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Medical News

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Wednesday, October 7

# Warren Commission Gives Autopsy Findings, Full Medical Story of Kennedy Assassination

# Dallas and Bethesda Events **Detailed in Final Report**

Medical Tribune - World Wide Report
Washington Bureau
WASHINGTON, D. C. - The special Presidential Commission headed by Chief
Justice Earl Warren, in its official findings, confirmed early reports that it was probably the second of three bullets fired at President Kennedy that killed him. (MEDICAL TRIBUNE, December 23, 1963.)

Extensive medical data on the bullet wounds and the treatment for them, and the first official autopsy report on the late resident, were included in the 888-page report submitted to President Johnson.

report submitted to President Johnson.

"President Kennedy was first struck by a bullet which entered at the back of his neck and exited through the lower front portion of his neck, causing a wound which would not necessarily have been fatal," the commission stated.

"The President was struck a second time by a bullet which entered the right-rear portion of his head, causing a massive and fatal wound." In addition, the "weight of the evidence" indicates a third shot was fired, which missed the Presidential party. The three shots were fired in less than The three shots were fired in less than seven seconds, the commission found.

# Recommendations for Protection

The commission's exhaustive investiga-tion, which began one week after the as-sassination, led to a series of recommendasassination, let to a series of recommenda-tions for improved protection of the Presi-dent. One recommendation was that the President's physician should "always ac-company him during his travels and oc-cupy a position near the President where he can be immediately available in case of any emergency."

The Wisters readward at the National

The autopsy conducted at the National Naval Medical Center in nearby Bethesda, Md., at the request of Mrs. Kennedy be-cause of the President's Naval service in World War II, found that one wound, ap-World War II, found that one wound, approximately one-fourth of an inch by five-eighths of an inch, was located about 2.5 cm. to the right and slightly above the external occipital protuberance that jutout at the center of the lower part of the back of the skull. A second wound, "a large irregular defect of the scalp and skull on the right," measured approximately five inches (13 cm.) in its greatest diameter, but it was difficult to measure accurately because multiple crisscross fractures radiated from the large defect.

Most of Skull Assembled

# Most of Skuli Assembled

"During the autopsy examination," it added, "Federal agents brought the sur-geons three pieces of bone removed from Elm Street and the Presidential automo-

Elm Street and the Presidential automobile. When put together, these fragments accounted for approximately three-quarters of the missing portion of the skull.

"The surgeons observed, through x-ray analysis, 30 or 40 tiny dustlike fragments of metal running in a line from the wound in the rear of the President's head toward the front part of the skull, with a sizable metal fragment lying just above the right eye. From this head wound two small irregularly shaped fragments of metal irregularly shaped fragments of metal

Continued on page 26

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# Text of Report on Kennedy Autopsy

Medical Tribune-World Wide Report, Washington Bureau

WASHINGTON, D.C.-Following is the Autopsy Report and Supplemental Report on President Kennedy, published as Commission Exhibits Nos. 387 and 391 in Appendix IX of the Warren Commission report:

# **Pathological Examination Report**

According to available information the deceased, President John F. Kennedy, was riding in an open car in a motorcade during an official visit to Dallas, Texas on 22 November 1963. The President was sitting in the right rear seat with Mrs. Kennedy

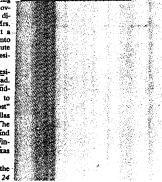
seated on the same seat to his left. Sitting seated on the same seat to his left. Sitting directly in front of the President was Governor John B. Connolly of Texas and directly in front of Mrs. Kennedy sat Mrs. Connolly. The vehicle was moving at a slow rate of speed down an incline into an underpass that leads to a freeway route to the Dallas Trade Mart where the President of the Preside

dent was to deliver an address.

Three shots were heard and the dent fell forward bleeding from the head. Governor Connolly was seriously wounddovernor Connojly was serjously wounded by the same gunfire.) According to newspaper reports ("Washington Post" November 23, 1963) Bob Jackson, a Dallas "Times Herator "Photographer, said he looked around as he heard the shots and saw a rifle barrel disappearing into a window on an upper floor of the nearby Texas School Book Depository Building.

Shortly following the wounding of the

Shortly following the wounding of the Continued on page 24



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# Text of Report on Kennedy Autopsy

Continued from page 1

two men the car was driven to Parkland Hospital in Dallas. In the emergency room Hospital in Dalias. In the emergency room of that hospital the President was attended by Dr. Malcolm Perry. Telephone communication with Dr. Perry on November 23, 1963 develops the following information relative to the observations made by Dr. Perry and procedures performed there exists to death.

Dr. Perry noted the massive wound of the head and a second much smaller wound of the low anterior neck in approximately the midline. A tracheostomy was performed by extending the latter wound. At this point bloody air was noted bubbling from the wound and an injury to the right lateral wall of the trachea was observed. Incisions were made in the upper anterior chest wall bilaterally to com-bat possible subcutaneous emphysema. Intravenous infusions of blood and saline were begun and oxygen was administered.

Despite these measures cardiac arrest occurred and closed chest cardiac massage failed to re-establish cardiac action. The President was pronounced dead approxi-mately thirty to forty minutes after receiving his wounds.

The remains were transported via the

Presidential plane to Washington, D.C. and subsequently to the Naval Medical School, National Naval Medical Center, Bethesda, Maryland for postmortem ex-

# **General Description of Body:**

The body is that of a muscular welland body is Inat or a muscular weil-developed and well nourished adult Cau-casian male measuring 72½ inches and weighing approximately 170 pounds. There is beginning rigor mortis, minimal dependent livor mortis of the dorsum, and early algor mortis. The hair is reddish brown and abundant, the eyes are blue, the right pupil measuring 8 mm. in diameter, the left 4 mm. There is edema and ecchymosis of the inner canthus region of the left cyclid measuring approximately 1.5 cm. in greatest diameter. There is edema and ecchymosis diffusely over the right supra-orbital ridge with abnormal mobility of the underlying bone. (The remainder of the scale will be described with the brown and abundant, the eyes are blue, the of the scalp will be described with the skull.) There is clotted blood on the ex-ternal ears but otherwise the ears, nares, and mouth are essentially unremarkable. The teeth are in excellent repair and there is some pallor of the oral mucous mem-

Situated on the upper right posterior thorax just above the upper border of the scapula there is a 7 x 4 millimeter oval wound. This wound is measured to be 14 cm. from the tip of the right acromion process and 14 cm. below the tip of the

Situated in the low anterior neck at approximately the level of the third and approximately the level of the third and fourth tracheal rings is a 6.5 cm. long transverse wound with widely gaping ir-regular edges. (The depth and character of these wounds will be further described

Situated on the anterior chest wall in the nipple line are bilateral 2 cm. lor recent transverse surgical incisions into the subcutaneous tissue. The one on the left is situated 11 cm. cephalad to the nipple and the one on the right 8 cm. cephalad to the nipple. There is no hemorrhage or ecchymosis associated with these wounds. A similar clean wound measuring 2 cm. in length is situated on the antero-lateral aspect of the left mid arm. Situated on the antero-lateral aspect of each ankle is a recent 2 cm. transverse incision into the bcutaneous tissue

There is an old well healed 8 cm. McBurney abdominal incision. Over the lumbar spine in the midline is an old, well healed 15 cm. scar. Situated on the upper antero-lateral aspect of the right thigh is an old, well healed 8 cm. scar.

# Missite Wounds:

1. There is a large irregular defect of

chiefly the parietal bone but extending somewhat into the temporal and occipital regions. In this region there is an actual ence of scalp and bone producing a defect which measures approximately 13 cm in greatest diameter.

From the irregular margins of th scalp defect tears extend in stellate fashion the more or less intact scalp as fol-

a. From the right inferior temporoparietal margin anterior to the right ear to a point slightly above the tragus.

b. From the anterior parietal margin anteriorly on the forehead to approximately 4 cm. above the right orbital ridge. c. From the left margin of the ma defect across the midline antero-laterally

listance of approximately 8 cm. d. From the same starting points as c. 10 cm. postero-laterally.

Situated in the posterior scalp approximately 2.5 cm. laterally to the right and slightly above the external occipital pro-tuberance is a lacerated wound measuring 15 x 6 mm. In the underlying bone is a corresponding wound through the skull which exhibits beveling of the margins of the bone when viewed from the inner aspect of the skull.

aspect or me semi.

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

of the superior saggital sinus.
Upon reflecting the scalp multiple complete fracture lines are seen to radiate from both the large defect at the vertex and the smaller wound at the occiput. These vary greatly in length and direction, the longest measuring approximately 19 cm. These result in the production of numerous fragments which vary in size from a few millimeters to 10 cm. in greatest diameter.

The complexity of these fractures and the fragments thus produced tax satisfactory verbal description and are better appreciated in photographs and roent-genograms which are prepared.

The brain is removed and preserved for further study following formalin fixation. Received as separate specimens from smaller wound at the occiput. These vary

Received as senarate specimens from

as, Texas are three fragments of skull bone which in aggregate roughly approximate the dimensions of the large defect described above. At one angle of the largest of these fragments is a portion of the perimeter of a roughly circular wound presumably of exit which exhibits beveling of the outer aspect of the bone and is esti mated to measure approximately 2.5 to 3.0 cm. in diameter. Roentgenograms of this fragment reveal minute particles of metal in the bone at this margin. Roent-genograms of the skull reveal multiple genograms 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. From the sur-face of the disrupted right cerebral cortex two small irregularly shaped fragments of metal are recovered. These measure 7 x 2 mm. and 3 x 1 mm. These are placed in the custody of Agents Francis X. O'Neill, Jr. and James W. Sibert, of the Federal Bureau of Investigation, who executed a receipt therefor (attached).

The second wound presumably of entry is that described above in the upper right posterior thorax. Beneath the skin there is ecchymosis of subcutaneous tissue and musculature. The missile path through the fascia and musculature cannot be easily probed. The wound presumably exit was that described by Dr. Malco Perry of Dallas in the low anterior cervical region. When observed by Dr. Perry the wound measured "a few millimeters in diameter", however it was extended as a tracheostomy incision and thus its char-acter is distorted at the time of autopsy. However, there is considerable ecchymosis of the strap muscles of the right side of the neck and of the fascia about the trachea adjacent to the line of the trach tomy wound. The third point of reference in connecting these two wounds is in the



Parkland Hospital director Dr. Kemp Clark, emergency operations for newsmen following assassination, also summarized the grim pro eedings for sion. With him at left, is Dr. Malcolm Perry, attending sur-geon. The other attending surgeon, right, is Dr. Cha



apex (supra-clavicular portion) of the apex (supra-clavicular portion) of the right pleural cavity. In this region there is contusion of the parietal pleura and of the extreme apical portion of the right upper lobe of the lung. In both instances the diameter of contusion and ecchymosis at the point of maximal involvement measures 5 cm. Both the visceral and parietal pleura are intact overlying these areas of

The scalp wounds are extended in the coronal plane to examine the cranial content and the customary (Y) shaped incision is used to examine the body cavities.

# Thoracic Cavity:

The bony cage is unremarkable. The thoracic organs are in their normal positions and relationships and there is no increase in free pleural fluid. The above described area of contusion in the apical portion of the right pleural cavity is noted.

# Lungs:

The lungs are of essentially similar appearance the right weighing 320 Gm., the left 290 Gm. The lungs are well aerated iert 290 Gm. Ine tungs are weit aerated with smooth glistening pleural surfaces and gray-pink color. A 5 cm. diameter area of purplish red discoloration and increased firmness to palpation is situated in the apical portion of the right upper lobe. This corresponds to the similar area described in the overlying parietal pleura. Legiston in this zerior aveals recent ben. Incision in this region reveals recent hem-orrhage into pulmonary parenchyma.

The pericardial cavity is smooth walled and contains approximately 10 cc. of straw-colored fluid. The heart is of essentially normal external contour and weight 350 Gm. The pulmonary artery is opened in situ and no abnormalities are noted. The cardiac chambers contain moderate amounts of postmortem clotted blood. There are no gross abnormalities of the Inere are no gross aonormanues of the leastest of any of the cardiac valves. The following are the circumferences of the cardiac valves: aorite 7.5 cm., pulmonic 7 cm., tricuspid 12 cm., mitral 11 cm. The myocardium is firm and reddish brown. The left ventricular myocardium averages 1.2 cm. in thickness, the right ventricular myocardium 0.4 cm. The coronary arteries

tion and smooth walled and elastic throughou

## minal Cavity:

The abdominal organs are in their normal positions and relationships and there is no increase in free peritoneal fluid. The vermiform appendix is surgically absent verminorm appendix is surgicarly assent and there are a few adhesions joining the region of the cecum to the ventral ab-dominal wall at the above described old minal incisional scar.

### Skeletal System:

Aside from the above described skull wounds there are no significant gross skeletal abnormalities.

### Photography:

Black and white and color photographs depicting significant findings are exposed but not developed. These photographs were placed in the custody of Agent Roy H. Kellerman of the U.S. Secret Service, who executed a receipt therefore (attached)

### ntgenograms:

Roentgenograms are made of the entire body and of the separately submitted three fragments of skull bone. These are developed and were placed in the custody of Agent Roy H. Kellerman of the U.S. Secret Service, who executed a receipt there-

Based on the above observations it is our opinion that the deceased died as a result of two perforating gunshot wounds inflicted by high velocity projectiles fired by a person or persons unknown. The projectiles were fired from a point behind and somewhat above the level of the deceased. The observations and available informa-tion do not permit a satisfactory estimate: as to the sequence of the two wounds.

The fatal missile entered the skull above and to the right of the external occipital protuberance. A portion of the projectile traversed the cranial cavity in a posterioranterior direction (see lateral skull roentgenograms) depositing minute particles along its path. A portion of the projectile made its exit through the parietal bone on made is skill through the partetal one one the right carrying with it portions of cere-brum, skull and scalp. The two wounds of the skull combined with the force of the missile produced extensive fragmentation of the skull, laceration of the superior saggital sinus, and of the right cerebral hemi-

The other missile entered the right superior posterior thorax above the scapula' and traversed the soft tissue of the suprascapular and the supra-clavicular portions of the base of the right side of the neck. This missile produced contusions of the right apical parietal pleura and of the apical portion of the right upper lobe of the lung. The missile contused the strap muscles of the right side of the neck, damaged the trachea and made its exit through the anterior surface of the neck. As far as can be ascertained this missile struck no bony structures in its path through the

In addition, it is our opinion that the wound of the skull produced such extensive damage to the brain as to preclude the ssibility of the deceased surviving this injury.

A supplementary report will be sub-mitted following more detailed examina-tion of the brain and of microscopic sections. However, it is not anticipated that examinations will materially alter the findings.

> J. J. Humes Cdr, MC, USN (497831) "J" THORNTON BOSWELL CDR, MC, USN (489878) PIERRE A. FINCE LT COL, MC, USA (04-043-322)

See text of Supplementary Report, page