

Curtis Crawford letter

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New York 25, N. Y.
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Mr. Robert B. Silvers, Editor
The New York Review of Books
250 West 57th St.
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Dear Mr. Silvers, To the Editors

Dr. Richard Popkin's article, "The Second Oswald," divides into two sections, (1) a resume of the arguments by Salandria, Epstein, Weisberg, and Cook which supposedly demonstrate that the Warren Commission's theory of the assassination is impossible, and (2) an alternative theory which explains some of the facts which the Commission could not. I have some questions concerning the second section, this letter is addressed only to the first.

The reason for concluding that the official theory is impossible is the contention that, based on the Commission's own evidence, it is impossible for all the shots to have been fired by the same man using the ~~Carcano rifle~~ ^{Carcano rifle}. This statement is based on two others, that (a) if Governor Connally's wounds were not caused by the first bullet to hit the President, they cannot have been caused by the same man firing the Carcano, but (b) the evidence proves such a double hit impossible.

I grant the claim that, if the double hit theory fails, the Report fails. As I view the Zapruder film of the assassination sequence, if Connally's back is not struck by the first Kennedy shot, there is no time when it can have been struck, from the Depository, which is not under the minimum repeat time for the Carcano rifle. Awareness of this problem was a major factor in a skepticism concerning the Warren Report which seduced me into several months' study of the hearings and documents.

The main argument against the double hit is that the bullet supposedly entered the President's back top far down to be able to exit

where the autopsy claims it exited, and to strike Connally's back where his doctors say it was struck. Now, if the Commission's calculations concerning the position of the car are correct, the angle of fire from the Depository window was approximately 18 degrees. (R 106) According to the autopsy report, the Kennedy back wound was "on the upper right posterior thorax just above the upper border of the scapula ... (and) is measured to be 14 centimeters from the tip of the right acromion process and 14 centimeters below the tip of the right mastoid process." (R 540) (The posterior thorax = the back between the neck and the abdomen; scapula = shoulder blade; acromion process = the protuberance at the top of the shoulder joint; mastoid process = the protuberance of the skull immediately behind the ear lobe; 14 centimeters = about 5 1/2 inches.) The autopsy examination found no continuous bullet trail, but it did find bruises on the strap muscles and the linings of the chest cavity, and a tear in the trachea, which indicated a course straight through the base of the neck between the back wound and the lower throat. (R 541) According to the Dallas doctors, Kennedy's throat wound was immediately below the Adam's apple, and Connally's back wound was immediately below the right shoulder blade near the edge of the body. (R 89,531)

No one denies that the positions of the Kennedy throat wound and the Connally back wound are compatible with the assumed angle of fire. What about the position of the Kennedy back wound? If one is sitting up ramrod straight, the point designated by the autopsy is roughly level with the Adam's apple. If, however, the shoulders are slightly rounded, or the head thrust slightly forward, the back wound is above the throat wound, and readily compatible with an 18 degree angle of fire. That the President's posture was the latter is hardly impossible or improbable, and indeed is suggested by a photograph showing the Presidential party

earlier during the motorcade. (R 104)

What, then, is the problem? First, there is a prima facie discrepancy between the position of the back wound as measured on the President's body, and the position as indicated by his clothing. Dr. Popkin and other critics have ~~insisted~~^{calculated} incorrectly that this discrepancy may be as much as six inches. According to the Report, the holes in the back of the suit coat and the shirt are respectively 5 3/8 and 5 3/4 inches below the top of the collar. (R 92) But the reader will discover through observation that the tip of the mastoid process is rarely more than 2 - 3 inches above the top of the shirt collar. Thus the apparent discrepancy between the position on the body and the position as indicated by the clothing is approximately 2 - 3 inches, rather than 6 inches. Would the critics maintain that it is impossible for the coat and shirt to be hunched up to this extent, either from a sitting posture, or from rubbing against the car seat, or both?

But suppose there were strong evidence that in fact the coat and shirt were not hunched up at all, that the lower wound they indicate is the true one, and that the autopsy report as printed by the Commission is inaccurate. Just such evidence, the critics suggest, may lie in the FBI statements concerning the autopsy findings, which clash with the official account, and which were omitted from the Commission's 27 volumes. In its extensive Summary Report, ^{on the Assassination,} dated Dec. 9, 1963, ~~more than two weeks after the autopsy,~~ the FBI states, "Medical examination of the President's body revealed that one of the bullets had entered just below his shoulder to the right of the spinal column at an angle of 45 to 60 degrees downward, that there was no point of exit, and that the bullet was not in the body." (Epstein 184) On Jan. 13, 1964, the FBI Supplemental Report states, "Medical examination of the President's body had revealed that the bullet

which entered his back had penetrated to a distance of less than a finger length." (E 198)

The language locating the back wound is imprecise, but it is consistent with a position lower than that indicated by the printed autopsy. Are there objective grounds for crediting one rather than the other? I understand that the FBI statements are based on the testimony of two FBI agents, which in turn was based on conversations during the autopsy examination. In contrast, the location and measurements in the printed autopsy are based on a diagram made by the doctors during the examination, containing the same location and identical measurements. (See Comm. Exhibit 397 referred to at II 372.) It seems to me that the probability of error in evidence which is imprecise, second hand, and orally transmitted, is much higher than in evidence which is first hand, precisely measured, and immediately written down. Moreover, the FBI location of the wound is tied to statements concerning the angle of entry and the destiny of the bullet which contradict not only the autopsy evidence concerning the path of the bullet which I mentioned earlier, but also generally accepted evidence concerning the assassination sequence. Thus, during the shooting there is no possible assassination perch from which the angle of fire would ~~be~~ remotely approximate 45 to 60 degrees downward. ^{A/50} Moreover, there is no evidence that the bullet struck anything, either inside or before reaching the back, which would slow it down so much that a few inches of flesh could halt it.

A second argument that Dr. Popkin and others advance against the double hit is that it contradicts Gov. Connally's memory that he heard a shot, turned to look at the President, and had turned most of the way back before feeling any impact. The governor gave this testimony, precise and insistent, in a context of strong admiration for the work of the Commission and acceptance of the official conclusions, not

realizing that if he were right, they had to be wrong. However, if the governor was hit at the point in the Zapruder film (circa Frame 231) at which he (and Dr. Popkin) think he was hit, his memory of the sequence is demonstrably incorrect. The only turn by Connally which the films show occurs after he was hit, not before.

It is argued that too much time elapses between Kennedy's reaction and Connally's, for them to be caused by the same shot. If I read the Zapruder film correctly, this is not the case. Colored slides have been made of the individual frames comprising the assassination sequence, and I studied them carefully under a microscope at the National Archives. The evidence is strong that the governor was hit no later, and probably several frames earlier, than he thinks. Up to Frame 224 Connally's position seems steady, his shoulders and head facing slightly to the right of the direction in which the car is moving, as if he were watching the bystanders ahead. By 229 his shoulders have moved somewhat forward and left, and his hands appear to be on their way to his chest. By 234 Connally's right shoulder is lower, as if sagging. By 236 he begins a turn to the right which takes 20 frames (over a second), his hands clutched to his chest, his face indicating pain, very like his wife's memory that "he recoiled to the right, just crumpled like a wounded animal..." (IV 147) From 210 to 225 the intervention of a highway sign between most of the President's body and the camera prevents certainty as to when the President's reaction begins. Up to 210 there is no apparent reaction: the President's right elbow is resting on the car door, his right forearm and hand waving to the crowd, his left hand out of sight; by 225 his right hand is already at his throat. However, at 224 I noticed something the Commission doesn't mention: the left hand is even with the chest, and the right hand, though close to the waving position, seems to have the palm turned in, as if beginning its trip to the throat, where it

arrives in the next frame. I conclude that Kennedy's hands start toward his wound at or shortly before frame 224, and Connally's hands start toward his wound at 229, a delay of slightly over one-fourth of a second.

A third argument against the double hit is that the Commission's Bullet No. 399 is supposedly not banged up enough to have traversed the President's lower neck, and the governor's chest and forearm, fracturing a rib and a radius along the way. In support of this argument, Dr. Popkin states, "... almost all of the medical experts, including two of the Kennedy autopsy doctors, held that No. 399 could not have done all the damage to Governor Connally, let alone Kennedy." Dr. Popkin is incorrect. Seven of the Commission's doctors spoke to this question (Humes, Finck, Olivier, Dziemian, Light, Shaw, Gregory). Olivier, Dziemian and Light thought that ^{Kennedy's} back wound and all of Connally's wounds were caused by No. 399. (V 86-92, 95) Gregory thought all of Connally's wounds could have been caused by 399, but doubted it had the velocity to have traversed Kennedy as well. (VI 127) The others thought that 399 could have caused the Kennedy back and Connally chest wounds, but held it improbable (Shaw, Humes) or impossible (Finck) that 399 fractured Connally's wrist. (IV 113, II 375, 382) Boxscore: 3 probables, 2 improbables, 1 impossible, 1 improbable on different grounds -- which is hardly unanimous expert testimony proving impossibility.

It should be stated that Dr. Popkin and other critics are incorrect in assuming that the Commission's double hit theory requires all of Connally's wounds to have been caused by Bullet 399. Two of the doctors (Gregory, Light) suggest that the wrist wound could have been caused by a fragment of the bullet which had exploded in the President's skull. (IV 128, V 97). This explanation is disputed by Olivier, and doubted by Light himself, but not disproved. (V 90, 97)

In this letter I have tried to show that asserting the impossibility of the double hit means, in effect, asserting the impossibility

of one of the following:

- a. That the President was sitting with his shoulders slightly rounded or his head thrust slightly forward.
- b. That his coat and shirt were hunched up 2 or 3 inches.
- c. That the FBI statements concerning the autopsy findings are mistaken.
- d. That Governor Connally's memory of the assassination sequence is mistaken.
- e. That Connally reacted to the same shot 1/4 of a second later than Kennedy.
- f. That Kennedy's back wound, and the three Connally wounds, were caused by Bullet 399, either alone or with the help of bullet fragments from the President's skull wound.

The reader must judge whether Dr. Popkin's arguments prove, either that any of these links is impossible, or that any of them misstates the issue. I should like to add three things.

First, the above discussion was confined to refuting impossibility. However, in my own opinion, the theory that the same bullet caused the Kennedy back wound and at least the Connally chest wound, far from merely possible, is the only reasonable explanation of the evidence. Consider, in addition to the circumstances already mentioned, that no bullet was found in the President's body, that there is no evidence of any collision in the body which could have halted or deflected the bullet's progress, that the Commission's experiments on simulated tissue indicated that in traversing the body the bullet lost only 5-7% of its velocity, that the governor was seated directly in front of the President, that no evidence developed that the area immediately surrounding the governor, nor indeed any place in the limousine or on the road nearby, had received this bullet. Under these circumstances, the difficulty is not to imagine the bullet's striking Connally, but to imagine its doing anything else.

Second, my letter assumed that the evidence, though possibly mistaken, is honest. There has not been space to answer those who fear that important data concerning, for instance, the condition of the President's body, or of the limousine, may have been fabricated or suppressed. But let me at least suggest an experiment, based only on evidence which the skeptics would consider reliable, which tends to corroborate the evidence they suspect. Forget, for the moment, the presupposition that all or any of the shots were fired from the Depository. Forget the autopsy data on the President's body, and the Secret Service testimony concerning the condition of the car. Note the course of the bullet through Connally, as described by ~~Major~~ Dr. Shaw, back to front, downward, at an angle of 25 degrees. Note the seating arrangement: photographs, testimony and the design of the car all place the President immediately behind the governor and somewhat to his right. Observe in the Zapruder film the position of the governor when he is hit: his shoulders facing slightly right or forward. Observe the position of the President: erect, not slumped. Given these circumstances, construct a trajectory for the bullet back from the governor's body toward point of origin. A path through the man behind the governor is not inevitable, but it is quite plausible. This experiment does not, by itself, prove the double hit, but it does suggest that important evidence which is not suspect is consistent with and tends to support the evidence ^{that} has been questioned.

Third, the theory of a "Second Oswald" in no way conflicts with the conclusion ^{that} Kennedy and Connally were struck by the same bullet, and so remains unaffected by my arguments. Unless a general impression of Commission incompetence or legerdemain was meant to be Second Oswald's entree.

Sincerely,

Curtis Crawford
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