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**THE GREAT LAPEL FLAP:**

**A Rebuttal of Dr. John K. Lattimer's Interpretation  
of the Kennedy and Connally Wounds**

**by**

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In the May, 1994, issue of the Journal of the American College of Surgeons, Dr. John K. Lattimer reported on recent testing which he conducted while attempting to recreate the shooting of President Kennedy and Governor Connally. According to Dr. Lattimer, his study of the Zapruder film of the assassination showed a "sudden forward 'bulge' of the lapel" of Governor Connally's coat at Zapruder frame 224, and this marked the "precise moment when bullet 399 passed through" his body.(1) Dr. Lattimer stated that a shooting experiment he carried out with mock-ups designed to represent the neck of President Kennedy and the chest and wrist of Governor Connally "has been the reaffirmation" of this multiple wounding of both men by the same bullet. The article is accompanied by numerous illustrations, including relevant frames from the Zapruder film and high-speed frames showing a test bullet passing through the Connally chest mock-up.

In his article, Lattimer also claimed:

\* "it was apparent that the right arms of both men react immediately and simultaneously to the stimulus of the bullet having passed through them."(2)

\* the Zapruder film shows that the bullet "exits under his [Connally's] right nipple with a cloud of bloody soft tissue and rib fragments."(3)

In addition, Lattimer claimed that damage done to a rib in the shooting of the mock-up is comparable to actual damage to Governor's Connally's rib, and that bullet holes created in the

test clothing closely match the defects found in Governor Connally's shirt and coat. (4)

This rebuttal article examines each of these assertions, using the Zapruder film and records of the Warren Commission and the House Select Committee on Assassinations (HSCA), as well as Dr. Lattimer's own test results. It is our contention that a close examination of Dr. Lattimer's experiments, instead of proving the simultaneous wounding of Kennedy and Connally at frame 224, actually shows that such a double wounding was impossible.

*\* It is "apparent that the right arms of both men react immediately and simultaneously to the stimulus of the bullet having passed through them."*

There is no such simultaneous reaction. President Kennedy actually began reacting to being wounded **before** the limousine passed behind a freeway sign (and nearly two seconds before the moment claimed by Lattimer), as the HSCA's photography panel concluded. (5) At frame 189 (See Fig. 1-a), Kennedy waved to the crowd, his right hand held vertically alongside his face, but then - by frame 206 - his right hand had jerked horizontally across the front of his face, in a movement which is clearly **not** a wave. Beginning at frame 189, Jackie Kennedy turned and stared at her husband. She continued to look at him until Governor Connally's cries drew her attention away several seconds later. In frame 224, Kennedy's hands can be seen to the right of the freeway sign (Fig. 1-c). [For some reason, Dr. Lattimer cropped frames 223, 224, and

225 (Fig. 3).. As a result, Kennedy and his movements are not seen in the version printed with Lattimer's article.] His hands were crossed horizontally in front of his chest, with the right hand above the left as he reached for his throat. This very awkward position is Kennedy's response to having been hit, and not part of a waving motion, as some have suggested. It is difficult to imagine that the President would sit in a motorcade, in plain view of onlookers, with his hands in such an unnatural position.

There is also a major timing problem inherent in any claim that Kennedy and Connally were hit simultaneously at frame 224. According to Lattimer, the bullet exited the lapel, marking the "exact moment when bullet 399 went through him." But Kennedy was clearly already responding by that point in time. According to Warren Commission tests at Edgewood Arsenal, a bullet emerging from Kennedy's neck would have had a velocity of approximately 1779 feet per second, and would have been slowed another 400 feet per second in passing through Connally's chest.(6) Kennedy's throat was almost 3 feet from Connally's coat front. At 1379 feet per second, the bullet would have reached Connally's lapel only 2 milliseconds after striking Kennedy -- yet Kennedy was obviously already reacting to having been shot (Fig. 1-c). His hands had been moving into their awkward position for at least 1.5 seconds, and, at frame 225, Kennedy's face already showed distortion (Fig. 1-d).

\* "...bullet 399...exits under his right nipple with a cloud of bloody soft tissue and rib fragments."



When Dr. Lattimer fired Mannlicher-Carcano ammunition into a rib cage draped with a coat and tie, a spectacular cone of fragments was driven from the front of the coat (Fig. 2). The spray was blown forward for at least a foot and a half, reaching a diameter of 6-8 inches. The cone remained clearly visible in Lattimer's test films for the equivalent of at least 3 Zapruder frames.

When the actual Zapruder frames are examined, no such spray is seen. In contrast to the test results, no spray is seen in frames 224 and 225 (Compare Fig. 2 with either Fig. 1 or Fig. 3). In his legend to these frames, Lattimer described a "cloud of bloody soft tissue and rib fragments". However, as can be seen, no such "cloud" existed in front of Connally's chest, even though he was wearing a contrasting dark suit. It should be noted that in the actual assassination, a transiting bullet would have produced debris not only from dried ribs [as in Lattimer's test], but from blood and other chest tissues as well, so that the resulting spray should have been far more conspicuous than is seen in Lattimer's test. The absence of any such spray at frame 224 is persuasive evidence that no such chest shot occurred at that point.

Lattimer's test produced other significant results. As he noted, a 3 centimeter exit defect was torn in the right coat front, causing the white inner lining to be seen (Fig. 2). No such everted lining is seen in Connally's coat (Fig. 1 or Fig. 3). Both Lattimer's mock-up and Governor Connally wore ties; yet while

Connally's tie does not appear to move in frames 224 and following, the mock-up tie flew forward and upward until it extended forward nearly at face level (Fig. 2). While Lattimer's "Connally coat" clearly developed both a forward bulge and a lapel flap, no bulging of the Governor's coat can be seen beneath the lapel in the Zapruder film (Compare Fig. 2 with either Fig. 1 or Fig. 3).

\* A 4 1/2 centimeter segment of one of our 'Connally' ribs was removed by the tumbling bullet that had gone through our model."

However, when Governor Connally was shot in Dallas, 10 centimeters of his fifth rib -- more than twice the amount from Lattimer's test -- were blown out.(7) And it must be remembered that the Lattimer mock-up consisted of only a rib cage, while the Governor's ribs were held in place by muscles, ligaments, and connective tissue.

\* "The exit wound in the front of our shirt was large and ragged and peppered with small holes from the rib fragments. This was exactly how Governor Connally's shirt was damaged."

In point of fact, there were no small holes in the front of the Governor's shirt. There was only one large hole, consisting of tears in the rough shape of an "H".(8) It should also be noted that Governor Connally's shirt, like his coat, had been cleaned and pressed before it was examined, destroying much of its evidentiary value.(9) When Dr. Pierre Finck, one of the Kennedy autopsy

pathologists, examined Connally's shirt, he was of the opinion that the hole had been enlarged by scissor cuts. (10)

Dr. Lattimer noted that when he fired a test bullet through the Kennedy neck mock-up before it traversed the Connally rib cage, the bullet produced an elongated, 3 centimeter exit defect in the front of the coat. (11) Lattimer attributed this to the tumbling of the bullet as it passed through both "men". When Lattimer fired a bullet through the "Connally" rib cage without passing through the "Kennedy" neck first, a rounded hole, which Lattimer called "tiny", was created in the front of the mock-up coat. (12) But this is precisely what resulted in Dallas. Both the Warren Commission and the HSCA measured the hole in the front of Connally's coat to be 1 x 1 centimeters, the Warren Commission calling it a "circular hole" (13), while the HSCA referred to it as an "irregular round defect." (14) The fact that Dr. Lattimer produced a hole of comparable size and shape only when his bullet did not go through a "Kennedy" neck indicates that the bullet which wounded Connally in Dallas had not struck anyone else first. It should be noted that Dr. Robert Shaw, who repaired Connally's chest wound, always maintained that the bullet did not strike Kennedy before it struck the Governor. (15)

If the movement of Connally's lapel at Z-224 was not caused by the passage of a bullet [and Dr. Lattimer's own tests are the best evidence that it was not], then what did cause the lapel to move? The most likely culprit is the wind. Weather records for



Love Field in Dallas at 12:30 P.M., on November 22, show winds of 13 knots (about 15 miles per hour) from the west, with gusting. (16) The flags on the front of the Presidential limousine were flapping in the wind at about the same time as the lapel flap. Mrs. Kennedy was seen holding her hair and hat several times, and Governor Connally held his hair in place as the car turned onto Elm Street. (17) In the fall of 1993, CBS cameras captured wind flapping the lapel of FBI employee Ferris Rookstool as he stood in Dealey Plaza not 50 feet from where Governor Connally's lapel flap occurred 30 years earlier (See Fig. 4).

#### Summary

Dr. Lattimer's claim that he reaffirmed or proved the simultaneous wounding of President Kennedy and Governor Connally through his shooting tests must be rejected. When Dr. Lattimer fired a test bullet through his simulated "Connally" rib cage, a large and highly visible spray of material was blasted from the front of the chest, the lining of the coat was everted, and the tie was knocked forward and upward. None of this is seen on the Zapruder film of the events in Dallas. Holes in the clothing worn by Lattimer's target are not consistent with the holes found in Governor Connally's clothing. Additionally, Dr. Lattimer failed to consider evidence that President Kennedy began reacting to being wounded well before Zapruder frame 224.

Dr. Lattimer's tests indicate that if a bullet passed through the chest of Governor Connally, it should have produced --



## References

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1. Lattimer, J.K.; Laidlaw, A.; Heneghan, P.; et al.:  
"Experimental Duplication of the Important Physical  
Evidence of the Lapel Bulge of the Jacket Worn by Governor  
Connally When Bullet 399 Went Through Him", J. Am. Coll.  
Surg. 178:517 (1994).
2. Ibid., 517-518.
3. Ibid., 518, legend to Fig. 1.
4. Ibid., 518, legend to Fig. 4; 521, legend to Fig. 9.
5. Select Committee on Assassinations of the United States  
House of Representatives, Investigation of the  
Assassination of President John F. Kennedy, Appendix to  
Hearings, Volume VI, 43, U.S. Government Printing Office  
(hereinafter referred to as "HSCA"), Washington (1979).
6. President's Commission on the Assassination of President  
Kennedy, Investigation of the Assassination of President  
John F. Kennedy, Hearings Before the President's

in addition to the moving of the lapel -- a number of other visible results. The absence of these results demonstrates that no bullet passed through Governor Connally's chest at frame 224.

Dr. Lattimer's experiment represents still another attempt to prop up the single-bullet theory with some sort of scientific underpinning. The failure of his experiment underscores yet again the untenability of this theory, the *sine qua non* of the government's "lone assassin" conclusion.

Commission, Volume V, 77-78, 86, U.S. Government Printing Office (hereinafter referred to as "Warren Commission"), Washington (1964).

7. Ibid., Volume VI, 86.
  8. Ibid., Volume V, 64.
  9. Ibid., 63-65.
  10. Lt. Col. Pierre Finck, Personal Notes on Autopsy of President Kennedy (Memorandum sent to Brig. Gen. J. M. Blumberg), Otis Historical Archives, National Museum of Health and Medicine, Armed Forces Institute of Pathology, 17 (1965).
  11. Lattimer, op. cit., 519-520.
  12. Ibid., 518, legend to Fig. 9.
  13. Warren Commission, Appendix to Hearings, Volume V, 63.
  14. HSCA, Volume VII, 114.
  15. Warren Commission, Appendix to Hearings, Volume IV, 114.
- Also, remarks made before the Council on World Affairs, Dallas, Texas (June 4, 1992).

16. HSCA, Volume VI, 21, 174, 179.

17. Zapruder film; Phil Willis photograph #4.



## Abstract

### Background

Shooting tests were recently performed by Dr. John K. Lattimer in an effort to duplicate the wounding of President Kennedy and Governor Connally in Dallas and to confirm his theory that the flapping of Governor Connally's lapel was caused by the passage of a bullet.

### Results

Lattimer's tests failed to substantiate his theory. When test bullets were fired into a clothed mock-up of the chest of Governor Connally, a lapel flap was produced, but it was accompanied by a highly visible spray of tissue fragments. The inner lining of the coat was exposed, and the tie was flipped upward and forward by the passage of the bullet. None of these things are seen in film of the actual shooting of the Governor. Additionally, holes produced in the clothing of the mock-up did not match the holes in Governor Connally's clothing.

### Conclusion

Lattimer's testing indicated that the passage of a bullet through the Governor's chest should have produced a number of other effects, in addition to the movement of a lapel. The absence of these effects indicates that the lapel flap was not caused by a bullet.

Key Words

- \* Lattimer
- \* Wecht
- \* "lapel flap"
- \* Zapruder film
- \* single-bullet theory

PLEASE NOTE: The attached chart is to be added to the submitted article, "The Great Lapel Flap: A Rebuttal of Dr. John K. Lattimer's Interpretation of the Kennedy and Connally Wounds" by Cyril H. Wecht, M.D., J.D., and Wallace Milam.

The chart may either be treated and placed like the other illustrations already submitted, or it may be added at the close of the article.

Dr. Lattimer asserted that his tests duplicated what happened to Governor Connally when he was shot in Dealey Plaza. As this chart shows, when he fired his test bullet through "Connally", he obtained many results which are quite different from those which occurred during the actual wounding of the Governor.

Lattimer's tests produced

- \* a large, highly visible cloud of whitish debris from the rib
- \* a 3 inch, elongated tear in the coat front
- \* an everted inner lining of the coat
- \* bulging of the coat
- \* destruction of 4.5 cm. of rib (Connally actually lost 10 cm. of his 5th rib)
- \* a shirt front with many tiny holes
- \* A LAPEL FLAP

Only the last item, the lapel flap, actually occurred on November 22, 1963.