

Recorded 12-6-63
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FEDERAL BUREAU OF INVESTIGATION
UNITED STATES DEPARTMENT OF JUSTICE

Laboratory Work Sheet

NO LAB FILE

Re: LEE HARVEY OSWALD, aka;
ASSASSINATION OF PRESIDENT
JOHN FITZGERALD KENNEDY,
11-22-63, DALLAS, TEXAS;
AFO

File # 62-109060
Lab. # D-437341 ET

Examination requested by: Dallas (89-43)

12-5-63

Examination requested: Photographic

Date received: 12-6-63

Result of Examination:

Examination by: *Webb*

*List roll of film exposed in K51 at "RUN"
Speed. For 30 sec run of film on 2nd half
of tank with fully wound camera 209 cm film went
through camera.*

$209 / .38 = 550 \text{ ft. / 30 sec}$

$\frac{550}{30} = 18\frac{1}{3} \text{ ft. / sec.}$

A2

Specimens submitted for examination

K51 One Bell and Howell Zoomatic 8mm motion picture camera
SNAS13486 obtained from Mr. ABRAHAM ZAPRUDER.

*8mm movie film recording assassination examined
to determine timing in light of above.*

- A. Time from frame where Pres. Kennedy first starts to
turn around which is third frame after he moves
from back of car to frame recording direct hit on
head is 37 frames. $37 / 18\frac{1}{3} = 4.74 \text{ sec.}$*
- B. Time from a frame about half way through legs
to direct hit on head is 112 frames. $102 / 18\frac{1}{3} = 5.57 \text{ sec}$*
- C. Time from A to frame when Connolly makes sudden
move to turn back around after having fired the P...
to*

Zapruder Camera film speed.

10 second intervals	Interval	Speed 1	Speed 2	Average
	12 to 2	18.0	18.1	18.05
	2 to 4	18.5	18.3	18.4
	4 to 6	18.4	18.4	18.4
	6 to 8	18.1	18.1	18.1
	8 to 10	17.9	17.8	17.85
	10 to 12	17.6	17.8	17.7
		<u>108.5</u>	<u>108.5</u>	
Average				18.083

Both give average speed 18.3

1-30-64

lg

AJ

Zapruder film runs 26.850 sec. total based on 18.3 fps.

First 132 frames or 7.333 sec. at speed of 18 frames per second. Balance of film runs 19.517 seconds. There is a stop between the first 132 frames and the frames from 132 to 486. Assassination occurs between frame 132 and 486 when camera speed was 18.3.