House SFChronicle

What Bullets Tell About JFK Death

Washington

A ballistics expert, supplying new evidence that John F. Kennedy was assassinated by a lone gunman, asserted yesterday that tests indicate nearly all bullet fragments found in the President's car came from the two bullets fired from behind.

Vincent P. Guinn testified that all the fragments tested by a sophisticated neutron activation method came from the bullet previously identified as having exploded Kennedy's skull and from a bullet that injured then-Texas Governor John Connally.

But Guinn, testifying independently of the House assassinations committee's nine-member panel of pathologists, refused to go any further than to say his tests make it "highly probable" that the fragments were from two bullets and "extremely unlikely" to be from any other bullet.

Guinn, a chemistry professor at the University of California at Irvine, said he was unable to test a copper bullet covering found in the front seat of the President's limousine because there was no lead in it, and was unable to test lead shavings found in the windshield of the car.

His testimony before the House assassinations committee supported theories advanced by the Warren Commission, which concluded that Lee Harvey Oswald killed Kennedy alone by firing three shots from behind, including one shot that missed the car entirely.

Guinn's testimony disputed conspiracy theories contending that shots were also being fired by another gunman from a different direction, perhaps from a grassy knoll facing the presidential motorcade.

Guinn said he was not able to test the crucial commission finding that the same bullet went through Kennedy's neck and on to cause all of Connally's wounds. He said the absence of bullet fragments from Kennedy's neck precluded such a test.

But Guinn said all the fragments he could test came from that bullet or the second bullet — the one that exploded Kennedy's skull.

All nine of the assassination committee's medical experts agreed that both bullets were fired from behind the President, the committee was told Thursday.

Guinn said three fragments from Connally's wrist matched the bullet that was found on his stretcher in Parkland Hospital after Kennedy's assassination.

He said fragments from Kennedy's skull, a fragment found on the front seat of the car and a fragment found on its rear floor all came from the second bullet, according to the tests.

Guinn said the tests show the fragments came from the two bullets because by radiating them with neutrons he was able to determine that the fragments had two separate sets of nearly identical amounts of antimony and silver, showing they were parts of the same bullets.

At the committee's direction, scientists subjected the recovered bullet and the wrist fragments to neutron activation analyses, in which solid objects are bombarded with a stream of neutrons, forcing the objects to emit a variety of rays. The rays can be measured to determine the amounts of certain elements present in the test objects. If the amounts present in two different objects match, that is considered proof that the objects also match.

The late FBI Director J. Edgar Hoover told the Warren Commission in late 1964 that the bureau's neutron activation tests on the fragments were inconclusive.

Guinn told the committee that when he saw the FBI results, he at first agreed because the findings seemed to have no pattern. But he said after getting his own results, he went back to the FBI figures and found that by organizing them a different way, "the FBI results were nearly identical to mine."

The finding that one bullet hit both men was crucial to the commission's conclusion that Oswald's assassination of Kennedy was a solo performance involving the firing of three shots from behfnd the presi-



Ballistics expert Larry Sturdivan held up a model of the bullet found on Connally's stretcher

dential motorcade.

Dr. Charles Petty, supporting the conclusion of eight committee medical experts, said the singlebullet theory is not only credible but is not even surprising.

"This ammunition is designed to go through people," he said. "And it does not surprise me that it. went on into another individual."

Another ballistics expert, Larry Sturdivan, who conducted wound tests for the Warren Commission, testified that he does not know if the bullet went through both men. But he said it easily could have.

Sturdivan said the bullet had hit something before it hit Connally because it had yawed — it was no longer traveling straight as it would from the rifle barrel.

Holding and studying the bullet at the witness table, Sturdivan also said the slight damage of the bullet was consistent with going through Kennedy's neck and into Connally's body and wrist.

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