MEMORANDUM

May 22, 1997

TO: Jeremy Gunn

FROM: Joseph Masih

Subject: Ballistics

Per our discussion three weeks ago, I reviewed the work that I completed on this project, and the work of others who contributed to this ongoing endeavor prior to my arrival.

As I relayed to you in e-mails dated 3/13/97 and 4/16/97, I will bring you up to date on what has been catalogued and what remains to be done. However, this time, I will go into greater detail.

First, the Warren Commission Testimony of Frazier, Simmons, and Nichol were reviewed and entered into the spreadsheet which we were using to list the series of ballistics tests for the rifle, pistol, bullets, fragments and shells. All of the entries are appropriately sourced (Please see attachment 1)

Before explaining what remains to be completed, it would be helpful to provide a list of those items of research which were previously completed. Some of these went beyond the work I carried-out and provide explanations that will assist whomever you give the responsibility of completing this project.

Short List of Previous Work

1) Chain of Custody-Ballistics evidence: Phil put together this item-by-item list of the ballistics evidence and the chain of custody based upon Warren Commission Testimony (See Attachment 2).

2) Testing Locations/Participants: Tammi Long compiled a rather comprehensive listing of the tests, participants and locations at which most of the tests were performed. She used both Warren Commission Testimony and contemporaneous documents (See Attachment 3).

3) There are three other charts that were created by both members of the ARRB staff and interns. While there is some overlap in each of these charts, each one follows its own unique direction. Reconciling all three will provide a clearer picture of what needs to be done (See attachment 4, each chart is separated by color paper.)

Remaining Work

The Mannlicher-Carcano wound ballistics report needs to be reviewed and entered into the

spreadsheet. Particular attention should be given to the documents generated by this study, which include photographs and possibly video. If possible there should be an accounting for the actual rifle slugs which are photographed in the report. Contact should be made with the Edgewood laboratory to discover whether or not they keep records or evidence used in their tests from thirty years ago.

Regarding the FBI laboratory work on the ballistics evidence, it appears from Frazier's testimony that the worksheets generated by their tests were provided to the Warren Commission. Nevertheless, accountability for these items at the National Archives should take place. In addition, I took a trip to Jim Lesar's, Assassination Archives Research Center and found that it would be worthwhile to take a closer look at the affidavits of Frazier and others who worked with Frazier in the FBI laboratory on the Kennedy Assassination. The amount of information generated by Lesar's work is enormous, but I am not sure of the utility of the bulk of this material.

Regarding the House Select Committee on Assassinations, the entire work of the HSCA for this project needs to be reviewed. While Tammi's memo on tests and locations covers some of the HSCA's work, to this date there has been minimal research done on this aspect of the ballistics evidence. HSCA testimony and reports need to be reviewed. In particular the Report of the Firearm examination panel needs a closer look. While this report provides a good listing of all of the evidence the panel reviewed, it appears to be lacking in providing sufficient detail in understanding how the panel arrived at its conclusions. Therefore, a review of any other HSCA material on this subject is necessary to backstop this report. Furthermore, by doing this any other evidence or documentation can be discovered and possibly determine whether there is a need to interview or depose individuals.

Other areas of interest:

When this project was initially handed off to me one of the areas you expressed an interest in was the accuracy of the weapon as reported by Frazier and Simmons to the Warren Commission. Early on I read the testimonies of these two witnesses very closely, especially when it came to the accuracy of C.E. 139. On the surface, it appears that there might be some discrepancy between their description of the weapon's accuracy and their conclusion as to the difficulty of the actual shot. I am specifically referring to the inability to zero the weapon with the scope.

Final Observation

It should be noted that the person tasked with this project is going to have to review all of the Warren Commission Testimony once again. Without knowing what is contained in the testimony there is really no point of reference for this project. The forensics/ballistics project requires that one person be

Masih e:\wp-docs\forsum.wpd (ballistics) File: 4.0.4 solely dedicated to seeing it through to completion. This individual should have no interruptions for at least a month. Like the medical evidence project, the need to "pay attention to detail" is enormous.

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