

UNITED STATES GOVERNMENT

# Memorandum

- Tolson \_\_\_\_\_
- Belmont \_\_\_\_\_
- Mohr \_\_\_\_\_
- Casper \_\_\_\_\_
- Callahan \_\_\_\_\_
- Conrad \_\_\_\_\_
- DeLoach \_\_\_\_\_
- Evans \_\_\_\_\_
- Gale \_\_\_\_\_
- Rosen \_\_\_\_\_
- Sullivan \_\_\_\_\_
- Tavel \_\_\_\_\_
- Trotter \_\_\_\_\_
- Tele. Room \_\_\_\_\_
- Holmes \_\_\_\_\_
- Gandy \_\_\_\_\_

- 1 - Mr. Conrad
- 1 - Mr. Jevons
- 1 - Mr. Griffith

DATE: 6/8/64

- 1 - Mr. Shaneyfelt
- 1 - Mr. Frazier
- 1 - Office, Rm. 7133

TO : Mr. Conrad

FROM : W. D. Griffith

SUBJECT: ASSASSINATION OF PRESIDENT JOHN F. KENNEDY  
DALLAS, TEXAS, 11/22/63

On June 4, 1964, Inspector Leo Gauthier, SA Lyndal L. Shaneyfelt and SA Robert A. Frazier testified before the President's Commission concerning an on-site survey of the scene of the assassination which survey was requested by the Commission. Commission members present during all or part of the testimony were Chief Justice Earl Warren, Senator John Sherman Cooper, Congressman Charles R. Ford (Republican), Michigan, Mr. John J. McCloy, Chairman, Advisory Committee, Arms Control and Disarmament Agency, and Mr. Allen W. Dulles, former head of the Central Intelligence Agency. Inspector Thomas Kelley, U. S. Secret Service, testified concerning the physical specifications of the President's car as compared with the car used to reconstruct the assassination scene. Inspector Gauthier is preparing a separate memorandum concerning his testimony.

SA Shaneyfelt testified regarding the amateur motion picture films made by Abraham Zapruder, Orville Nix and Marie Muchmore, which have been extensively examined in the Laboratory. He testified regarding the examinations he had made of the cameras used to make these films, the determination of the film speeds of these cameras and the comparison of the film speeds of the cameras to the elapsed times between various frames of the films depicting the assassination. He also explained the manner in which frame numbers were assigned to each frame of each of the assassination films for convenience in the study of the films. In addition he testified regarding the numerous reviews of the motion picture films that have taken place at the Commission, individuals present at these reviews and, in general, the purpose of the film reviews, which was to try to establish the specific points in the films where shots occurred.

SA Shaneyfelt then testified in detail regarding the on-site survey and re-enactment that took place in Dallas on May 24, 1964. He

62-109060

ENCLOSURE

l. Demh (15)

REC-18 62-109060-3310

2 JUN 17 1964

- 1 - Mr. Belmont
- 1 - Mr. Rosen
- 1 - Mr. Sullivan
- 1 - Mr. Callahan
- 1 - Mr. Malley
- 1 - Mr. Rogge

ENCLO. BEHIND FILE

EX-103

PERS. REC. UNIT

58

Section 73

UNRECORDED COPY FILED IN 62-109060

Memorandum to Mr. Conrad  
Re: ASSASSINATION OF PRESIDENT JOHN F. KENNEDY  
62-109060

stated the members of the Commission, FBI and Secret Service that were present at the re-enactment and the manner in which the car and its occupants were established at locations on the assassination route based on specific frames of the Zapruder, Nix and Muchmore films and observations of SA Frazier from the sixth floor window of the Texas School Book Depository (TSBD) building. The specific frames of the Zapruder film used for the re-enactment were, A, 161, 166, 185, 186, 207, 210, 222, 225, 231, 235, 240, 249, 255 and 313. He testified regarding photographs that were made of the re-enactment at each of the specified points along the assassination route as well as motion pictures made of the re-enactment car moving along the assassination route. Exhibits had been prepared for each of the frame numbers re-enacted and each exhibit contained a copy of a Zapruder photograph, a corresponding copy of a re-enactment photograph, a photograph taken through the scope of the rifle and a listing of the measurements related to that location including distance and angle to the window of the TSBD building and distance and angle to a nearby triple overpass. He further testified regarding the motion picture film that was taken through the telescopic sight of the rifle, of the car both in the fixed location previously determined and during the time the car drove the assassination route at approximately eleven miles per hour. SA Shaneyfelt also testified regarding his examination of the Zapruder film including reaction or lack of reaction in either President Kennedy or Governor Connally at various points in the film. He also testified that he had established as a result of the survey and a further study of the Zapruder film that the assassination car was traveling at an average speed of 11.2 miles per hour during the pertinent portion of this film. All of the exhibits presented by SA Shaneyfelt regarding the re-enactment were admitted in evidence.

SA Frazier testified that he participated in the on-site re-enactment, making observations from the sixth floor window of the TSBD BUILDING. In this connection, the Commission desired to place the car used in the re-enactment at the point where the assassin would have his last clear shot before the car passed under a tree which overhangs Elm Street in front of the TSBD. The Commission wished to determine

Memorandum to Mr. Conrad ,  
Re: ASSASSINATION OF PRESIDENT JOHN F. KENNEDY  
62-109060

also if the assassin would have a clear shot at the President through any break in the foliage of this tree and to position the car where the first clear shot could be made after the car emerged from under the tree. SA Frazier, using the telescopic sight on the assassination rifle, fixed these positions as frame number 166 (last clear shot), frame number 186 (shot through opening in tree) and frame number 210 (first clear shot beyond tree) of the Zapruder film and so testified.

SA Frazier also testified that under certain hypothetical conditions set out by the Commission (in particular that there was no deflection of the bullet while passing through the President's body), and under the conditions shown in the photographs taken during the on-site re-enactment, a bullet which struck President Kennedy in the back of the neck (first wound) would necessarily have struck the car or its occupants after exiting from the front of the President's neck. This condition exists due to the downward angle of the path of the bullet and to the position of the Presidential limousine which was moving virtually directly away from the assassin's position.

Under the hypothetical conditions set out by the Commission (in particular that there was no deflection of the bullet while passing through the President and that Governor Connally was sitting in front of the President approximately as the scene was reconstructed on 5/24/64), SA Frazier testified that it was possible the bullet which wounded the President also could have struck Governor Connally in the back and passed through his body.

However, in connection with all of SA Frazier's testimony concerning hypothetical questions and assumed conditions, SA Frazier was careful to inform the Commission that there was insufficient technical evidence known personally to him to support or otherwise resolve the hypotheses and assumed conditions advanced by the Commission representatives.

Following the testimony of Messrs. Kelley, Gauthier, Frazier and Shaneyfelt, movie films made by SA Shaneyfelt at the re-enactment scene were shown to the Commission and made a part of the Commission's exhibits.

ACTION: None. For information.

