

April 7, 2017

Mr. Roland J. Zavada
21 Cottonwood Lane
Pittsford, New York 14534

Re: Information Related to the Mechanical Operation and the Optics of Abraham Zapruder's Camera

Dear Rollie:

During the ARRB-Kodak meeting in Rochester on August 21, 1997, you asked me to attempt to locate technical reports by Itek (or others) which would provide information on any assumptions made in determining shutter speed and/or exposure time (how long the shutter was actually open and closed during each cycle) of Zapruder's Bell and Howell camera, and you also expressed an interest in reading the testimony of Abraham Zapruder and Forrest Sorrels as they related to operation of Zapruder's movie camera on November 22, 1963.

I have concluded my search, with the following results:

-The only Itek reports I could locate that discussed the Zapruder film made no mention of the operation of the shutter, how shutter speed was determined, or the optical qualities of the lens; instead, they related to the direction of travel of skull fragments as seen in the Zapruder film, whether or not any single bullet could account for President Kennedy's rapid motion to the left and rear as seen in the Zapruder film following frame 313, and various image enhancement issues. [These 3 Itek reports were forwarded as enclosures to our July 26, 1996 letter to Mr. Fred Williamson--Kodak's Director of Imaging Technology Policy, Federal Government Relations--in Washington, and I believe he forwarded them on to Jim Milch last summer; you may well already have seen them.] I'm sorry that I have been unable to locate any Itek reports which relate to the operation of the shutter, or the optical qualities of the lens, the two subjects in which you expressed interest. If you are aware of any substantial leads regarding such an Itek report, please provide them to me and I will see if subject document can be found in Government files.

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-Using Richard Trask's book *Pictures of the Pain* as a research guide, I have used our own research databases here in the office to locate several FBI reports that discuss shutter speed, or Zapruder's camera. I have enclosed the pages from his book in which I located (and have highlighted) research leads, and also enclosed photocopies of the following FBI documents:

-Memo dated 12/5/63 from SAC, Dallas to Director, FBI;

-AIRTEL dated 12/20/63 from SAC, Dallas to Director, FBI;

-Memo dated 12/20/63 from W.D. Griffith to Mr. I.W. Conrad;

-FBI Laboratory Report from FBI Lab in Washington to FBI, Dallas, dated 12/20/63;

-Memo dated 1/24/64 from W. D. Griffith to Mr. Conrad;

-Memo dated 1/31/64 from W. D. Griffith to Mr. Conrad.

-I have enclosed a memo from Dallas SAIC Forrest Sorrels to Inspector Kelley dated 1/22/64, and a 1/27/64 letter from Secret Service Chief Rowley to LIFE Bureau Chief Henry Suydam; both illuminate chain-of-custody issues involving Forrest Sorrels on 11/22/63. (Under separate cover, I have already provided you with the chain-of-custody affidavits and letters executed by Abraham Zapruder on 11/22/63 and 11/25/63.)

-Per your request, I have enclosed the Warren Commission testimony of Abraham Zapruder, and the brief portions of Forrest Sorrels' Warren Commission testimony which pertain to the Zapruder film.

Unfortunately, you will note that none of these documents appear to reveal the methodology of the FBI's shutter speed tests, or any assumptions the FBI made about the shutter operation on Zapruder's Bell and Howell camera.

One item in Trask's book which I found of interest was his mention on page 108 that Bell and Howell had conducted its own shutter speed tests. I have no reason to believe the government ever received a copy of this report; perhaps you can obtain a copy during the course of your work on this project.

If I can be of any further assistance in providing you with government documents related to the

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Zapruder film, please let me know. I look forward to seeing you on September 8th at Archives II in College Park, Maryland.

Sincerely,

Doug Horne

Supervisory Analyst

Enclosures