

October 29, 1970

Dear Tink,

Thanks for your letter of September 15. I think most of your major points are covered in the enclosed supplementary draft report and explanatory memo. I would welcome any further comments you have.

Let me make some additional comments on your letter. (I assume you have gone through the enclosures first.)

I'm sorry that you feel the correspondence on the "jiggle theory" didn't clear things up. As you know, I didn't endorse what Alvarez told you, but concentrated on making sure the factual part was clear. The Appendix to the enclosed supplement sums up my opinions of the "jiggle theory".

Point 1, on page 2: You are right that what I say is no explanation. What I was trying to get across was a way of looking at the problem that made it seem less implausible. If you say "can a bullet drive a target backwards," the answer seems to be obviously negative. But if you break it down into two parts, it seems less impossible: "If some fragments go forward fast enough, the rest of the target will have to go backwards, by conservation of momentum, which I really believe, even though I haven't thought about how it would be satisfied in this particular case. So, the remaining problem is whether fragments can go forward fast enough to have more than the incident momentum. If the bullet doesn't slow down much and pulls a lot of matter with it, then it seems possible."

As you can see, I have essentially adopted the arguments in your point 2. I'm glad you took the time to present it to me so well.

Your last paragraph mentions the direction of the impact debris. One point which I didn't mention in the enclosures is the reference on page 102 of your book to a bone fragment driven back and down in Z313. I don't see it. How sure are you of this point? The arrow in the sketch seems to be pointing to JFK's shirt cuff. If there really is bone at that point it is much more significant than all the fine spray that may have just drifted to the rear.

Sincerely,

*Paul*

Paul L. Hoch

cc: Sylvia Meagher