Date: 02/01/94 Page: 1

JFK ASSASSINATION SYSTEM

IDENTIFICATION FORM

AGENCY INFORMATION

AGENCY : FBI

RECORD NUMBER : 124-10020-10074

RECORDS SERIES :

HQ

AGENCY FILE NUMBER: 62-109060-2313X

DOCUMENT INFORMATION

ORIGINATOR : FBI

FROM : GAUTHIER, L. J.

TO : CALLAHAN

TITLE :

DATE: 01/14/64

PAGES: 2

SUBJECTS :

KENNEDY, JOHN, OSWALD, LEE, VISUAL AIDS

DOCUMENT TYPE : PAPER, TEXTUAL DOCUMENT

CLASSIFICATION : U

RESTRICTIONS : OPEN IN FULL

CURRENT STATUS : 0

DATE OF LAST REVIEW: 10/26/92

OPENING CRITERIA :

COMMENTS : ' "

ENITED STATES COVERNMENT $\gamma_{l}o\gamma_{ll}n$ Mr. Callahan

DATE: 1-14-64

Mohr Caster . Calinian Contad Gale . Sullivan Trotter Holmes

Tollion

Belmont

L. J. Gauthier

SUBJECT:

SSASCINATION OF PRESIDENT KENNEDY AND THE KILLING OF LEE HARVEY OSWALD VISUAL AIDS

The Director on 1-11-64 spent one hour going over the visual aids prepared in connection with captioned matter. He sought the answers to many questions concerning the movement of the motorcade, the shooting scenes, location of eyewitnesses, position of assassin and assailant, etc. The Director firmly believes that the FBI should turn over full custody of these visual aids to the Commission as soon as possible in order that inquiries concerning these exhibits can be referred directly to Chairman Warren, particularly requests from news media to publicize the "new development" and the possible interest of the State of Texas and/or the defense in the scale model of the "Oswald shooting site" as a demonstrative courtroom aid.

In accordance with the Director's instructions, the following action was taken on 1-13-64:

1. Messrs. James R. Malley and Leo J. Gauthier visited Mr. Rankin at his office, 200 Maryland Avenue, N.E., Washington, D. C. Although the exhibits would fit in the Commission's conference room, Mr. Rankin felt the room would be too crowded for conference use and asked that Mr. Wade Holland, Superintendent of the building, be contacted concerning the possible use of the "Assembly Room." This room is large enough to accommodate all of the exhibits and can be made available by Mr. Holland for the Commission's use. Mr. Rankin stated he would discuss this matter further with Chief Justice Warren and that he would be in touch with the Bureau concerning the disposition of the exhibits.

REC- 106 2. Mr. Rankin viewed a copy of the attached brochure. He was advised that the Director would provide sufficient copies for distribution to Commission members and its legal staff. He appreciated this offer and requested 28 copies which will be made available by 1-22-64.

Enclosure 1 - Mr. Mohr

1 - Mr. Rosen (Mr. Malley) FJC 1 - Mr. DeLoach

PLB 1 - Mr. Conrad 1 - Mr. Sullivan

l - Mr. Belmont

1 - Mr. Casper

8 4 FEB 1 9 1975.

thier to Callahan

Assassination of President Kennedy

and the Killing of Lee Harvey Oswald

- 3. Mr. Rankin was advised that should the Commission need advisory help with regard to the use of these exhibits that the Director has instructed Gauthier to make this service available on a "need basis."
- 4. Pursuant to the Director's request one copy of the technical brochure is attached for his personal file. Seven (7) additional copies can be made available immediately for the Director's use.

RECOMMENDATIONS:

1. That this memo be referred to the Director.

I have detar Nied

2. That one copy of the attached brochure be made available to Mr. Rankin at this time and an additional 27 copies by 1-22-64.

The Market

Date: 02/08/94 Page: 1

JFK ASSASSINATION SYSTEM

IDENTIFICATION FORM

AGENCY INFORMATION

AGENCY : FBI

RECORD NUMBER : 124-10020-10100

RECORDS SERIES :

HQ

AGENCY FILE NUMBER: 62-109060-2324

DOCUMENT INFORMATION

ORIGINATOR : FBI

FROM : GAUTHIER, L. J.

TO : CALLAHAN

TITLE :

DATE : 01/23/64

PAGES: 2

SUBJECTS :

WC, INSTR, VISUAL AIDS, CRIME SCENE REENACTMENT, FILMS, NIX, ZAPRUDER

DOCUMENT TYPE : PAPER, TEXTUAL DOCUMENT

CLASSIFICATION : U

RESTRICTIONS : OPEN IN FULL

CURRENT STATUS : 0

DATE OF LAST REVIEW : 10/26/92

OPENING CRITERIA:

COMMENTS :

C-TIONAL FORM NO. 10 A 1962 EDITION GSA GEN. REG. NO. 27 UNITED STATES GC RNMENT emorandum TO MR. CALLAHAN FROM SUBJECT: ASSASSINATION OF PRESIDENT KENNEDY AND THE KILLING OF LEE HARVEY OSWALD VISUAL AIDS.

Casper 1-23-Trotter

The Commission is utilizing the FBI's visual aids to considerable extent. On 1-23-64; I met with members of the Commission's legal staff, Messrs. Joseph Ball, David Belin, Melvin Eisenberg and Norman Redlich, for a three-hour session re-enacting on the scale model the Secret Service views concerning the approximate points where the shooting occurred. Inspector Thomas Kelly, Secret Service, was present and stated that the versions of the FBI and the Secret Service were good approximations. The staff is hoping to eventually be in a position to say exactly where the shots occurred on the Parkway with a plus or minus factor of several feet. They realize that many variables exist that will make this determination a most difficult one to resolve.

DATE:

They requested that the FBI show the color movies (Zapruder and Nix) to them at 10:00 a.m. on 1-27-64 at which time an effort will be made by the staff, the FBI and Secret Service to re-enact on the scale model visual interpretations of the shooting sequence appearing in the movies. Secret Service Agent Kelly will be present along with the Secret Service Agent who originally viewed the Zapruder movie and who is responsible for fixing the shooting sequence on the Parkway in Dallas.

Attorney Norman Redlich advised that he will also seek the help of the FBI's Laboratory where Zapruder's camera was examined to determine if it would be possible for the Laboratory, by counting frames, to assist in defining the location where shots one, two and three were fired three were fired

ENCLOSURE The attached information explains the present position of the FBI and Secret Service with regard to the approximations of the shooting sequence re-enacted on the scale model. All of the attorneys

Enclosure *See Addendum on Page 2. LJG: bod AND REC. 1 - Mr. Mohr (Enclosure) (Sent. Direct) 56 1 - Mr. Belmont (Enclosure) (Sent Direct) (1060) 1 - Mr. Rosen (J. R. Malley) (Enclosure) (Sent Direct) 1 - Mr. DeLoach (Enclosure) (Sent Direct)_ - Mr. Conrad (Enclosure) (Sent Direct)

Memo Gauthier to Callahan Re: Visual Aids 1-23-64

present used the scale model extensively advising they will continue to do so in the future. The meeting of 1-27-64 will take place in the same room where the models are maintained, in order that the versions of those visually examining the movies can be re-enacted on the model without loss of time.

COMMENTS:

- l. Arrangements will be made to show the Zapruder and Nix movies to the Commission on 1-27-64. A Bureau employee will be utilized to operate the projector.
- 2. The points on the Parkway as defined by the FBI are considered to be the best approximations possible and in line with the Secret Service version. Inspector Kelly shares the same views. The FBI has the first shot occurring just before the President's head emerges from behind the sign while the Secret Service approximates the location moments after the President emerges. Approximately one second is involved between the two versions. The Commission realizes that there is no material difference between the FBI's and Secret Service's approximations; however, they wish to attempt to fix shooting sequence with a great degree of accuracy with a plus or minus factor of a few feet.

RECOMMENDATION:

None; for information only.

A

J Am 11/23

ADDENDUM BY I. W. CONRAD 1/24/64:

The FBI Laboratory previously has thoroughly examined the film in question. Laboratory has been in touch with representatives of the Commission and arrangements have been made for the Laboratory representative to be present when the film is shown.

Date: 02/03/94 Page: 1

JFK ASSASSINATION SYSTEM

IDENTIFICATION FORM

AGENCY INFORMATION

AGENCY : FBI

RECORD NUMBER : 124-10020-10099

RECORDS SERIES :

HQ

AGENCY FILE NUMBER: 62-109060-2324

DOCUMENT INFORMATION

ORIGINATOR : FBI

FROM : DIRECTOR, FBI

TO:

TITLE :

DATE : 00/00/00

PAGES: 2

SUBJECTS :

PHOTOGRAPHS AND FILMS, NIX, ZAPRUDER

DOCUMENT TYPE : PAPER, TEXTUAL DOCUMENT

CLASSIFICATION : U

RESTRICTIONS : OPEN IN FULL

CURRENT STATUS : 0

DATE OF LAST REVIEW: 10/26/92

OPENING CRITERIA:

COMMENTS :

SHOOTING SEQUENCE AS LOCATED ON THE SCALE MODEL

The approximate location of the shooting sequence was determined from an interpretation of the ZAPRUDER movie and from observations made at the site regarding the location of the Stemmons highway sign which was obscuring ZAPRUDER'S line of view while he was photographing the approaching motorcade. The movie also includes details of the surrounding area.

SHOT ONE:

It occurred when the Presidential car was unobserved by ZAPRUDER for approximately twenty feet while moving behind a road sign. Shot one was approximately fixed on the model at a point directly behind the center of this sign. The movie reveals that prior to reaching this sign the President was seen waving and moments later after emerging from behind the sign he was slumped forward. The position on the Parkway where shot one occurred as approximated by the FBI and the Secret Service varies about one car length (13 feet) or about one-half second at 15 mph. The FBI's estimate places the President approximately one-half second nearer to the assassin when shot one was fired.

SHOT TWO:

It occurred approximately at the time Governor Connally was turning his head to the right rear. This point was established through the interpretation of the relative location of trees, shrubs, street lights, curbing, etc. appearing in the movie. The position on the Parkway approximated by the FBI and the Secret Service varies about 1.5 car lengths (22 feet) or about one second at 15 mph. The FBI's estimate places the Governor approximately one second further away from the assassin when shot two was fired.

SHOT THREE:

It occurred approximately at the time a circle of light resembling an explosive blast encircles the President's head. The position on the Parkway approximated by the FBI and the Secret Service varies about 2/3 car length (14 feet) or about 2/3 second at 15 mph. The FBI's estimate places the President approximately 2/3 second nearer to the assassin when shot three was fired.

62-6-1060 -2394

COMMENTS:

The FBI's analysis of the shooting sequence was determined independently of a similar study made of the movie by the Secret Service. "WHERE ON THE PARKWAY WAS THE PRESIDENTIAL CAR EXPOSED TO GUN FIRE?" The answer to this question is subject to varying factors such as the speed of the vehicle, the firing position of the assassin and the position of ZAPRUDER. It is a matter of accepting the fact that there will be as many versions as there are analyses made of the shooting sequence. The FBI bases its approximations on an interpretation of the ZAPRUDER movie re-enacted on a scale model. The Secret Service has also used the movie to approximate the shooting sequence; eye-witnesses may vary in locating the car at the time of the shooting; members of the Commission may also have differing opinions regarding this matter.

The ZAPRUDER movie was utilized by the FBI as the best medium for approximating the points on the Parkway where the shooting occurred.

Date: 02/01/94 Page: 1

JFK ASSASSINATION SYSTEM

IDENTIFICATION FORM

AGENCY INFORMATION

AGENCY : FBI

RECORD NUMBER : 124-10020-10179

RECORDS SERIES :

HQ

AGENCY FILE NUMBER: 62-109060-2366

DOCUMENT INFORMATION

ORIGINATOR : FBI

FROM : GAUTHIER, L. J.

TO : CALLAHAN

TITLE :

DATE : 01/28/64

PAGES: 3

SUBJECTS:

WC, VISUAL AIDS, FILMS, ZAPRUDER, NIX

DOCUMENT TYPE : PAPER, TEXTUAL DOCUMENT

CLASSIFICATION : U

RESTRICTIONS : OPEN IN FULL

CURRENT STATUS : 0

DATE OF LAST REVIEW : 10/26/92

OPENING CRITERIA :

COMMENTS:

	1
8	
5	
1	
	11
٦	
\	5
2	ş
CH EN	4
Vacco	3
UNRECORDED	

Callaho

STATES GOVERN

MR. CALLAHAN

DATE: January 28, 1964

J. GAUTHIEF

SUBJECT:

ASSASSINATION OF PRESIDENT/KENNEDY AND THE KILLING OF LEE HARVEY OSWALD

VISUAL AIDS /

The Commission's legal staff, Messrs. Joseph Ball, David Belin, Melvin Eisenberg and Norman Redlich visually examined the Zapruder and Nix movies from 10:00 A. M. to 6:30 P. M. on 1/27/64. Present were Secret Service Agent John J. Howlett, who visually fixed the position of the shots in Dallas, and Secret Service Inspector Thomas Kelley. Special Agent Shaneyfelt of the FBI Laboratory was available to answer questions concerning the frame count appearing in the Zapruder film. The results of the first day's examination by the staff is as Zaprade Movie follows: =

1. SHOT ONE

Six movie The FBI's and Secret Service's approximations were accepted tentatively as being within several feet of each other behind the road sign moments before the President's head emerged at the right edge of the sign as viewed by Zapruder. Staff members agree that this position appears to be "firm" subject to a minus or plus of 6 feet either direction.

2. SHOT TWO

Approximately 3/4 seconds separates the FBI's and Secret Service's estimated positions. This represents a difference of about 13 frames. The staff has individual views concerning where Connally was shot. They are not sure where the Governor was hit feeling this may have occurred between frames 56 thru 73. They desire to narrow this approximation down to a minus or plus factor of about 6 feet in either direction. The staff is arranging to obtain a layman's report of the medical account describing the Governor's wounds in order that the turning action of the Governor as viewed in the movie can be used to more nearly fix the position he was in at the time the bullet struck him in the back. Fixing the Governor's position at the time the bullet struck, according to the staff, may make it possible to determine the frame wherein shot two eccurred.

1 - Mr. DeLoach - 1 - Mr. Conrad

Memo to Mr. Callahan

Re: Assassination of President Kennedy

and the Killing of Lee Harvey Oswald - Visual Aids

One staff member, according to Inspector Kelley, quietly spoke about the "outside" possibility of shot one going through the President with sufficient velocity remaining to penetrate Connally's body, wrist and leg. Inspector Kelley mentioned this to me confidentially. He was of the opinion that this was a personal remark made on the spur of the moment. Shot two under those ridiculous facts would have gone completely "wild" according to Kelley.

3. SHOT THREE

The FBI's and Secret Service's approximations differ between one second (18 frames) and 1.5 seconds (29 frames). Staff members are endeavoring to pinpoint the third shot (frame 89) on the Parkway. The Nix film of the third shot clearly locates Zapruder across the roadway. An approximation which occurs 1.2 seconds before the FBI's approximation is being considered as a tentative location for shot three as re-enacted on the scale model again with a minus or plus factor of 1/3 second (6 feet) either direction.

Attorney Norman Redlich asked Secret Service to determine from Orville Nix the exact position at the time he made the movies especially whether he was moving at the time he photographed the Presidential car. Redlich also inquired of me at the time we adjourned at 6:30 P.M. whether the FBI's Laboratory had determined the true speed of the Nix camera and if not, whether the FBI would obtain the camera and conduct necessary examinations. This information was discussed with Mr. Conrad who will be in touch with Redlich.

The Staff members are using the model extensively in the visual examination of the movies mentioned. The model is considered by them to be as accurate as a visual aide could possibly be constructed to a scale of 1/4" to the foot which is 48 times smaller than actual measurements. The staff realizing the many variables that exist in a model re-enactment is considering eventually having a surveyor plot "on-site" the data now being obtained from scale model re-enactments. This they feel will more nearly approximate the shocting sequence from which the speed of the Presidential car may be fixed insofar as acceleration if any between shots and the range of gun fire.

pemo to Mr. Callahan (continued)
pe: Assassination of President Kennedy
and the Killing of Lee Harvey Oswald - Visual Aids

Staff members are continuing their visual examinations of the movies. The Secret Service has a 16 mm movie "on-site" re-enactment of the shooting sequence which will be re-enacted on the scale model. I will be present to assist in the visual examination of the Zapruder and Nix movies and the further re-enactment of the views of the staff on the model. Exhibit Specialists Hughes, Rose and Arey who assisted in the preparation of the visual aids will be with me. FBI photographer Hudgins will operate the projector.

RECOMMENDATION

None. For information.

- 3 -

Date: 02/01/94 Page: 1

JFK ASSASSINATION SYSTEM

· IDENTIFICATION FORM

AGENCY INFORMATION

AGENCY : FBI

RECORD NUMBER : 124-10020-10202

RECORDS SERIES :

HO

AGENCY FILE NUMBER: 62-109060-2379

DOCUMENT INFORMATION

ORIGINATOR : FBI

FROM : GAUTHIER, L. J.

TO : CALLAHAN

TITLE :

DATE: 01/29/64

PAGES : 2

SUBJECTS :

WC, PHOTOGRAPHS AND FILMS, NIX, ZAPRUDER

DOCUMENT TYPE : PAPER, TEXTUAL DOCUMENT

CLASSIFICATION : U

RESTRICTIONS : OPEN IN FULL

CURRENT STATUS : 0

DATE OF LAST REVIEW : 10/26/92

OPENING CRITERIA :

COMMENTS :

Memorandum

TO

MR. CALLAHAN

DATE: January 29, 1

DeLoadi Evans Gale Rosen

Casp

FROM

L. J. GAUTHIER

Tele. Room Holmes

SUBJECT:

ASSASSINATION OF PRESIDENT KE NNEDY AND THE KILLING OF LEE HARVEY OSWALD

VISUAL AIDS

Secret Service Agent John J. Howlett utilized the scale model of the assassination site on 1/28/64 to re-enact the shooting sequence from surveying data plotted for the Secret Service by a Dallas surveyor. The physical make-up of the model compares favorably with the surveying data; however, the distance separating Zapruder's position and the road sign which obscured the camera view of shot one as measured on the model was at variance with the surveyor's measurements. A check by the Secret Service revealed that the surveyor had made an error which will require new re-enactments to position shot one.

Attorney Melvin Eisenberg was the only staff member. present for about 5 minutes during late afternoon. Commission conferences kept other members from continuing the visual examination of the movies. Mr. Eisenberg was very complimentary about the visual aids. The scale model is considered by the staff as a most valuable media for re-enacting various views of the staff. The staff realizes that a 1/4" scale model (48 times reduction) cannot be used to "precisely" locate shots one, two and three on the parkway. The staff wishes to go beyond "approximations" if possible and is considering the need to use the data compiled from the scale model as the basis for locating as accurately as possible shots one, two and three on the parkway in Dallas. The goal of the staff is to "pinpoint" each shot with a minus and plus factor of 1/3 second. Further "on-site" data may be required by the Commission.

The results of the second days examination of the assassination movies are as follows:

- Attorney Eisenberg requested that the visual examination of the movies and re-enactments on the model be continued at 10:00 A. M. 1/29/64.
- 2. He requested Secret Service Agent Howlett to determine whether Orville Nix was standing or moving when he photographed the third shot which struck the President.

LJG:gt (7)

1 - Mr. Mohr

∧1 - Mr. Belmont

r 1 - Mr. Rosen (Malley)

79 FM: 19elogach

REC 8 6 2 - 1

SOVIET SECTION

Memo to Mr. Callahan

Re: Assassination of President Kennedy and the Killing of Lee Harvey Oswald - Visual Aids

- 3. He mentioned that Mr. Willens, Administrative Assistant to Mr. Rankin had discussed with Special Agent Shaneyfelt of the FBI Laboratory about an examination of the Nix camera.
- 4. He stated that Mr. Rankin would make arrangements to obtain the original Zapruder film of the "shooting sequence" from Life Magazine for the use of the staff in further examining a clear image of the action.
- 5. He indicated that if an understandable medical report of Governor Connally's wounds is not available the Commission would be in touch with Mr. Malley of the FBI to obtain a suitable report from Parkland Hospital. The staff feels that more information in everyday language will assist them in determining the seating position of the Governor at the time he was struck by shot two.

Pursuant to the request of Mr. Rankin the members of the Commission's secretarial staff were shown the movies of the shooting and briefed concerning the visual aids. These exhibits are maintained under strict security in the first floor Assembly Room. Admittance to the room is controlled by Mr. Rankin's personal secretary who requires the name, organization, time in and out to be posted in a log book.

I will be present on 1/29/64 to further assist the staff in the use of the model to re-enact views of the shooting sequence. Exhibits Specialists Hughes, Rose and Arey who worked on the construction of the scale model will be present. FBI photographer Hudgins will operate the projector. The malley will excompany these imployees on any wisits to RECOMMENDATION

None. For information only.

- 2 -

Theyno