

December 27, 1967

Dear Harold,

It has been barely one hour since we have been on the phone this evening, and I have carefully reread my memorandum, and those portions of WWII which are pertinent to it.

I think that my memo adequately states what I wanted to say, and that this is done in a forthright and straightforward manner.

Here are some specifics that we discussed, upon which I would like to comment:

1. My use of the Nix camera, and the Nix instruction booklet, despite the fact that Barret interviewed Zapruder regarding his camera.

First of all, as I pointed out, Abernathy apparently confused film speed and camera speed. Abernathy interviewed Nix, and so the example was pertinent. More important, however, is that the main point of the memo is to illustrate the difference between film speed and camera speed, to show how Abernathy apparently confused the two in the case of the Nix film, and that Barrett may have (and I think did) make similar mistakes in the case of Zapruder.

You kept saying that the Zapruder camera is not constructed like the Nix camera; specifically, the Zapruder camera runs at more than one speed: regular, and slow motion. This does not affect the film-speed/camera-speed argument. The instruction booklet of any electric-eye moving picture camera can be used to illustrate the basic fact that such a camera has a film-speed control that is not the same thing as a camera speed control. That is the point I was trying to make.

Rather than jump right into the matter of electric eye camera, I first introduced the reader to the concepts of fast and slow film by illustrating how they show up when one uses a light meter. It is unfair for you to call this "padding". Clear writing, Harold, takes a considerable amount of organization, and the proper use of illustrative examples.

2a. Unlike the Nix camera, the Zapruder camera can run at two separate camera speeds. You stress the fact that at no frame can we be certain whether it was at 18 or 48 frames/second. And why? Because, you argue, it "is possible" to go from one to the other while filming, Zapruder MAY HAVE done so. This is a possibility. But how probable is this? You posit a model which has Zapruder, over the course of 6 seconds, accidentally slipping back and forth from 18 to 48 frames per second. I am going to check, this coming week, on whether in fact this camera is so badly designed that to go from 18 to 48 frames per second is a hair trigger type of thing.

2b. Suppose, for the sake of argument, that this is the case. That does not give you the logical right to claim that the camera "can run at any speed in between". There is quite a difference between the camera being said to have exposed ON the average at some frame speed between the two distinct speeds, and claiming that the camera can actually run at that "in-between" speed.

If the camera runs at 18 frames per second for 3 seconds, and then at 48 frames per second for 3 seconds, then the average rate for the six second time segment is a little more than 32. Assuming the hair-trigger mechanism stated before, then it is in principle possible to get different

average speeds. You, Harold, do not have the right to confuse average camera speed, (based upon different constant camera speeds, averaged over time) with the two distinctly different operating speeds of the Zapruder camera.

By switching back and forth between the two speeds, it is possible to say one has exposed film at an average rate of some number, between 18 and 48. But the camera cannot run at that ~~XXXX~~ "inbetween" rate!

And, therefore, Zapruder would have no reason to report that it had done so.

2c. Furthermore, it is not incumbent upon me to create sentences that are foolproof against your specific "exception-to-the-rule" use of Zapruder's camera, combined with an equally far-out use of the English language, in which users of the word "speed", are obliged to insert the redundant modifier "constant", in order to have the term "speed" not confused with "average speed". Really, Harold!

Therefore, my sentence at the bottom of page 8 (Zapruder's camera runs at only 18 frames per second, and at 48 frames per second) and my sentence on the last page (it is physically impossible for Zapruder's camera to run at that speed) are literally, scientifically, and precisely accurate.

If you wish to invent a model of camera operation (X period of time at 18 frames per second) plus Y period of time at 48 frames per second) such that over a given time span, some type of average rate of exposure occurs, that is your privilege. You will then have to be careful to distinguish between Average frames exposed, and camera speed. I posited no such model, and my language was accurate and conveyed the full meaning intended.

3. No matter what model you wish to posit (Zapruder filming at 18 frames per second, or 48 frames per second, or with jittery finger switching back and forth between the two) I tried to point out that this does not address itself to the question of the conversation that took place when Mr. Barrett interviewed Mr. Zapruder for the FBI.

Why did Barrett write down "24" ? That is the question?
Did Zapruder tell him this? That is the question.

Mr. Zapruder, knowing his own camera, would report either 18 frames per second or 48 frames per second. He would have no reason to report the 24 frames per second Barrett implied he did.

4. And, therefore, since THIS mistake on Barrett's part has nothing whatever to do with the speed at which Zapruder said his camera ran, ~~XXXX~~ (but does have much to do with Barrett's inability to either take notes, or to understand what Zapruder was saying) it is unfair of you to

- a) present this in such a manner

or

- b) permit it to be publicized in such a manner

as to relate it to the 30% error Shaneyfelt refers to in his testimony regarding the reconstruction.

The only thing these two have in common is the number "30".
That's why I called it sheer numerology in my memo.

5. On the phone, you tried to imply that you did not imply causality, but look at page 183 and 184 in WWII, Harold. What impression is one to get from this? It matters not that you state "Belately----after this book was written---I discovered the Dec 4, 1963 report of FBI agent Robert M. Barrett..."

On the bottom of page 184, you write: "The FBI knew not later than Dec 4, 1963, that the Zapruder camera had exposed 24 frames of film per second, yet it made a false "reconstruction" of the assassination based on a camera speed of 18 fps."

This is completely incorrect, and ~~XXXXXX~~ represents a bundle of unwarranted conclusions and inferences on your part, all rolled into one big moral judgement.

The FBI knew no such thing. According to the record, all it had was a written report of agent Barrett. I did not "know" that "the Zapruder camera had exposed 24 frames of film per second". This is a serious error on your part to say they "know" such a thing.

They had a conflict in ~~evidence~~^{evidence}, and that is all. And what is the better evidence, in this case? The Barrett report? Or the camera, itself, as tested in the lab?

If there is such a thing as "best evidence", surely a lab test of the camera is the thing to believe here.

6. I would also like to point out that in your text, without using quotes, you paraphrased Barrett's report as follows:

"And that the camera was set to expose film at 24 framers per second".
(WWII, page 183, bottom, underlinings in original)

Barrett's report, however, states:

"The camera was set to take normal speed movie film or 24 frames per second." (emphasis added).

Clearly, the underlined phrase "normal speed movie film" is totally consistent with and suggestive of "film speed". Your paraphrase includes ~~XXX~~ only that portion of Barrett which agrees with Weisberg.

7. The evidence concerning Zapruder's knowledge of photography, and the procedures used in filming (one sets it at one speed---any jiggling is accidental---and certainly one does not make mental averages of the jiggled speeds!) clearly indicates that the number "24" in the context of the Barrett report is UNrelated to the 30% error in reconstruction. There is no logical relationship there.

I claim that the way you treated the material implies that there is such.

Furthermore, the way the controversy has evolved and the publicity attendant to the controversy clearly revolves around the Barrett report, whether or not you happened to add that at the last minute, and originally *had* based your case on Shaneyfelt's 30%.

I am a close student of these matters, and have the right to voice my views.

8. I do not in any way condone the fact that the Commission's staff and the FBI "sat on" FBI reports indicating camera speeds other than those testified to. This indicates sloppy and irresponsible work at best, and the possibility that they feared what they might find, at worst.

9. Your attempt to somehow relate my memo to my acquaintance with Liebel is silly and unwarranted. Yes, Harold, I have stopped beating my wife.

10. Your constant use of profanity, personal insults, 4 letter words, and other unintellectual insulting ~~language~~ in debate do not speak well for you.

Sincerely yours,

David
David