

## Acoustic Evidence in Kennedy Shooting Fails

To the Editor:

Alfred Lee (letter, March 2) refers to the House Select Committee on Assassinations, which in 1979 came to the conclusion that "scientific acoustical evidence establishes a high probability that two gunmen fired at President John F. Kennedy."

Mr. Lee does not mention that the finding of the House committee was refuted by a committee established by the National Research Council (of the National Academy of Sciences, National Academy of Engineering, Institute of Medicine), which reported in 1982 (particularly *Science*, Oct. 8, 1982, pages 127-33). This committee on ballistic acoustics, on which I served, was headed by Norman F. Ramsey, professor of physics at Harvard University.

The Department of Justice requested us to review the methodology in previous evaluations of the acoustic data (from the routine recordings of the Dallas Police Department radio channels) and conclusions about a shot from the grassy knoll. We unanimously concluded that "the acoustic impulses attributed to gunshots were recorded about one minute after President Kennedy had been shot and the motorcade had been instructed to go to the hospital."

This conclusion is most readily established by the finding of a phrase, "hold everything," on the individual recordings of both police radio channels and overlapping the recorded signals claimed by previous investigators to be gunshots. Since "hold everything secure until the homicide and other investigators can get there" is clearly audible on channel II and was evidently spoken about a minute after the events of Dealey Plaza, the acoustic evidence cannot be used to support allegations of a second gunman. Steve Barber, a musician, brought the tell-tale "hold everything" to the attention of our committee.

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Yorktown Heights, N.Y., March 3, 1992  
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### The Fatal Bullet

To the Editor:

Oliver Stone castigates Anthony Lewis in a Feb. 3 letter for drawing "misleading and false" conclusions in a Jan. 9 column about President Kennedy's movements after he was shot. As a neurologist long interested in the medical side of the assassination, I believe Mr. Stone has misinterpreted the facts.

Mr. Stone states that the backward snap of the President's head recorded by the Zapruder film strongly supports his own impression that Kennedy must have been shot from the front, rather than the rear, as the Warren Report contends. He rejects the official explanation that the backward movement was a "seizure-like neuromuscular reaction" caused by the bullet's damage to "major nerve centers in the brain" and would have us believe instead that "the autopsy photos and X-rays show no damage to the major nerve centers of Kennedy's brain, making such a neuromuscular reaction impossible." Mr. Stone's commentary makes no sense.

The medical information in Appendix VIII of the Warren Report offers incontrovertible proof that the fatal bullet entered the right rear of the President's skull from above and exited toward the front. When the bullet slashed through the President's brain, immediate and massive brain swelling ensued, causing the backward head posturing and irreversible damage to the brain's vital centers of consciousness and cardiorespiratory control as a result of a lethal increase in pressure inside the skull. This reaction to severe brain injury is typical, irrespective of cause.

The autopsy showed on the right side of the top and front of the skull a 5-inch "defect" (hole), which was roughly covered by three large fragments of bone that were found in the President's car. J. J. Humes, the pathologist, observed in the right rear of the scalp near the midline a small "wound," penetrating through the entire thickness of bone with "inward

beveling of the margins of the bone when viewed from the inner aspect of the skull." He also noted that "at one angle of the largest of the three bone fragments is a portion of the perimeter of a roughly circular and larger wound, presumably of exit, which exhibits outward beveling of the bone on the external surface."

In other words, the smaller wound at the rear of the skull with inward beveling was the bullet's portal of entry and the larger wound in the fragment from the top and front of the skull with outward beveling was the portal of exit.

Mr. Stone's film "J.F.K." is a brilliant fictional re-creation of one of the darkest moments in American history. The director's erroneous manipulation of the facts is credible to most viewers, especially young people, because they haven't bothered to examine the evidence for themselves. The Warren Report will compel any open-minded reader to conclude that Lee Harvey Oswald killed President Kennedy by shooting him in the back of the head from the sixth floor of the Texas School Book Depository building.

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### A Line of Cheap Guns

To the Editor:

Like Hudson Hatcher (letter, March 2), I have read that Lee Harvey Oswald was a marksman (lowest pass rating of a military rifleman). Moreover, military targets are much larger than those civilian rifleman use. But Oswald had the equivalent of a braced foxhole position, one of the steadiest and most accurate from which to fire. He could use the windowsill to allow a steadier shot or shots. And the low recoil of the Mannlicher-Carcano rifle would allow him to refocus on the target rapidly.

True, this is one of the last rifles I would pick for a battle rifle, but it can kill at much longer distances than 88 yards and can be made to shoot accurately enough at those distances.

We will probably never be certain that Oswald operated alone, but the preponderance of evidence certainly points toward Lee Harvey Oswald and his cheap and old military rifle.

As a historical note, John Wilkes Booth killed President Lincoln with a cheap single-shot derringer. A more knowledgeable assassin would have used a more powerful Colt Model 1860 .44 caliber revolver.

President James A. Garfield was killed by Charles Guiteau, who used a .44 caliber "British bulldog" revolver, which did not compare with high quality Colts or Smith & Wessons.

President William McKinley was killed by Leon Czolgosz, who used an Iver Johnson .32 caliber revolver, inexpensive and not powerful.

Thus, all four Presidents were killed by gunmen who knew little about firearms and used cheap ones to do the job.

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Bensalem, Pa., March 10, 1992

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