

**Topics for Discussion Between ARRB and Kodak
September 11, 1996**

I. Introduction: ARRB

- A. ARRB's goals and interests regarding photographic experts
 - a. To consider tests that may be able to enhance the historical record
 - b. Not to challenge or support results of prior examinations
 - c. To learn what can be done in the 1990s that was not possible earlier
- B. Films at issue
 - a. Originals now available
 - b. Other films that might be obtained

II. Response: Kodak

- A. General observations
- B. Discussion of types of tests that can be performed on 1960s film stock regarding:
 - a. Identifying camera originals
 - b. Identifying alterations
 - c. Making enhancements
- C. What can be done in the 1990s that was not possible earlier
- D. Recommendation: extent to which ARRB should attempt to secure other originals

III. Zapruder Film

Preliminary examination of the Zapruder film (and two Secret Service copies) to determine whether Kodak might be able to provide assistance regarding some or all of the following issues:

A. Evaluation

- a. Determination whether the film is the camera original
- b. Determination whether there have been any alterations of the film
- c. Possibility of enhancements
- d. Determination whether beginning of motorcade sequence contains any "inertial effect" (or blue tint)
- e. Determination of locations, extent of splices
- f. Determination whether the presidential limousine stopped

B. Means

In addition to suggestions that Kodak may have, the following may be of use:

- a. Evaluation of frame and edge numbers
- b. Evaluation of images between sprocket holes
- c. Comparison of Zapruder film with "Secret Service" copies

C. Tests

What kinds of tests could/should be performed? Would any of the possible tests harm the film stock?

D. Condition of the Zapruder film

To what extent has the film deteriorated or been damaged over time?

E. Making a "state of the art" copy

What recommendations does Kodak have for making the best possible

copy of the Zapruder film? What technology would be required and what would the approximate costs be?

F. Any other recommendations?

IV. Autopsy-related images

- A. "Right posterior occipital" photographs (nos. 15, 16, 42, and 43). What tests might be performed to evaluate authenticity and whether there has been any alteration?
- B. Photographs of brain (seven black and white negatives and seven color positive transparencies). What useful information might Kodak provide regarding the format of film used (duplex holder versus film pack), type of film (Ektachrome or Ansco), authenticity, generation, etc.
- C. Roll of 120 film. What useful information might Kodak provide regarding this roll, including the type of film (is it Ektachrome E3 film, or some other type?), format, exposures, whether there are images (and how many) and whether they can be enhanced.
- D. X-rays. Are there any additional tests that could be performed that would assist in evaluating authenticity?
- E. Any other recommendations?

V. Robert Groden material

- A. Nix and Muchmore films
When were these prints made? From what sources?
- B. Groden video
Were Groden's Nix and Muchmore films the source material for the video?
- C. Are any of Groden's Willis slides originals?
- D. Any other recommendations?

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