## Experts Track Mystery JFK Bullet

By George Lardner Jr. Washington Post Staff Writer

New scientific tests for the House Assassinations Committee reportedly show that a shot fired at President Kennedy's motorcade from the grassy knoll in Dallas 15 years ago landed in or near the presidential limousine.

According to informed sources, acoustical experts hired by the committee also fixed the velocity of the bullet at rifle-shot speed of 2,200 to 2,-300 feet per second, and concluded that it ended up close to or in Kennedy's Lincoln.

"It seemed to have stopped in the presidential limousine," one source said. Another source said, it would be more accurate to say that it apparently landed "in the area of the presidential limousine, plus or minus 10 feet."

With little more than a week to go before its congressional mandate runs out, the House committee is to meet in secret session today to try to assess the reliability of the new scientific evidence indicating there may have been a conspiracy behind the president's assassination in Dallas on Nov. 22, 1963.

The Warren Commission concluded that only three shots, all from behind, all fired by Lee Harvey Oswald from the sixth floor of the Texas School Book Depository, were fired in Dealey Plaza as the motorcade passed through.

The House Assassinations Committee was on the verge of reaching a similar conclusion in a 600-page final report on the Kennedy and King assassinations that it was preparing to make public to wind up its two-year, \$5.8 million inquiry.

The chairman of the JFK assassination inquiry. Rep. Richardson Preyer (D-N.C.) said yesterday that the committee will probably vote to reopen its public hearings next week for a one-day airing of the startling new study.

"I think the public would want to be able to judge it for themselves," he said.

The acoustical experts, Mark Weiss and Errest Aschkenasy of Queens College in New York City. concluded—from extensive tests with a Dallas police radio recording of the sounds in Dealey Plaza—that a fourth shot was fired from the grassy knoll, in front and to the right of the presidential motorcade.

"It's a prima facie case of conspiracy," one well-placed source said in a

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terse summary of what it all means. "Everything must now be rethought." Other evidence, this source said, such as statements of eyewitnesses, shunted aside or explained away before, must now be re-examined in a more sinister light.

For instance, Forrest V. Sorrels, the Secret Service agent in charge of the Dallas office, who was riding in the lead car, told the Warren Commission that he thought the shots came from the grassy knoll "or terrace" to the right of the motorcade. So did Abraham Zapruder, the bystander with the 8-millimeter movie camera who took the famous film of the assassination.

"... That was my first thought, somebody up on the terrace, and that is the reason I looked there," Sorrels told the Warren Commission in 1964.

Acoustic expert Weiss and his colleague told the House committee in a secret briefing Monday night that there was a 95 percent or greater probability of a fourth shot from the grassy knoll. They were supported by the chief scientist for a Cambridge, Mass., firm, Dr. James E. Barger of Bolt, Beranek & Newman, who had conducted an earlier, but less intensive study of the police tape and had concluded that there was a 50-50 probability.

After Barger testified before the committee, to the exasperation of several members, such as Rep. Harold S. Sawyer (R-Mich.). last Sept. 11, Bolt, Beranek & Newman recommended that the committee hire Weiss "to review our findings and undertake further independent analysis."

The chairman of the Massachusetts firm, Richard H. Bolt, and Weiss had worked closely together before, as members of the court-appointed panel that studied the 18½-minute gap in one of former president Nixon's Watergate tapes and found that the erasures were the result of several, apparently deliberate, manual operations

Weiss was vice president of a New York f.rm known for using complex instruments to break down a sound into its component parts for analysis.

He is widely regarded as an expert in the use of techniques for reducing background noise and interference on speech recordings to increase intelligibility of underlying sounds.

The recording of the sounds of the assassination was made when a motorcycle patrolman left his microphone switch in the "On" position, deluging his transmitting channel with what seemed to be simply a lot of motorcycle noise while the assassination took took place.

"The Warren Commission had this tape, as I recall, but to them it was just noise," Preyer said yesterday. "I don't believe they had the capability to do these [sophisticated studies] on it."

In the four-shot sequence that Barger had tentatively singled out, the first bullet came from the Book Depository. A second came from the de-

pository 1.6 seconds later. A third seemed to come from the grassy knoll 5.9 seconds after that, and the final shot came from the Book Depository just a half-second after that.

Weiss and his colleague, sources said, concentrated on the noise from the grassy knoll, the one that left Barger up in the air, and performed still more sophisticated tests, filtering out the motorcycle sounds, plotting the remaining echo patterns more precisely and determining the exact location of the motorcycle radio that picked them up.

The work was so elaborate that they fixed the position of the press bus coming around the corner and discerned what seemed to be a boxcar on nearby railroad tracks.

They also concluded, "beyond a reasonable doubt," according to several descriptions, that four shots had been fired, and that the third ofthese came from the grassy knoll.

Weiss and Aschkenasy could not be

reached for comment, but Bolt, Beranek & Newman said in a statement last night that they concurred in the more certain findings.

"It is therefore our view that there is a 95 percent or greater likelihood that the sounds of four gunshots are present on the tape and that the third shot came from the direction of the so-called grassy knol! in Dealey Plaza, Dallas, Tex.," the Bolt, Beranek & Newman statement said.

The committee appears likely to endorse the conclusion, although several members are still leery.

"This is a new science, and I've always wondered whether there might be some flaw in it just because it is so new," said one committee Democrat. "Maybe we'll find a flaw at the public hearing, but at this point it looks like a pretty solid study."

A bigger dispute may be touched off by what appears to be the committee's inclination to conclude that the bullet from the grassy knoll missed the president's car. This would enable the panel to hold firm to its earlier conclusions and other scientific studies stating firmly that the president and Texas thengovernor John B. Connally were hit by one bullet fired from the rear and that the president was killed by a subsequent shot to the head, which also came from behind.

"Kennedy was not hit from the front, but he was shot at from the front," one committee source said. "I think we've proved the 'single bullet' theory [that one bullet struck both Kennedy and Connally]. Ironically, we have also established that there were two gunmen."

Critics of the Warren Commission have contended for years that at least one of the pullets that hit the president came from the front. The only bullets and bullet fragments analyzed in the House inquiry came from Oswald's rifle, but the critics remain suspicious, pointing of that a number of bullet fragments are inexpicably missing.

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