

PART IV: CRITIQUE OF THE EARLIER EXAMINATION, WITH PRESENTATION OF SUGGESTED PROCEDURES TO BE FOLLOWED IN PERFORMING AN INVESTIGATION AND EXAMINATION ON THE REMAINS OF A GUNSHOT VICTIM

INTRODUCTION

(495) The members of the forensic pathology panel were asked to comment on the post mortem examination conducted by the pathologists, Dr. Humes, Boswell, and Finck, including the procedure and the report prepared afterwards.

(496) According to a summary report prepared by Drs. Humes, Boswell, and Finck pursuant to requests by the Department of Justice following a meeting on January 20, 1967, at the office of Dr. Robert H. Bahmer, Archivist of the United States, (92) then-Commander Humes was directed to perform the autopsy by the Surgeon General of the U.S. Navy because of the decision to bring the body of the late President to the Naval Medical Center in Bethesda, Md., where Dr. Humes was Director of Laboratories. According to the summary, the Surgeon General of the Navy advised Dr. Humes "to determine the nature of the President's injuries and the cause of his death. (93)

(497) The same record indicates that the autopsy began at approximately 8 p.m. on Friday, November 22, 1963, and was concluded at approximately 11 p.m. The autopsy report, written by Dr. Humes with the assistance of Drs. Boswell and Finck, was prepared the morning of November 23 and delivered by Dr. Humes to Admiral Burkley, the President's physician, on November 24 at about 6:30 p.m.

(498) The Navy "Clinical Record Authorization for Post Mortem Examination, U.S. Naval Hospital, Bethesda, Md.," dated November 22, 1963, indicates the following:

2. You are hereby authorized to perform a complete post mortem examination on the remains of John F. Kennedy. Authority is also granted for the preservation and study of any and all tissues which shall be removed. This authority shall be limited only by the conditions expressly stated below: [no restrictions are indicated] Signature: [Mrs.] John F. Kennedy [typed]; Address: White House, Washington, D.C.; Authority to consent: wife [no signature is present]. The performance of the autopsy specified above is approved: R. O. Canada, Captain MC USN; Title: Commanding Officer; Date: 22 November 1963 [no signature in this location either]. (94) Signature of witness: Robert Kennedy.

On the bottom of this document is a block designated "Patient's Identification (for typed or written entries give: name—last, first, middle; grade; date; hospital or medical facility) is the signature "G. G. Burkley, Physician to the President." (95)

(499) The autopsy doctors had the following qualifications, as detailed in their report on their 1967 review of the autopsy photographs and X-rays:

In charge was James J. Humes, M.D., at the time commander, Medical Corps, U.S. Navy, and Director of Laboratories, Naval Medical School. He was certified in 1955 by the American Board of Pathology in anatomic and clinical pathology. Assisting him were J. Thornton Boswell, M.D., and Pierre A. Finck, M.D. Dr. Boswell at that time was a commander in the Medical Corps, U.S. Navy, and Chief of Pathology, Naval Medical School. He was certified in 1957 by the American Board of Pathology in anatomic and clinical pathology. Dr. Finck, a lieutenant colonel, Medical Corps, U.S. Army, was then chief of the Military Environmental Pathology Division and Chief of the Wound Ballistics Pathology Branch, Armed Forces Institute of Pathology, Walter Reed Medical Center. He was certified in 1956 by the American Board of Pathology in anatomic pathology and in 1961 in forensic pathology. (96)

(500) In his testimony before the Warren Commission, Dr. Humes characterized his experience as follows:

My type of practice, which fortunately has been in peacetime endeavor to a great extent, has been more extensive in the field of natural disease than violence. However, on several occasions in various places where I have been employed, I have had to deal with violent death, accidents, suicides, and so forth. Also, I have had training at the Armed Forces Institute of Pathology, I have completed a course in forensic pathology there as part of my training in the overall field of pathology. (97)

(501) When asked what his specific function was in connection with the autopsy, Dr. Humes responded as follows:

As the senior pathologist assigned to the Naval Medical Center, I was called to the center by my superiors and informed that the President's body would be brought to our laboratories for an examination, and I was charged with the responsibility of conducting and supervising this examination; told to also call upon anyone whom I wished as an assistant in this matter that I deemed necessary to be present. (98)

(502) Dr. Humes said he selected Dr. Boswell as one of his assistants and, later, Lt. Col. Pierre Finck, who was made available to him by Brigadier General Blumberg, the commanding officer of the Armed Forces Institute of Pathology, because "I felt it advisable and it would be of help to me to have the services of an expert in the field of wound ballistics and for that reason I requested Colonel Finck to appear. (99)

(503) Many of the difficulties that arose in relation to the post mortem examination or autopsy developed in part because of the basic differences between an autopsy conducted in a hospital pursuant to

the wishes of the next of kin and one conducted under the aegis of a medicolegal investigative system, pursuant to statute, for official purposes. The investigation of a death that is known or suspected to be unnatural is a multidisciplinary effort, requiring cooperation amongst a number of scientific disciplines and ongoing communication between those disciplines from the initiation of the investigation until its completion. The medicolegal autopsy is only one stage of this investigation, albeit an important one. To be performed properly, it requires that the prosecutor evaluate information obtained from those aware of the circumstances of the death and that the prosecutor anticipate and address questions which might arise subsequently.

(504) In a suspicious death, the body is initially the property of the State (state's evidence), and the autopsy is usually, if not invariably, conducted in accordance with a statute, in anticipation that the evidence gathered as a result of the procedure may be introduced into a civil or criminal proceeding. Such an examination is conducted without the consent of surviving members of the family who, on completion of the examination, assume custody of the body and make final disposition.

(505) Traditionally, the hospital pathologist conducts the examination in a hospital setting, invariably pursuant to the wishes of the family. Such an examination is concerned primarily with pathologic appraisal of the clinical diagnosis for which the physician was attending the patient, with evaluation of the treatment afforded the patient, and, in a more general sense, with the education of the medical community concerning the interrelationship between morphologically recognizable disease and the manifestation of this disease in the patient while alive. Such a procedure is also conducted in order to understand the development (pathogenesis) of the one or several diseases that the deceased person may have had, commencing with the identification of the causative (etiologic) agent or process responsible for initiating the disease, and continuing through the primary and subsequent secondary changes in the body incident to this disease. This usually culminates with an understanding as to which disease processes were immediately responsible for the patient's death. Correlation of the clinical presentation of the patient while alive with the disease processes identified at the autopsy is the responsibility of the traditionally trained hospital pathologist, who usually commences this procedure with a thorough review of the medical history of the deceased and with consultation with the attending physicians in an attempt to define the "problems" or questions to be answered during this type of procedure.

(506) The medicolegal autopsy, on the other hand, addresses itself to a number of different problems, although it has a number of features in common with the traditional hospital autopsy discussed above. The forensic pathologist conducting this examination has an educational background that initially is the same as the hospital pathologist's and includes a thorough understanding of natural disease processes, the manifestation of these diseases within the body and the correlation of these changes with clinical findings in the living person. He must also, however, fully understand the manifestations and ramifications of so-called "unnatural disease," that is, dis-

ease deriving from the effects of violence of all types, as well as other exogenous, unnatural agents on the body. The examination conducted by the hospital pathologist is designed to establish "clinical pathological correlation"—the relating of the medical illness to the findings of the autopsy. The forensic pathology examination is conducted after understanding the questions which have arisen in the course of the investigation prior to the autopsy and with anticipation of questions that might arise during or after the procedure. Such questions must be specifically addressed in the subsequent report.

(507) Such an investigation and examination should be conducted so that the observations and findings are objectively documented, before conclusions or opinions deriving from them are reached. Such documentation entails careful scrutiny, appropriate measurements, photography and use of any other means to make the observations and findings of the initial procedure available to professionals in the same or related fields whose expertise might be sought for further evaluation, or for review by other physicians in the event of criminal or civil litigation. Therefore, the medicolegal autopsy is conducted not only as a problem-oriented procedure that addresses itself to questions raised or anticipated, but also as a procedure that attempts to document the answers to these questions in such a way that other independent experts may review the findings and reach their own conclusions. The procedure is conducted in a systematic sequence, and a number of examinations by several different disciplines may be conducted concurrently.

(508) The general steps of any medicolegal investigation might be summarized as follows:

(509) 1. Careful scrutiny of the scene of death, with collection and preservation of evidence gathered, whether or not it is immediately apparent that it has a bearing on the evaluation of death. Such an investigation naturally includes careful documentation, not only by photography, but also by detailed report, from which a subsequent evaluator may be able to reconstruct independently the circumstances of death. If there is any possibility that the victim may survive, the body is moved from the crime scene prior to this examination by the investigator. Even then the subsequent investigation and documentation should be as thorough as is reasonable.

(510) 2. The medicolegal autopsy. This procedure begins after members of the team responsible for the onscene investigation have been consulted. The examiner should be familiar with the evidence derived from it and from all of the other individuals who may have had contact with the body of the victim subsequent to injury, with detailed collection of information concerning artifacts which may have been introduced onto or into the body incident to therapeutic management. The medicolegal autopsy in every instance should address itself to establishing the cause of death beyond a reasonable doubt and the elimination of other competing causes of death, these being criteria for presentation of such evidence in a criminal proceeding. The medicolegal autopsy is intended to be a complete examination which minimizes speculation.

(511) In a gunshot homicide, there are other specific questions, in addition to the above, which the examiner should address, including:

1. The identification, characterization, and localization of all wounds of missile entrance (inshoot), and the identification, characterization, and localization of all wounds of exit (outshoot).

2. The correlation of individual entrance and exit wounds, examination of the internal bullet track, the structures penetrated or perforated, and the extent of resulting injury.

3. The evaluation, if possible, of the lethality of individual wounds, the expected survival period, and the capability and extent of physical activity after injury.

4. The evaluation, if possible, of the sequence of individual wounds from observations on and in the body.

5. The determination of the cause of death and the exclusion of other antecedent and competing conditions.

### *The medicolegal examination*

#### *1. Physical facilities*

(512) The pathologist conducting the procedure should have access to facilities that will allow all team members to proceed in an orderly systematic fashion, without undue pressures, to complete the examination successfully and collect all of the necessary evidence in an expeditious manner. Included among equipment which should be available are examining and washing facilities and instruments, equipment for color, and black and white photography, X-ray equipment, and recording equipment to enable onsite observation and description of the findings.

#### *2. Personnel*

(513) Among the members of the team who should be available for consultation in examination of a gunshot victim are:

a. A radiologist and technical assistant to take and evaluate X-rays prior to commencement and during the procedure, if necessary.

b. A representative from the physical evidence laboratory who should have appropriate containers and labels for collecting individual items of evidence for subsequent examination. Such evidence should be individually itemized, packaged, and sealed and the chain of custody maintained by appropriate receipts.

c. Representatives of such other professional disciplines as may be needed to assist in the identification. These may include a forensic odontologist and/or a forensic anthropologist.

d. A forensic toxicologist to assist in determining that specimens should be collected to rule out intervening or antecedent chemical conditions which might cause, contribute, or otherwise relate to the death.

e. An investigator from the onscene investigation team should be available to assist in correlating onscene findings with the on-going autopsy findings.

(514) Considering the purposes and significance of a medicolegal autopsy, it is necessary that every attempt be made to have appropriate professional staff and physical facilities available, recognizing that such resources to vary from community to community. This is especially true when a medicolegal autopsy is conducted on the President

of the United States. The examination must be conducted without compromising professional or physical resources, even if there were contrary pressures in the interests of time or for some other expediency. The decision to perform an autopsy should take into consideration the wishes of the family, and the necessity and requirements of the procedure should be explained to the family as sensitively as possible, but the forensic pathologist must retain final decisionmaking authority and responsibility as to whether an autopsy should be performed and its scope.

### *3. Details of the procedures*

(515) The individual steps that should be followed in the course of such procedures and the reasons for these steps include the following:

a. Examine exterior to body, clad, as received. Look for any abnormalities and other signs of cause and manner of death.

b. Photograph body overall as received. These photographs will aid in the documentation of the chain of custody and serve to refresh the memory of the investigator and examiner.

c. Search for and remove special items of evidence and individually package and label. Undress the body carefully and air dry clothing. Control samples of hair, et cetera, for comparison with similar evidence recovered from a suspect should be collected at this time. Trace evidence may provide clues to identify the assailant and/or help rule suspects in or out. It may also assist in identifying the scene of death or the location of the body, if moved after death.

d. Examine exterior of body, unclad. Look for evidence of violence.

e. Describe clothing, indicating general nature, defects due to violence of any type, their location, size (in centimeters) and approximate location (in centimeters, from fixed landmarks). Clothing defects may provide valuable clues about the cause and manner of death, as well as the events leading to death.

f. Photograph external unusual features of the body as received, with body landmarks. Diagrams of involved areas may also be important. These photographs may aid in documentation of the chain of custody and serve to refresh the memory of the investigator and examiner and may reveal features not noted previously.

g. At this point, careful cleaning of the body may be undertaken, with particular care to insure that significant external manifestations of trauma, et cetera, are not altered or removed. The cleaning of the body so as to rid it of excess blood, grease, and the like, is necessary to permit proper external examination. The removal of dirt, drainage, and debris may afford better visualization of external injury. The time delay associated with these procedures may allow for the settling of blood by gravity (dependent lividity) and thus afford better delineation of poorly defined bruises.

h. Describe natural external features of the body. This procedure is a normal part of the medicolegal autopsy and is vital for victim identification.

i. Describe unusual identifying marks, scars, and tattoos if present. Describe unnatural external features of body (external evidence of injury).

j. Size, shape, color, and location (both to fixed body landmark, such as above the heel or gluteal fold, or below the top of the head, and relationships to each other) of each gunshot entrance and exit wound should be noted, along with the diameters of wound, residues, abrasions, et cetera. The size and shape of the wound and surrounding residue may be compared with test patterns fired with the same or a similar weapon. Distances of the defects above the floor, ground or a seat may be used for reconstruction by triangulation.

k. Photograph face of body from the front, with identification number. This photograph can establish identity in court. Photograph unusual identifying features of body (tattoos, scars, et cetera.)

l. Photograph the closeup appearance of gunshot entrance and exit wounds, including wound residues from the gunshot and missile, with landmark and ruler in the photograph. Reconstruction of the measurements of wounds, their relationship and surrounding residues would be possible from such a photograph, in the event the voice recorded report or other notes are lost. These may also serve as illustrations in court to indicate the procedures used to determine the range of the weapon from the body.

m. Photograph all unusual external features of the body after cleaning, using body landmarks and an identifying number and ruler if necessary. The hair should be shaved around wounds prior to this final series of photographs. The examiner must remember that proper photographs take time. These photographs document the descriptive report.

n. X-ray the body as appropriate. X-rays may establish the presence of a bullet within the body and indicate its location. Removal of all the bullets is imperative for subsequent examination. X-rays also provide documentation for court.

o. Open the body cavities to inspect organs in their natural position (in situ). Internal evidence of injury should be noted and not be obscured by careless organ removal.

p. Collect specimens for appropriate toxicologic and serologic examination.

1. Blood.

2. Urine.

3. Other samples, as indicated, after consultation with the toxicologist. Blood should be collected from the heart and/or a large, more peripheral artery or vein, and labeled accordingly. Urine should be collected free of contamination. Vitreous humor from the eye may also be of toxicologic value.

q. Collect samples for serology. Serologic typing of the victim's blood may provide important information for comparison with blood stains found on the alleged assailant or at the scene.

r. Describe internal evidence of injury, and effects of medical or surgical therapy, if any. Photograph any internal evidence of injury or therapy in situ and after dissection. These photographs document the descriptive report.

s. Describe internal evidence of injury and distinguishing abnormalities due to hospital treatment. Again, descriptions must be thorough, accurate, concise, and logically ordered.

t. Photograph internal evidence or organ injury dissected. Of value may be photographs of the body from sagittal and coronal locations, with rigid probes in place to indicate angles of bullet tracks. These may be used to measure more accurately the angles of the bullet track(s), to remeasure these angles in the event the voice recorded report or notes are lost, or for court illustration.

u. Describe internal natural findings. The pathologist should note evidence of natural disease, as it may be relevant to a traumatic death.

v. Collect representative sections of unusual pathologic findings from appropriate organs and samples of all organs for histopathologic examination. This is the standard procedure for all well-conducted autopsies and is not unique to a forensic autopsy.

w. Retain appropriate gross organs as necessary and appropriate for illustration for the attending physician or as subsequent evidence in criminal or civil proceedings. In those cases in which there is known or suspected injury or disease of the brain, supplemental examination with sectioning should be conducted after 10–14 days of fixation (usually in formalin).

x. Photograph significant findings on dried clothing, with identifying number and ruler. Individually package significant portions and seal and label. Individual packaging will prevent cross-contamination with other articles of clothing and will aid in documenting the chain of custody.

y. Bag all clothing. Clothing helps in preserving the chain of custody and in avoiding contamination.

z. Fingerprint body for definite and independent identification.

aa. Complete the description of findings and conclusions concerning the cause and manner of death. The final report should be completed promptly after all pertinent examinations are finished. The opinions and conclusions of this report should attempt to interpret subtle medical findings and anticipate questions of lay readers.

bb. Submit collected specimens to the forensic physical science laboratory, maintaining a proper chain of custody.

### *Specific considerations pertaining to the John F. Kennedy autopsy*

(516) The panel evaluated some of the major difficulties encountered during and after the Kennedy autopsy and the reasons for these difficulties, in addition to those which might have been encountered had a defendant allegedly responsible for this crime been placed on trial within the jurisdiction where the crime occurred.

#### *1. Jurisdiction*

(517) Chapter 49 in the Code of Criminal Procedure in the State of Texas details the responsible authorities and procedures for "Inquests upon dead bodies." (100) Article 49.01, entitled "When Held," states: "It is the duty of the justice of the peace to hold inquests, with or without a jury, within his county in the following cases \* \* \*"(101) Paragraph two lists these cases, among others: "When any person is killed, or from any cause, dies an unnatural death, except under sentence of the law; or dies in the absence of one or more good witnesses." (102) Paragraph four includes: "When the circumstances of the death of any person are such as to lead to suspicion that he came to his death

by unlawful means.”(103) The same section also contains this statement: “The inquests authorized and required by this article shall be held by the justice of the peace of the precinct in which the death occurred.”(104)

(518) Article 49.03, entitled “Autopsies and Tests,” states the following concerning an inquest held to ascertain the cause of such death:

The justice of the peace shall in all cases call in the county health officer, or if there be none or if his services are not then obtainable, then a duly licensed and practicing physician, and shall procure their opinions and advice on whether or not to order an autopsy to determine the cause of death. If, upon his own determination he deems an autopsy necessary, the justice of the peace shall, by proper order, request the county health officer, or if there be none or if it be impracticable to secure his services, then some duly licensed practicing physician who is trained in pathology to make an autopsy in order to determine the cause of death, and whether death was from natural causes or resulted from violence, and the nature and character of either of them.(105)

(519) The record of inquest details that the formal inquest on John Fitzgerald Kennedy was held on November 22, 1963, at 1 p.m., at Parkland Memorial Hospital in Dallas, Tex., and that the date of death was November 22, 1963, at Parkland Hospital.(106) The “Nature of Information given J.P.” was “Death as a result of two gunshot wounds of head and neck.”(107) The document states that the information was provided by Dr. Malcolm Perry, M.D., Parkland Memorial Hospital, Dallas, Tex.(108) It also contains the official “Findings by the Justice:”

I, Theran Ward, justice of the peace, precinct No. 2, Dallas County, Tex., after viewing the dead body of John Fitzgerald Kennedy and hearing the evidence, find that he came to his death as a result of multiple gunshot wounds of the head and neck. With this, my hand, officially, this the 10th [sic] day of November A.D. 1963, Theran Ward, justice of the peace, precinct No. 2, Dallas County, Tex.(109)

(520) Thus, the Texas statute in effect at that time placed the responsibility for determination of the cause of death with a layman, the justice of the peace, who might consult the county health officer and might order an autopsy by a qualified pathologist, if deemed necessary, “to determine the cause of death.”(110)

(521) Other than the official record of inquest, which states specifically that Ward did, in fact, view the remains of President Kennedy, there is no record of a formal inquest or other procedure to gather evidence from the body within the territorial jurisdiction of death. Nor does the record indicate whether Ward was consulted prior to removal of the body from Dallas County, Tex., for which the President’s personal physician, Admiral Burkley, was responsible. If such was the case, the authority to approve an autopsy subject to the wishes of the next of kin in Bethesda was a legal order, and evidence obtained as a result of that procedure undoubtedly would have been admissible in a subsequent criminal procedure. If he was not consulted and chose

to make an issue of his responsibilities and their abrogation by authority other than himself, and had criminal litigation ensued, a duly constituted court in the State of Texas might have found legal problems to be associated with the criminal proceeding.

(522) The record of inquest signed by Ward was dated November 10, antedating the assassination of the President by some 12 days. The panel concludes that the document is in error and that the correct date of issue most probably was December 10, some 18 days after assassination of the President.

(523) The official certificate of death, signed by Ward on December 6, 1963, records the "Findings by the Justice" as follows:

I, Theran Ward, justice of the peace, precinct No. 3, Dallas County, Tex., after viewing the dead body of John Fitzgerald Kennedy and hearing the evidence find that he came to his death as a result of two gunshot wounds (1) near the center of the body and just above the right shoulder, and (2) 1 inch to the right center of the back of the head. Witness my hand, officially, this the sixth day of December A.D. 1963, Theran Ward, justice of the peace, precinct No. 3, Dallas County, Tex.

On the same document is the official recording:

I, Theran Ward, a justice of the peace, in and for Dallas County, Tex., do hereby certify that said inquest was held before me, on the day mentioned, and the proceedings in said inquest, as described above are correct. (s) Theran Ward, justice of the peace, precinct No. 3. (111)

*2. Pathologists conducting the autopsy*

(524) As his Warren Commission testimony indicates, Commander Humes was selected to perform the post mortem examination because he was the senior pathologist at the U.S. Navy Medical Center in Bethesda, where the President's body was taken at Mrs. John F. Kennedy's request. (112) His testimony further indicates that Commander Humes was directed to seek assistance from any individual of his choosing, recognizing the distinct difference between the background and training of an individual regularly employed in hospital practice and one trained in forensic pathology. (113) As Commander Humes stated to the Warren Commission, his training in forensic pathology was limited to a course "at the Armed Forces Institute of Pathology," and his experience was limited to "several occasions in various places where I have been employed (where) I have had to deal with violent death, accidents, suicides, and so forth." (114)

(525) The panel concludes that the assistance of experienced pathologists engaged in the full-time practice of forensic pathology, not merely in a consulting or review capacity (such as was the experience of Lieutenant Colonel Finck), would have materially assisted in the proper performance of this autopsy.

*3. Secrecy during and following the autopsy*

(526) A memorandum directed to Commander Humes and his associates by Capt. John H. Stover, dated November 25, 1963, officially reminded the physicians of his earlier verbal admonition that they not

discuss any of the procedure or findings with anyone unless with his specific authorization. Lieutenant Colonel Finck, in his letter to J. M. Blumberg dated Feb. 1, 1965, recalled this admonition:

After the completion of the post mortem examination, the Surgeon General of the Navy told us not to discuss the autopsy with anyone, even among prosecutors or with the investigators involved. (115)

This directive prohibiting communication, even with "the investigators involved," would certainly impede a proper medicolegal investigation and timely preparation of an accurate report.

#### 4. *Completeness of the autopsy*

(527) As stated earlier, a complete medicolegal autopsy is necessary not only to determine the exact cause of death and to gather other evidence that might be of value in identifying the manner of death, but also to rule out other or contributing causes. Commander Humes has indicated on record and before this panel that he was not advised of any restrictions on the performance of a complete autopsy. Dr. Finck indicated the contrary during a trial in New Orleans, La., on February 24, 1969. This was the trial of the *State of Louisiana v. Clay L. Shaw*, that resulted from the investigation of New Orleans District Attorney Jim Garrison into the possibility that Clay Shaw and others conspired to kill President Kennedy. In connection with the medical inquiry in this trial, Finck had been called to testify and was asked, "Why did you not dissect the track of the bullet wound that you have described today and that you saw at the time of the autopsy at the time that you examined the body? Why? I asked you to answer that question." Dr. Finck replied: "As I recall I was told not to, but I don't remember by whom." Question: "Could it have been one of the admirals or one of the generals in the room?" Answer: "I don't recall." Question: "Do you have any particular reason why you can't recall at this time?" Answer: "Because we were told to examine the head and chest cavity, and that doesn't include the removal of the organs of the neck." (116)

(528) Dr. Finck, in his letter further detailed his understanding of the restrictions:

After the publication of the Warren report, numerous physicians criticized the autopsy protocol that did not describe the adrenal glands of Kennedy who suffered from adrenal insufficiency. The prosecutors complied with the autopsy permit and its restrictions. I was told that the Kennedy family first authorized autopsy of the head only and then extended the permission to the chest. Organs of the neck were not removed, because of the same restrictions. I feel that the prosecutors accomplished their mission that was to determine the direction of the shots and the cause of death. (117)

(529) He further noted the restrictions of the procedure as he understood them: "The organs of the neck were not removed: The President's family insisted to have only the head examined. Later, the permission was extended to the chest." (118) He also states:

On Sunday, November 24, 1963, I went to the naval hospital to help Commander Humes who had written an

autopsy report. Humes, Boswell, and Finck, the three prosecutors, signed the autopsy report in the office of Admiral Galloway. (I had suggested several corrections in the autopsy report. While we were checking the autopsy report in the admiral's office, the television announced the murder of Oswald by Ruby.)

In my discussion with Commander Humes, I stated that we should not check the block "complete autopsy" in the autopsy report form. In compliance with the wishes of the Kennedy family, the prosecutors had confined their examination to the head and chest. Humes declared that the block "complete autopsy" should be checked. (119)

(530) Lieutenant Colonel Finck also indicated:

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 within the autopsy report that the autopsy was not complete, as I had suggested to indicate. I saw the clothing of Kennedy, for the first time on March 16, 1964, at the Warren Commission, before my testimony, more than 3 months after the autopsy. (120)

(531) Commander Humes indicated to the panel that during the autopsy Admiral Galloway ordered that the procedure be a complete examination. As indicated in section III of the panel's report, the autopsy report acknowledged removal and description of thoracic and abdominal organs, but not of neck organs. Likewise, the forensic pathologist on the team, Dr. Finck, the individual who might have observed changes on the clothing which would characterize entrance and exit wounds, did not have access to this evidence, apparently because the senior pathologist, Dr. Humes, did not have the experience or education to be aware of the value of such an examination.

(532) As indicated elsewhere in this report, the panel members also took note of the failure to include the description of certain organs, including the adrenal glands, within the body of the autopsy report. The panel members are divided in their opinion as to the propriety of this omission in a public report, but all agree with the need to maintain permanent records of such observations in the event that there is need to provide them in subsequent criminal litigation.

(533) The panel also took note of the unavailability of the histopathologic sections and the brain, which had not hitherto been sectioned. The panel acknowledges the need for such evidence in subsequent criminal litigation and the adverse effect that failure to retain such evidence might have on the proper outcome of such litigation.

(534) The panel likewise took note of the failure to record properly the findings during the procedure, particularly the measurements of the location of the entrance wound in the head, or even to retain the original notes from which the final report was prepared for reasons stated by Dr. Humes before the Warren Commission. The panel

believes that the inability to examine such documentation in the event of a legal dispute could adversely affect the outcome of subsequent criminal litigation.

(535) Finally, prosecutors should have reviewed the preliminary report in conjunction with the photographs taken during the course of this procedure and prepared a more complete diagram which included critical measurements not otherwise recorded. By doing so they might have avoided a very obvious error in the location of the wound of entry in John F. Kennedy's head, as documented elsewhere in this report.

#### 5. Examination procedure

(536) The more serious procedural errors of the post mortem examination include the following:

(537) a. The body was moved out of the geographical area statutorily responsible for investigation of the death and autopsy. b. The pathologist(s) charged with performing the autopsy had insufficient training and experience to evaluate a death from gunshot wounds. They did not confer with the physicians who had treated the President at Parkland Hospital before commencing their examination and did not therefore realize that a bullet perforation in the neck had been altered by a tracheotomy procedure until after the body had been removed.

(538) c. The pathologists did not or could not control the circumstances at the time of autopsy to afford privacy to the remains and to work unimpeded by visitors.

(539) d. Proper photographs were not taken.

(540) e. The President's clothing was not examined by the pathologists.

(541) f. The autopsy procedure was incomplete:

1. The external examination did not take thorough note of all the wounds: The anterior neck exit wound was not noticed, the head entrance wound was not accurately located with reference to fixed anatomic reference points, and the head was not reconstructed in order to determine the precise location of the head exit wound.
2. The bullet track in the back and neck was not dissected, so the extent of injury to the neck structures was not evaluated and the course through the body not fully appreciated.
3. The angles of the bullet tracks through the body were not measured relative to the body axis.
4. The brain was not properly examined and sectioned.

(542) g. The autopsy report was incomplete, prepared without reference to the photographs, and was inaccurate in a number of areas:

1. The entrance head wound location was incorrectly described.
2. The entrance and exit wounds on the back and front neck were not localized with reference to fixed body landmarks and to each other so as to permit reconstruction of trajectories.
3. There was no description of the neck areas which were not dissected. Instead, the pathologists referred to the observations of the treating physician at Parkland (hearsay) and did not mention that they failed to detect the presence of the missile exit in the anterior neck.

4. There was no description of the adrenal glands or of other organs. (543) Resources available to conduct medicolegal autopsies vary tremendously in different sections of the country, with accompanying variation in the degree of sophistication of the examination and related ancillary procedures, such as odontology, toxicology, et cetera. The resources available for this autopsy, however, were extensive.

(544) The above list of deficiencies in the autopsy reflects only those gross errors which would have been avoided in most metropolitan medicolegal jurisdictions and which probably would have been avoided in this instance if a forensic pathologist with day-to-day experience in the investigation and examination of such deaths had been present at the autopsy.

(545) Despite the deficiencies of the postmortem examination of the President, the panel found that sufficient documentation was available for it to arrive at correct and valid conclusions, as stated in this report, as to the cause of death of President Kennedy and the precise injuries the President suffered.