

University Club
1 West 54th Street
New York, New York

May 18, 1967

Miss Sylvia Meagher
302 West 12th Street
New York, New York

Dear Sylvia:

Enclosed is a revised, updated and expanded version, as of May 1, 1967, of my earlier monogram on "What The Photographs Show." It is not substantially different from my April 1 piece except that I have eliminated the THEORY section and have listed missing or unobserved photographs appearing on the big chart (Exhibit 1).

The exhibits are not enclosed but are available upon request. They are in a continual state of flux as I see and analyze new photographs. Only one serious error appeared in my April 1 monogram. The Nix film does not show man #2. The observer working with me who gave me this information mistook Zapruder's legs for a man. This optical illusion occurs if one views Nix in normal motion.

However, you will note Man #2 does appear in Zapruder.

Regards,



Richard E. Sprague

RES/jnl

May 1, 1967

THE KENNEDY ASSASSINATION

WHAT THE PHOTOGRAPHS SHOW

RICHARD E. SPRAGUE

A. INTRODUCTION:

Ever since the twenty-six volumes of evidence were published by the Warren Commission on the assassination of President Kennedy, researchers in New York, Maryland, California, Pennsylvania and Texas have been analyzing the evidence in minute detail. Since that time in October 1964, a great amount of additional evidence has been placed in the assassination files in the National Archives.

Some of the researchers have attempted to find out whether a conspiracy existed purely through analysis of the photographic evidence. These include principally, Ray Marcus-Los Angeles, Harold Weisberg-Hyattstown, Md., Lillian Castellano-Los Angeles, David Lifton-Los Angeles and myself. The basic tenets with which this group have approached the situation is that photographs, when properly interpreted, do not lie.

If the collection of movie films (both professional and amateur), television tape recordings (some made from 16 MM film), and still camera photos taken at the time of the assassination can all be obtained in their original form and properly analyzed, it is possible we will ascertain the truth about what happened on November 22, 1963. If there was more than one assassin these photographs may actually show, identify and trace the real assassins.

B. CONCLUSIONS AS OF MAY 1, 1967:

In my analysis to date which has utilized the work done by Ray Marcus, Harold Weisberg, Lillian Castellano and David Lifton, plus some of my own work, the following conclusions can be drawn with a reasonable degree of certainty:

1. The shots came from more than one direction.
2. There were at least two, and probably three, assassins firing shots;
3. The first shot was fired before Zapruder frame 202, most probably at frame 189. It is improbable that this shot came from the Depository sixth floor window. The large oak tree was

between the sixth floor Depository window and Kennedy at the time of the first shot. Also the Hughes' film shows no rifle in the sixth floor Depository window and no person in the sixth floor Depository window from approximately one minute prior to and up to six seconds prior to the first shot.

4. The first shot was most probably fired from the grassy knoll from a position between the fence and the stone wall or from the Cupola. It most probably hit Kennedy in the throat.
5. The second shot most probably was fired at about frame 226 and hit Kennedy in the back. It could have been fired either from some part of the Depository building other than the sixth floor window, or the second floor window of the Dal Tex Bldg.
6. Another shot (either the third or fourth) hit Connally in the back at frame 237. This shot came from either the Depository Bldg. or the Dal Tex Bldg. It was probably not fired by the same man who fired the second shot, because two shots could probably not have been fired in 11/18 of a second from the same rifle.
7. Another shot (either the third or fourth) narrowly missed the car and hit the curb on the south side of Main Street. It was probably fired from the Dal Tex Bldg second floor window at sometime between the first shot (frame 189) and the fifth shot (frame 313).
8. The last shot (fifth) was the fatal head shot. It was probably fired from behind the stone wall or from the Cupola at frame 313. The head motion violently backward indicates this. It is highly improbable that the fatal shot was fired from the Depository window, because the Dillard photo taken within three seconds of the time of the shot shows there was no person in the window.
9. The photographs currently available to researchers partially confirm the above conclusions. No definite photograph has been found showing the Dal Tex assassin. However, photographs definitely establish the fact that the first shot probably was not fired from the sixth floor window of the Depository Building because the oak tree was in the way.

The Dal Tex second floor window is the most likely source for the curb shot, indicated by plotting trajectories in two dimensions and partially supported by the Underwood photo taken from the curb.

10. Several photographs show that shots probably came from the Dal Tex building and they show possible or probable assassins on the grassy

knoll. No one of these photographs is conclusive. However, several of them taken together tend to confirm the existence of the possible assassins. The numbers of the men referred to are those assigned by Ray Marcus and used by the author in Exhibit 5 (Map) (See also Moorman Photo #18).

11. The Martin Film: A movie taken by John Martin, a portion of which was incorporated into the Dallas Cinema Associates' film titled "President Kennedy's Final Hour", shows several things. It was taken beginning approximately eight seconds after the fatal shot. Man #5 can be seen framed in the Cupola doorway and moving to the north side of the arcade.

Men #s 2, 3, and 4 can be seen standing between wall and fence at the start of the film. After about a second or two, they begin running to the south and west along the fence and at the top of the grassy slope back towards the triple overpass. Man #2 has proceeded several feet back along the top of the slope by the end of the film approximately four to five seconds later. What appears to be a white puff of smoke, shows against the wall, puffing and growing, in the same position as in the Moorman photo, Willis #5 photo, and Zapruder.

12. Willis #5: A color slide taken by Phil Willis shows man #2 in the crook of the stone wall at the equivalent of Zapruder frame #202. This is six seconds prior to the fatal shot. The man is facing south with an object about three to four feet long extending upward at a 45 degree angle from the position of the man's hands. The man is wearing a dark black cloak or coat. The man's position corresponds to that of the Martin film, the Moorman photo and Zapruder.
13. The Nix film: A film taken by Orville Nix during the time of the fatal shot shows man #5 in the Cupola doorway after the fatal shot. A blowup of an earlier Nix frame shows possible confirmation of man #5 in the Cupola window corresponding to Moorman.
14. Unidentified photographer: A black and white photo taken by an unidentified photographer and seen recently by Wes Wise KRLD-TV Dallas, shows the black figure of a man behind the stone wall in the approximate position of man #2 in the Martin and Nix films. This photo was taken from the south side of Elm Street a few seconds after the fatal shot.
15. Mary Muchmore Film: Miss Muchmore's camera was aimed too low to show the men behind the wall or in the Cupola. However, the puff of smoke shows clearly in the same position as in the

Moorman and Martin photos. This film also shows a violent head motion backward after the fatal shot.

16. Zapruder Film: The Zapruder film supported by Willis #5 establishes the time of the first, second, third (or fourth) and fifth shots. An analysis of the film was made by David Lifton and Ray Marcus which places the time of the first shot at 189 by the motion of President Kennedy's right hand. The second shot is placed at 226 by analysis of the President's elbow and head motions; and the third shot timing at 237 is placed by analysis of Connally's head and shoulder motions.

The fatal shot can be determined at frame 313 to have come from the front by noting the President's head motion. Man #2 also appears in Zapruder frames 413-424.

Willis #5 confirms frame 189 as the time of the first shot because the picture was snapped (in reaction to hearing the shot) at frame 202. Allowing for the time the sound of the shot took to reach Willis, plus his reaction time, the 189 time would be approximately correct.

17. Rickerby #1: A photo taken by Art Rickerby, Life Magazine, riding in Camera Car #2, shows two men and a possible third man or a woman in the Cupola doorway. The photo was taken about one minute after the fatal shot. One of the men in the doorway could be man #5. The others could be men #s 3 & 4.
18. Mary Moorman Photo: Shows possible faces of five men behind the concrete wall, the fence and the Cupola structure at the west end of the arcade. Man #1 is behind the fence. Man #2 is in the crook of the stone wall. Men #3 and 4 are either behind the fence or between the wall and the fence. Man #5 is framed in the lowest rectangular hole in the Cupola. The photograph also shows a possible puff of smoke at the end of the stone wall. (Man #6 is assigned to a possible Dal Tex assassin.)
19. David Weigman: A very important film was taken by David Weigman of NBC riding in Camera Car 1. His camera was running almost continuously from the time he was about fifty feet from the corner of Elm and Houston (before the first shot was fired) until several minutes after the fatal shot. Weigman's film shows the Depository doorway and the people standing in it at the time of the first shot, taken from a distance of about 75 feet. (Much closer than the Altgens' photo) It also shows several clear pictures of the grassy knoll area within a few seconds after the fatal shot. Analysis of these frames is still continuing at this date.

20. James Altgens: Mr. Altgens, an AP photographer, took three pictures in Dealey Plaza. The second one, published as the Yarborough exhibit in the Commission's volumes and taken 3.6 seconds after the first shot and one second after the third shot, shows a man on the fire escape of the Dal Tex Bldg. just above the second floor window. He has obviously almost fallen off the fire escape. Just 9.3 seconds earlier, before the first shot was fired, he was standing straight in a normal position and had been in this position for more than a minute. (See Hughes film) This would indicate the man was startled by something nearby such as a possible loud noise coming from directly beneath him. (This man remains unknown as do all of the other occupants of the Dal Tex Bldg.)

21. Robert Hughes: Mr. Hughes took a color movie from the southwest corner of Houston and Main Streets. It shows Kennedy's car proceeding down Houston and turning on Elm Street. It also shows the sixth floor window of the Depository Building. During this sequence, which begins 9.9 seconds before and ends 5.7 seconds before the first shot, no one and no rifle appears in the window. A stack of cartons does appear in the window. Coupled with the Dillard photo which was taken 3.7 seconds after the fatal shot, the conclusion can be reached that it is highly unlikely that an assassin fired three shots from the window. The total elapsed time between the last Hughes frame and the Dillard photo is 16.2 seconds.

Also, the two photos show that several Commission witnesses were imagining things they could not have seen. This includes Mr. Brennan.

22. Puff of Smoke: Six separate photographs show a possible puff of smoke at the corner of the nook of the concrete wall. The position corresponds to the location identified by Mr. Holland from the overpass where he saw a puff of smoke. Several other witnesses on the overpass also saw it. The photos are: Nix 2A, Nix 2B, Hughes 3, Martin 2, Moorman 2, and Weigman.

D. UNUSED PHOTOGRAPHS:

There are many photographs taken during the assassination which were never tracked down or analyzed by the Commission or the FBI. Some of them probably show the real assassins actually firing the shots, or in the case of the Dal Tex Building, show indications of the shots.

Other photos probably show exactly what each assassin did and where he went after firing the shots. Enlargements may even make it possible to identify the assassins. Exhibit 1 lists all of the photos known to the author as of May 1, 1967. This chart lists objects or photographers which appear, or probably appear

in each of the photos. The photos are divided into three categories: Still pictures, Movies, and TV or Newsreel footage. Efforts are continuing to locate all of the photos listed and to view and analyze them. These include the following: Wilma Bond, Moorman 1, Betzner 1-3, Babushka Lady, Dallas Times Herald, Ron Reiland, Dillard 3, Darnell, Alyea, Couch, Underwood, Craven, Atkins, Stoughton, Burrows, Brandt, Mrs. Dorman, Cancellare, Foley, Beck, Weaver, Powell and several unidentified men and women appearing in other photos with cameras.

E. CHARTS:

Several other types of charts are being prepared. Exhibit 1A is a chart showing the times and frame numbers of photographs and movies used as timing references for all pictures. Times are expressed in seconds, negative for times prior to the first shot (Z189) and positive for times after the first shot.

Exhibit B shows all of the movies, still photographs and TV footage with the photographers' name, sequence or photo number, position, what the picture shows, and the time of the picture or sequence in seconds and in reference frame numbers.

Exhibit C shows the times of the pictures as above, except in graphical form.

Exhibit D will show the location of each of the men, one through six, (plus any others which might, or who may develop) from the first time they appear in any photo to the last time they can be seen. The photos or movie frames showing these positions will be listed thus providing a trail for following photographically each of the potential assassins.

Exhibits E & F will be a chart and map showing the locations of the cars and buses in the motorcade at all times during their passage through Dealy Plaza.

F. MAP -- EXHIBIT G

It is difficult, if not impossible, to analyze the photographic evidence without use of an accurate map. The attached map, Exhibit G, is a reduced version of the map prepared for the FBI and the Commission by Robert West, Dallas County Surveyor. On the attached version, the scale is 1" = 20'. The position of all the photographers and their lines of sight have been placed on the map. Also, the postulated trajectory of the curb shot has been drawn, and can be seen to pass through the second floor window of the Dal Tex Building. The positions of man #1-5 and the puff of smoke as they appear in the photos of Moorman, Nix, Willis, Martin and others, are shown on the map. Other selected people and objects are also shown.