

UNIVERSITY COLLEGE LONDON
DEPARTMENT OF PHYSICS AND ASTRONOMY

*File A - How HSCA
distorted the
acoustical timing
evidence.*

With Compliments

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Professor G. Robert Blakey
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Assassination of President
John F. Kennedy

Dear Professor Blakey,

In the past few months, since reading Anthony Summers' book Conspiracy, I have been reading through the twelve volumes published by the House Select Committee in order to see what else might be gleaned from them. I believe I have found some confusion in the Report's reconstruction based on acoustic data which seems to have been caused by an error in the way the data were handled. Perhaps you can help me clear this up.

In Dr. Barger's original BB+N acoustics report (VIII, p. 101) times for impulses are given in Table II for all impulses. These are to be adjusted for recorder speed by multiplying by 1.05. The time interval between the last two shots (let's call them that for the sake of brevity) was thus found to be 0.48 seconds. The times are expressed as the measured interval from the instant when the microphone was switched on. Dr. Barger, when he testified (II, p. 75), confirmed this calculation.

Much later, when Weiss and Aschkenasy completed their tests of the 'grassy knoll' shot, they also reported a measured time for the interval between the keying-in impulse and this shot. I found that, in a letter you wrote dated February 22nd, 1979 (V, p. 722) that you had inserted their measured time into the sequence measured by Dr. Barger for the other shots. This procedure resulted in a different time interval of 0.7 seconds between the last two shots, which was subsequently adopted in various reconstructions.

As a scientist I must object strenuously to this procedure; it invites errors. One simply cannot take the measurements by two separate groups and combine them in such an arbitrary way. The slightest difference (even one part in one thousand) in the speed of their tape playback devices will produce a shift in the relative times. Weiss and Aschkenasy did not, as far as I can determine, measure the times of any other shot impulses; Barger did. Although W&A improved the probabilistic determination that the impulse was a shot, in no way did they improve on our

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its timing relative to other shots. An examination of data given in Dr. Barger's report as graphs of waveform vs. time further verifies his original measurement of the interval as 0.5 seconds.

The question of the time interval is pivotal in choosing the Zapruder frame number which should be examined for a strike by the shot fired from the rear, if one performs a reconstruction assuming that frame 313 represents a shot from the grassy knoll. The photographic panel adopted 0.7 seconds and analyzed frame 327. In the Report this was eventually transformed into frames 328-9. I suggest that the correct frame to analyze is 323.

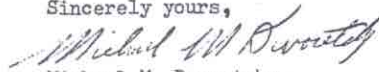
Unfortunately I do not have any high quality reproductions of the relevant Zapruder frames, only those published in black and white by the HSCA or in the Warren Commission volumes. However, they show that President Kennedy's movement from frame 323 to frame 328 is consistent with a shot from behind, as his head and torso move sharply forward.

I would be grateful for your comments on the point I have raised. There are several other evidential aspects of the case which I have analyzed in detail and I would be happy to communicate these results to you as they could be of value in the Justice Department investigation. Many of them indicate quite specific items which were neglected by the HSCA and its panels and which require further expert analysis.

I realized after writing the above that you do not know anything about me or what my qualifications are. In 1965 I received a Bachelor of Science in physics from Harvey Mudd College, and in 1971 received a Ph.D. in Astronomy from the University of California, Los Angeles. After that I spent two years at the Hale Observatories as a Carnegie Fellow, doing research; finally, in 1974, I came to London to take up a Lectureship in Astronomy in this Department. Much of my work has dealt with photographic materials and spectroscopy.

I have been a student of the Kennedy assassination controversy, but never before have I felt that I could add anything to what has already been said.

Sincerely yours,


Michael M. Dworetzky