



FEDERAL BUREAU OF INVESTIGATION  
WASHINGTON, D. C.

To: **FBI, Dallas (89-43)**

Date: **December 20, 1963**

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

*J. Edgar Hoover*  
John Edgar Hoover, Director

FBI File No. **REC 7 62-109060-1**  
Lab. No. **D 137341 ET**

Examination requested by: **Dallas**  
Reference: **Letter 12/5/63**  
Examination requested: **Photographic**

**EX-112**

**FBI  
REC'D**

**DEC 28 3 57 PM '63**

Remarks:

**DEC 23 11 03 AM '63**  
**FBI**

**MAILED 30  
DEC 23 1963  
COMM-FBI**

**DEC 23 11 32 AM '63**  
**FBI**

Enclosures (2) (2 Lab report)

1 - Mr. Henry A. Schutz, Jr. Room 5722 (sent direct)

1 - Mr. Elbert T. Turner Room 649 RB (sent direct)

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

**NEW: GFM (9)**

**NOTE: Mr. Belmont has authorized the return of the camera, K51.**

**REC'D NETWORK**

**DEC 31 1 28 PM '63**

**ADMINISTRATIVE PAGE**

MAIL ROOM  TELETYPE UNIT

**W. E. Moore**

**MR. SCOTT**

REPORT  
of the



FEDERAL BUREAU OF INVESTIGATION  
WASHINGTON, D. C.

To: **FBI, Dallas**

Date: **December 20, 1963**  
FBI File No. **62-109060**  
Lab. No. **D-437341 ET**

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

Specimens received **12/6/63**

**K51 One Bell and Howell Zoomatic 8mm motion picture  
camera SN AS13486, obtained from Mr. Abraham Zapruder**

**Result of examination:**

The K51 8mm motion picture camera has been tested to determine the running speed of this camera, and it has been determined that this camera when operated at normal "RUN" speed operates at 18 1/3 frames per second.

While it is not possible to establish accurately from the film the moment of impact of the first two shots, applying the above camera speed to the film previously submitted which was exposed by Abraham Zapruder and which recorded the assassination, it has been determined that the best estimate of the elapsed time between the first and third shots lies between approximately five and six seconds. It is noted that the President's car moves behind a signboard at about the time of the first shot, and the President's movements during this period are not observable. However, he begins to fall forward immediately upon emerging from behind the sign.

Specimen K51 will be returned to you separately.  
Appropriate photographs have been made.

FEW:GFM:GJ (9)

MAIL ROOM  TELETYPE UNIT