

ADDENDUM C: MEMORANDUM FROM G. ROBERT BLAKEY TO THE SELECT
COMMITTEE ON ASSASSINATIONS ON THE MANNLICHER-CARCANO
FIRING TEST

MEMORANDUM

TO: ALL COMMITTEE MEMBERS

FROM: G. Robert Blakey, Chief Counsel and Director

SUBJECT: Test on Mannlicher-Carcano

DATE: March 22, 1979

Yesterday, with the assistance of Sgt. Cecil Kirk and other members of the D. C. Police Department, the staff conducted a second test of the time necessary to fire two consecutive rounds from a 6.5 mm Mannlicher-Carcano rifle similar to that found on the 6th floor of the Texas School Book Depository on November 22, 1963. The test was conducted primarily to answer the question, would it have been possible for Lee Harvey Oswald to fire two shots in less than 1.7 seconds? Our test shows that it is.

As you recall, the estimated trigger pulls for the shots that the acoustics analysis identified as #1 and #2 occurred approximately 1.66 seconds apart. (See my previous memo on correlating the shots)

In addition, the test was designed to provide some insight into the difficulty Oswald would have encountered in firing three consecutive shots within 8.31 seconds, at least two of which were less than 1.7 seconds apart, and at least two of which hit the targets at the noted ranges.

From knowledge of the difficulty involved in so shooting, it may be possible indirectly to infer something about the probability, as opposed to the possibility, that Oswald did so. Nevertheless, even the most improbable event may have occurred. Thus, to answer the ultimate question of whether Oswald did fire the first two shots 1.66 seconds apart and hit his target at least once in so doing, as much information as available in addition to that gathered in yesterday's testing should obviously be taken into consideration. This, of course, was what the Committee did in reaching its decisions on December 29, 1978, when it reviewed the previous test firing data, together with other evidence such as the acoustics analysis, and the physical evidence (e.g. the three empty shell casings found on the TSBD 6th floor).

The test was conducted yesterday between 10:00 a.m. and noon at the Lorton Correctional Facility firing range in Virginia. The National Archives, represented by Mr. David Paynter, brought the Oswald rifle (C.E. 139) for use in the test, but bench rest firing tests and operation of the weapon established that it was in too poor condition to be used. (The Committee's Firearms Panel had previously noted the weapon's deterioration since 1963, and their final report reflects the specific nature of the deterioration). Consequently, a similar weapon was used for the actual testing. This rifle was one of the two previously used in August, 1978 for the tests in Dealey Plaza and will be turned over to the Archives as part of the Committee's files at the end of this month.

The shots were fired from a two story tower (approximately 20 feet high), at three targets, stationed from left to right at distances of 143, 165 and 266 feet from the tower. ^{1/} The rifle was shot by four expert marksmen from the D.C.P.D., Officers D. M. Smith, B. L. Miller, Joe Masson, and E. E. Lewis, and two inexperienced staff members, Deputy Chief Counsel Gary Cornwell and myself. Also present were Sgt. Cecil Kirk and Officer M. D. Gonzales, the D.C.P.D. Range Instructor. All members of the D.C.P.D. who fired the rifle had prior military experience. Officers Lewis and Smith had additional extensive civilian training in the use of rifles, while officers Miller and Masson had similar extensive training in the use of handguns. Each of the officers thus can be considered experts in the use of such weapons. Gary Cornwell and I have had neither military nor civilian training in the use of firearms, although I hunted with rifles as a boy, and Cornwell has hunted with rifles periodically throughout his adult life.

Each shooter practiced working the bolt for several minutes (usually 2 to 3 minutes) before shooting. All shots were fired using open iron sights. All times were determined by 3 handheld stop watches. Only 35 shells were fired, including those expended in preliminary tests to determine if the weapon operated properly. ^{2/} Each officer fired two series of three shots and Cornwell and I each fired one series of two shots.

The test established the following:

(1) The weapon can be quite accurately fired more rapidly using open iron sights than the FBI tests in 1963 indicated, where the telescopic sight was used. For example, Officer Masson, during one test series, hit the body silhouette at 143 and 165 feet on the first two shots, and missed the head portion of the silhouette at 266 feet on the third shot by approximately one inch (1"), taking 2.0 seconds between shots 1 and 2, and a total of less than 5 seconds for all three shots. Two other series, one by officer Smith and another, again, by Officer Masson, were fired in which only 1.9 seconds elapsed between two shots, and one of the three shots scored a "kill". ^{3/}

^{1/} The distances were chosen upon the assumption that the 4th shot (Oswald's third) hit the President in the head at frame 312.

^{2/} We found that the weapon was characteristically difficult to operate, due to its poor basic design, and in addition, the particular weapon we used had badly worn riflings and therefore shot somewhat inaccurately.

^{3/} Normal target range body silhouettes, portraying an individual from waist to head, were used as targets. A "kill" was judged to be any shot that hit the silhouette. A "miss" was scored even if the bullet struck the target background, but not within the silhouette.

(2) It is apparently difficult, but not impossible -- at least with only minimal practice with the firearm used -- to fire 3 shots, at least two of which score "kills", with an elapsed time of 1.7 seconds or less between any two shots, even though, in the limited testing conducted, no shooter achieved this degree of proficiency.

(3) It is not difficult to fire two consecutive shots from a Mannlicher-Carcano within 1.66 seconds, and to "point aim", if not carefully "sight" it, on the target on each shot. Cornwell fired the rifle twice in 1.2 seconds, and I fired it twice within 1.5 seconds. In both cases the second shot missed, but was close to the silhouette. In fact, my second shot only missed the silhouette by approximately 2".4/

(4) There was ample time for Oswald to have fired 3 shots, hitting with two of them, within 8.31 seconds. All series of 3 shots were fired in less than 8 seconds, two were fired in less than 7 seconds, two in less than 6, and two in less than 5.5/

4/ The first shot in the test series, of course, routinely scored "kills" since there was no time pressure imposed in aiming the rifle in preparation for that shot.

5/ In light of the difficulty involved in making the first two shots in 1.66, I note that showing that it is possible does not offer any reason why he would have acted so quickly after the first miss.

