

April 27, 1964

MEMORANDUM

TO: J. Lee Rankin

FROM: Norman Redlich

The purpose of this memorandum is to explain the reasons why certain members of the staff feel that it is important to take certain on-site photographs in connection with the location of the approximate points at which the three bullets struck the occupants of the Presidential limousine.

Our report presumably will state that the President was hit by the first bullet, Governor Connally by the second, and the President by the third and fatal bullet. The report will also conclude that the bullets were fired by one person located in the sixth floor southeast corner window of the TEND building.

As our investigation now stands, however, we have not shown that these events could possibly have occurred in the manner suggested above. All we have is a reasonable hypothesis which appears to be supported by the medical testimony but which has not been checked out against the physical facts at the scene of the assassination.

Our examination of the Zapruder films shows that the fatal third shot struck the President at a point which we can locate with reasonable accuracy on the ground. We can do this because we know the exact frame (no. 313) in the film at which the third shot hit the President and we know the location of the photographer. By lining up fixed objects in the movie frames where this shot occurs we feel that we have determined the approximate location of this shot. This can be verified by a photo of the same spot from the point where Zapruder was standing.

We have the testimony of Governor and Mrs. Connally that the Governor was hit with the second bullet at a point which we probably cannot fix with precision. We feel we have established, however, with the help of medical testimony, that the shot which hit the Governor did not come after frame 240 on the Zapruder film. The Governor feels that it came around 290 which is certainly consistent with our observations of the film and with the doctor's testimony. Since the President was shot at frame 313, this would leave a time of at least 4 seconds between the two shots, certainly ample for even an inexperienced marksman.

Prior to our last viewing of the films with Governor Connally we had assumed that the President was hit while he was concealed behind the sign which occurs between frames 215 to 227. We have expert testimony to the effect that a skilled marksman would require a minimum time of 2 1/2 seconds between shots with this rifle. Since the camera operates at 18 1/3 frames per second, there would have to be a minimum of 45 frames between shots. It is apparent therefore, that if Governor Connally was hit even as late as frame 215, the President would have to have been hit no later than frame 190 and probably even earlier.

We have not yet examined the assassination scene to determine whether the assassin in fact could have shot the President prior to frame 190. We could locate the position on the ground which corresponds to this frame and it would then be our intent to establish by photography that the assassin could have fired the first shot at the President prior to this point. Our intention is not to establish the point with complete accuracy, but merely to substantiate the hypothesis which underlies the conclusions that Oswald was the sole assassin.

I had always assumed that our final report would be accompanied by a surveyor's diagram which would indicate the approximate location of the three shots. We certainly cannot prepare such a diagram without establishing that we are describing an occurrence which is physically possible. Our failure to do this will, in my opinion, place this Report in jeopardy since it is a certainty that others will examine the Zapruder films and raise the same questions which have been raised by our examination of the films. If we do not attempt to answer these questions with observable facts, others may answer them with facts which challenge our most basic assumptions, or with fanciful theories based on our unwillingness to test our assumptions by the investigatory methods available to us.

I should add that the facts which we now have in our possession, submitted to us in separate reports from the FBI and Secret Service, are totally incorrect and, if left uncorrected, will present a completely misleading picture.

It may well be that this project should be undertaken by the FBI and Secret Service with our assistance instead of being done as a staff project. The important thing is that the project be undertaken expeditiously.