

## MEMORANDUM

April 26, 1996 (Revised 9/19/96)

To: Jeremy Gunn  
David Marwell  
Tom Samoluk

cc Tammi Long

From: Joe Freeman

Subject: Chain of custody for bullet fragments extracted from Gov. John  
Connally's wrist at Parkland Hospital on November 22, 1963

The number and disposition of bullet fragments extracted from Gov. Connally's wrist on the day of President Kennedy's assassination has long been a matter of controversy and confusion. What follows is an explication of that controversy through an annotated chronology.

11/22/63

- 12:30 PM The President and Gov. Connally are shot in Dealey Plaza. Gov. Connally sustains three wounds (incorporating five entry/exit points): chest, wrist and thigh.
- 12:36 PM Presidential limousine arrives at Parkland Hospital. Gov. Connally is removed from the car first and is taken to Trauma Room 2 where initial treatment of his chest wound is begun. After this initial treatment Gov. Connally is moved to an operating room (OR).
- 1:00 PM In the OR, Governor Connally is put under general anesthesia by Dr. Adolphe Giesecke.
- 1:35 PM The operation begins on Connally's chest wound -- his most serious. Primary surgeon is Dr. Robert Shaw, assisted by Drs. Boland and Duke. According to the operative report, scrub nurses are Boland and Duke; circulation nurse is Johnson.
- 3:20 PM Chest operation is completed.

4:00 PM According to the Parkland Hospital operative reports, the separate operations on the wrist and thigh injuries begin simultaneously. The primary surgeon for the operation on Governor Connally's wrist is Dr. Charles Gregory. He is assisted by Drs. William

Osborne and John Parker. The operative report lists Nurse Rutherford as the scrub nurse and Nurse Schrader as the circulation nurse. (The foreign body envelope -- see below -- lists "Bell" in addition to Rutherford and Schrader.) The anesthesiologist listed on the operative report is Adolphe Giesecke (the Governor had remained under general anesthesia since 1:00 PM). Dr. Gregory's report references bullet fragments as follows:

"Small bits of metal were encountered at various levels throughout the wound and these were, wherever they were identified and could be picked up, were picked up and submitted to the Pathology department for identification and examination." (CE 392)

Dr. Gregory's handwritten operative notes (as opposed to his report) state: "Wound contaminated by several bits of lead, some recovered." The language in both the report and the notes is unclear as to the number and precise size of the bullet fragments, but certainly suggests a plural number. Later, Dr. Gregory would tell Arlen Specter of the Warren Commission that he removed "two or three" fragments (see 3/23/64, below). Nurse Bell, who retrieved the fragments after the operation was complete (see below), would -- long afterwards -- claim that there were four or five.

4:20 PM The thigh operation is completed.

4:50 PM The wrist operation is completed.

Nurse Audrey N. Bell was the Surgery Supervisor and had earlier been both in Trauma Room 1 and 2. She entered Connally's OR sometime after Gov. Connally's wrist and thigh operations had begun. Years later, Bell described to HSCA investigators the

standard procedure followed at Parkland relative to the recovery of foreign bodies from gunshot victims. As described in a HSCA interview summary memo dated 3/18/77: "The foreign matter would be removed from the patient in the operating room and placed in a small glass container which would be located on a tray near the doctor. The doctor would either place the item in the glass or give it to the operating nurse who would place it in the glass" (HSCA Record Number 180-10086-10297). From his later testimony before the WC, it seems most likely that Dr. Gregory passed the fragment(s) to an operating nurse, who would have placed it/them in the glass container or vial. In any case -- according to what she told the FBI contemporaneously and the HSCA years later -- it was Bell who retrieved the bullet fragments removed from Gov. Connally's wrist from the glass container where they had been placed by either Dr. Gregory or one of the operating room nurses. According to an FBI report of an interview on 11/23/64 (see below), Bell indicated that she removed the fragment(s) after the completion of the operation. She placed the fragment(s) in a Foreign Body Envelope (a small manila envelope approximately 6 inches by 3 inches in size) which was filled out as follows:

DATE: Nov. 22, '63                      TIME: 1600 hrs.  
NAME: Gov. John Connally  
UNIT NUMBER:  
AGE:    SEX-RACE:  
TYPE OF FOREIGN BODY: Bullet fragments.  
AREA FROM WHICH REMOVED: Right-arm  
DOCTORS: Dr. C.F. Gregory  
NURSES: Rutherford - Schrader - Bell

Note that the envelope references fragments (plural), although there is no entry in the space where the number of fragments should have been recorded.

Bell, after consulting with one or more members of Governor Connally's staff present at Parkland, turned the envelope containing the fragment(s) over to Texas State Trooper Bobby M. Nolan.

There is a receipt for this transaction written in hand-writing which appears to be the same as that on the envelope itself, ie., Audrey Bell's. On the *receipt*, as opposed to the *envelope*, the term "fragment" is used in describing the envelope's contents (as opposed to the plural version of the noun). The receipt is written on an office memorandum form and, in the "To" category Bell writes what appears to be : "Lt. Alexander [top line] Crime Lab [second line]." Bell and Nolan each sign the receipt, which is dated 11/22/63. Nolan also initialed the envelope itself.

Both Bell and Nolan understood that he was to convey the fragment(s) to the FBI. Nolan took the envelope to the Dallas Police Department and, after communication with his superiors, turned the envelope over to DPD Captain Will Fritz. Nolan's and Fritz's initials are on the envelope (which is part of CE 842).

7:50 PM According to Nolan, as told to FBI Special Agent J. Doyle Williams the next day (see below), the transfer of the Connally bullet fragment(s) -- from Nolan to Fritz -- takes place at approximately this time.

Post 7:50 Sometime after 7:50 PM, the FBI takes various pieces of evidence, including "1 bullet fragment taken from the body of Gov. John Connally," from the DPD. While there should be a contemporaneous receipt for this transfer, I have yet to find it. What has been found is a receipt for the return of the material to DPD which references it having been taken on 11/22 (HSCA record 180-10023-10051, see 11/24 below). We also know from an FBI lab report of the next day (see below) that the fragment, along with other evidence, arrives at the Washington FBI lab early on the 23rd.

11/23/63 At 7:30 AM FBI SA Drain turns eleven (11) evidentiary items over to Robert Frazier at the FBI Lab in Washington. This transfer is referenced in two documents, the first being an FBI Lab Report of this same date, where Frazier's list of evidentiary items includes, under the heading "Evidence received from Special Agent Vincent E. Drain of the Dallas Office of the FBI on 11/23/63", an exhibit labeled "Q9" and described as "Metal

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fragment from arm of Governor John Connolly [sic]." Note the singular number of the noun (HSCA record 180-10087-10200). Later,

when he testifies before the Warren Commission, Frazier states that he received this "fragment" from SA Drain who had in turn secured it from Capt. Fritz and the DPD.

Confirmation of the transfer from Drain to Frazier also comes from a FBI memo of this date from R.H. Jevons to Mr. Conrad in which Jevon states: "At approximately 7:30 a.m., this date, an Agent of the Dallas Office delivered the following items of evidence to the Laboratory...

a metal fragment from the right arm of Governor Connally..." (FBI record number 124-10035-10148)

Microscopic and spectrographic analysis of Connally fragment performed on this date.

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FBI SA J. Doyle Williams interviews both State Trooper Bobby Nolan and Nurse Audrey Bell. *The summaries of both these interviews reference a fragment (singular) rather than fragments (plural).* The summary of Bell's interview includes the following:

"... after surgery had been completed she [Bell] obtained custody of the metal fragment which had been placed in a small receptacle and which had been removed from the right arm of the Governor by Doctor Gregory. She stated her instructions from the Governor's office were to identify the metal fragment and to turn this possible evidence over to Texas State Trooper Bob Nolan whom she understood was to transfer the metal fragment to the Federal Bureau of Investigation. She stated she obtained a receipt from Officer Nolan, and that her files contain a copy of this receipt.

Miss Bell stated she did not of her own knowledge know of any other metal fragment which may have been removed from the Governor's body during surgery." (HSCA Record 180-10090-10270)

SA Williams' report of his interview with Nolan not only references *a fragment* but also describes it as coming from Connally's *thigh*, not his

wrist or arm. This reference was the cause of subsequent confusion, since the single fragment in Connally's thigh was left there by Dr. Shires who operated on that wound. But it seems clear that the reference to the thigh is simply mistaken (HSCA Vol. 7, p. 156).

11/24/63 At 3:40 PM Dallas time, the FBI returns various pieces of evidence to the DPD, including, as noted above, "1 bullet fragment taken from the body of Gov. John Connally." A receipt signed by DPD Chief Curry, FBI SA Drain and FBI SA John J. Flanagan records the occasion.

11/26/63 A signed receipt appears to indicate that at 2:00 PM a long list of evidentiary items -- including "1 Bullet fragment taken from the body of Gov. John Connally" -- are taken back by FBI SA Drain, whose signature is on the invoice prepared by DPD Property Clerk H.W. Hill. (HSCA record 180-10023-10052)

11/27/63 Parkland radiologist Dr. Jack Reynolds takes post-operative X-rays of Gov. Connally's wrist: "As before, two small metallic densities are seen to lie near the fracture site in the volar aspect of the distal forearm." Two fragments remain in Connally's wrist.

11/28/63 Teletype from SAC, FBI Dallas, to the Director: "Re --- Reported Fragment from Thigh of Governor Connally." This teletype references a call of the night before (10:45 PM on 11/27) from a Mr. Freeman of the FBI Lab in Washington to SAC, Dallas. According to the teletype, "Dr. Gregory furnished metal fragment taken from right arm of Governor Connally and same has been forwarded to lab for appropriate comparisons" and the teletype goes on to reassure the Director that there was no fragment removed from the thigh. Clearly, someone in Washington has been confused about SA Williams' reference to a removed thigh fragment in his report of 11/23.

11/30/63 In a report of this date, SA Williams describes an interview with Dr. Gregory in which a wrist/arm "fragment" is referenced and in which Williams attempts to sort out the issue of the thigh fragment:

"...he [Gregory] states... that he removed from the arm a small

fragment of metal. He stated the metal fragment was placed into a transparent container for preservation, and that during the operation, he recalled no other pieces or bits of metal being removed from the Governor's body. Doctor Gregory was asked whether or not he removed or saw another doctor remove a small fragment of metal from the left thigh of Governor Connally, and he states that although X-rays indicated the possibility of a small fragment of metal embedded in the left thigh that no surgery was performed to remove same. Doctor Gregory stated Surgery Supervisor Audrey Bell took custody of the fragment of metal removed from the Governor's arm, and that the ultimate disposition of the metal... could best be explained by Miss Bell. He stated that he did not of his own knowledge know, however, but he had been advised [that] Miss Bell obtained a receipt from State Trooper Bob Nolan and transferred the metal fragment to him in accordance with instructions from the Governor's office at Parkland Hospital."

(HSCA Vol. 7, p. 156)

Note that here SA Williams is quoting Dr. Gregory as referencing only a single fragment.

12/4/63 Parkland radiologist Dr. Jack Reynolds takes another follow-up X-ray of Gov. Connally's wrist: "As before, two punctate metallic densities are superimposed on the general area of the fracture site."

1/13/64 The FBI's Supplemental Report on the assassination states that "one [fragment] was recovered from Governor Connally's arm."

1/28/64 USSS SA Roger C. Warner interviews Dr. Gregory and other Parkland doctors for the purpose of preparing a diagram requested by USSS Inspector Thomas Kelley on 1/27, re: Gov. Connally's wounds. The diagrams prepared by Warner misrepresent Gov. Connally's wrist wounds: Warner depicts the bullet entering the volar/palm side of the wrist and exiting the dorsal/top side of the wrist. In fact, the path of the bullet was in the reverse, entering in the dorsal side and exiting on the volar side. (HSCA Record 180-10116-10054)

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2/12/64 David Belin of the Warren Commission sends USSS Inspector Kelley a memo pointing out the error in Warner's 1/28 report on Connally's wounds, re: entry/exit into wrist. He asks that Kelley sort the matter out. (HSCA Record 180-10116-10051)

2/14/64 SA Warner submits correction to his flawed 1/28 report in which he acknowledges the error in his earlier submission. (HSCA Record 180-10099-10384)

3/23/64 Arlen Specter deposes Dr. Gregory at Parkland Hospital (WC Vol. VI, pp. 95-104).

Specter: "Did you observe any foreign objects identifiable as bits of fragments or portions of a bullet missile?"

Gregory: "A preliminary X-ray had indicated that there were metallic fragments or at least metallic fragments which cast metallic shadows in the soft tissues around the wounded forearm. Two or three of these were identified and were recovered and were observed to be metallic in consistency. These were turned over to appropriate authorities for further disposition."

Specter: "Approximately how large were those fragments, Dr. Gregory?"

Gregory: "I would judge that they were first -- flat, rather thin, and that their greatest dimension would probably not exceed one-eighth of an inch. They were very small."

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Specter: "...I am interested to know whether the metal which you found in the wrist was of sufficient size so that the bullet which passed through the wrist could not have emerged virtually completely intact... or whether the portions of the metallic fragments were so small that

they would be consistent with having virtually the entire 6.5-mm bullet emerge.”

Gregory: “Well, considering the small volume of metal as seen by X-ray, and the very small dimensions of the metal which was recovered, I think several such fragments could have been flaked off of a total missile mass without reducing the volume greatly... on the basis of the metal left behind in Governor Connally’s body, as far as I could tell, the missile that struck it could be virtually intact, insofar as mass was concerned, but was probably distorted.”

Specter: “Would you have any idea at all as to what the fragments which you observed in the Governor’s wrist might weigh, Dr. Gregory?”

Gregory: “No, not really, but it would have been very small -- very small.”

4/21/64 Dr. Gregory testifies before the Warren Commission: Arlen Specter conducts the questioning (WC Vol. IV, pp. 117-129).

Specter is questioning Gregory on what the diagnostic (pre-operative) X-rays showed relative to Gov. Connally’s wrist injury:

Specter: “Will you continue to describe what that X-ray shows with respect to metallic fragments, if any?”

Gregory: “Three shadows are identified as representing metallic fragments...”

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Specter: “Will you describe as specifically as you can what those metallic fragments are by way of size and shape, sir?”

Gregory: “I would identify these fragments as varying from five-tenths of a millimeter in diameter to approximately

2 millimeters in diameter, and each fragment is no more than a half millimeter in thickness. They would represent in lay terms flakes, flakes of metal."

Specter: "What would your estimate be as to their weight in total."

Gregory: "I would estimate that they would be weighed in micrograms which is [a] very small amount of weight... something less than the weight of a postage stamp."

Specter: "Have you now described *all* the metallic substances *which you observed either visually or through the X-rays* in the Governor's wrist [emphasis added]?"

Gregory: "These are the three metallic substances which I saw."

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Specter: "Do you know what the color was of the fragments in the wrist of the Governor, Dr. Gregory?"

Gregory: "As I recall them they were lead colored, silvery, of that color. I did not recall them as being either brass or copper."

Specter: "Are there any other X-rays of the Governor's wrist which would aid the Commission in its understanding of the injuries to the wrist?"

Gregory: "Only to indicate that there were two fragments of metal retrieved in the course of dealing with this wound surgically. For the subsequent X-rays of the same area, after the initial surgery indicate that those fragments are no longer there. And as I stated, I thought I had retrieved two of them. The major one or ones now being missing..." [missing, presumably, from the post-operative X-rays].

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Specter: "What did you do, Dr. Gregory, with the missile fragments which you removed from his wrists?"

Gregory: "Those were turned over to the operating nurse in attendance with instructions that they should be presented to the appropriate authorities present, probably a member of the Texas Rangers, but that is as far as I went with it myself."

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Specter: "Dr. Gregory, does that report [CE 392, Gregory's Operative Report] show the name of the nurse to whom you turned over the metallic fragments?"

Gregory: "There are two nurses who are identified on this page. One is the scrub nurse, Miss Rutherford, and the second is the circulating nurse, Mrs. Schrader."

Specter: "And is one or the other the nurse to whom you turned over the metallic fragments?"

Gregory: "I do not remember precisely to whom I handed them. I do not know."

5/13/64 Robert A. Frazier, FBI ballistics expert, testifies (again) before the Warren Commission, this time questioned by Specter. The Connally fragment(s) is introduced as Commission Exhibit 842. Frazier testifies that the fragment(s) was brought to him at the FBI laboratory in Washington on November 23, 1963 from SA Vincent E. Drain who stated that he had secured the item from Captain Fritz of the Dallas Police Department. The exhibit is referred to repeatedly in the singular: a bullet fragment, as opposed to bullet fragments. Frazier describes the fragment as weighing half a grain. (Warren Commission Hearings Vol. 5, p. 72)

5/15/64 According to Analyst Tammi Long's *Preliminary Report on Ballistics*

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*Evidence*, neutron activation analysis tests would have been performed on CE 842 on this date.

6/8/64 Arlen Specter's draft of "Phase I" of the Warren Commission's Report states: "An x-ray of Governor Connally's wrist showed very minute metallic fragments, and *one* of these fragments was removed from the Governor's wrist [emphasis added]." (p. 54)

7/6/64 FBI memo, Jevons to Conrad, re: neutron activation analysis testing of ballistic evidence, including Connally fragment.

"Generally speaking, the small lead metal particles fell into two categories. In one category fell the small lead fragment from the arm of Governor Connally and the lead from the almost intact bullet recovered from the stretcher. In the other category fell the lead particles from the head of President Kennedy, the lead fragments from the rear floor of the car and the lead from the mutilated bullet fragment from the front seat cushion. While there is a probability that the fragment from the Governor's arm came from the whole bullet rather than [sic] from the mutilated bullet fragment from the front seat cushion, it remains a probability and does not permit a positive finding or statement that any given small fragment did in fact come from one of the bullets to the exclusion of the others." (FBI record number 124-10028-10188)

Jevons attached a draft letter to the Warren Commission which reflected his recommendation that the Bureau indicate that the findings did not permit a positive determination as to the particular origin of any of the small lead fragments.

7/8/64 J. Edgar Hoover letter to J. Lee Rankin, re: neutron activation analysis of ballistic evidence, including Connally fragment. Hoover's letter, per the recommendation of the 7/6 memo, states:

"While minor variations in composition were found by this method, these were not considered sufficient to permit

positively differentiating among the larger bullet fragments and thus positively determining from which of the larger bullet fragments any given small lead fragment may have come.” (HSCA record 180-10014-10438)

9/24/64 The Warren Commission Report is presented to President Johnson. It states: “An X-ray of the Governor’s wrist showed very minute metallic fragments, and *two or three* of these were removed from his wrist [emphasis added].” (p. 95)

9/14/66 FBI transfers evidence relating to the assassination to the National Archives.

1969 Former Dallas Police Chief Jesse Curry publishes a book entitled *JFK Assassination Files*, in which a photo of various evidentiary exhibits is published. A relatively large object in the photo is described as being a fragment removed from Governor Connally’s arm. It is clearly far larger than the fragment in CE 842. The book is in the HSCA collection.

3/12/77 HSCA staffers Howard Gilbert and Jack Moriarty interview Audrey Bell in Dallas. Transcript appears in various parts of the HSCA collection; audio cassette also available. Gist of the interview revolves around Bell’s claims that there were 4 or 5 fragments, and that she describes them as being larger than those in CE 842. She is asked to draw the smallest of the fragments and her drawing depicts a fragment significantly larger than CE 842. (HSCA record 180-10108-10166)

3/18/77 HSCA staffers Gilbert and Moriarty write a memo to Bob Tanenbaum, re: their interview of Audrey Bell. On the same date, Gilbert writes to Bell, enclosing photocopies of both the Foreign Body Envelope and the fragments from CE 842. He asks Bell to call him after she’s had an opportunity to review the photocopies. No record of any further communication between Bell and the HSCA has been discovered. (HSCA record 180-10086-10297 and 180-10090-10268)

4/11/77 HSCA staffer Kevin Walsh writes a memo referencing a call from Dallas

reporter Earl Golz in which Golz says that a Texas State Trooper named Charles W. Harbison had come forward with the following information: Harbison claimed to have been at Parkland several days after the assassination, as Governor Connally was being moved out of the Intensive Care Unit; Harbison claimed that one of Connally's doctors handed Harbison three or more bullet fragments which were explained to Harbison as having been removed from Connally. Harbison told Golz he turned the fragments over to an FBI agent whose name he could not recall. Apparently, Golz wrote about this claim in an article for the *Dallas Morning News* in or near the 1st of April, 1977. Golz told Walsh that he (Golz) had put Harbison in touch with Audrey Bell and that Harbison believes the fragments he handled were different from the ones Bell was involved with.

No other information or corroboration has been found regarding this claim; nor has the news article been located as of this writing.

- 11/12/77--  
6/15/78      These dates mark the period in which the HSCA Firearms Panel examined assassination-related bullet fragments at both the National Archives and at the Washington, DC, Metropolitan Police Department.
- 9/12-13/78      As part of his neutron activation analysis report for the HSCA, Vincent Guinn examines CE 842 at the Univ. of California, Irvine; in his report, Guinn refers to CE 842 as consisting of three (3) fragments: one larger and two smaller ones. Guinn states that the weight of the larger fragment is 16.4 milligrams; the weight of the two smaller ones (combined) is 1.3 milligrams. (HSCA Record 180-10094-10419).
- 1979              HSCA Volume 7 is published which describes CE 842 as consisting of four (4) fragments (p. 356 and 367), with the largest weighing 0.3 grains. The other three (3) fragments were described as too small to weigh.
- 1991              Harrison Livingstone conducts a series of interviews with Audrey Bell in preparation for *High Treason 2*. She draws a picture of the Connally bullet fragments for the author, showing five, all of which are far larger than the largest fragment in CE 842.

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Freeman e:\wp-docs\041996  
File 4.0.2 Medical Evidence, Connally Bullet Fragments