

Mr. Herndon

1 - Mr. J. J. McDerrett  
6/11/79

W. S. Clark

1 - Mr. J. A. Mintz  
(Attn: L. Posabella)

1 - Mr. D. W. Moore, Jr.  
(Attn: J. Carey)

HOUSE SELECT COMMITTEE  
ON ASSASSINATIONS

1 - Mr. W. L. Bailey

1 - Mr. D. Pyar

1 - Mr. B. J. Clark

U. S. HOUSE OF REPRESENTATIVES (HACA)

1 - Mr. D. P. Herndon

1 - Mr. M. S. Clark

① - Mr. J. W. Kilty

**PURPOSE:** To advise of the results of an interview with former SA John F. Gallagher and the results of a review of pertinent documents in the Kennedy Assassination file to determine the disposition of certain fatal ballistic evidence. Reference D. Ryan to Mr. Bailey memo dated 6/1/79 (attached).

**SYNOPSIS:** Former Laboratory SA advised that radioactive metal samples were disposed of at Oak Ridge National Laboratory (ORNL). A review of Bureau file indicates that certain fatal ballistic evidence, namely specimens Q1 through Q5, Q9, Q14 and Q15 were examined by neutron activation analysis (NAA) and/or emission spectroscopy. Portions (exact weight not determined) of these specimens were consumed by emission spectroscopy. Weighed replicate samples of specimens Q1, Q2, Q4, Q5, Q9 and Q15 were analyzed by NAA. All of these samples were disposed of at ORNL. What remained of specimens Q1 through Q5, Q9, Q14 and Q15 after cleaning and analysis was transferred to National Archives and Records Service (NARS) in 1966.

**RECOMMENDATION:**

That the attached LHM with cover letter be approved for transmission to Deputy Assistant Attorney General Robert L. Keuch.

**DETAILS:** On 6/2/79, SA John W. Kilty of the Laboratory contacted former SA John F. Gallagher, now retired, to determine if Gallagher knew the whereabouts of the lead fragments which were examined by NAA in this case. Gallagher took lead fragments to the ORNL where

Enclosures (3)

JWK:MLC (10)

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he and ORNL personnel performed examinations on them. He advised that it was his recollection that the lead fragments which were made radioactive were disposed of as "radioactive trash" at the ORNL. This, according to Callagher, was the appropriate method of dealing with these radioactive samples at the time.

The HSCA's consultant in NAA, Dr. Vincent P. Guinn, Professor of Chemistry, University of California, Irvine, made an informal inquiry about these specimens to SA John Kilty in May 1978. Kilty stated that if the fragments were not maintained by NARS they were most likely disposed of at ORNL.

A review of pertinent documents in the file reveals the following concerning the description and weight of the "fatal ballistic evidence" when it was received in the FBI Laboratory:

Specimen	Description	Weight (grams)	Weight (milligrams)
CZ 399 (Q1)	Bullet from stretcher	158.6	10,277
CZ 567 (Q1)	Bullet fragment	44.6	2,899
CZ 509 (Q3)	Bullet fragment from beside front seat	21.0	1,361
CE 843 (Q4)	Metal fragment from the President's head	1.62	107
CS 843 (Q5)	Metal fragment from the President's head	0.15	9.7
CE 842 (Q9)	Metal fragment from arm of Governor John Connally	0.5	65
CE 849 (Q14)	Three metal fragments removed from rear floorboard carpet	0.9 0.7 0.7	58 45 45
CZ 841 (Q15)	Scraping from inside surface of windshield	No weight listed	

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The milligram weight was determined by multiplying the grain weight by 64.6. The documents do not show matrix weights when the specimens were first received.

Other documents in the file show that all the above-listed specimens were examined by emission spectroscopy. This method of analysis consumes, by burning, the metal analyzed. The documents do not indicate the weight of material analyzed; however, it was likely less than 10 milligrams per specimen.

The documents pertaining to the NAA of the specimens show that metal samples weighing the following were subjected to this type of analysis:

<u>Sample</u>	<u>Weight (milligrams)</u>
Q1	17.73
Q2	60.97
Q4, Q3	32.045
Q9	5.33
Q15	32.75

It is pointed out that the documents indicate that replicate samples were analyzed. For example, five replicates of Q1 were analyzed which have a total weight of 17.73 milligrams. These are the samples which were disposed of at ONHL and to which Professor Culan refers.

It is also pointed out that some mass of material may have been 'lost' because of the necessity for cleaning the specimens prior to emission spectroscopy and NAA.

Information concerning the weights of the specimens when they were turned over to FARS is not retrievable from Bureau files. However, Bureau records disclose that the 'fatal ballistic evidence' listed above minus the portion removed for analysis and/or cleaning was transferred to FARS in 1966.

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<u>Specimen</u>	<u>Description</u>	<u>Weight (grains)</u>	<u>Weight (milligrams)</u>
CE 399 (Q1)	Bullet from stretcher	158.6	10,277
CE 567 (Q2)	Bullet fragment from from seat cushion	44.6	2,890
CE 569 (Q3)	Bullet fragment from from beside front seat	21.0	1,361
CE 843 (Q4)	Metal fragment from the President's head	1.65	107
CE 843 (Q5)	Metal fragment from the President's head	0.15	9.7
CE 842 (Q9)	Metal fragment from arm of Governor John Connally	0.5	65
CE 840 (Q14)	Three metal fragments removed from rear floorboard carpet	0.9 0.7 0.7	58 45 45
CE 841 (Q15)	Scraping from inside surface of windshield	No weight listed	

The milligram weight was determined by multiplying the grain weight by 64.8. The documents do not show metric weights when the specimens were first received.

Other documents in the file show that all the above-listed specimens were examined by emission spectroscopy. This method of analysis consumes, by burning, the metal analyzed. The documents do not indicate the weight of material analyzed.

The documents pertaining to the NAA of the specimens show that metal samples weighing the following were subjected to this type of analysis:

<u>Sample</u>	<u>Weight (milligrams)</u>
Q1	17.73
Q2	68.87
Q4, Q5	32.045
Q9	5.33
Q14	32.75

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It is pointed out that the documents indicate that replicate samples were analyzed. For example, five replicates of Q1 were analyzed which have a total weight of 17.73 milligrams.

It is also pointed out that some mass of material may have been "lost" because of the necessity for cleaning the specimens prior to emission spectroscopy and NAA.

Information concerning the weights of the specimens when they were turned over to NARS is not retrievable from Bureau files. However, Bureau records disclose that Commission Exhibits 399, 567, 569, 840, 841, 842 and 843 minus the portion removed for analysis and/or cleaning were transferred to NARS in 1966.