

Burrows 11/16/69

When I wrote my notion about the timing of the first shot, I was being exceedingly circumspect and asserting no more than I think can be proved beyond any doubt. I believe that the first blast occurred at about Z189, but I am more comfortable asserting what can be proved beyond doubt: a blast (but not necessarily a hit) before Z195, and a hit before Z200. Specifying with greater exactness than that requires speculating about reaction times, and such speculation is not necessary-- it adds a problem that merely obscures what can definitely be known.

Some of this depends on Marcus's analysis of the movements of JFK's ~~right~~ right arm and Mrs K's head as seen in Zapruder. Probably you have his exhibit on this. The rest is my own observation.

The earliest limit is set by Betzner's photo. Betzner corresponds with Z185. Betzner's affidavit, and the absence of any element that contradicts it, clearly establishes that no shot was fired before Z185.

Willis#5 sets another limit, though somewhat less important than the earlier limit. Willis corresponds with Z202. Willis's testimony and evidence from Zapruder establish that at least one blast was heard before Z202.

In the instant of time that separates Betzner and Willis, we can observe the rapid and almost simultaneous movement of four people. It is more than reasonable to suppose that they are all responding to the same stimulus, viz the blast of a rifle shot. The four are SS agents Hickey and Bennett, Mrs Kennedy, and JFK:

Hickey is sitting in the left rear of the follow-up car. In Betzner, Hickey's head is facing to his left; in Willis his head is turned completely forward. Hickey is visible in Zapruder, which shows Hickey rapidly turning his head between Z195 and 197.

Bennett is sitting in the right rear of the follow-up car. In Betzner, Bennett's head and body are facing to his right; in Willis, Bennett is in the process of turning head and body forward. Bennett is not visible in Zapruder, but his report of 22Nov(date?) indicates that he immediately responded to the first blast by turning toward JFK. (He says, moreover, that he saw JFK struck in the back. In Willis (Z202) Bennett is not yet in a position to see JFK, so it appears that the JFK hit in the back was not the first shot fired).

Mrs JFK: Four (and, I think, only four) witnesses describe the movements of Mrs K when the first blast was heard; they are Willis, Holland, O'Donnell, and Mrs K herself. All agree that she

(as in Willis #4)

was looking to her left when the first blast was heard, and that she turned to face JFK in response to the sound of the first shot. ~~Willis and Zapruder Zapruder and Willis~~ Z183 shows her looking in a direction other than toward ~~JFK~~ JFK. A comparison of the angle of her hat at Z183 and Z225 shows this clearly-- see Marcus). Willis and Zapruder show her facing JFK at Z202, ~~XXXXXX~~ (Zapruder seems to show her facing JFK slightly earlier, too, but this is not very clear in the crude black and white versions of the Zapruder frames).

JFK: Two movements are discernable, and they need to be discussed separately, for they do not necessarily yield the same information. a) In Zapruder, JFK's head is turned to his right until it turns rapidly forward between Z 195 and 198 (compare this with the movement of Hickey's head). This does not necessarily indicate a hit, for the movement may be a response to the same stimulus (viz a hit blast) that caused Hickey to turn forward. b) JFK's right arm moves erratically after Z198. The movement is discernable in the published black and white version of Zapruder, but I prefer to cite the Eisenberg memo of 22 April 1964 both because it records observations of the movement of JFK's arm in the color original of Zapruder, and also because it indicates that the Commission staff had more than ample reason to believe that the first shot was fired before Z210. The Eisenberg memo is reproduced in the back of Thompson's book, about p.305. LIFE showed its Zapruder movie and stills to the Commission's staff and "experts" on 14 April 1964; present were (from my memory) the three autopsy surgeons, Olivier and another "expert", two FBI, two SS, and three of the Commission staff (Specter, Redlich, Eisenberg). In the memo, Eisenberg records that the consensus of those present is that JFK may have been hit as early as Z199; they base that conclusion solely on their observation of the erratic movement of JFK's right arm beginning at Z199 (no mention is made of other individuals in the film or of the movement of JFK's head). I do not cite this for the conclusion that JFK was hit at Z199, but I do cite it for their observation of the erratic movement of JFK's arm. They used a far clearer copy of Zapruder than most others have seen, and at the time when the memo was written, there appears to ~~be~~ have been no prejudice for setting the first shot after Z210.

(I prefer to assert that he was hit by Z 199) →

I don't think that anyone is competent to judge reaction times in minuscule fractions of a second, for it may vary from individual to individual, circumstance to circumstance. Nor can you make assertions based on the speed of sound, unless one knows the origin of the first blast, and I do not think that that is discernable from the photos. Lacking better material than I have on hand, I'll stick with the notion of keeping the first blast and the first hit within the limits that I described above: first blast between Z185 and 195; first hit before Z200. It's neat, for that much at least is beyond argument.

I have kept you busy for a long time, and I had better stop.

One other thing concerning Zapruder that I forgot to mention in a previous letter concerning my ~~mutt~~ friend who used to work at LIFE and saw the original Zapruder. He said that he could see the impact debris flying rearward from JFK's head after Z 313.

I just read Stephen White's, Should We Now Believe the Warren Report? (N.Y.; Macmillan; 1968). Blechh!

*Handwritten signature*

nick BERNABEI

P.S. Sylvia Meagher wrote an article in the September, 1968, issue of The Minority of One. In it there appears a photo of Jose Duarte-- a good shot of his face. In the background is shown a newspaper (from Anaheim, California, as I recall).

If you want the picture, tell me and I shall send it to you.