while the reasons for this discrepancy are unclear, the large (either 13 cm X 13 cm, or 10 cm x 17 cm, depending on which account one believes) wound seen at Bethesda, particularly if little or no brain was present in the cranium as O'Connor claims, may have caused Humes to wonder why a tracheostomy was performed on a man with such a gaping and obviously fatal head wound, or alternatively--based on the O'Connor allegations-- on a man with essentially no brain in the cranium. Because of the speculation which now surrounds this Humes to Perry question in the literature, it is reasonable to ask this question...Arlen Specter did not ask Humes this question.)
- (8) Why did you ask Dr. Malcolm Perry on November 23, 1963 if he had made any wounds on President Kennedy's back? (See Perry's testimony in 6 WH, page 17; this is essentially a repeat of "condition of the body: back wound" question #1 below. See the justification below.)

Dr. Livingston?

(1) Did you receive a telephone call at any time on November 22, 1963 from a Dr. Livingston? If so, when was the call taken--before or after the autopsy? What was it about? (See

Dr. Livingston's deposition from November 19, 1993 in which he claims to have called Dr. Humes prior to start of the autopsy to inform him that he had heard news reports that the President had been shot in the throat from the front.)

Photographs

- (1) Please study autopsy photos #17, 18, 44 and 45 for us, and tell us whether these photographs depict the posterior of the skull with scalp reflected taken from the outside of (from behind) the back of the head, or the inside surface of the posterior of the skull after the removal of the brain, as taken from above and in front? (Rationale: Drs. Humes, Boswell and Finck, and photographer Stringer all signed an inventory list dated November 1, 1966 which described these photos as either "missile wound of entrance in posterior skull, following reflection of scalp"--#s 17 and 18; or alternatively as "missile wound in posterior skull with scalp reflected"--#s 44 and 45. However, the Clark Panel in 1968 described this photo as "cranial cavity with brain removed viewed from above and in front," thus indicating the orientation of the camera lens, and went on to describe in detail that the photo shows the beveled crater of the entrance wound where it exited on the inside of the posterior part of the skull. What this photo depicts, and the angle from which it was depicted, is crucial because the prosectors' January 26, 1967 "Military Review" report clearly describes, a month and a half after it was identified and labeled, that the beveled edges of an exit wound can be seen in these same photos. The HSCA, in 7 HSCA, pages 128-129, part 330, concurred with the Clark Panel that these photos depict the inside surface of the posterior part of the skull, in diammetrical opposition to the way these photos were described in the autopsists' November 1966 Inventory. (In the November 1966 Inventory, it seems clear that the outside of the back of the skull is being described, for two reasons: first, because the scalp is reflected--there is no scalp on the inside of the skull--and second, because the surface photographed appears to be a convex surface--such as the exterior of the skull viewed from outside--and not concave, as the back of the cranium would appear if photographed from the inside.) Because an exit crater was described as present in these photographs by the autopsists in January, 1967 in their "Military Review" Report, this glaring discrepancy in interpretation of what part of the cranium the photos depict, and from what vantage point, is key to understanding the true location, size and orientation of the head exit wound and may bear directly upon the issue of the authenticity of other photos...and X-Rays...showing the back of the head seemingly intact.)
- (2) Can you equate the entry wound in the occiput (described on the face sheet body chart as "ragged, slanting") with anything seen in the close-up photographs of the empty cranium (without a brain inside), photographs # 17, 18, 44 and 45? Do you see the entry wound on these photographs? If so, would you please mark in writing where it is on this black and white photograph which represents photo #17(on the reproduction provided)? If not, what is the meaning of the description of photo #17 in the November, 1966 Inventory wherein it says: "negative depicting missile wound over entrance..."? (Does this mean "...depicting large defect, or exit

wound, over entrance wound"?)

- (3) Please point out on the appropriate photographs of the back of the head where you see the entrance wound in the scalp. Would you please mark its location on the black and white copies of these photographs provided here? (The prosectors indicate on page 3 of the 1967 "Military Review" that the entrance wound is visible on the photographs, specifically on Nos. 15, 16, 42 and 43. They further state that from the photographs, the object seen is not recognizable as a penetrating wound because of the slanting direction of entry; they go on to describe the entry wound as "a laceration and tunnel, with the actual penetration of the skin obscured by the top of the tunnel." Humes, Boswell and Finck all denied to the HSCA's Forensic Pathology Panel in 1977 that the "red spot" in the midst of parted hair in these photos was the entrance wound, and stated that the entrance wound in the photos was the object seen near the hairline in the bottom half of the photographs. One year later Humes, and only Humes, recanted and changed his mind during public testimony in front of the Committee; Boswell and Finck were not brought to the public hearing. It is not only appropriate for the ARRB to ask the prosectors to mark where the entry wound is on our sample photographs, but virtually mandatory in light of the controversy created by the HSCA Forensic Pathology Panel's disagreement with them over the entry wound's location in the 1977 hearings, followed by Humes' public recantation in the open hearing in 1978 and the HSCA's eventual placement of the entrance wound 100 mm higher than the prosectors had placed it in the official HSCA findings, which in turn was followed in 1992 by all 3 prosectors' adamant reinsistence in the JAMA articles that the low, occipital location -- 100 mm lower than the Clark Panel and HSCA Forensic Pathology Panel opinions is the correct one. This question is an invaluable opportunity to clarify the record for history.)
- (4) In your January 26, 1967 "Military Review" of the autopsy photographs and X-Rays vis-a-vis the autopsy report findings (conducted at the request of the Justice Department), you state that autopsy photos #17, 18, 44 and 45 show the other half of the missile exit wound (i.e., the half of the exit wound not on the loose 10 X 6.5 cm fragment), and shows the beveling of bone characteristic of a wound of exit. How do you reconcile these photographs of a semi-circular wound of exit in the periphery of the large defect (and your comments regarding this semi-circular crater on page 4 of your January 26, 1967 "Military Review" report) with your statement to Arlen Specter in 1964, under oath (as found in WH 2, page 353), that you could find no evidence of exit in the margins of the large bone defect? Do these photographs (#s 17, 18, 44 and 45) represent what you saw at the autopsy that night when you viewed the cranium? (The point here is to determine where this beveled half-crater in the cranium is located on the skull. If photos #17, 18, 44 and 45 really are the posterior of the skull with scalp reflected, per the November 1, 1966 inventory, then they are photographs of the back of the skull taken from outside the back of the head. If so, this beveled crater would appear to be evidence of an exit wound in the rear of the head, somewhere in the occipital-parietal region, in opposition to the findings of the Clark Panel and HSCA that the exit wound was in the right front of the head: see figure 29 in 7 HSCA, page 125. If photos #17, 18, 44 and 45 really represent the posterior of the skull photographed from the outside the cranium behind the head, as indicated by the prosectors in their 1966 inventory, and if it is JFK's skull, then either the

3 prosectors missed this evidence entirely during the autopsy and noticed it only upon review of the photographs, or they lied about its presence both in the Autopsy Protocol, and under oath to the Warren Commission.) Does this semi-circular, beveled crater in photographs #17, 18, 44 and 45 represent an exit wound in the posterior part of the skull? (Confusing the record even further, in 7 HSCA, on page 249, when Dr. Petty and Dr. Angel ask Dr. Humes about the orientation of photograph #44 and whether it depicts frontal bone, Dr. Humes replies: "That is not frontal bone where that semi-circle is--its either temporal or parietal bone, Dr. Angel," seeming to contradict the combined description of photograph #44 which one arrives at by marrying its description in the November, 1966 inventory and the January, 1967 "Military Review" Report. Humes should be asked how he could say this to Dr. Angel, when he seemingly described the photograph in another way in 1966 and 1967.)

- (5) Does the location of the back wound in the autopsy photographs (#s 11, 12, 38 and 39) accurately represent what you saw on November 22, 1963 at autopsy?
- (6) Do the photographs which show the back of President Kennedy's head (#s 15, 16, 42 and 43) accurately represent what you saw on November 22, 1963 at autopsy?
- (7) In the autopsy protocol, you describe the throat wound/tracheostomy incision as having "widely gaping, irregular edges"; does its appearance in the autopsy photographs (#s1-6, 29-31, and 40-41) match what you saw on November 22, 1963? Specifically, do these photographs depict the "widely gaping, irregular edges" which you wrote about in the protocol? (Rationale: Paul O'Connor has told researchers that the actual throat wound was much more jagged and irregular than what appears in the photographs, and for this reason he believes that this portion of the pertinent autopsy photos have been airbrushed to make this jagged, irregular wound look more like a tracheostomy.) Furthermore, is the size of the throat wound in these photos the same as the size of the wound you observed on November 22, 1963?
- (8) Was an autopsy photograph taken showing a metal probe inserted into the President's back (or "neck") wound? (Rationale: Andy Purdy's HSCA interview report of his August 23, 1977 interview with Dr. Karnei, HSCA #002198, quotes Dr. Karnei as saying that he--Karnei--recalls the prosectors putting the probe in the hole in the President's back in an attempt to determine where the bullet came out, and taking pictures while the body was on its side. No such photographs are now in evidence, nor have they ever been listed on the 1966 or 1977 inventories.)
- (9) Were photographs taken of the cranium with the brain still inside and the scalp reflected? How many?
- (10) Were the photographs of the back of the head showing the scalp intact/not reflected taken with the brain in the cranium, or after removal of the brain?
- (11) How many photographs were taken of the 5 cm bruise on the apical portion of the upper right lung?
- (12) Were photographs taken of the coning/beveling on the inside surface of the cranium opposite the inshoot in the occiput? How many? (See transcript of Finck's sworn testimony before the HSCA forensic pathology panel, pages 88, and 90-91 for Finck's testimony that the prosectors

directed the taking of photographs on both surfaces of the entrance wound, namely on the outside table of the skull with the scalp reflected, and also of the inside, beveled surface of the entrance wound in order to show the crater on the inside table of the skull.)

X-Rays

- (1) On the A-P X-Ray of President Kennedy's skull there is a prominent radio-opaque object 6.5 mm in diameter which the Clark Panel and all subsequent official bodies have interpreted as a bullet fragment embedded in the outer table of the back of the skull. Did you see this object on this X-Ray on the night of the autopsy?
- (2) Did you see any such fragment embedded in the scalp on the back of the President's head in that location at autopsy? (The Clark Panel observed that the fragment appears in the X-Ray on the outer table of the skull.)
- (3) After looking at the position of the 6.5 mm radio-opaque object (fragment) on both the original and enhanced A-P X-Ray, would you please provide your opinion as to whether the position of that object on the X-Ray is, or is not, in the same location as the large occipito-parietal-temporal defect in the skull which you describe in the autopsy protocol? (Rationale: other autopsy witnesses, namely O'Connor and Custer, have told researchers that the 6.5 mm fragment on the A-P X-Ray appears to be located on the present X-Ray at a position where there was nothing but a large defect at autopsy.)
- (4) On the night of the autopsy, when you viewed the A-P X-Ray of the skull, did you notice any evidence of an equivalent-sized (entry) hole in the posterior table of the skull slightly (about 1 cm) above where this 6.5 mm radio-opaque object now appears? (Dr. Mantik, a board-certified radiologist who has access to the autopsy materials in the archives, can find no evidence whatsoever on the A-P X-Ray, either by visual inspection, or by optical densitometry measurements, of an entry wound--or hole--in the posterior skull 1 cm above the 6.5 mm radio-opaque fragment. Yet the HSCA forensic pathology panel opined that the entry wound is about 1 cm above the 6.5 mm fragment, in parietal bone. It should be much more visible on the A-P X-Ray than it is on the lateral X-Ray; the HSCA panel and the Clark Panel describe a small entry hole in the skull on X-Ray #2, the right lateral X-Ray, but neither body mentions whether such an entry hole can be seen on the A-P X-Ray, where it should be more visible than on the lateral X-Rays. The absence of an entry wound in the bone on the A-P X-Ray, when such a wound is present on the right lateral X-Ray, seems to bear directly on the authenticity of the A-P X-Ray.) Did you see an entry wound in any location on the A-P X-Ray when you viewed the X-Ray on the night of the autopsy? (According to Dr. Mantik, the entrance wound 2.5 cm to the right and slightly above the EOP described in the Autopsy Protocol, and subsequently to the HSCA and in the JAMA articles, is not visible in the JFK A-P X-Ray due to its being obscured by dense bone anterior to the wound. Therefore, if the prosectors did see an entry wound in the A-P X-Ray, it would have been evidence of an entry wound above where they described it in the protocol.)

- (5) On the night of the autopsy, did you see evidence of your occipital entrance wound on any of the lateral skull X-Rays? If so, would you please indicate where on a photocopy of the enhanced lateral X-Ray?
- (6) On the right lateral X-Ray of the President's skull, many tiny fragments can be seen in the upper half of the skull leading from an area near the coronal suture to the vertex at the rear of the skull; are these fragments in the same position as the "dust-like" fragments you saw on this X-Ray the night of the autopsy, and are they generally the same size? (In 7 HSCA, page 251, Dr. Boswell describes most of the bullet fragments recovered from the skull as a millimeter or so in size, at which point Dr. Humes says, "I don't recall them of that size." One researcher who has viewed the X-Rays in the archives, radiologist Dr. Mantik, says that the sizes of these fragments as seen on the X-Ray appear to be too large to equate to the "dust-like" fragments described by Dr. Humes in his 1964 testimony to Arlen Specter -- see 2 WH, page 353 -- as "extremely minute, less than one millimeter in size." Furthermore, Humes described these fragments in his Warren Commission testimony--again see WH 2, page 353-- as traversing a line from the entry wound in the occiput to just above the right eye, which is not where the very visible trail of fragments in the right lateral X-Ray is located today.) Stated in another way, the Clark Panel stated in 1968 that "the majority of these fragments lie anteriorly and superiorly"...and "consists of finely divided fragments, distributed in a posteroanterior direction in a region 45 mm. long and 8 mm. wide," connecting both their entrance wound which they located 100mm, above the EOP and their exit wound which they located somewhat vaguely in the right side of the head, near the right front of the coronal suture----how does this relate to your statement in the Autopsy Protocol (WR, page 541) that "Roentgengrams of the skull reveal multiple minute metallic fragments along a line corresponding with a line joining the above described small occipital wound and the right supra-orbital ridge?"

(Humes appears to describe a fragment trail which is barely hinted at in the X-Rays today, whereas the very visible fragment trail described by the Clark Panel, and seen today, is not located where Humes described his fragment trial in the Autopsy Protocol.

This matter may bear directly on the authenticity of the X-Rays in the Archives today.)

- (7) When you viewed the skull X-Rays (both A-P and lateral) on the night of the autopsy, was bone shown to be absent in the posterior region of the skull?
- (8) When you view the enhanced skull X-Rays now, both the lateral and A-P, do you see any evidence of the beveled half-crater which is so prominently displayed in photos # 17, 18, 44 and 45? (The prosectors cite strong visual evidence of this crater in the photos cited above in their 1967 "Military Review" report. It is reasonable to ask whether the prosectors can see such evidence of the beveled half-crater on the margin of the exit wound (seen in photos #17, 18, 44 and 45) in any of the X-Rays. If not, why not? If not visible on either the enhanced lateral or A-P skull X-Rays, then absence of such evidence may impugne the authenticity of either those photos, or of the X-Rays.)
- (9) Was an X-Ray taken of the President's body with a metal probe inserted? (Rationale: Roger Feinman letter of November 16, 1993 to the Conyers Government Operations Subcommittee in which he provides a copy of an internal CBS memo circa January, 1967 written by a CBS executive

who was a friend and neighbor of Dr. Humes, who says in the memo that Humes had told him that an X-Ray had been taken of the body with a metal probe inserted.)

(10) Were any X-Rays taken of the skull after removal of the brain? (One researcher, Dr. Mantik, a board-certified radiologist who has been granted access to the autopsy X-Rays and photographs, believes that the reason the extant lateral X-Rays of the skull are so extremely dark in the anterior region of the cranium, and show such a high optical density in that region, may be because they were—taken after removal of the brain, or at least without much brain in that part of the cranium. It is interesting to note that the Sibert-O'Neill report lists a total of 11 X-Rays as having been taken, whereas the official record lists 14. Since there are indications that some autopsy activity may have continued after their departure, and since the official record shows three more X-Rays in evidence than Sibert and O'Neill recorded, it is reasonable to ask whether the 3 skull X-Rays now in evidence were taken late in the evening, after Sibert and O'Neill departed the morgue, perhaps even after the brain was partially or totally removed.)

Description of the body

back wound

- (1) Why did you ask Dr. Malcolm Perry, on November 23, 1963 if he had made any wounds on the back of the body of President Kennedy during treatment at Parkland hospital? (Source: Dr. Perry's Warren Commission testimony, WH 6, pg. 17. One possible reason is the shallow nature of the wound observed at the autopsy; i.e., less than two inches deep with no apparent transit lane through the body found by the prosectors, based on their own testimony---it did not even penetrate the pleura---combined with the fact that no bullet associated with this wound was found in the body. Another possible reason is that if Dr. Humes did not observe an abrasion collar around the back wound, he may have had questions about its origin: although an abrasion collar can now be seen on certain autopsy photographs, there is no mention of an abrasion collar in the Autopsy Protocol, or in the Supplementary Autopsy Report.)
- (2) Is it true that you estimated President Kennedy's back wound to traverse a 45-60 degree downward angle? If so, why was that not entered into the written autopsy protocol? (Source: Sibert-O'Neill Report, and Purdy's HSCA interview report of August 10, 1977 conversation with Humes, HSCA # 002070.) How was this determination made--by dissection, by use of a probe, or by other means?
- (3) Why did you substitute the phrase "presumably of entry" for "of entry" in the autopsy protocol when describing the wound on the President's upper right posterior thorax? Was that handwritten change in the holograph of the autopsy protocol your idea, or someone else's? If someone else's idea, whom? What thinking, and what considerations, motivated the addition of the word "presumably" to the handwritten draft? (Rationale: There is no mention of an abrasion collar in association with the back wound in the Autopsy Protocol, Supplementary Autopsy Report, or in Dr.

Humes' sworn testimony before the Warren Commission. Although present now in the autopsy photos of the wound in the upper right posterior thorax, it is interesting that it is not mentioned in 1963 or 1964. If an abrasion collar was not observed by Dr. Humes, it could explain why the word "presumably" was inserted prior to the words "of entry" when describing the back wound in the Protocol. In the Shaw Trial transcript, Dr. Finck states that Admiral Galloway gave the direction to insert the word "presumably.")

(4) Why, Dr. Humes, in CE 385 (the Rydberg drawing which you supervised), and in your sworn testimony before the Warren Commission with Arlen Specter (2 WH, page 351), did you change your Autopsy Protocol description of a wound to the "upper right posterior thorax" (page 540, Warren Report) to a "neck" wound? How did this change in description come about? Was it suggested by a Government official or representative? (Rationale: "Upper right posterior thorax" is rather precise terminology which clearly translates as an upper back wound to the layman. Humes later describes this as a "wound in the low neck" under testimony with Specter, while CE 385 leaves no ambiguity whatsoever, showing a wound completely at variance with the holes in the President's coat and shirt. How this controversial change in description came about should be clarified and put on record, if possible.)

throat wound

- (1) Why did you describe the dimensions of the throat wound/tracheostomy incision as 6.5 cm in the autopsy protocol, but as 7-8 cm in size in your Warren Commission testimony? (See 2 WH, 361 for the 7-8 cm quote, and WR, 540 for the 6.5 cm quote.) Is it possible for you to clarify now which figure was correct, or what it was that caused you to change "6.5 cm" to "7-8 cm" when you were questioned by Arlen Specter in March 1964?
- (2) Why did you subsequently describe the tracheostomy as "3 to 4 centimeters" in size in the JAMA article dated May 27, 1992 (page 2798), when your previous description of it, under oath, was as "7-8 centimeters?" (This is not an unfair question----for example, if Humes is able to remember exactly how many X-Rays (14) and photographs (52) are in the official record for JAMA, which he does on page 2798, and if he is able to remember that the entrance wound in the occiput was 15 X 6 mm in size and 2.5 cm to the right of and slightly above the EOP, as he does on page 2798, then he presumably had his previously written reports available in front of him. One cannot help but wonder why he cannot accurately cite, from the published Autopsy Report or sworn Warren Commission testimony, a similar figure about what he said then about the size of the throat wound. An unavoidable rhetorical question is: "Was Humes trying to obfuscate or downplay, through JAMA, the major controversy about whether or not the tracheostomy was tampered with and enlarged after the President's body left Dallas? Was this why he states for the first time that the tracheostomy was 3 to 4 centimeters in size--one half the width of what he described under oath to Arlen Specter?")

Lung bruise

(1) In your opinion, could the 5 cm bruise on the apical portion of President Kennedy's right lung have been caused by the lodgement, and possible subsequent removal, of a bullet? (Rationale: if the 2-3 cm tracheostomy Dr.Perry allegedly described to one researcher really was enlarged by unknown persons prior to the autopsy as some have speculated--such speculation due to its increase in size to a width of 7-8 cm, and the description of widely gaping, irregular edges in the autopsy protocol--- it may very well have been for the purpose of removing a bullet from the top of the right lung. In support of the reasonableness of this speculation are the following facts: (1) Dr. Perry opined 3 times during the Parkland press conference on November 22, 1963 that the wound in the President's throat looked like one of entry, and although he has subsequently been "sitting on the fence" for years on this issue with the Warren Commission, the HSCA, and JAMA, he reportedly reaffirmed to Dr. Robert Artwohl in December, 1992 that he was "sure the wound in the anterior neck was an entrance wound;" (2) Dr. Kemp Clark told Arlen Specter under oath that Dr. Perry felt that a bullet had ranged downward into the President's chest and did not exit; and (3) the intelligent speculation regarding a wound in the chest attributed to Dr. Perry was based on bubbling, frothing, oxygenated blood exiting the small throat wound in the midline of the anterior neck, and also on the fact that the President's trachea was not only torn on the right side, but that his trachea was also deviated slightly toward the left--these details can be found in Dr. Perry's own deposition, in 6 WH, page 10.) If you think this possible, do you have any opinion on who might have done this, or when it may have occurred? (See the question on "certain other examinations.") When inspecting the President's tracheostomy during the autopsy, was there any evidence of post-mortem damage or surgery?

head inshoot

- (1) Please describe the proximity of the inshoot which was near the EOP to the large defect in the head; i.e., how close to the large defect (in centimeters) was the entry wound, and also what was the directional relationship of the inshoot to the large defect (i.e., directly above, or below, etc.)? Could you also produce a drawing demonstrating this? Does the Rydberg drawing, CE 386, still in your opinion accurately depict the proximity of the inshoot to the large defect in the cranium?
- (2) The entry wound in the occiput is shown by a dot on the autopsy face sheet body chart; attached to the dot on the body chart is an arrow pointing to the upper left of the posterior of the skull, and the notation: "ragged, slanting." Would you please explain the meaning of this notation? (Rationale: if the arrow drawn on the body chart skull refers to the direction of travel of the missile which entered the occiput, it is hard to reconcile the direction of the missile's travel with the location of the large defect presented in Warren Commission Exhibits 386 and 388. This slanting direction of entry is once again referred to in the January 26, 1967 "Military Review" report, on page 3.)
- (3) In the handwritten draft of the autopsy protocol, you twice described the entry wound in the occiput as a "puncture," but subsequently lined out the word puncture and did not use that

verbiage in the final, typewritten autopsy protocol. Why were these two changes made? What thinking went into the omission of this word "puncture"? Were these changes your own idea, or someone else's?

(4) Is it true that the entrance wound 2.5 cm to the right and slightly above the EOP was not "fully determinable" until one of the 3 skull fragments was brought into the morgue during the latter stages of the autopsy, completing the second half of the entrance wound? (In other words, is it true that you initially observed just one large head defect, and did not find a full, through-and-through entry wound until one of the 3 skull fragments delivered by the Secret Service was reassembled into the cranium?) (Rationale: the reason this is important is that if true, this could explain the difference between Humes writing in the Protocol, and describing to the Warren Commission, that the greatest extent of the large defect was approximately 13 cm, whereas Dr. Boswell's drawing indicates that an area in the skull 10 X 17 cm was missing. Dr. Boswell has provided this information about reassembly of the entry wound's circumference on the telephone to a researcher, Dr. Gary Aguilar, and also stated as much to Andy Purdy of the HSCA as recorded in the August 17, 1977 interview summary, HSCA # 002071, as well as in 7 HSCA, page 246--his testimony before the HSCA Forensic Pathology Panel. This explanation by Boswell of how the full circumference and dimensions of the EOP entrance wound was determined, if confirmed by Humes, further corroborates Parkland observations of a large defect in the occipital-parietal area, since Boswell states on page 6 of the Purdy interview summary that "the bone was completely gone above the entry wound.")

head outshoot

- (1) Did you find specific evidence of an exact point of exit, either on loose fragments, or around the margins of the large defect? (Rationale: Humes stated under oath in WH 2, page 353 that he could find no evidence of exit in the edges of the large defect; he did state, however, in WH 2, pages 354-355, that the prosectors found evidence of coning on the large triangular fragment which was the largest of the 3 fragments brought into the Bethesda morgue late in the autopsy by Federal agents. In opposition to the statement by Humes to Specter during Warren Commission testimony that he could find no evidence of exit around the edges of the large defect, there is clearly coning and beveling present on the surface of the cranium in the one existing close-up view of an empty cranium without a brain inside...photos #17, 18, 44 and 45. In the "Military Review" report of January 26, 1967, however, which the prosectors were requested to write by the Justice Department in order to relate the autopsy findings to the photographs and X-Rays, Humes contradicts his sworn Warren Commission testimony (2 WH, page 353) on page 4 of the Military Review where the report reads: "Photographs Nos. 17, 18, 44 and 45 show the other half of the margin of the exit wound, and also show the beveling of the bone characteristic of a wound of exit." It is unavoidable that one must rhetorically ask, "How could Humes not notice this in person on the body at the autopsy, with a Forensic Pathologist, Finck, assisting him, and yet notice it on photographs 3 years later?")
 - (2) What did you mean, Dr. Humes, when you testified under oath to Mr. Allen Dulles on

March 16, 1964 (2 WH, page 360), in response to his question about a bullet to President Kennedy's head, when you said: "Scientifically, sir, it is impossible for it to have been fired from other than behind. Or to have exited from other than behind?" (Rationale: this bears directly upon the orientation of photos 17, 18, 44 and 45, and therefore on the location of the beveled half-crater which is clearly a wound of exit in the autopsy photographs. The November 1, 1966 "Military Review" Inventory List of photos and X-Rays clearly describes these photos as showing the posterior of the skull, with scalp reflected, indicating that the photos are of the back of the head, taken from outside the head and behind the head--since there is no scalp on the inside of the skull, this conclusion is inescapable based upon the way the description was written. This statement by Humes to Dulles in March of 1964, under oath, seems to be early corroboration of what he would say about the exit wound over two and one half years later when he located it in the November 1966 Inventory, and then described it in the 1967 Military Review. Humes' reply to Warren Commissioner Allen Dulles seems to be a strangely obfuscated way of describing both an entry wound and an exit wound in the rear of the skull. Perhaps that is exactly what he saw in the posterior of the skull--both an entrance wound and an exit wound; if so, it does not necessarily follow that they were both made by the same bullet. In fact, since a bullet entering the brain is unlikely to make a U-turn, sighting both an entrance wound and an exit wound in the back of the cranium is virtually prima facie evidence of two shots to the head, from two different directions.) Was there scientific evidence, i.e., coning and beveling, of an exit wound in the rear of the skull? Is this what you meant by your reply to Allen Dulles?

brain (at autopsy)

- (1) When you first saw the body of President Kennedy on November 22, 1963, was there a brain inside the cranium? (Rationale: the repeated assertions of Navy autopsy technician Paul K. O'Connor, commencing with his August 25, 1977 interview with the HSCA's Andy Purdy (HSCA # 003272), in which he says there was nothing left in the cranium but "splattered brain matter," and later in the interview that there "were no brains." It was because there was essentially no brain in the cranium, he says, that he did not perform a craniotomy. The enigmatic--or awkwardly constructed--statement, "The brain is removed..." is found in the Autopsy Protocol; it is unclear, in light of the O'Connor allegations, whether this means the prosectors removed the brain, or whether this means that the brain was removed by someone else prior to the autopsy, and this was passively being noted as an observation made by the prosectors of the condition of the body when they first observed it.)
 - (2) Who removed the brain during the autopsy on November 22, 1963?
- (3) Was the brain stem already severed, or partially severed, when you commenced removing the brain from the cranium on November 22, 1963? (Rationale: see same justification used for question #6 below under "questions about the brain" related to the Supplemental Autopsy Report.)
- (4) Were there any steps normally involved in removing/freeing the brain from a decedent at autopsy which you did not have to follow or perform on November 22, 1963? If so, which ones?
 - (5) Describe the actions taken on November 22, 1963 to remove President Kennedy's brain.

Did you have to sever the brain stem to remove the brain?

- (6) Was the brain weighed on November 22, 1963 following its removal at autopsy? If so, who weighed the brain? What was the brain weight? If the brain was weighed, then why was the brain weight not listed on the face sheet?
- (7) Who took custody of the brain following completion of the autopsy on November 22, 1963?
- (8) Did you notice any damage to the cerebellum on November 22, 1963 following removal of the brain from the cranium?

<u>head</u>

- (1) At autopsy, did the area of the large head defect in the President's head which was devoid of scalp and skull--see WH 2, page 353-- include part of the occipital region of the skull? Was part of the occipital region, or was the occipital-parietal region of the posterior cranium devoid of scalp when the body arrived, or was it possible to cover the bone loss which you described as extending somewhat into the occipital region with a flap of loose scalp during the photography of the head?
- (2) Did you comment or speculate out loud (orally) to the other prosectors, or to others in the room during the autopsy, or did you ask, whether there had been "surgery to the head area, namely to the top of the skull"? (Rationale: this remark is attributed to Dr. Humes in the Sibert-O'Neill Report, and FBI internal memoranda subsequently reveal that in this specific instance, the agents recorded verbatim oral utterances of the autopsy prosectors. Furthermore, FBI agent James Sibert confirmed in his October 24, 1978 affidavit to the HSCA, on page 4, that the prosectors did make this speculation early in the autopsy. He also says they changed their minds later in the autopsy, after missing fragments were brought into the room. The prosectors should all be asked who made this statement, why it was made at the time, and whether they changed their minds later in the autopsy, and why.) If so, please describe in detail what caused you to comment or speculate in this manner, or to ask this question. Did you notice any evidence of post-mortem damage or incisions in the top of the skull?

Silence about adrenals

JAMA interview remarks about writing the story some day

Evidence brought into morgue

skull fragments

how many

(1) Please describe how many skull fragments were brought into the morgue, who brought them, and whether they were all brought in at the same time, or separately. (The record makes it clear that 3 fragments were brought in, but it is unclear by whom, and when, and whether they were all brought in together, or separately.)

description

- (1) Of the fragments brought into the morgue during the autopsy, the largest has been described (see Sibert-O'Neill Report, page 5, and their 11/29/63 report of interview with Gerald Behn, page 1) as 10 X 6.5 cm in size; on November 22, 1963, did you or the other prosectors make any determination regarding from which portion of the skull this fragment appeared to have come? (Rationale: Ebersole described this as occipital bone during his sworn testimony before the HSCA Forensic Pathology panel, yet Dr. Humes stated in his Warren Commission testimony in 1964 that he was unsure about the placement of the fragments in the large wound--see WH 2, pages 370-371.)
- (2) There is clearly a suture visible on the X-Ray of the large fragment. Did you or the other prosectors conclude during the autopsy whether this was the lamboid, saggital or coronal suture? (The HSCA Forensic Pathology panel eventually agreed that the suture seen in the X-Rays of this fragment was coronal suture, but disagreed internally as to whether the bone itself was parietal, or frontal.)

what happened to them(were they with brain)

(1) Do you recall what happened to the skull fragments which were brought into the morgue later on in the autopsy? Were they saved with other gross materials, interred with the body, or kept with the brain? (Rationale: Humes told Andy Purdy during the August 10, 1977 interview that they were not saved, and that he thought they remained with the body. However, X-Ray technician Jerrol Custer has repeatedly told researchers that he was asked by Dr. Ebersole and Dr. Loy T. Brown to X-Ray skull bone fragments on November 23, 1963, the day after the autopsy, when President Kennedy's body was already lying in state in the East Room of the White House. Mortician Tom Robinson of Gawler's Funeral Home, who performed the embalming, was unsure what happened to the 3 fragments when he spoke with Andy Purdy of the HSCA on August 17, 1977--although he said they were "...possibly put back in the head...", he also recalled that there were "...no loose ones..." when he closed the hole in the posterior cranium with a piece of rubber.)

Supplemental examination of the brain

when?

(1) How long must a brain be fixed in formalin prior to its post-autopsy examination? (Textbook answer is reputed to be two weeks. Dr. Karnei opined to Andy Purdy in

1977 in his interview that the brain examination normally occurs about two weeks after the autopsy.)

(2) Exactly when (on what date) did you conduct the Supplemental Examination of the Brain? (Rationale: Both Boswell (8/17/77) and Stringer (8/17/77) told Andy Purdy during interviews that the brain was examined "2 or 3 days" after the autopsy, and in a second reference in his interview by Purdy, Boswell says the brain was examined and described at the time of the autopsy and was examined further 2 days later; yet the Supplemental Autopsy Report is dated 12/6/63, which is 14 days after the autopsy. The main Autopsy Report was more than twice as long as the Supplemental Report, and yet it was submitted on November 24, 1963, only 2 days after the autopsy; it is therefore appropriate to wonder why the Supplemental Autopsy Report was not completed and submitted to higher authority until December 6, 1963, if it was conducted "2 or 3 days" after November 22nd. Humes should be asked when the brain examination was conducted; prior to asking this question we should ask him how long a brain has to sit in formalin before it is "fixed". The two official investigations never asked Humes (or stated) when the brain examination was conducted; in WH 2, page 355, Humes says the Supplemental Autopsy Report was prepared "some days after the examination," and that the delay was "necessitated by, primarily, our desire to have the brain better fixed with formaldehyde before we proceeded further with the examination of the brain;" 2 HSCA, 16 says "The pathologists completed a supplementary report approximately one and one half weeks later...," and 2 HSCA, 133 says that "the brain...was further examined," without saying when or even referring to the date on the report. (If possible, the ARRB staff should consult an independent pathologist, or a medical text prior to questioning Dr. Humes to obtain an accurate answer to how long a brain has to remain in formalin before it is adequately "fixed" prior to pathological examination.) Both the Warren Commission and the HSCA were uncharacteristically vague about both not describing, and not pursuing, exactly when the brain examination itself was conducted; this is surprising, since both the brain weight of 1500 grams (more than a complete average male brain), and its physical appearance (namely, a completely intact cerebellum and considerable disruption and apparent tissue loss in the right cerebral hemisphere--known to the HSCA through several photographs) were at odds both with each other, and with the condition of the brain described by Dallas doctors at Parkland (i.e., one third or so of the brain, namely posterior cerebral tissue and part of the cerebellum, "blasted out;" and macerated cerebellar tissue hanging from the wound). (Note: Finck's report to Blumberg of Feb. 1, 1965 states: "CDR Humes called me on 29 November 1963 that the three prosectors would examine the brain at the Naval Hospital." It is unclear whether this was simply the notification date, or the actual date of the examination. Even if it was the actual date of the examination, it is not consistent with the Boswell and Stringer recollections that the brain examination was "2 or 3 days" after the autopsy.)

who was present?

(1) Who was present? (Comments: In 2WH, 355 Humes states that he, Boswell and Finck examined the brain. It is clear that a photographer was present from both the presence of photographs

in the record, and from the comments of Dr. Humes about the number of photographs taken on page 545 of the Warren Report. John Stringer identifies himself as the photographer in his interview with Andy Purdy of the HSCA on August 12, 1977. What is not clear is whether or not Dr. Karnei was present at the brain examination: Boswell told Purdy on August 17, 1977 that Karnei was, along with 2 lab technicians assisting himself and Humes; Karnei tells Purdy on August 23, 1977 that he has no information regarding a subsequent brain examination, and that he personally was not present for the sectioning of the brain. Even more confusing, Boswell does not mention Finck as being present during his interview with Purdy.)

(2) When Dr. Finck asked you if an AFIP neuropathologist would be admitted, why did you refuse this request? (Rationale: Dr. Pierre Finck, in his February 1, 1965 report to General Blumberg, says that he asked Humes "if a representative of the Neuropathology Branch of the Armed Forces Institute of Pathology would be invited to the gross examination of the brain. Humes told me that no additional persons would be admitted." Dr. Karnei opined to Andy Purdy in 1977 that a neuropathologist should have been present. The reasons for this decision attributed to Humes are unclear, and if possible should be placed on the record by asking Humes.)

Questions about the brain

- (1) Would you please describe the chain-of-custody of the brain from the time of the autopsy on November 22, 1963 to the time you began your Supplemental Exam.? (During his August 29, 1977 interview with Purdy, Dr. Karnei said he "...has a feeling Humes locked it in his office." During his August 17, 1977 interview with Purdy, Boswell said that subsequent *to* the examination of the brain 2 or 3 days after the autopsy, the brain and other tissue materials were put in a locked closet in Stover's office without benefit of a guard.)
- (2) Do these photographs (#s 46-52) accurately depict the brain you examined during the Supplemental Autopsy?
- (3) Do these photographs (#s 46-52) accurately depict the brain which you removed from the President's cranium on November 22, 1963?
- (4) In your opinion, was the brain you examined during the Supplemental Examination the same brain you removed from the President's cranium during the autopsy on November 22, 1963?
- (5) Why did you take a histological tissue section from the line of trans-section of the spinal cord? (The purpose of taking sections for microscopic study is to study damaged tissue--there would seemingly be no point in studying damage done after death by the prosector's own scalpel. James C. Jenkins, enlisted autopsy technician, has reportedly told at least one researcher that Humes declared during the autopsy that "this brain fell out in my hands...the brain stem has been surgically cut," or words to that effect, and was quite sure that as soon as Dr. Humes extended the saggital suture by cutting, that the brain fell out into his hands unimpeded, and that Dr. Humes never did have to sever the spinal cord at all.)
 - (6) Was the brain stem already severed, or partially severed, when you previously removed

the brain at autopsy? (Rationale: autopsy technician James C. Jenkins has told a researcher on at least two occasions that the brain literally fell out into Dr. Humes' hands as soon as Dr. Humes extended the saggital suture with minimal cutting, that Humes then declared "This brain fell out in my hands. The brain stem has been surgically cut," and that Dr. Humes definitely did not have to sever the brain stem to remove the brain.)

- (7) Who weighed the brain during the Supplemental Exam.? (Brain weight is listed as 1500 grams in the Supplemental Examination Report on page 544 of the Warren Report.)
- (8) How do you explain the brain weight of 1500 grams, in light of the apparent loss of tissue from the right cerebral hemisphere seen in photographs # 46-52?
- (9) How do you explain the brain weight listed in the Supplemental Autopsy Report of 1500 grams, in view of your comments in the May 27, 1992 issue of JAMA (page 2798) that "two thirds of the right cerebrum had been blown away?" (Note: an average complete male brain weighs anywhere from 1380-1450 grams. When the prosectors make themselves available, voluntarily, to be interviewed by a journal because they want to clarify the record, it is certainly fair and appropriate to question them on statements such as this regarding two thirds of the right cerebral hemisphere being missing, when it is at such gross variance with what they wrote about brain weight in their Supplemental Autopsy Report, an official document. This appears to be a major discrepancy, not a minor one, and bears directly on the brain identity/authenticity issue. Seemingly, both conditions cannot be true, and the record in this matter should be clarified as much as possible.)
- (10) Was the cerebellum damaged? How extensively? Was any of the cerebellum missing? How much? (Specific mention of the cerebellum is absent from the narrative text of the Supplemental Autopsy report; it is only mentioned in the summary list of tissue sections taken for study. Parkland descriptions of the cerebellum variously indicate that it was damaged, exhibited tissue loss, herniated, and/or extruding from the head wound in the posterior skull; yet Dr. Paul Peters, following a 1988 viewing of the 7 brain photographs in the National Archives, remarked to Gerald Posner that on the photographs he viewed, the cerebellum was depressed, but not herniated or torn. Viewed another way, the conflict in the record looks like this--after listing the 7 areas of the brain from which sections were taken, the following summary remarks, from WR 545, are printed regarding the results of the microscopic examination of the 7 brain tissue sections: "All sections are essentially similar and show extensive disruption of brain tissue with associated hemmorhage." I am unsure about whether this is consistent with the depressed, but seemingly intact--and according to Peters, not herniated-cerebellum in the brain photos. If not consistent with what is shown in the brain photos, this is one more reason to question the identity/authenticity of the brain that was photographed. The HSCA made clear that it could not authenticate that brain as the brain of President Kennedy.)
- (11) Why did you take a histological tissue section from the right cerebellar cortex? (The purpose of taking sections for microscopic study is to examine damaged tissue microscopically. Once again, see the printed results of the microscopic examination of this section, on page 545 of the Warren Report: "...extensive disruption of brain tissue with associated hemmorhage." Viewing something of this nature would have explained taking the section, but this description does not seem

to be consistent with the cerebellum's appearance in the brain photos.)

- (12) Did the missile which caused the entrance wound in the occipital region of the skull damage, or puncture the tentorium? (Humes, when asked this question by the HSCA Forensic Pathology Panel, does not give a clear or precise answer--see 7 HSCA, page 247. The tentorium is the membrane which covers the cerebellum.)
- (13) How many times did you meet to conduct a supplemental brain examination? Once, or twice? (See rationale provided below after question number 2.)

Supplemental Autopsy Report-Microscopic Examination of Tissue Sections

- (1) In this report, you summarize the results of microscopic tissue examinations of specimens taken from President Kennedy's brain, heart, lungs, liver, spleen, kidneys, and skin wounds. Who conducted the microscopic tissue examinations? Were the results of these examinations written down? If so, who wrote them and where would they be found today? Who provided these reports to you? (If no reports were written on these many tissue sections, then how were you able to write your Microscopic Examination summaries found on the second and final page of the Supplemental Autopsy Report, WR page 545?)
- (2) When were the 7 tissue sections of the brain referred to on page 544 of the Warren Report actually taken from the brain: during the autopsy on November 22, 1963 immediately following removal of the brain and prior to infusion, or during the supplemental examination of the brain subsequent to the autopsy? (Rationale: Dr. Karnei told Purdy on August 29, 1977 that he recalled "...a Secret Service man assigned to watch the tissue processor... all night..." and said they "...always present during the processing," thus indicating that tissue slide processing began concurrent with the autopsy late Nov. 22/early Nov. 23, 1963, but not clearly indicating which tissues were being processed. In his interview with Purdy in 1977, Boswell said that the tissue people were given the tissue that was removed following the autopsy, and further states that the slides were available about noon on the 23rd (of November). He indicated that a microscopic report was dictated at that time. Of great interest is another Boswell comment in his interview with Andy Purdy of the HSCA, in which he says he could not specifically recall whether sections were taken from the brain or not at the supplemental examination. Editorial comments: (1) What is unclear from the way this was phrased by Boswell and/or Purdy is who dictated the report, and whether the report was the simple summary found on page 545 of the Warren Report, or perhaps a much more detailed report, related to each individual slide and section, from which the summary of findings on page 545 was derived by the author of the Supplemental Autopsy Report; (2) If the brain sections were taken on November 22, 1963, and the microscopic report was dictated on November 23, 1963, and the supplemental brain exam was conducted "2 or 3 days" after the autopsy as claimed by Boswell and Stringer, then what is unclear is why the date "12/6/63" is written on the Supplemental Autopsy Report. However, if the recollections of two people who were present (Boswell and Stringer) on the timing of the brain exam are incorrect, and Finck's recollection of receiving a call from Humes on November 29, 1963 tasking

him to participate in the brain examination is correct, and furthermore, if the brain tissue sections were not taken until the supplemental examination when the brain was already fixed, then this latter possibility may account for the delay in the issuance of the Supplemental Autopsy Report; (3) Since the physical appearance of the cerebellum in the brain photographs is seemingly at great variance with both the numerous descriptions of cerebellar trauma from Parkland, and the verbal summary of the microscopic examination of brain tissue damage on page 545 of the Warren Report, it is essential that all possible steps be taken to clarify this timeline, including when the brain tissue sections were taken, when they were analyzed under the microscope, when the report of that analysis was written, and the exact date of the supplemental brain exam itself. Asking the rhetorical question: "Were there two separate brain examinations after the autopsy?" becomes almost unavoidable after plowing through the conflicts in the evidence on the timing of the exam, and who was present.)

ADDITIONAL QUESTIONS FOR DR. BOSWELL

Note: The only questions in Dr. Humes' list which are not appropriate to ask Dr. Boswell are those regarding Humes' destruction of notes and draft autopsy report; the question about the preparation of the Rydberg drawings; the alleged Livingston phone call prior to the autopsy; those regarding the content of the Humes phone calls to Dr. Perry (re: the back wound and the tracheostomy); the question asking Humes why he did not allow a neuropathologist to be present during the supplemental examination of the brain; exit wound question #2, about Humes' response to Allen Dulles' question about the direction of the head shot; and back wound question #4, which refers to why Humes personally began describing a high back wound as a low neck wound. Brain question number 9, regarding how Humes' quote in JAMA regarding two thirds of the right cerebral hemisphere being missing relates to the brain weight of 1500 grams in WR, page 544, should simply be rephrased when asked of Dr. Boswell.

(1) In the JAMA article of May 27, 1992 (page 2800) you stated that "Having seen the clothing, I now know that I created a terrible problem with my own autopsy drawings. My drawings of the bullet holes on the night of the autopsy did not precisely match up with the actual holes in the clothing, because we were not aware that the President's suit jacket had humped up on his back while he waved at the spectators". Your statement is not understood at all, since in reality your diagram (dot) on the autopsy face sheet locating the President's back wound does appear to match precisely with the holes in the President's coat and shirt, and furthermore appears to match precisely with RADM Burkley's White House Death Certificate of November 23, 1963, which places the back wound at the level of the third thoracic vertebra. Why did you make this statement in JAMA? (Rationale: The ability to make a correct drawing of a wound's location on a body chart should depend only upon one's ability to correctly observe and measure a wound on the body...furthermore, since the holes in the President's coat and shirt appear to precisely match each

other, and since there is not a double set of holes, there is no direct evidence that any clothing was hunched up. This statement is so outrageous that one inevitably wonders if Boswell was attempting, somewhat lamely, to make an excuse for the redescription of a back wound ("upper right posterior thorax," in the Protocol on page 540 of the Warren Report) as a "neck" wound (in CE 385, in 16 WH, 977, and in Dr. Humes' testimony under oath before Arlen Specter--see 2 WH, 351), in an attempt perhaps to bolster the Warren Commission's single bullet theory.)

(2) In your estimation, Dr. Boswell, how much of the mass of the right cerebral hemisphere of President Kennedy's brain was missing? Please use a rough percentage, or if you prefer, you can describe it in terms of a fraction--please use your own words to best describe your recollection of how much of the cerebral hemisphere was missing. (Rationale: the intention here is to see if his recollection is on the same order of magnitude as Dr. Humes expressed in JAMA, and to then see if it is consistent with the recorded brain weight of 1500 grams.)