

**Petition for the Reconsideration and Modification of the National  
Transportation Safety Board's Findings and Determination of the  
Probable Cause for the Crash of TWA Flight 800**

*Tom Stalcup, Flight 800 Independent Researchers Organization  
May. 20, 2002*

# **Attachments**

# **Attachment I**

## **A Brookhaven National Laboratory Report with Analyses of Suspicious TWA Flight 800 Debris Items**

Note: A summary by the Flight 800 Independent Researchers Organization precedes the Brookhaven Report in this attachment

**Feb 20, 2002**

## A Brief Summary of a Declassified FBI Report

Subject: The analysis of evidence with possible high energy characteristics at the Brookhaven National Laboratory

*Tom Stalcup, Feb. 20, 2002*

A recently declassified FBI report presents the results of an analysis of TWA Flight 800 debris “*that exhibited possible high energy characteristics*” and other items of “*unknown origin*.”[1] The FBI and NTSB contracted scientists from the Brookhaven National Laboratory (BNL) to analyze these items, but restricted the scientists from sharing their findings with individuals outside the official investigation. The parties to the investigation (e.g. Boeing and TWA) did not participate in this activity.

Some of the items tested are listed below:

**Note:** All quotations that follow have been taken from the aforementioned report[1] unless cited otherwise.

1. One of 20 similar objects of “*unknown origin*” approximately 0.2 inches in diameter found during victim autopsy examinations.
2. A piece of titanium alloy consistent with jet engine parts that contained “*spike fractures*” and “*melting*.”
3. Part of the left side of the aircraft that contained a penetration apparently “*directed into the fuselage*.”

The FBI report is a summary of the BNL activities and is apparently missing some pages and attachments. Its “Executive Summary” seems to conflict with the findings presented in the body of the report.

The summary reads “*no material compositions were found to indicate the presence of non-TWA Flight 800 or weapons related materials*,” but item 1 (listed above) was inconsistent with aircraft wreckage.[1] These pellet-like objects were in fact tested “*because of their dissimilarity in appearance with TWA 800 debris*.” After numerous examinations, the report classified their origin as “*unknown*.”

When polished, the objects of unknown origin became “*orange-colored and transparent*.” They were non-conductive, and contained Zirconium, Barium, and Cerium within a multi-phase Aluminum-Titanium “*matrix*.”

The significant quantity of Zirconium and the presence of Barium is indicative of an incendiary device[3, 4] and the matrix structure of these object is consistent with pellets used in anti-aircraft missiles<sup>1</sup>. Similar pellets were apparently recovered from the bodies

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<sup>1</sup>National Defense Magazine stated that “*pellets embedded in a titanium matrix*”[2] are used in anti-aircraft missile warheads.

of victims of a recent missile engagement of a civilian airliner.<sup>2</sup>

Two days after the BNL report was submitted to the FBI leadership, then FBI Assistant Director James Kallstrom sent a letter to the NTSB requesting that the discussion of “*Missile/Warhead Impact/Bombs/Explosives*”[7] be banned from the NTSB public hearing on the crash, scheduled to be held the following week. The NTSB complied with the request and the FBI classified the BNL report as “secret.”

Although FBI investigators suspected “*that a missile might have been used against flight 800,*”[6] there is no indication that the any items discussed in the BNL report were ever analyzed by warhead experts. On the contrary, the report mentioned having “*little forensic documentation or guidance on large-body aircraft missile engagements.*”

The characteristics of the items discussed in the BNL report are consistent with a missile engagement. But by not supplying proper guidance, classifying the report as secret, and influencing the agenda of a public hearing, the FBI leadership reduced the likelihood of this evidence ever becoming proof.

#### References:

1. FBI, *TWA Flight 800 Brookhaven National Laboratory Examinations*. Declassified FBI Report, 1997.
2. Ezell, V.H., *Experts Question Lethality of OICW Warhead*. National Defense Magazine, .
3. Durgapal, V.C., A.S. Dixit, and R.G. Sarawadekar, *Study of zirconium-potassium perchlorate pyrotechnic system*. Proceedings of the International Pyrotechnics Seminars, 1988. **13**.
4. Taylor, F.R. and L.R. Lopez, *Development of a reliable, miniature delay system using zirconium / nickel alloys - potassium perchlorate - barium chromate*. Proceedings of the International Pyrotechnics Seminars, 1991. **16**.
5. Pravda, *UKRAINE DENIES MISSILE HITTING RUSSIAN LINER. "UNCONVINCING," SAYS AIR FORCE MARSHAL*. Oct. 9, 2001, Pravda.ru, 2001.
6. Mayer, D., *Witness Group Study Report*. NTSB Public Docket, 2000.
7. Kallstrom, J., *Dec. 3, 1997 Letter to NTSB Chairman Jim Hall Regarding Objections to Hearing Items*. NTSB Docket, 1997.
8. Bott, R., *TWA Flight 800 Missile Impact Analysis*. NTSB Public Docket, 1997.

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<sup>2</sup> In the recent missile engagement of a Sibir Airlines aircraft over the Black Sea, “*metal articles [were] found in several bodies [that] closely resembled in shape and weight pellets inside S 200 missiles.*”[5]

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265A-NY-259028

# TWA Flight 800 Brookhaven National Laboratory Examinations

ALL INFORMATION CONTAINED  
HEREIN IS UNCLASSIFIED EXCEPT  
WHERE SHOWN OTHERWISE

SA [REDACTED]  
SA [REDACTED]

December 1, 1997

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4/9/00

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4/13/00  
CLASSIFIED BY SP5 bsp/dec/utive  
REASON: 1.5 (C) 1  
DECLASSIFY ON: X 1

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FEDERAL BUREAU OF INVESTIGATION  
TWA Flight 800, Case 265A-NY-259028  
Naval Weapons Industrial Reserve Plant  
Calverton, New York

**TWA Flight 800 Brookhaven National Laboratory Examinations**

Date of Report: December 1, 1997

**EXECUTIVE SUMMARY**

Brookhaven National Laboratory was asked by the FBI to assist in the Trans World Airlines (TWA) Flight 800 investigation by providing scientific support. Its scientists graciously donated both expert advice and laboratory examinations of several evidence items.

Selected debris items and impact sites on the wreckage of TWA 800 that exhibited possible high energy characteristics were submitted to Brookhaven scientists for microscopic examination and chemical identification. No damage, characteristics, or material compositions were found to indicate the presence of non-TWA Flight 800 or weapons related material.

**PROJECT CONTRIBUTORS**

**FBI:**

SA [redacted] Squad I-49; research and report co-author.  
SA [redacted] Squad I-48; research and report co-author.

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26 Federal Plaza  
New York, NY 10278

**Brookhaven National Laboratory, Director's Office:**

[redacted] Planning and Policy,  
office tel. (516) 344-[redacted]

Brookhaven National Laboratory  
Upton, NY 11973

**Brookhaven National Laboratory, Department of Applied Science, Materials Science Division:**

[redacted] office tel. (516) 344-[redacted]

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[REDACTED]

Materials Science Building 480  
Brookhaven National Laboratory  
Upton, NY 11973

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Brookhaven National Laboratory, National Synchrotron Light Source (NSLS):

[REDACTED] IR Program, office tel. (516) 344 [REDACTED]

NSLS - Building 725D  
Brookhaven National Laboratory  
Upton, NY 11973

Brookhaven National Laboratory, Department of Advanced Technology, Environment and Waste Technology Center:

[REDACTED]  
office tel. (516) 369 [REDACTED]

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Brookhaven National Laboratory  
Upton, NY 11973

BACKGROUND

It became apparent by the end of November 1996, about four months into the FBI's criminal investigation, that no aircraft debris recovered to that time had clear indicia of a high explosive event, although evidence recovery (i.e. ocean trawling for aircraft debris) and subsequent examination by bomb technicians for such indicia was continuing. In the face of no "classic" explosive artifacts,<sup>1</sup> little forensic documentation or guidance on large-body aircraft missile engagements, and no supportable mechanical or operational explanation for the crash of Trans World Airlines (TWA) Flight 800, FBI management decided that "...any investigative or scientific avenue that was reasonable and which could assist in providing a factual cause of the incident should and would be pursued."<sup>2</sup>

To supplement the already extensive scientific effort the FBI Laboratory was applying

<sup>1</sup>Bomb technicians and FBI Laboratory scientists often cited, based on their experiences, the associated presence of variable-depth surface pitting, melting, penetrations, spalling, and hot gas impingement as examples of classic explosive artifacts.

<sup>2</sup>FBI New York Electronic Communication by SSRA [REDACTED] January 7, 1997, case file 265A-NY-259028 serial 1186.

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to the investigation, provide scientific peer review and a fresh perspective, and to have access to a nearby federal government facility with materials science experts capable of performing advanced imaging examinations in short turnaround, Brookhaven National Laboratory (BNL) was approached for assistance, resulting in a favorable response.<sup>3</sup> The NTSB and FBI Laboratory concurred with FBI New York Office's proposed utilization of BNL and participated in several meetings with BNL scientific staff during January and February 1997 held at both the Director's Office, BNL, and Hangar Six, Naval Weapons Industrial Reserve Plant, Calverton, New York (Calverton facility). During these meetings, participating BNL scientists were briefed on the investigation, introduced to FBI and NTSB investigators, and advised investigators on the scientific capabilities of their labs, offering gratis support that resulted in the efforts reported herein.<sup>4</sup>

At Calverton, the scientists were briefed on, among other topics, the evidence recovery, debris identification and placement, reconstruction projects, scientific observations, and NTSB's crash sequence theory. They were escorted through the TWA 800 debris and reconstruction projects.

Three projects ultimately resulted from this collaboration: metallurgical peer review of the wing center section failure assessment, chemical analysis of an unknown "splattered" material, and examinations of selected evidence items for indicia of high energy penetration. The scientists' project reports are at Attachments (1), (2), (3), and (4).

The cursory metallurgical peer review was conducted by [REDACTED] Department of Advanced Technology, BNL. His task was to provide an unbiased review of metallurgical findings. No analysis or microscopic examinations were conducted. [REDACTED] memorandum, Attachment (1), is self-explanatory and will not be addressed further. b7c

The unknown "splatter" material was found at various locations on the top of the wing center section. This location was significant because of the early role the wing center section had in NTSB's sequence theory.<sup>5</sup> Several specimens were taken for analysis by NTSB and

<sup>3</sup>December 1996 meeting between Senior Supervisory Resident Agent [REDACTED] FBI; Special Agent [REDACTED] FBI; and [REDACTED] Planning and Policy, Brookhaven National Laboratory. b7c

<sup>4</sup>As a preface to discussions about the investigation, BNL personnel were informed of the sensitivity of the case regarding possible criminal prosecution and civil litigation. They agreed to restrict discussion and dissemination of related subject matter to those involved in the investigation. None of the non-government NTSB party members (e.g. Boeing, TWA) were involved in the BNL activities.

<sup>5</sup>NTSB's sequence theory points to the ignition of the fuel-air mixture in the center wing tank, part of the wing center section, as the event that led to the catastrophic airframe failure. The ignition source is as of the date of this report unknown. See NTSB Metallurgy/Structures Sequencing Report 97-38. As of the date of this report, NTSB was still studying the relationship and implication the splatter material had to the overall mishap

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the FBI, one of which was submitted to ██████████ National Synchrotron Light Source, BNL. Once a preliminary chemical identification was done, several control specimens from known aircraft structure were submitted for comparison. ██████████ report, Attachment (2), comprehensively documents his analysis and will not be addressed further.

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██████████ conducted materials science examinations, primarily looking for high energy penetrations.<sup>6</sup> The interest in high energy penetrations stemmed from the development of several hypotheses of criminally initiated events that might have accounted for the lack of a classic explosive signature. Among these hypotheses were the possibilities that a missile warhead detonated at some distance external to the TWA 800 airframe, resulting in only a few warhead fragment penetrations of the aircraft, or that an explosive device detonated in or on the aircraft but the explosive signature was, for some reason, masked or attenuated. If either of those scenarios were true, then the evidence of an explosive fragment penetration—amongst the myriad penetration sites throughout the airframe—might be discovered under microscopic examination.

██████████ first examination was on a non-TWA 800 penetration site that Boeing made by firing a steel projectile through an aluminum alloy plate. ██████████ examination revealed a presence of steel, apparently transferred to the aluminum plate by the steel projectile, anecdotally supporting the possibility of discovering microscopic material from a penetrator in a penetration site. Her report, Examination of the Boeing Test Sample: The Fracture Surface of Al 2024 Alloy Following Penetration by Steel Projectile @ 3000 ft s<sup>-1</sup> is at Attachment (3).

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Subsequently, two evidence items associated with the TWA 800 debris were submitted to ██████████ for examination because of their damage features. FBI evidence item 1B-377 was a penetration site in the vicinity of the L3 door. It appeared to have been made by a penetration directed into the fuselage. As well, the surrounding fuselage skin had various degrees of scraping, dimpling, and fracturing. The area was examined by FBI bomb technicians, yielded no identification of an explosive signature, so the site was cut from the fuselage and submitted to ██████████ whose report is at Attachment (4).

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The other item of intriguing appearance was 1B-423. This piece was recovered during trawling. There was no way to confirm that it came from the TWA 800 aircraft, but bomb technicians pulled the item aside because of its spike-feature fractures. To discover the item's composition and to search for possible transferred material, it was subjected to microscopic examination by ██████████

sequence.

<sup>6</sup>High energy in this context denotes a penetrant of such mass and/or velocity sufficient to leave certain characteristics in the penetration site, such as those identified in ██████████ Boeing Test Sample report at Attachment (3).

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Two other items, 1B-410 and -28, were submitted for identification because of their dissimilarity in appearance with TWA 800 debris, not for any particular damage features. This examination was an attempt to discover any probative characteristics in the material and was performed by BNL because of their close proximity to Calverton and fast turnaround.

METHOD

All items were tracked and documented as evidence. Unknown evidence items submitted for examination remained in the custody of SA [redacted] throughout. Items of known identity or samples extracted from an item were released into the custody of Brookhaven personnel only when necessary. The following four items were examined by [redacted] Materials Science, BNL:<sup>7</sup>

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1B-28

OK

This item, one of 20 similar pieces removed during autopsy of Suffolk County Medical Examiner's case [redacted] was approximately 5mm in diameter and charcoal colored. The item was polished and then subjected to an energy dispersive spectrometer (EDS) analysis to determine its chemical composition.

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1B-377

The item was a 5 x 5 cm square piece with a penetration at its center, cut from the fuselage aft of the L3 door. EDS analyses were performed on both of its fracture surfaces, the external coated areas, and indentations. The item was also analyzed using a synchrotron x-ray fluorescence microprobe.

1B-410

The item was a sliver of grey uncoated material that was submitted to BNL for an EDS analysis. No further tests were required.

↑

1B-423

Item 1B-423 was transported to BNL for testing. An EDS analysis was performed on three areas: the spike-feature fracture surface, the green colored area, and the base of the "teeth" at some apparently melted areas. A small piece was cut from 1B-423 and mounted in an epoxy resin to facilitate alloy identification. This cut piece was released into [redacted]

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<sup>7</sup>Attachment (4), Materials Analyses of Samples from TWA Flight 800.

31

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2. 7) Spectrum is consistent with oxidation of base alloy material (O, Ti,

This specimen shows evidence of fast fracture and possible transfer of Fe at the fracture surface. It should be noted however, that Fe is a common impurity in Ti alloys resulting from the extraction process (up to 0.2 wt. % for the most commonly used "Kroll" process - see Table 1 - from "The physical metallurgy of Titanium Alloys, [REDACTED]). The bulk alloy is possibly engine material used on the aircraft (49XX series Ti alloys) and further tests are presently underway in order to match the sample to actual engine pieces (see Appendix 1). Currently the origin of the piece remains unknown.

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Sample ID # IB410 (item 86) - "fin"

Sliver of grey uncoated metal - *Unknown origin*

EDS spectrum of sample (unwashed) indicated the material to be Al based with Cu and Fe (consistent with a 2000 series alloy used in aircraft), additional peaks from salt contamination (Na, Ca, Cl, K, S, Mg) were also observed. No further tests were required.

Sample ID # IB28



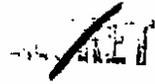
Small charcoal colored particles (1 of ~20 similar pieces) measuring ~5 mm in diameter. On polishing the sample was orange colored and transparent. *Unknown origin.*



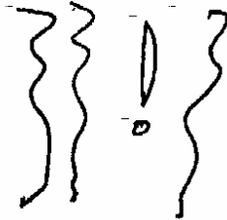
SEM analysis indicated that the material was multi-phase having a base matrix containing Al and Ti (Fig. 9). The sample showed significant charging under the electron beam indicating that it is a very poor conductor - i.e. not metallic. Three other distinct areas could be observed, two were similar to the matrix but contained significant amounts of Zr (Figs. 10,11), the other was mostly Al with Ca, Ba and Ce (Fig. 12).

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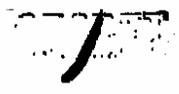
32



- Figure 1. EDS Spectrum of IB377 (item 63) Fracture surface.
- Figure 2. EDS Spectrum of IB377 (item 63) Green "primer" area.
- Figure 3. EDS Spectrum of IB377 (item 63) Red paint.
- Figure 4. EDS Spectrum of IB377 (item 63) Indentation around penetration site.
- Figure 5. EDS Spectrum of IB423 (item 92) Polished sample - base alloy
- Figure 6. EDS Spectrum of IB423 (item 92) Fracture surface.
- Figure 7. EDS Spectrum of IB423 (item 92) Green area.
- Figure 8. EDS Spectrum of # IB423 (item 92) "Melt" area at base of teeth.
- Figure 9. EDS Spectrum of IB 28 - Matrix
- Figure 10. EDS Spectrum of IB 28 - Particulate 1
- Figure 11. EDS Spectrum of IB 28 - Particulate 2
- Figure 12. EDS Spectrum of IB 28 - Particulate 3



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**Table 1 — Total Impurity Contents  
of Iodide- and Kroll-Process Titaniums  
in Weight %**

Element	Iodide Ti	Kroll Ti
Mg	0.01	0.13
Si	0.01	0.05
Al	0.02	
Fe	0.01	0.20
Ni	0.01	
Co		0.02
Cr	0.01	
Mn	0.005	0.02
C	0.01	0.08
N	0.02	0.04
O	0.02	0.11

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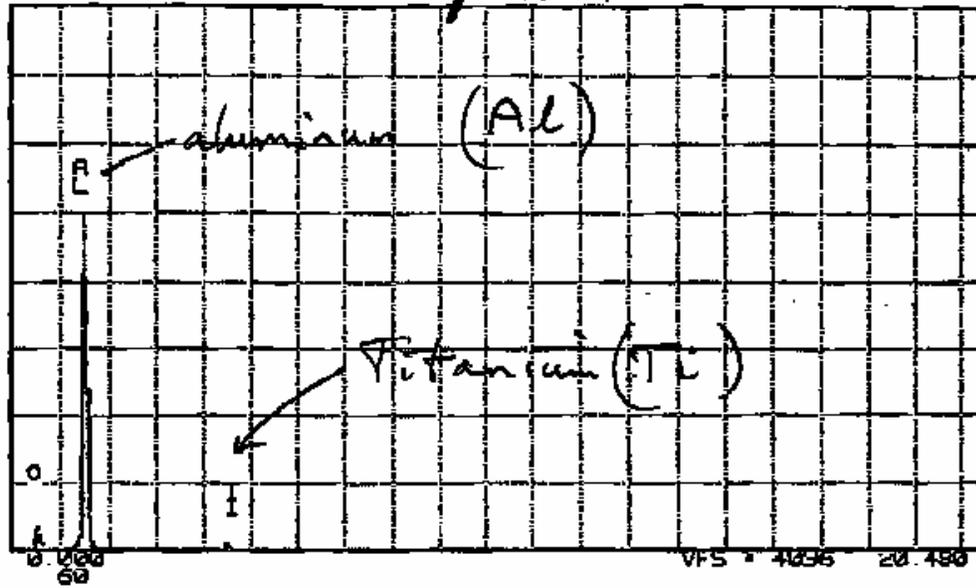


Figure 9. EDS Spectrum of IB 28 - Matrix

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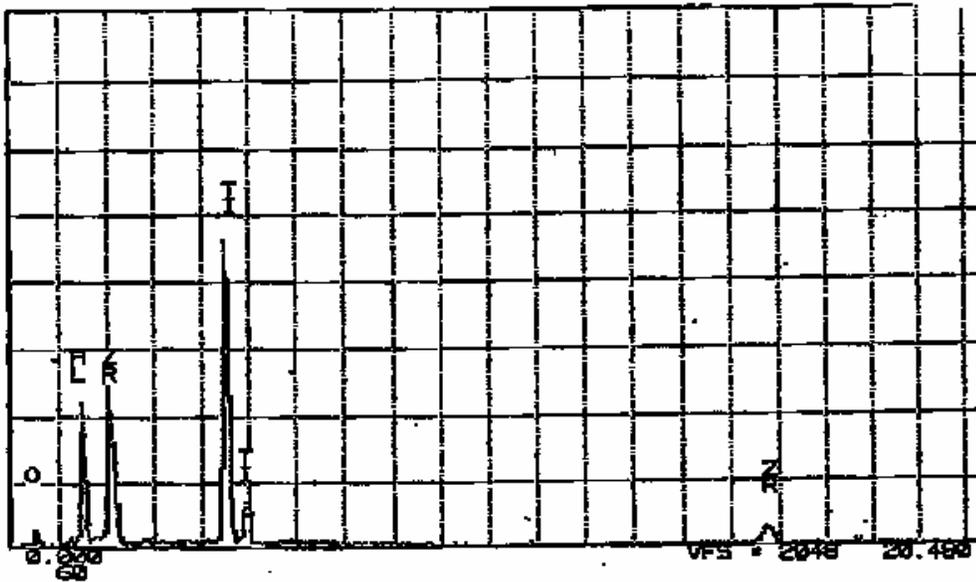


Figure 10. EDS Spectrum of IB 28 - Particulate 1.

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## **Attachment II**

**TWA Flight 800 Radar Analysis by FBI-Contracted  
Radar Expert Michael O'Rourke**

### LINE-OF-SIGHT

Since the subject of line-of-sight (LOS) came up early on in our discussions, I have provided LOS values for the JFK, HPN, and ISP ASR systems below. The calculations were completed utilizing a program developed at the NTSB, and still in use by that agency. The values listed below depict the NM range of the first primary target received by the site listed after loss of the flight's transponder signal, and represent the minimum MSL altitude that a target would be detected given all things atmospheric were normal at the time of the event. However, as you are aware from the presence of surface (primary) targets extracted from the ISP primary data set at ranges exceeding 40 NM, it appears that these targets were the result of a temperature inversion at the time of the incident.

<u>ASR</u>	<u>RANGE from ASR</u>	<u>MINIMUM ALTITUDE</u>
JFK	50.46nm	1,687'
HPN	53.34nm	1,885'
ISP	21.51nm	306'

Keep in mind that, based on a standard set of circumstances (*weather, atmosphere, radar tuning, etc.*), the ASR antenna should not receive or detect primary targets below the minimum altitudes listed above.

### TARGET SELECTION

For the most part, primary targets were selected in the area of the last received transponder return commencing with the time of the next expected return and continuing for approximately 1¼ minutes (0031:14 - 0032:00), with the exception of JFK data which continues through 0033:12.

The selection of above times is based on my experience with past in-flight break-up accident sequences and the intentional destruction of target drones, while a GCI controller in the military. These experiences have shown that after a time period of approximately 60-75 seconds after an airframe experiences a catastrophic in-flight failure, primary radar targets tend to represent a scenario more closely associated with a chaff<sup>2</sup> drop rather than an intact aircraft, or portion of one.

<sup>2</sup>CHAFF - Thin, narrow metallic strips of various lengths that reflect RF energy. These reflectors, when dropped from an aircraft and allowed to drift downward, with the wind, result in the appearance of targets of varying sizes on radar scopes (displays).

A brief visual review of plotted data indicates the HPN ASR system received the least amount of primary target returns while the JFK system received a larger number of returns. The difference in the number of primary returns received from these sites, at nearly identical ranges, tends to indicate that the temperature inversion played a factor in contributing to the lesser number of targets received by HPN versus the larger number of targets received by JFK.

Of interest in the HPN data is that after 0032:34.671, primary target returns become very intermittent and cease in the accident area at 0033:07. Within the JFK data, only 11 targets are recorded after 0032:30, and become increasingly intermittent in the accident area with primary targets ceasing after 0035:21.

Although primary data associated with the ISP ASR was selected through 0032:31.387 for the purposes of the aforementioned plots, primary target returns within the ISP data are indicated beyond 0040:00. Many of the latter targets appeared near stationary and no determination could be made as to whether these targets were aircraft debris aloft or surface targets (small boats) that reportedly responded to the scene of the crash. Additionally, the possibility exists that a portion of the ISP primary data points could be attributed to heavy dense smoke from a fossil (jet) fuel fire. The foregoing statement may garnish a few snickers, however, I have witnessed several occurrences where such smoke conditions appeared on radar (JFK & EWR ASR systems) as very faint (*TRL 1 values*) from structural fires in and around the New York City area while a controller at JFK. Additionally, I have observed this occurrence in the Minneapolis area while an FAA controller.

### **DISCUSSION**

In an effort to present both sequential target listings and TRL values in a combined view, a series of three joint-plots were created for each of the ASR systems. These plots were designated as TWAJFK7/7A, TWAHPN7/7A, and TWAISP7/7A [ATTACHMENT # 15].

Based on information you provided relative to debris locations documented during the recovery phase [ATTACHMENT # 19], I have marked each of the above plots with circles to indicate the locations of debris from the forward portion of the aircraft in **green** and the aft portion of the aircraft in **blue**. Additionally, I have placed an **orange** circle around a grouping of returns that appear immediately to the right of the apparent flight track of TWA800, approximately 1 N.M. southwest of the area encompassing the nose or forward section.

Since I could not recall seeing a similar depiction of primary target data while visiting CTO nor was there an indication of this debris pattern in the copy of the Oceanering plot indicating TWA800 Tag Locations provided by FAX, I became quite curious as to what portions of the aircraft these could be.

Within the ISP and HPN plots, targets located in the orange circle appear to be closely grouped within an area measuring approximately 0.2 NM east/west and 0.4 NM north/south. Within these plots, both data sets indicate TRL values generally at 3 and below. However, both data sets also include a single TRL value of 7 near the northern end of the target field.

In the JFK plots, targets within the orange circle indicate TRL values of between 5 and 7 while for the most part they appear near the end of the data set. The grouping of the JFK data appears to be generally within a 0.4 NM diameter area.

The relatively tight grouping of these targets in all three data sets (less than 1/2 NM) would tend to indicate more vertical movement versus lateral movement.

Additionally, plotted data indicates targets located within the orange area appear immediately to the right (abaft) of the projected flight path of TWA800 at a distance of approximately 0.5 NM, at 0031:16.224 in the ISP data set. Coincidentally, the first appearance of this target in the HPN data occurred at 0031:14.792 and was also located approximately 0.5 NM to the right of the projected flight path.

A similar target appears to the right of the projected flight track at 0031:16.895 in the JFK data set but at a distance of approximately 0.25 NM.

The above information indicates that some portion or component of the aircraft kicked out to the right nearly immediately after loss of the transponder signal and experienced a throw to the right of the aircraft's flight track of between 0.25 and 0.5 NM. Once it lost the momentum that caused its departure from the aircraft, the part or parts associated with this debris descended to the ocean surface very near vertically with minimal lateral movement.

Target returns located within the green (fwd) and blue (aft) coincide with the information depicting debris fields in the Oceanering TWA800 Tag Location plot.

I doubt that NTSB personnel have plotted all three primary data sets as contained in the enclosed attachments although the recommendation to complete such a process was communicated.

ISP: 1 NM abt 01:16.224 ~ 4 sec after explosion  
=> = 1 NM / 4 sec  
= 450 kts  
HPN: 1 NM abt 01:14.792 ~ 2.5 sec after  
= 1 NM / 2.5 sec = 720 kts

For your convenience, I have provided three complete sets of text and plots. Also, I have provided six large (30x30") plots depicting numbered sequential returns as well as TRL values from the three ASR systems.

Feel free to call if you have any questions, comments, or suggestions. I should be in for the next few weeks.

Very truly yours,



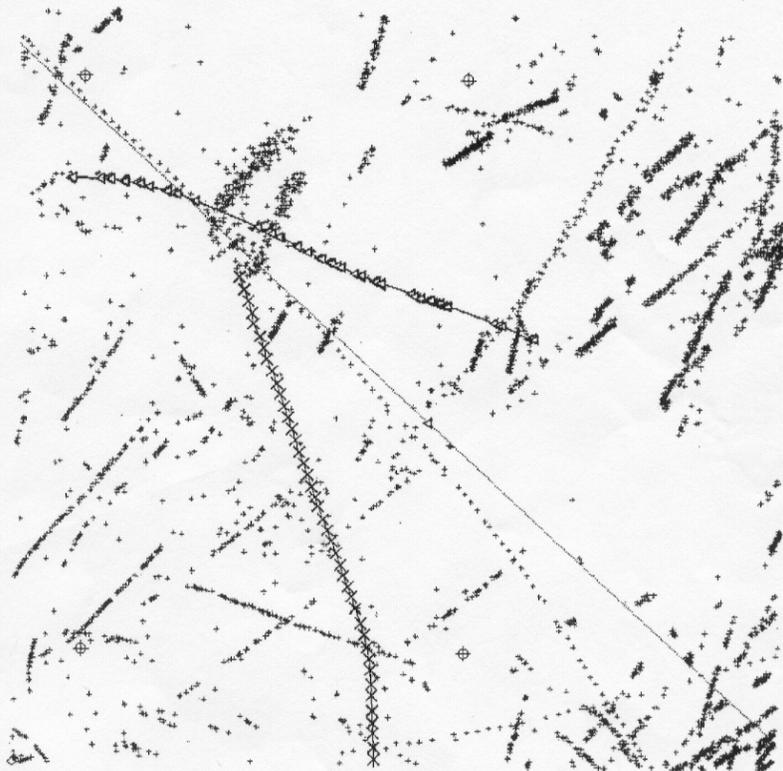
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End.

VIA EXPRESS MAIL

PACKAGE 1 of 2 = EH549463815US

PACKAGE 2 of 2 = EH549463824US



--x-- TWA800 - N90 ISP DATA  
—x— UNKNOWN SURFACE TGT  
—·— N90 ISP PRIMARY TGTS

TWA800

# **Attachment III**

## **Calculating Velocity and Altitude from TWA Flight 800's Primary Radar Data**

**May 12, 2002**

## **Calculating Velocity and Altitude from TWA Flight 800's Primary Radar Data**

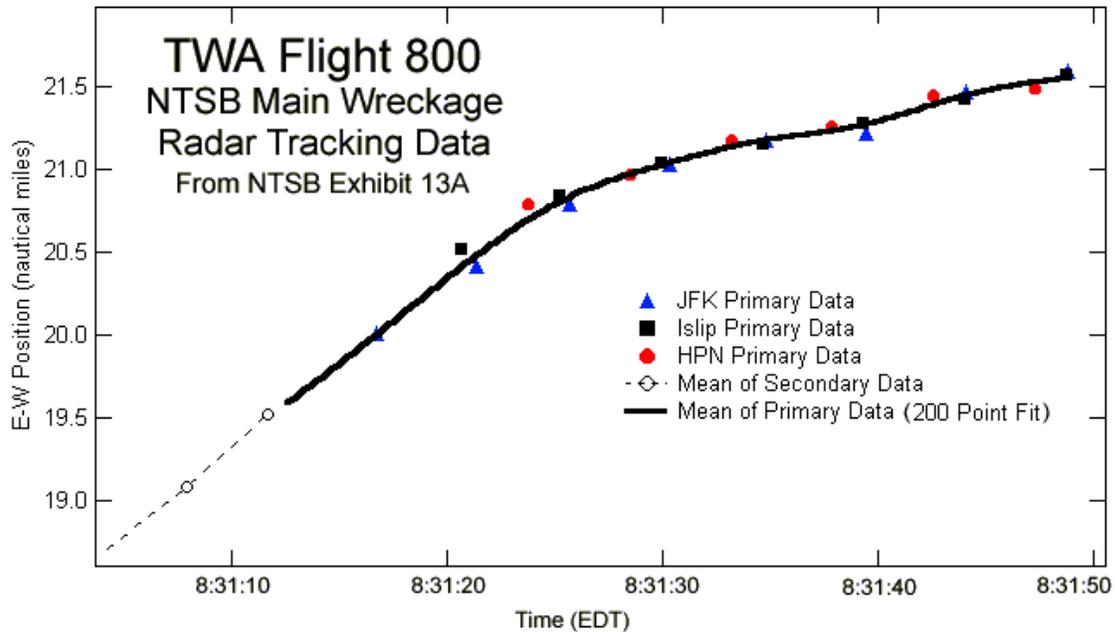
Tom Stalcup, May 12, 2002

When TWA Flight 800 exploded in midair, its transponder and Flight Data Recorder immediately stopped functioning. Both of these provide investigators with altitude data. Their failure aboard Flight 800 left investigators without any explicit altitude data of the crash sequence. However, Flight 800's altitude in the early crash sequence can be approximated from its radar-recorded ground speed.

Flight 800 was tracked by three FAA radar sites in New York: ISP in Islip; HPN in White Plains; and JFK at John F. Kennedy International Airport. The data from these radar sites were analyzed by NTSB investigators and the horizontal flight path of TWA Flight 800's main wreckage was established with a good degree of certainty. See NTSB Exhibit 13A.

Radar data representing Flight 800's main wreckage was displayed in NTSB Exhibit 13A. From its recorded flight path, the speed of Flight 800 can be calculated from the timestamps associated with every data point (see Figure 1).

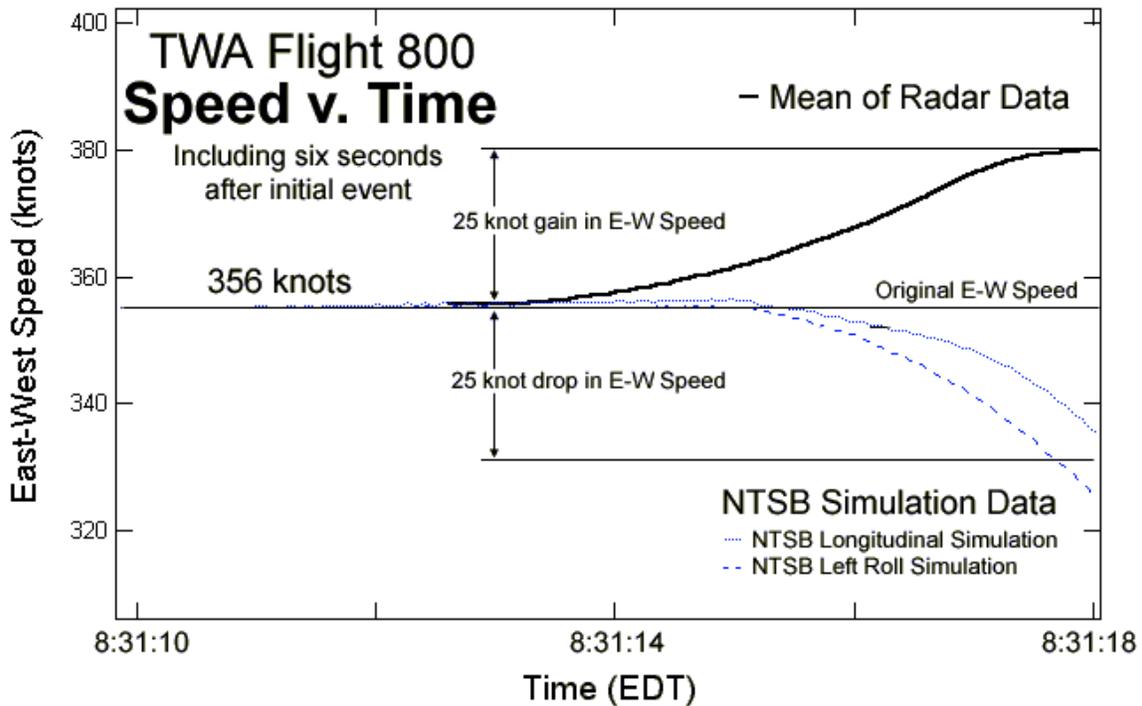
Note: Some readers may not be familiar with the graphs and mathematics that follow. If that is the case, consultation with a scientist or engineer is recommended.



**Figure 1:** Radar data that represents the east-component of main wreckage flight path. The solid black line is a 200-point cubic spline interpolation of the mean of all of the primary radar data representing Flight 800's main wreckage in NTSB Exhibit 13A.

The black line in Figure 1 was created from an average of data from the three radar sites that the NTSB used to track the path of the main wreckage in the "Airplane Performance Study" (NTSB Exhibit 13A).

To determine Flight 800's speed after losing electrical power, the techniques of Calculus can be employed. Specifically, the differentiation of an interpolation of the mean of the radar data was calculated. The results are displayed in Figure 2.



**Figure 2:** East-West Speed vs. Time plot comparing the radar data with NTSB simulations. The NTSB simulation data shown is a time differential of the East-West position data in NTSB Exhibit 22C. An offset of 24 knots was added to the NTSB data after differentiating to align with the radar data. The radar speed data was differentiated from an interpolation of the mean of the "main wreckage flight path" radar data in NTSB Exhibit 13A.

Flight 800's East-West ground speed was approximately 356 knots prior to the loss of electrical power. The radar data indicates that Flight 800's speed increased<sup>3</sup> immediately after the loss of electrical power. All NTSB simulations diverge from the radar-recorded mean position and ground speed due to a simulated climb.

The only explanation for the speed increase indicated on radar is that Flight 800 began an immediate descent after losing electrical power. Since its engines were inadequate to account for such an acceleration, the only other source of energy available (the law of conservation of energy) was the plane's altitude. To account for the indicated rapid increase in airspeed, Flight 800 had to lose altitude. To understand this phenomenon, consider the activity of bicycling.

Bicyclists speed up going down hills and slow down climbing them. Although a 747 is many times more massive than a bicyclist, the same principles hold true. For an aircraft to accelerate faster than its engines can maintain, it must lose altitude. And likewise, an

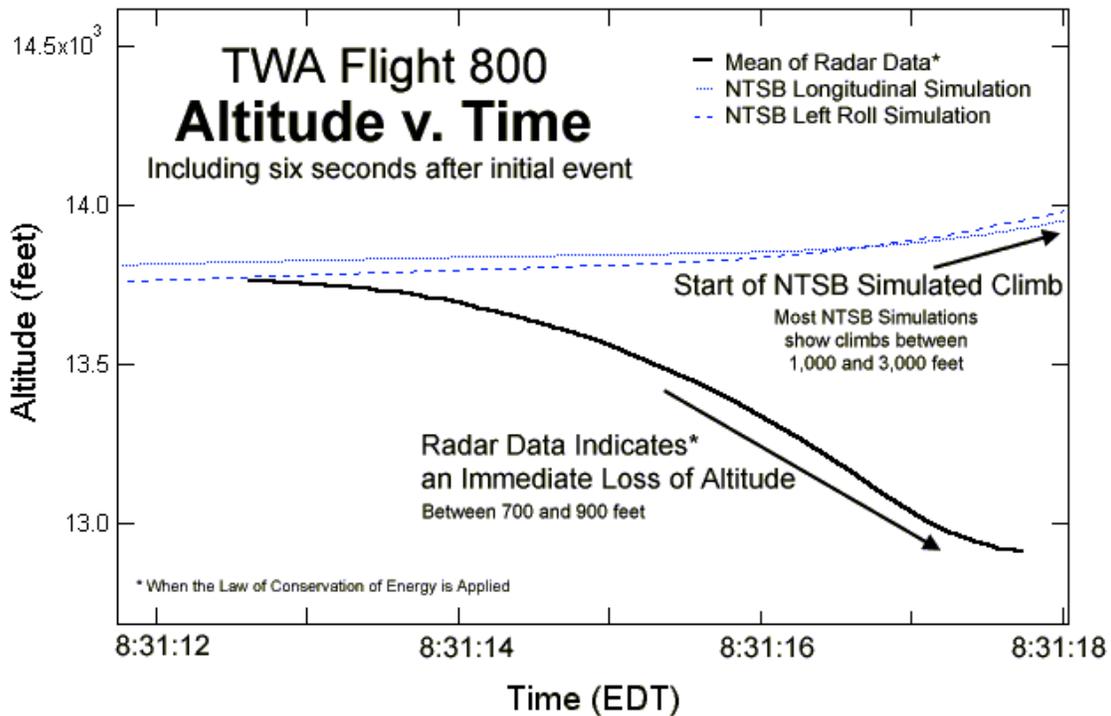
<sup>3</sup> The differentiation of the mean of the three radar sites used by the NTSB to plot the main wreckage Flight path of TWA Flight 800 indicates that Flight 800 gained airspeed immediately after the loss of electrical power.

aircraft will slow down when climbing sharply. Because of this, the law of conservation of energy may be applied to calculate altitude changes from speed data.

The following equation is needed for such a calculation.

$$m * g * A = \frac{1}{2} m * v^2$$

In the above equation,  $m$  is the mass of the aircraft,  $g$  is the acceleration of gravity,  $A$  is altitude and  $v$  is velocity. The energy from engine power is not included in the above equation because “the effect of [engine] power is small” during rapid changes in altitude.<sup>4</sup>



**Figure 3:** Altitude vs. Time plot comparing the radar data with NTSB simulations. The NTSB simulation data shown is from NTSB Exhibit 22C. The Law of Conservation of Energy was applied to the speed data in Figure 2 to calculate the loss of altitude (see discussion below).

The data in Figure 3 was calculated from the speed data in Figure 2 using the conservation of energy equation shown above. As can be seen in Figure 3, radar data indicates that Flight 800 lost altitude immediately after losing electrical power.

Because every NTSB simulation in the NTSB Final Report and the NTSB public docket shows a significant increase in altitude soon after the loss of electrical power, none match the radar data.

<sup>4</sup> Figure 4 in NTSB Exhibit 22C shows that engine power has little effect on rapid changes in altitude.

# **Attachment IV**

**The Flight 800 Eyewitness Hearing**

**September 15, 2001**

# The Flight 800 Eyewitness Hearing

*Tom Stalcup, September 15, 2001*

Flight 800 Independent Researchers Organization (FIRO) sponsored the first public hearing on the crash of TWA Flight 800 that included eyewitnesses. Eight witnesses testified before a five member panel of FIRO representatives at the July 14, 2001 hearing. The witnesses described their observations and answered questions from the panel. The media and public questioned the witnesses after the panel, followed by a summary of an independent study of 670 official FBI eyewitness documents.

TWA Flight 800 crashed eight miles south of Long Island, New York ten minutes after takeoff on July 17, 1996. Moments before the crash, witnesses observed a streak of light rise from the ocean surface. These observations initially caused FBI agents "*to suspect that a missile might have been used against flight 800.*"[1] Ultimately however, federal investigators concluded that the witnesses mistook the aircraft itself for a missile.

This hypothesis was first released in the form of a CIA animation shown during a widely televised FBI press conference in November of 1997.[2] The animation showed the forward section of the jetliner break away and the remaining portion perform a steep, flaming climb in excess of 3,000 feet. The animation's narrator stated that "*this may have looked like a missile attacking an aircraft.*"[2]

The witness evidence, upon which the animation was allegedly based, was scheduled for release at the first of two National Transportation Safety Board (NTSB) public hearings on the crash within a month of the animation's broadcast. But the FBI intervened.

Five days before the NTSB hearing, FBI Assistant Director James Kallstrom wrote a letter requesting that all witness testimony and related discussion be banned from the hearing.[3] On the same day, NTSB Chairman Jim Hall replied with a letter of his own stating that the NTSB would comply with the FBI's request.[4] There would be no release or discussion of witness testimony by any federal agency for more than three years after the broadcast of the CIA animation.

At the FIRO hearing in July 2001, witnesses were given the opportunity to compare their observations with the CIA animation. The accounts of two of the witnesses testifying were featured in the CIA animation. The animation contained the vantage points of Dwight Brumley and Mike Wire, from a window seat on a nearby aircraft and on a bridge respectively.

The CIA alleged that both witnesses saw only a flaming aircraft climbing from 13,800 feet to approximately 17,000 feet after a spontaneous explosion caused the airliner to break in two.[2] Brumley and Wire commented on the animation's portrayal of their testimony.

Dwight Brumley: *"That's totally, almost perpendicular to the direction I saw...It doesn't even get close to what I saw, not even close..."*

Panel member Tom Stalcup: *"But Dwight, they're saying this is what you saw. Now surely they must have contacted you to ask you ..."*

Brumley: *"No, the CIA never contacted me. The FBI never re-contacted me...nobody with any aviation expertise...went through it with me to try to really understand, you know, to get down in black and white--a diagram or whatever--what I had seen."*

Mike Wire commented on the relevant portion of the CIA animation while it was paused at the initial portion his CIA-interpreted observation. Onscreen was a point of light above some distant rooftops.

Wire: *"What they should show at this time is back behind the houses on the beach...It should have been coming up and across this way [near the rooftops], not starting up there in the sky..."*

Panel member Stalcup: *"Now the CIA used you as a key eyewitness in their animation. Surely they must have contacted you to help create this animation. Did the CIA ever contact you?"*

Wire: *"I never knew that the CIA was involved in anything about the case at all. No, they did not contact [me] at all...or the NTSB for that matter."*

Wire's FBI witness summary confirms that he observed *"what appeared to be cheap fireworks coming off the beach"* behind a distant rooftop[5]. However, the CIA animation placed Wire's initial sighting of a firework at the position where Flight 800 lost electrical power (2.6 miles up).

There is no record of any CIA interview with Mike Wire or Dwight Brumley. In fact, Congressional investigators reported that the CIA *"did not interview any of the eyewitnesses"*[6] in connection with the Flight 800 animation. Instead, the CIA relied upon scant notes and summaries from preliminary FBI witness interviews. The following is all the CIA had to work with when calculating the animated trajectory of a strange flare reported by Dwight Brumley.

*"It was moving from 'right to left' and it appeared to have 'peaked,' then it was going downward."*[7]

From this single sentence describing "right to left" motion, the CIA concluded that the flare Brumley saw was Flight 800. But the relative motion of Flight 800 outside Dwight Brumley's right-side window on US-Air flight 217 was, at all times, left to right, from the moment it exploded until it hit the water. The CIA animation offers no explanation for this discrepancy.

According to the NTSB, 256 other witnesses also reported a streak of light in connection with the crash. One was Air National Guard helicopter pilot, Major Fred Meyer. Meyer and his crew were the first to arrive on scene for search and rescue after observing the tragedy during a routine training mission.

At the FIRO hearing, Meyer spoke about the streak he saw: *"I tracked it across about twenty degrees of azimuth in the sky and then...I saw an explosion. And that explosion was military ordinance. I'll stake my life on it, and I have many times. I have two years in combat over North Vietnam. I hold the distinguished flying cross. I made nine over-land rescues. If I don't know what a missile looks like, if I don't know what flak looks like, I wouldn't be here talking to you. I saw military ordinance explode in the sky that night."*

Major Meyer believes the CIA animation does not account for his observations and sent a letter to the NTSB charging them with ignoring eyewitness testimony. The official crash scenario does not account for Meyer's testimony of seeing military ordinance prior to the crash.

Suzanne McConnell also testified at the FIRO hearing. McConnell was eating dinner on her back porch when she saw a flare-like object rise quickly from across the bay. At the apex of its climb, the object exploded and then a fireball descended into the ocean, according to McConnell.

After being shown a slide created from the official CIA/NTSB crash sequence, from her approximate vantage point, McConnell said that it did not include the object she saw travel nearly *"straight up"* and explode. When she called the FBI to report her observation, she said the FBI agent replied, *"that's pretty much what everyone else is telling us"*

The FBI did interview other witnesses who gave accounts similar to McConnell's. Roland Penney was one of them.

Penney: *"There were three or four of us standing on the dock and we saw basically what that woman [Suzanne McConnell] had just said. We saw this stream of smoke go up...[and then] it disappeared for about a second and a half...and then we saw a big bright white light....The white light descended down about two seconds I guess and then there was another explosion and then we saw the red flames and we saw the plane break into two pieces."*

Penney also testified that the *"[stream] was going basically straight up...[and] just a tad off to the west."* Without interviewing Penney, the CIA concluded that the object he saw was Flight 800 continuing eastward. But other witness observations matched Penney's, and thus conflicted with the CIA animation.

Darrell Miron testified that a streak rose to the west very quickly before Flight 800 exploded. Miron said, "*I know missiles travel much faster than planes do. That was not a plane flying in any direction at that speed.*"

As the hearing continued, eyewitness Bill Gallagher, a commercial fisherman who was on his boat at the time of the crash, expressed his frustration with the way the Flight 800 investigation was handled.

Gallagher: "*...[A] major thing people should come out of this with today is the fact that seven hundred and some witnesses are being told to blast off...I've never seen a concerted effort to **not** have information come together.*"

Gallagher saw a strange flare rise upward, originating at a position consistent with the closest (2.9 nautical miles) surface vessel to the crash when it occurred. According to the FBI, this surface vessel "has not been identified." [8] Gallagher testified that the flare exploded at its apex, followed by the descent of two flaming objects.

Lisa Perry was the final witness to testify at FIRO's hearing. Perry was on a porch overlooking the beach of one of Long Island's barrier islands. She described seeing two strange objects in the air that closed in on Flight 800, one of which first appeared close to the beach.

Perry: "*It looked like a bullet hurling through the air...I don't see any wings on it...there's a redness at the back of it. It goes up to the side of the plane...[then] at that point, it explodes...*"

Panel Member Tom Shoemaker: "*Did you make a drawing for the FBI?*"

LP: "*Yes I did as a matter of fact. I made three drawings for them...[The FBI] specifically wanted to know whether or not the two objects were separate and I said they were completely separate objects and that's one of the drawings that I made for them.*"

At the writing of this article, Perry's drawings are missing. The NTSB, which already concluded its investigation, has not viewed Perry's drawings. Likewise, at least thirty other witness documents are presently listed by the FBI as "unable to locate." [9]

During the investigation, the FBI was "unable to identify" [8] the closest surface vessel to Flight 800 when it crashed and apparently lost three sketches of an object colliding with the plane. Thirty similar sketches and other witness documents were evidently lost by the FBI [9]. The identity of the surface vessel and the illustrated events on the missing pictures may help investigators determine the cause of the crash, which is still deemed inconclusive today.

The FBI and NTSB concluded their investigations without letting any of the 670 eyewitnesses testify. Both investigations attempted to account for portions of some witness accounts, but the witnesses were not consulted when guesses were turned into

official crash scenarios and animations. The animations support a mechanical malfunction theory that, according to many witnesses, does not account for a fast, vertically-rising streak of light seen prior to the crash.

The eight witnesses at FIRO's hearing come from varying backgrounds and viewed the crash from different vantage points. Dwight Brumley was an active duty Master-Chief in the US Navy and watched the tragedy unfold from his seat in a commercial jet 6,000 feet above Flight 800. Suzanne McConnell is a Nurse and watched the crash from her back porch. Mike Wire, a Vietnam veteran, was working on a bridge. Bill Gallager saw the crash from his commercial fishing vessel. Darrell Miron is a carpenter and Website producer who was walking on the beach with his wife. Major Meyer was hovering at 200 feet in a Black Hawk helicopter. Lisa Perry was vacationing near the beach on Davis Island. Roland Penney was on a dock. These individuals were miles apart and did not know each other prior to the crash. They are eyewitnesses not by choice. Common curiosity defined their role in the official investigation.

All disagree with the official crash scenario and none were allowed to testify at either of two NTSB public hearings on the crash.

#### **References:**

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2. CIA, *CIA Animation of TWA Flight 800 Crash Sequence*. FBI November 1997 Press Conference, 1997.
3. Kallstrom, J., *Dec. 3, 1997 Letter to NTSB Chairman Jim Hall Regarding Objections to Hearing Items*. NTSB Docket, 1997.
4. Hall, J., *Dec. 3, 1997 Letter to FBI Assistant Director Jim Kallstrom Regarding Objections to Hearing Items*. NTSB Docket, 1997.
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6. Traficant, J.A., *Report on the TWA Flight 800 Investigation*. The Transportation and Infrastructure Subcommittee on Aviation, 1998.
7. Mayer, D., *NTSB Witness Group Chairman's Factual Report, Appendix B, #32*. NTSB Docket, 2000.
8. Schiliro, L.D., *July 27, 1998 Letter in Response to Congressman James A. Traficant, (D) Ohio*. Congressman Traficant's Report to the House Aviation Subcommittee on the Investigation into TWA Flight 800, 1998
9. Schiliro, L.D., *August 25, 1998 letter from FBI Assistant Director Lewis D. Shiliro to NTSB regarding missing witness materials*. NTSB Public Docket: Appendix EE of Witness Group Chairman Factual Report, 1998.

# **Attachment V**

**Official FBI Witness Documents  
of Eyewitness 649**

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*dup*

**619**

FEDERAL BUREAU OF INVESTIGATION

Date of transcription 7/24/96

[redacted] Westhampton Beach, New York, telephone number [redacted] Date of Birth - [redacted] was contacted regarding the sighting he observed near Westhampton Beach High School (WBHS). After being advised he provided the following information:

[redacted] was standing in the WBHS parking lot and looking toward the beach. At approximately 8:15 PM, he saw over the tree line at Mill Road what he described as a projectile ascend in the sky. [redacted] described the projectile as red or pink with a trail of whitish smoke. The projectile moved in a squiggly manner in a southwest direction. The projectile was airborne for six-seven seconds and then met with a shiny object that produced white smoke. The white smoke disappeared and then a red ball began to form. The red ball fell in an easterly position and at a much quicker pace than the projectile was ascending.

[redacted] point of reference on the Mill Road tree line was a telephone pole next to the yellow fire hydrant. This is the point from where he originally sighted the projectile.

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Investigation on 7/18/96 at Westhampton Beach, New York

File # 265A-NY-259028

by SAs JAMES P. MIKALIC  
RICHARD MCCARTHY (RM:dp)

Date dictated 7/21/96

*0568*

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FEDERAL BUREAU OF INVESTIGATION

Date of transcription 7/19/96

[redacted] Westhampton, New York, [redacted] and was advised of the identity of the undersigned Agents. Also present during the interview was his wife, [redacted] provided the following information:

On the evening of July 17, 1996, [redacted] explained that he had just finished exercising for approximately 23 minutes on the track located at the Westhampton High School. At approximately 8:15 PM or 8:25 PM, [redacted] began to walk in a south westerly direction to his vehicle parked in the school parking area. [redacted] stated while he was walking back to his vehicle, he observed just above his line of vision, and the tree line directly in front of him, an object (object number one) ascending from behind the trees. [redacted] stated that the object originated from the south beyond Mill Road in Westhampton, New York. [redacted] explained that the sun was directly behind him, above his shoulders, and there were no clouds in the direction he was facing.

[redacted] stated object number one appeared to be bright white light with a reddish pink aura surrounding it. [redacted] said the object continued to maintain that appearance throughout his observation, except for, the last second, when he believed the object impacted with another object. [redacted] compared the moving object to a "fire work."

Initially, object one ascended almost vertically beyond the tree line with no apparent direction and at moderate speed. Object one evolved into a "squiggly" pattern going up vertically and increasing in velocity and then arced off to the right in a south westerly direction. [redacted] stated that the object continued to stay just above his line of vision, and he never had to pick up his head up to observe the events.

[redacted] stated that he observed a second stationary object (object number two) that appeared to glitter in the sky. Object number one was heading toward object number two, which [redacted] said he would not have seen if it was not for object

Investigation on 7/19/96 at Westhampton, New York (telephonically)

File # 265A-NY-259028 - CCI-304

by SA WILLIAM A. JOHNSON  
SA ROBERT DOHERTY (WD:dp)

Date dictated: 7/19/96

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265A-NY-259028

Continuation of FD-302 of [REDACTED]

On 7/19/96 Page 2

number one drawing his attention to it. However, object number one appeared like it was initially going to slightly miss object number two unless it made a dramatic correction at the last moment. In less than a second, [REDACTED] believed object number one impacted with object number two; however, [REDACTED] explained that it occurred when he must have blinked because he did not actually see the point of impact. [REDACTED] then observed a white "puff" (white flash) approximately the size of a small ball in the sky, however, he heard no noise. Out of the puff came two objects that arched upward from the initial impact trailing smoke. [REDACTED] said the objects then appeared to turn into large rectangular balls of fire descending at an angle down past the horizon of the trees. [REDACTED] stated that the rectangular fire balls were the equivalent in size to a quarter (1/4) of a piece of paper (8"X11") from his vantage.

Initially, [REDACTED] said the explosion appeared to be approximately 1.5 - 2.5 miles from where he observed the event, and he recalled he was concerned that the burning object might have landed on Dune Road or the outlying beach area.

After the burning object fell beyond the horizon of the trees he did not observe or hear anything else.

[REDACTED] believed, after some retrospect, the entire chain of events took approximately seven (7) seconds from the time he first sees object number one and when the explosion occurred.

[REDACTED] further described object number one as an elongated object that had an oval "head" with an extremely bright white center that had a reddish pink "aura" about the object. The tail was the size of his pinkie nail which seemed to become smaller as it ascended in the air. The tail, grey in color, moved in a "squiggly" pattern which provided a sense of direction.

After the explosion, [REDACTED] got into his vehicle with the windows down and the radio off and drove in the direction of this occurrence. [REDACTED] drove to Dune Road, Westhampton, where he met his wife. [REDACTED] believed he had witnessed some type of explosion over the beach area; however, he did not know actually what he had observed. Later that day, [REDACTED] learned of the plane crash and realized that he had observed the entire occurrence.

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At the conclusion of the interview, [REDACTED] brought the undersigned Agents to the exact location where he made his above

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FD-302 (Rev. 11-15-83)

265A-NY-259028

Continuation of FD-302 of [REDACTED] , On 7/19/96 , Page 3

described observations and he reenacted the events prior, during and immediately following the event. In addition, a rough draft drawing was created. [REDACTED] point of reference was a telephone pole next to a yellow fire hydrant located on Mill Road.

2405

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House

(from memory) X = 2/5 miles to boat

West Hampton H.S.

trash bins

Sun position

(2)

work  
happened  
between  
piles

o from play  
+ piles

→  
line

1  
+ piles

no wind

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- 1 -

## FEDERAL BUREAU OF INVESTIGATION

Date of transcription 7/21/1996

On July 20, 1996, three locations were visited. The purpose of these visits was to record general sighting information from three (3) previously interviewed witnesses who, at these respective locations, made observations of Trans World Airlines (TWA) flight 800 and/or "a flare" which seemed to be launched in the general direction of TWA flight 800 at approximately 8:30 PM on July 17, 1996.

The three (3) locations visited were:

- (1) Rogers Beach, West Hampton Beach, New York (NY), for plotting observations previously reported by [REDACTED] 650
- (2) West Hampton Beach High School Parking Lot, for plotting observations previously reported by [REDACTED] 649
- (3) East side of Center Moriches inlet, end of jetty, for plotting observations previously reported by [REDACTED] 129

The personnel making these visits were: Federal Bureau of Investigation (FBI) - Special Agent (SA) Paul Shea, SA Peter C. Casazza, SA William F. Lynch; Suffolk County Marine Bureau (SCMB) - Deputy Inspector Douglas Matulewich, Police Officer Vincent Termine, Sergeant Charlie Gerlach; Suffolk County Police Department (SCPD) - Police Officer Ken Treder; Defense Intelligence Agency (DIA) Senior Intelligence Officer Robert A. Doherty; and Surface to Air Missile Armaments Analyst Thomas P. LeBlanc.

At the above locations, azimuth directions based on witness statements were taken by SCMB personnel using a GPS 45 Personal Navigator and a hand bearing magnetic compass.

The purpose of recording this and other similar information was to allow for future interpretation of this data.

265A-NY-259028-SUB 309

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Investigation on 7/20/1996 at West Hampton Beach, New York CC-

File # 265A-NY-259028

by SAs WILLIAM F. LYNCH  
PETER C. CASAZZA, PAUL SHEA (PS:iaw)

Date dictated 7/20/1996 TC

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## FEDERAL BUREAU OF INVESTIGATION

Date of transcription 5/14/97

On May 8, 1997, [REDACTED]  
Eastern Suffolk Board of Cooperative Educational Services,  
Oakdale, New York.

[REDACTED] was interviewed at Westhampton Beach High School parking lot regarding his observations on the evening of July 17, 1996. Present at the interview was [REDACTED] Naval Air Warfare Center, China Lake, California. [REDACTED] was introduced to [REDACTED] as a member of the Department of Defense. [REDACTED] was advised of the identity of the interviewing agents and the nature of the interview. During the course of the interview, [REDACTED] first drew a picture of what he saw on the night of July 17, 1996, on a piece of paper on which had already been drawn a tree line and ground line approximating his view of these frames of reference and the sky while facing south (this drawing was labeled #1). The tree line was visually estimated to extend approximately two (2) degrees maximum above the ground line. At the conclusion of the interview, after [REDACTED] had drawn his own sketch of his observations, [REDACTED] was given a drawing taken from a slide presentation of the Central Intelligence Agency's Office of Weapon's Technology and Proliferation (a copy of this drawing was labeled as drawing #2a). This drawing was the C.I.A. office's probable trajectory of TWA Flight 800 after the last transponder reading when viewed by a hypothetical witness perpendicular to the flight path of the aircraft. [REDACTED] was informed that this drawing was done by another observer so as not to taint his observations as conflicting with a government agency's analysis. [REDACTED] was also informed the orange 'bursts' on the drawing indicated probable points of explosions. [REDACTED] drew his modifications on this drawing (drawing #2b). During the interview [REDACTED] provided the following information:

On July 17, 1996, [REDACTED] had just finished exercising at the track at Westhampton Beach High School and walked in an approximate direction of southeast toward his car in the parking lot of the school. He stopped in the parking lot to stretch facing south, shoulders square to the Southern boundary of the parking lot. [REDACTED] was located a foot or two east of a speed bump which ran towards the shore and was located just west of the second row of parking north of the softball fields of the high

Investigation on 5/8/1997 at Westhampton Beach, NYFile # 265A-NY-259028 - CC 154010 Date dictated 5/14/1997by SA Bradley S. Morrison  
SA Steven A. Bongardt (SAB:sab)

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265A-NY-259028

Continuation of FD-302 of [REDACTED]

On 5/8/1997

Page 2

school. [REDACTED] leaned all the way forward bending at the hips while straddling his legs for a few short moments and then leaned back, rotated up and looked at the sky. [REDACTED] stated that the sky was clear at this point. A very short time later [REDACTED] stated words to the effect of "I could have missed it if I had not been looking"). [REDACTED] observed an object, like "a firework", rise straight-up, neither angling to the right or left, ascend in the sky close to a telephone pole (near a fire hydrant). This telephone pole was near the tree line on his horizon. The object ascended "fairly quick" and [REDACTED] impression was that it had risen from somewhere behind and below the tree line as there was no space between the tree line and where he had first observed it. He could not recall seeing an actual physical object but did recall seeing a small flame or plume. At some small vertical distance above the tree line, this "firework" (object) angled to the right (west) and appeared to "slow" and "wobble" while doing so, still ascending upward. After this change in direction, the object appeared to "speed up" and then [REDACTED] lost sight of it. [REDACTED] did not know why he lost sight of the object and mentioned that he "might have blinked". At the point he lost it, the object was still moving up and to the right (west).

The next two observations [REDACTED] recalled making almost simultaneously. First, in the direction the object was traveling, but at a higher point in the sky, [REDACTED] saw a second object. [REDACTED] stated that he saw this second object because he was looking in the direction of the first object and the second object appeared to "glimmer". [REDACTED] stated the "glimmering" object appeared to be reflecting light as opposed to emitting light. Second, almost immediately after [REDACTED] noted the second object, and "microseconds" or "seconds" after he had "lost" the first object, [REDACTED] saw a "red dot" at the "glimmering" object followed by a "puff". Very quickly after that first "puff", [REDACTED] saw a second "puff" up and to the left (east) of the first "puff". [REDACTED] stated he then observed the "red dot" a little to the right of the second "puff". The second "puff" turned into a "fire box" about the size of a finger nail as it descended from right to left (west to east) in an increasingly downward sloping arc. [REDACTED] stated that the "red dot" was more magenta colored at this point and that both it and the "fire box" descended at the same rate of speed - approximately half the speed of the object or "firework" he had observed ascend. [REDACTED] could not recall the "fire box" changing in any way as he

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265A-NY-259028

Continuation of FD-302 of \_\_\_\_\_, On 5/8/1997, Page 3

lost sight of it below the tree line. The "fire box" came down in the same location on the tree line as \_\_\_\_\_ had seen the first object, or "firework", ascend.

While \_\_\_\_\_ explained what he saw he used his hands to simulate the movement of the objects he had observed - up and to the right at an angle above the horizon for the "firework" object and down and to the left (left half of an upside down "U" shape) for the "fire box" and dot descending down to his visual horizon (the tree line). \_\_\_\_\_ recalled the duration that he saw the ascending "firework" object as five (5) seconds and the total duration of his entire observations as twenty (20) seconds. He estimated the time that it took the second "puff" to descend to the horizon was approximately ten (10) seconds. \_\_\_\_\_ was given a nautical plotting tool, a Weems and Plath Parallel Plotter, which consisted of a clear plastic rectangle on a small roller. The clear plastic rectangle had various measurement scales on it, one of which was nautical miles for a chart of scale 1:80,000. \_\_\_\_\_ estimated the height of the first "puff" and "glimmering" object to have been at approximately six (6) Nautical Mile Units above the ground line while he held the plotter at an arm's length. This equated to 5.6 inches. While \_\_\_\_\_ repeated his observations, \_\_\_\_\_ again estimated the first "puff" (and where he saw the "glimmering" object) to have been at a relative height of just greater than the combined height of two school buses relative to a standard school bus that he observed approximately thirty (30) yards away. \_\_\_\_\_ further estimated that the first "puff" (and "glimmering" object was horizontally observed somewhere between the small building located immediately in front of him (just south of the parking lot and immediately west of the softball field) and the larger building to the right of the smaller building (located just east of the intersection of Depot Road and Mill Road).

\_\_\_\_\_ initially thought he had observed a firework and decided to attempt to watch more of them down at the beach (in the direction his observations occurred) where he was to meet his girlfriend. He stated that when he went down to the beach he was asked by another man if he had come to the beach to watch the fireworks. \_\_\_\_\_ replied in the affirmative and the man informed him that he did not think there was a fireworks display occurring. When \_\_\_\_\_ heard reports of an airplane crash while returning home, he started to wonder whether or not he had seen

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FD-302a (Rev. 10-6-95)

265A-NY-259028

Continuation of FD-302 of [REDACTED]

On 5/8/1997 Page 4

something accidentally hit an aircraft. When he learned it was a Boeing 747 he felt that only a missile could have hit an aircraft at that height. In the last several months, [REDACTED] started to question his recollection of what he had observed because he had not heard of any determination as to the cause of the crash being due to a missile. Although his recollection of his observations had faded somewhat, [REDACTED] stated that what he felt he remembered was accurate and consistent with what he recalled of the incident immediately after it occurred. [REDACTED] further stated his observations were not altered by his ideas about what he thought he had observed as he learned more about what actually happened.

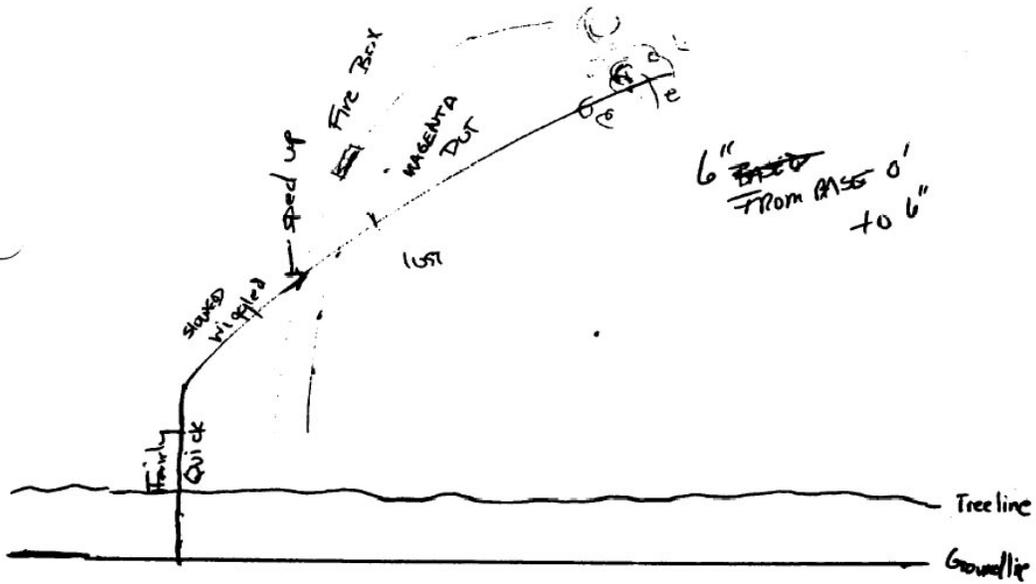
[REDACTED] drew a sketch of what he remembered on a sheet of paper that he was given which included an approximate tree line and ground line (Drawing #1). When given Drawing #2a, [REDACTED] felt it was pretty accurate except that it was "missing the entire first part" and sketched that part of his observations into the drawing (Drawing #2b). He also added the two separate lines of objects descending to the primary thicker black line already in the drawing.

0075

000256



ON 5/8/97  
at WHB High School



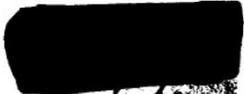
6" ~~BASE~~  
FROM BASE 0'  
to 6"

Tree line

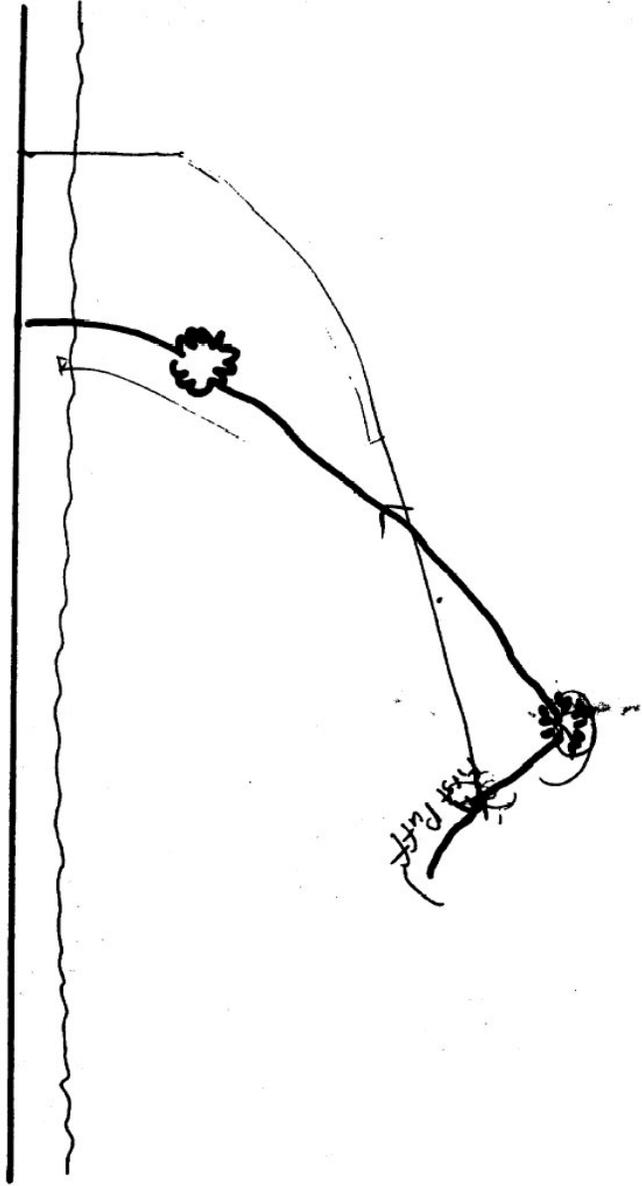
Groundline

0076

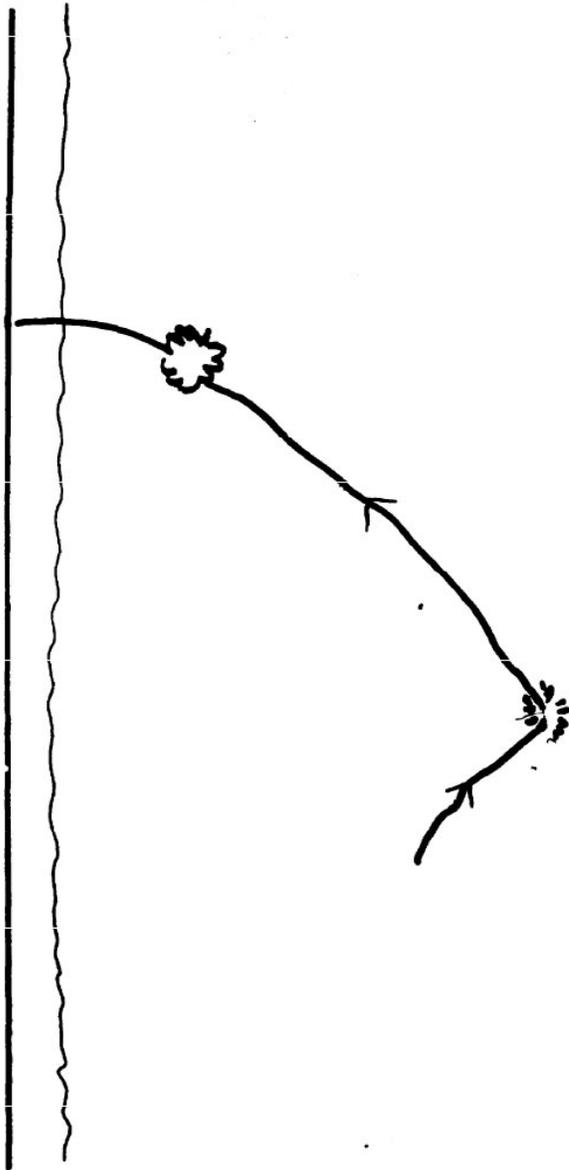
000257



on 5/8/99  
@ WHB H.I.



0077



0078

Analysis of CTA Analysis Trajectory

- 1 -

## FEDERAL BUREAU OF INVESTIGATION

Date of transcription 10/7/96

On October 7, 1996, Special Agents (SAs) WILLIAM F. LYNCH and PETER C. CASAZZA, of the Federal Bureau of Investigation (FBI), obtained from Deputy Inspector DOUGLAS S. MATULEWICH, of the Suffolk County Police Department (SCPD)-Marine Bureau, the below listed items all connected to a compass/MARINE CHART rendering Inspector MATULEWICH had done regarding TRANS WORLD AIRWAYS (TWA) flight # 800.

This rendering was based upon FBI interviews done between July 20-30, 1996 of eleven (11) witnesses who had observed a "flare-like" object rising up toward flight # 800, just before it exploded and crashed into the sea off the coast of Long Island, New York (N.Y.), approximately 8:31 PM, on the evening of July 17, 1996. These various sightings had raised the possibility that a missile might have been fired at, and caused the destruction of flight # 800.

Deputy Inspector MATULEWICH had either been present during those initial FBI interviews, or was brought back to interview those witnesses, in order to obtain compass readings from the spots from which those witnesses had made their sightings at the time of the flight # 800 explosion.

Eight (8) of those witnesses had been in the company of an accompanying witness, while three (3) of the witnesses had made sightings while alone.

The purpose of taking those compass readings was to obtain intersections of witness flare sightings of which might allow for the description of a possible sea-borne launch area from which a missile might have been launched toward flight # 800, if, in fact one was.

Deputy Inspector MATULEWICH's rendering did allow for the description of an area from which a missile could have been launched, and which area might be logically searched for either aircraft/missile debris, or an abandoned missile launcher. Obtained from Deputy Inspector MATULEWICH this date, were:

Investigation on 10/7/96 at Great River, N.Y.

File # 265 A NY 259028

by SA WILLIAM F. LYNCH  
SA PETER C. CASAZZA

Date dictated 10/7/96

2284  
This document contains neither recommendations nor conclusions of the FBI. It is the property of the FBI and is loaned to your agency; it and its contents are not to be distributed outside your agency.

000262

FD-302a (Rev. 11-15-83)

265 A NY 259028

Continuation of FD-302 of DEP. INSP. DOUGLAS MATULEWICH , On 10/7/96 , Page 2

1. A two page letter in which he sets forth his findings, and suggests an area that should logically be searched.
2. A one page summary listing the eleven (11) witnesses which sets forth in latitude and longitude readings, their positions at the time of their sightings of a "flare-like" object rising up toward flight # 800.
3. Seven (7), more detailed pages, setting forth the names of the paired or individual witnesses; the names of the FBI agents who interviewed them; Deputy Inspector MATULEWICH's actions upon meeting with those witnesses, and the latitude and longitude readings MATULEWICH obtained as a result of meeting with those witnesses.
4. A marine bureau map on which the witness sightings were plotted by Deputy Inspector MATULEWICH showing the resultant intersection of those sightings.
5. Also included is a hand drawn transparency generated by ROBERT DOHERTY, of the Defense Intelligence Agency (DIA) which he (DOHERTY) had previously given to Deputy Inspector MATULEWICH, and which MATULEWICH also gave to SAS LYNCH and CASAZZA, on this date.
3. Seven (7) pages setting forth the names of all seven

2235

000263

COUNTY OF SUFFOLK



ROBERT J. GAFFNEY  
COUNTY EXECUTIVE

PETER F. COSGROVE  
POLICE COMMISSIONER

POLICE DEPARTMENT

September 18, 1996

SA Peter Casazza  
SA William F. Lynch  
SA Paul Shea  
Federal Bureau of Investigation  
135 Pinelawn Rd. - Suite 350 South  
Melville, NY 11747

Gentlemen:

On Saturday, July 20, 1996, I became involved in a joint effort to determine the possibility of a missile shooting down TWA flight 800. The objective was to determine if the observations of eye witnesses could be plotted on a chart to determine a location from which a missile was shot.

Enclosed are the recordings of witness observation locations, of witnesses who on the evening of 7/17/96 saw a "flare-like" object rising immediately before the crash of TWA flight 800. These locations are indicated in Latitude (LAT) and Longitude (LONG). In addition are the results of the magnetic bearings taken with a hand held magnetic compass of these observations.

The results of these observations have been plotted on chart number 12353 (17th Ed., June 13/92) Shinnecock Light to Fire Island Light, published at Washington, D.C. by U.S. Department of Commerce, National Oceanic and Atmospheric Administration.

The course of TWA flight 800 on 7/17/96 at approximately 2030 hrs. has been plotted on chart number 12353. The results of the various lines of positions of the witnesses observations have been plotted on chart 12353. The flight path of TWA flight 800 may be overlaid with tracing paper which has missile information (to scale) provided by Robert Doherty of the Defense Intelligence Agency (DIA). All of this information taken together indicate to me the very real possibility that if a rocket was used to shoot down TWA flight 800 the "shooter" would have had to been at one of the following locations:

1. LAT 40°40.68'N LONG 072°40.66'W

2286

30 YAPHANK AVENUE, YAPHANK, NEW YORK 11980 - (516) 852-6000

000271

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On 7/20/96, at the request of SA WILLIAM F. LYNCH of the FBI, Deputy Inspector DOUGLAS MATULEWICH, Suffolk County Police Department Marine Bureau, met with ROBERT DOHERETY of the Defense Intelligence Agency (DIA) at the Westhampton Beach High School, New York.

Indicated to Deputy Inspector DOUGLAS MATULEWICH was that the observations on 7/17/96 of TWA FLIGHT 800 by [REDACTED] were made from the parking lot of the Westhampton Beach High School. From the indicated area in the school's parking lot, Deputy Inspector DOUGLAS MATULEWICH took the following readings as indicated on his Garmin GPS 45: LAT 40°49.187'N, LONG 072°39.003'W. From this location also indicated to D/I Matulewich by ROBERT DOHERETY was the location of the observations in relationship the several telephone poles which were used as a reference points.

The magnetic bearing to the left side of the observations indicated on D/I MATULEWICH'S hand held magnetic compass was 185°. The magnetic bearing to the right side of the observations indicated on D/I MATULEWICH'S hand held magnetic compass was 187°.

2294

000265

[REDACTED] 636  
637

LAT 40°37.613'N  
LONG 073°15.742'W  
Hand held magnetic compass was 098°.

[REDACTED] 521

LAT 40°40.961'N  
LONG 073°00.221'W  
Hand held magnetic compass was 110°.

[REDACTED] 364

LAT 40°45.104'N  
LONG 072°55.968'W  
Hand held magnetic compass was 124°.

[REDACTED] 641  
642

LAT 40°45.745'N  
LONG 072°46.573'W  
Hand held magnetic compass was 150°  
Hand held magnetic compass was 155°.

[REDACTED] 496  
534

LAT 40°48.172'N  
LONG 072°45.321'W  
Hand held magnetic compass was 152°.  
Hand held magnetic compass was 160°.

[REDACTED] 649

LAT 40°49.187'N  
LONG 072°39.003'W  
Hand held magnetic compass was 185°.  
Hand held magnetic compass was 187°.

[REDACTED] 527  
694

LAT 40°50.295'N  
LONG 072°28.526'W  
Hand held magnetic compass was 225°.  
Hand held magnetic compass was 223°.

2288

000271

649

On 7/20/96, at the request of SA WILLIAM F. LYNCH of the FBI, Deputy Inspector DOUGLAS MATULEWICH, Suffolk County Police Department Marine Bureau, met with ROBERT DOHERETY of the Defense Intelligence Agency (DIA) at the Westhampton Beach High School, New York.

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The magnetic bearing to the left side of the observations indicated on D/I MATULEWICH'S hand held magnetic compass was 185°. The magnetic bearing to the right side of the observations indicated on D/I MATULEWICH'S hand held magnetic compass was 187°.

2294

# **Attachment VI**

**Letter to NTSB Witness Group Chairman Dr. David Mayer  
Requesting Clarifications Regarding the NTSB's August 2000  
Sunshine Hearing Witness Group Presentation**

**May 12, 2002**

**Flight 800 Independent Researchers Organization**

Tom Stalcup, Chair

332 Hatchville Rd., E. Falmouth, MA 02536

(508) 564-7631, stalcup@hotmail.com

Dr. David Mayer  
National Transportation Safety Board  
490 L'Enfant Plaza, SW  
Washington, D.C. 20594  
May 12, 2002

Dear Dr. Mayer:

I am writing to you on behalf of the Flight 800 Independent Researcher's Organization (FIRO), a group of dedicated scientists, aviation professionals, and former NTSB crash investigators devoted to the safety of the flying public. We are writing in an attempt to clarify some of the information you presented during the eyewitness portion of the NTSB's TWA Flight 800 Sunshine Hearing held in August 2000.

As you are aware, the FBI witness interview summaries were not optimum for an NTSB crash investigation. And since the NTSB failed to conduct its own interviews for over ninety percent of the witnesses, ambiguities regarding many of the eyewitness accounts remain. However, some of the 736 official eyewitness accounts were quite detailed and provided investigators with a wealth of information regarding airborne events.

Your Sunshine Hearing presentation represented the NTSB's official position regarding the eyewitness evidence. Most Americans who attended the Sunshine Hearing or watched it on C-span relied on your presentation alone for their understanding of the TWA Flight 800 witness evidence. Because of this, the accuracy of the information you presented was of utmost importance.

Prior to the hearing, FIRO thoroughly reviewed all of the official witness materials. FIRO representatives, including myself, attended your presentation at the Sunshine Hearing. Upon hearing your presentation, we felt that several statements conflicted with what we remembered from the raw witness materials.

We then compiled a list of questionable areas within your presentation and reviewed the witness materials once again. From that review, we concluded that there were indeed several inaccurate and misleading statements in your presentation. The results of our review are included in the attached documents.

For each item in your presentation that we found to be inaccurate or misleading, we have submitted a request for clarification. We hope that you will respond to our requests so that you may correct any inaccuracies in your Sunshine Hearing presentation.

Sincerely,

Tom Stalcup

Enclosed: Review of the Sunshine Hearing Witness Presentation; Sketch by Witness 649

CC: **Victims' Family members:** Aurelie Becker, President, The Families of TWA Flight 800;  
Michel Breistroff  
**NTSB:** Chairperson Marion Blakey; Al Dickinson  
**Congress:** Honorable John Duncan; Honorable William D. Delahunt; Senator John Forbes  
Kerry; Senator Edward M. Kennedy

# **Review of the Sunshine Hearing Witness Presentation**

**Thomas F. Stalcup**

*Chair, Flight 800 Independent Researchers Organization*

The most significant factor contributing to the ambiguities in the NTSB TWA Flight 800 witness reports was the NTSB's failure to interview witnesses. During four years and through the formation of two Witness Groups, the NTSB interviewed only approximately two percent of the 736 official witnesses.[1]

The Witness Group's presentation at the NTSB's August 200 Sunshine Hearing was based upon 736 FBI witness summaries, which varied greatly in detail and clarity. Some were only a few sentences long, while others included graphics and many pages of detail. Among the more detailed summaries was the account of witness #649 (name redacted by the FBI).[2]

Witness 649's FBI file includes four sketches and several FBI witness summaries. It is one of the most thorough and comprehensive Flight 800 witness files in existence. The sketches and summaries describe an object ascending and traveling westward, spanning over ten degrees horizontally before colliding with a second object at a position and altitude consistent with where Flight 800 lost electrical power.

At the sunshine hearing, the NTSB Witness Group erroneously stated that witness 649's horizontal view of the accident was limited to just a few degrees (between "two flagpoles") and used this incorrect information to conclude that he could not have seen the initiating event.[3] However, the word "flagpole" does not exist in witness 649's FBI file, nor is it stated that his observations were ever restricted to an area inconsistent with the initiating event.[2]

Official investigators brought Witness 649 to the exact spot where he viewed the accident. With the aid of hand-held compass, the investigators determined that he first observed a rising "projectile" on a bearing line of 185° magnetic. This projectile rose quickly, turned westward and apparently impacted with another airborne object seen by Witness 649.

The point where the rising projectile met the second object was between two buildings (not flagpoles) identified by the witness (between 196° and 209° magnetic). Flight 800 lost electrical power on a bearing line of approximately 197° magnetic from Witness 649's position. For a more thorough examination of Witness 649's observations, see <http://www.multipull.com/twacasefile/second649.html>.

One of witness 649's sketches is included as an attachment below. Please refer to Request 15 below to clarify your Sunshine Hearing statements regarding witness 649's testimony.

To locate other areas of concern within the sunshine hearing witness presentation, an outline of that presentation is included below. Preceding any section of concern is a reference letter. Following the outline, the lettered sections are discussed.

Below we have included a total of fifteen requests for clarification. Thorough responses to these requests will help alleviate public concern regarding the accuracy and integrity of NTSB's investigation into TWA Flight 800.

## **Outline of Witness Group Chairman Dr. David Mayer's Sunshine Hearing Presentation**

- 1) Introduction
  - A- Detailing the collection of witness statements
  - Media reports spur public interest
  - The formation of the NTSB Witness Group
  - A- Introduction Summary
- 2) What Would an Eyewitness See?
  - B- Description of official crash scenario
- 3) Witnesses examples
  - C- Witness Paul Angelides
  - Two other witnesses
  - D- Quantitative Analysis
- 4) Eyewitnesses in Conflict with official crash sequence:
  - E- Only a relative few
  - F- Aircraft climbing may explain observations
  - G- Errors by witnesses or interviewers may explain summaries
- 5) Alleged missile witnesses discussed
  - H- Mike Wire (on bridge)
  - I- Mater-Chief Dwight Brumley (on US-Air 217)
  - J- Major Fred Meyer (in Air National Guard helicopter)
  - K- Captain Chris Baur (in Air National Guard helicopter)
- 6) Missile Visibility Test
  - L- Consistently reported as a rapidly rising light
  - Flight 800 witnesses not consistent with a missile
- 7) Conclusion: All witnesses consistent with official breakup scenario
  - M-
- 8) Q&A session
  - N- Various Questions from Chairman Hall
  - Washington Times witness advertisement
  - Comments and questions from other board members

## Items of Concern within Witness Group Chairman Dr. David Mayer's Sunshine Hearing Presentation

Dr. Mayer,

-A- You stated that "*the witness reports were the first and only evidence or indication of a missile attack.*"

-PETN (an explosive used in missiles) was found in the wreckage. The NTSB has not conclusively determined the source of these explosives, and their detection anywhere on the wreckage is evidence and an indication of a missile attack.[4]

-FAA radar detected high-speed (Mach 2) targets apparently exiting Flight 800 immediately after the initiating event. These targets are also evidence and indications of a missile attack.[5]

-The "localized recrystallization of portions of the rear spar" cannot be explained by the official breakup sequence. The recrystallization of metal is evidence of a missile attack and the NTSB has not ruled out the possibility that this damage was indeed caused by a missile.[6]

-If any of the above items were conclusively determined not to originate from a missile attack, their status of having, at one time, been considered evidence or an indication of such an attack does not change.

**Request 1:** That, in light of each item listed above, you thoroughly explain your statement regarding the witness reports being the only evidence or indication of a missile attack.

-B- You stated that it was "*unlikely witnesses would have seen nose departure.*"

However, witnesses did report seeing nose departure.

According to the official FBI witness summaries, at least four witnesses reporting some segment of nose departure.[1] Their accounts are credible because they first informed investigators that the front section of the aircraft departed—an evidentiary fact later confirmed during salvage efforts.[7]

All four conflict with the official crash scenario because they saw an object rise from the surface and cause the nose damage and/or reported Flight 800 falling immediately after nose separation. In the official theory, no rising object preceded nose departure. The rising object was attributed to Flight 800 after nose departure,[8] conflicting with each of these witness accounts.

**Request 2:** That you consider and explain in detail, within the context of the official crash scenario, each witness observation that includes descriptions of any portion of nose departure.

-C- Witness Paul Angelides' observations misrepresented.

*The NTSB never interviewed Paul Angelides.* FIRO's Chairman, Tom Stalcup, interviewed Angelides in 1997 and sent a letter to the NTSB reporting the results of this interview. This letter contained significant details in Angelides' account that conflict with the official breakup scenario. You did not consider these details or even interview Angelides. Instead, you referenced a single and deficient FBI witness summary[9] that "may" have supported the official breakup scenario.

This single FBI summary contains no details such as azimuth or elevation to the reported "flare." Two hand drawings that Angelides provided to the FBI are not in his NTSB witness file. Without adequate detail to support any crash sequence, Angelides was the first witness cited at the NTSB sunshine hearing in support of the official breakup scenario.

Paul Angelides' observations do not support the official breakup scenario. The initial position of the object he first noticed was far from where Flight 800 was traveling. According to Angelides, this object started out close to shore and very high in the sky (50 to 60 degrees above the horizon), moved toward the horizon, and exploded at an altitude and position consistent with where Flight 800 lost electrical power. Angelides believes the official crash scenario does not account for the object he saw.

**Request 3:** That you explain why you decided against contacting Angelides to confirm the information regarding his account provided to the NTSB by FIRO Chairman Tom Stalcup in 1999, and that you explain whether or not a flare-like object observed at an elevation of 50 to 60 degrees above the horizon from Angelides viewpoint is consistent with any stage of Flight 800's breakup.

-D- Quantitative Analysis.

This section of your presentation contained qualitative statements, like "*the reports of the streak of light were generally consistent with the calculated flight path of the accident airplane.*"

However, 116 out of 134 (86%) witnesses who gave information concerning the origin and/or trajectory of a rising streak of light conflict with the calculated flight path of TWA 800.[10]

**Request 4:** That you analyze each official FBI witness summary with information concerning the origin and/or trajectory of a rising streak of light and publicly state

whether a majority of these statements support or conflict with the calculated flight path of the accident airplane.

-E- Eyewitnesses in Conflict with official crash sequence

The official crash sequence includes Flight 800 heading *eastward* and trailing flames. You postulated that all witnesses who saw a streak of light or flare were watching Flight 800.

However, you mentioned fifty-six witness accounts that were inconsistent with the official crash scenario. These witnesses observed a streak of light originate at the surface or travel nearly straight up. You neglected to tally those witnesses who reported the streak of light head *westward* or in a horizontal direction inconsistent with the path of the accident airplane.

**Request 5:** That you add to the fifty-six witnesses that "didn't seem to fit" with the official crash scenario all witnesses who reported a trajectory for the streak with no eastern component, and that you report this new total publicly.

-F- Only a relatively few

You stated that "*only a relatively small number* [of witnesses] *seem to be at odds with the breakup sequence*"

116 is a statistically significant and large number within the segment (134) of witnesses who reported the origin and/or trajectory of a rising streak of light. These 116 witnesses are at odds with the breakup sequence.

**Request 6:** That you locate every official witness account with information regarding the trajectory and/or origin of a rising streak of light that is consistent with the official crash scenario and every witness account, from the same group, that is inconsistent with the official crash scenario. Only after this accounting will the public have a clear and objective understanding of the observations made by witnesses to the early stages of the breakup sequence.

-G- Aircraft climbing may explain observations

In an attempt to explain eyewitness sightings of a rising streak of light, the CIA[11] and NTSB promoted a theory that Flight 800 climbed sharply soon after a catastrophic explosion caused the airliner to break in two. In over ten published attempts and during a two-year period, no NTSB climb simulation was created that followed the radar-recorded course during the proposed climb.[8, 12]

Flight 800's airspeed was too high for too long to match the necessary speed reduction (exchange of airspeed for altitude) during these proposed climbs.[13] Because of the constraints imposed by "the law of conservation of energy," it has been determined that Flight 800 did not climb as suggested by the NTSB. Only simulations that **do not** include such a climb follow the radar-recorded course and obey the law of conservation of energy.

Nonetheless you used an unsubstantiated climb theory to explain witness reports of a rising streak of light. You said that *"it's possible that, for some witnesses, as the airplane maneuvered in crippled flight, it appeared to fly nearly straight up."*

After your presentation, NTSB Chairman Jim Hall asked you, *"if you could show that the airplane did not climb after the nose departed, will that change your analysis?"*

You responded, *"No sir,"* but went on to say that you believe it did climb.

At least 182 witnesses (28% of the witnesses) reported seeing a rising streak of light. Forty nine of these witnesses specifically stated that the streak rose vertically or nearly so. But according to your response to the NTSB Chairman, even if the streak could not be attributed to Flight 800, that would not have changed your analysis.

**Request 7:** That you offer an alternative explanation for the rising streak of light (assuming it was not Flight 800 climbing) reported by 182 individuals, while considering the fact that these individuals were dispersed throughout Long Island, on the ocean, and in aircraft.

-H- Witness Mike Wire's observations misrepresented

***The NTSB never interviewed Mike Wire.*** You misrepresented Wire's account, stating that "[his] *report is fully consistent with the breakup sequence of the accident airplane.*"

But his report says he saw an object *"traveling skyward from the ground,"* first coming into view *"just above the roof top"* of a distant house.[14] Flight 800 was approximately two miles above the line of sight of that roof top when it lost electrical power.[5] The distant house would have had to be over four times taller for your assertion to hold.

Mike Wire's observations do not support the official breakup scenario. FIRO brought Mr. Wire back to his exact vantage point on Beach Lane Bridge in Westhampton. He re-affirmed his FBI testimony by pointing to the distant roof top where he first saw a "white light" rise into the sky as fast as a typical firework. FIRO asked Wire to clarify exactly where he first observed the "white light" appear. Wire pointed to a distant rooftop and told us it appeared almost exactly at the level of the rooftop. Thus, his FBI summary that states he saw the firework "just above the rooftop" really meant "**just** above the rooftop."

**Request 8:** That considering the above clarification obtained by FIRO, you report whether an object ascending from where Wire first reported seeing the white light “*is fully consistent with the breakup sequence of the accident airplane.*”

-I- Witness Master-Chief Dwight Brumley's observations misrepresented

***The NTSB never interviewed Dwight Brumley.*** You misrepresented Brumley's account, stating that it "*is consistent with his having seen the latter stages of the breakup of Flight 800*"

Brumley's official FBI summary states that he saw an "flare" travel from "**right to left**" outside a right-side window of his US-Air flight that was heading northward.[9] This means that the flare Brumley saw was traveling faster than the US-Air flight before exploding. Flight 800 was traveling slower than and nearly perpendicular to the US-Air flight[5]. The radar-recorded motion of both planes shows Flight 800, at all times, heading **left to right** from Brumley's perspective.

Dwight Brumley's observations do not support the official breakup scenario. FIRO interviewed Brumley on several occasions. He said that the official crash scenario does not account for the object he saw overtake his flight.

**Request 9:** That you explain in detail what part of the Flight 800 breakup sequence is consistent with a "flare" overtaking US-Air Flight 217 on the right and then exploding in front of it.

-J- Witness Major Fred Meyer's observations misrepresented

***The Witness Group you chaired never interviewed Major Fred Meyer.*** Major Meyer was piloting an Air National Guard helicopter when he saw Flight 800 crash. He and his crew were the first to arrive on scene in the search and rescue effort.

The original NTSB witness group interviewed Major Meyer in January of 1997, recording Meyer's testimony of seeing "*military ordinance*" preceding the crash.[15] You never mentioned this portion of Meyer's testimony at the Sunshine Hearing. Instead, you said that his observation "*is consistent with his having seen the latter stages of the breakup of Flight 800.*"

The latter stages of Flight 800's breakup included large quantities of fuel erupting, which Meyer reported seeing **after** the "*military ordinance.*" As a veteran Vietnam rescue pilot, Meyer informed the original NTSB Witness Group of his ability to distinguish between fuel and ordinance explosions. During his NTSB interview, he said the first explosion was "*like an HPX [military explosive] explosion, as opposed to a soft explosion like gasoline.*" He described seeing a fuel explosion later on in the crash sequence.

Major Fred Meyer's observations do not support the official breakup scenario. Meyer saw what appeared to be a flare, followed by military ordinance explosions, and then a growing fuel explosion. But you said he saw "*a flare and then a growing explosion*," and completely omitted his recorded testimony of observing "*military ordinance*." Major Meyer believes the official crash scenario does not account for the object and explosions he saw.

**Request 10:** That you explain in detail why you failed to mention Major Meyer's description of military ordinance when summarizing his account.

-K- Captain Chris Baur's observations misrepresented

***The Witness Group you chaired never interviewed Captain Chris Baur.*** Captain Baur, together with Major Meyer, saw Flight 800 crash from the same Air National Guard helicopter. Baur was interviewed by the original NTSB Witness Group in January of 1997.

During that interview, Baur reported that a "*pyrotechnic device...came from the left and went to the right [to the west]. And it made the object on the right explode.*" After this initial explosion, Baur reported seeing more explosions, "*each larger than the other and engulfing.*" After concluding he had seen a midair collision, he radioed the control tower that he "*was proceeding there immediately.*"[16]

Captain Chris Baur's observations do not support the official breakup scenario. Baur reported seeing two distinct objects, one colliding with and causing another to explode. The pyrotechnic device which reportedly caused the explosions was heading **west**. Flight 800 was heading **east**. You never mentioned these facts when discussing Baur's testimony, but instead focused on the time he began the search and rescue effort.

You said Baur could not have seen a missile because "*after seeing the explosion, the crew immediately flew the helicopter [to the accident scene]...about 43 seconds after the explosion of the center wing tank.*" You inferred that the crew did not see the initial explosion aboard Flight 800 since they did not begin search and rescue at the moment of the first explosion.

But Baur never stated that he flew to the scene immediately after seeing the initial explosion. His NTSB interview transcripts states that he discussed the unexpected events with his crew, viewed secondary "engulfing" explosions, came up with a possible explanation of what he saw, and reported the event to the control tower—all before proceeding to the crash scene.

Other crew members discussed other factors that delayed the search and rescue mission—factors you never cited. Only after these delays did Baur begin the search and rescue effort. But regardless of the time Baur began flying to the scene, his observation of a pyrotechnic device heading west is in direct conflict with the official breakup scenario.

You misrepresented Captain Baur's testimony and neglected relevant testimony from Baur and other crew members. You focused on timing, rather than explaining or even mentioning the west-moving object that reportedly collided with a separate and distinct object that immediately exploded. After arriving on scene, Baur learned that one of the objects he saw was TWA Flight 800.

**Request 11:** That you explain in detail why you failed to mention Captain Baur's description of a pyrotechnic device heading west and colliding with another object, and that you list all the factors that delayed Baur's search and rescue effort listed in the official NTSB-recorded testimony of Baur and his crew.

#### -L- Missile Visibility Test

This test involved launching one type of missile (the shoulder-fired missile) to be viewed by observers placed at various locations.[3] No other type of missile was launched or considered in this analysis of the Flight 800 eyewitness evidence.

You explained that due to their limited range, the light from a shoulder-fired missile's exhaust would not have been visible all the way to Flight 800's altitude. You then presumed that any alleged missile-witness would have seen as "*two sequential streaks of light*," the second being Flight 800. You said that you could not find one witness who reported this sequence, and concluded that witness observations were "*not consistent with a missile*."

You neglected to consider missile systems consistent with witness observations. The light from mid- to long-range missiles would be visible all the way to Flight 800's altitude. Some knowledgeable witnesses described such a missile during FBI interviews.

Witness 166 was a Polish Army veteran with missile experience. He "*opined that this was a medium size missile which would have required three experienced people to operate*." [2] He ruled out a single-person, shoulder-fired missile **because** he saw a light glowing constantly to Flight 800's altitude.

Hundreds of other witnesses with observations that did not match the characteristics of shoulder-fired missiles, but did match the characteristics of larger missiles were not considered in the "Missile Visibility Test."

**Request 12:** That you release each NTSB witness number (1 - 755) that corresponds to witnesses with observations that are consistent with either mid- to long-range missiles.

#### -M- Conclusion: All witnesses consistent with official breakup scenario

In the body of your presentation, you stated that fifty-six streak of light witnesses "*didn't seem to fit*" into the official crash sequence. And when considering witness accounts that include descriptions of a rising streak of light with no eastern component to its trajectory, many more do not seem to fit. But when concluding your presentation you said that the "*witness reports and the streak of light are consistent with them having observed Flight 800 in crippled flight.*"

**Request 13:** That you retract the above conclusion and state to full number of witness accounts that are inconsistent with Flight 800 in crippled flight, and that you state which of the two following scenarios accounts for more of the witness evidence: 1) the official NTSB crash scenario; 2) a crash scenario initiated by a mid- to long-range missile.

-N- Washington Times witness advertisement

You misrepresented the following seven witness accounts during the portion of your presentation that responded to a full-page Washington Times advertisement containing these seven accounts.

-Mike Wire[14]: You said, "*his account was consistent with the motion of the airplane.*" You failed to mention that Wire reported an object rising upward from a line of sight two miles lower in altitude than Flight 800. Wire's account is discussed in more detail above.

-Dwight Brumley[9]: You said, "*he couldn't have seen a missile*" based on his recollection of the timing of events. You failed to mention that the timing of an event, as recalled by a witness, is a typically unreliable statistic. You also failed to mention that the described heading and speed of the "flare" was inconsistent with Flight 800 in crippled flight. Brumley's account is discussed in more detail above.

-Richard Goss[1]: You stated that Goss and others with him reported an object rising vertically, but suggested that this was Flight 800 maneuvering in crippled flight. But Goss reported publicly[17] that the object he saw rose straight up, headed outbound (south), took a hard left turn, and then exploded. Based on the radar data[5] and all available simulations[8, 12], Flight 800 would never have appeared to climb straight up from Richard Goss' perspective, nor follow the course described by Goss.

-Paul Angelides[9]: You stated that the witness documents available to the NTSB does not contain details mentioned in the advertisement. However, these details were provided to the NTSB one and a half years before the sunshine hearing, in a formal letter to the NTSB Witness Group. The NTSB had ample time to verify and consider these details before discussing Angelides account at the sunshine hearing. Angelides account is discussed in more detail above.

-Major Fred Meyer[15]: You said that Major Meyer saw "*the breakup sequence of the airplane, not a missile.*" You neglected to mention Major Meyer's testimony of seeing "*military ordinance.*" Major Meyer's account is discussed in more detail above.

-William Gallagher[18]: You suggested that Gallagher added details to his memory over time, conflicting with his FBI summary. But no NTSB group or individual ever interviewed William Gallagher. His one FBI summary is very limited. It lacks the details needed to support or refute the NTSB theory of the crash. FIRO interviewed William Gallagher and found that the streak he reported originated from a position consistent with the nearest surface vessel to the crash. This vessel has not been identified by the FBI[19] and is consistent with the origin of a rising streak of light reported by many others.

-Witness 649[2]: You said witness 649 could not have seen a missile because he was initially looking where Flight 800 crashed, not where it exploded in midair. But according to witness 649, his attention was drawn to the west (right) of this position, as the object he was watching "*arced off to the right.*" This westward-moving object apparently collided with a second airborne object at a position and altitude consistent with where Flight 800 lost electrical power. The above account, together with a picture drawn by 649 (attached) showing this collision exists in his NTSB file. You never mentioned that witness 649 reported and sketched a rising, westward-moving object that collided with another object resulting in a midair explosion.

**Request 14:** That you explain why the many significant details in the above witness accounts that conflict with the official crash scenario were never mentioned during the sunshine hearing when each witness account was being discussed.

**Request 15:** That you consider the sketch of witness 649 (attached) and to the best of the your ability, add the following features to it: 1) a line of site mark to the main wreckage debris field; 2) the approximate position of Flight 800 at the moment it lost electrical power; and 3) a detailed explanation for the initial object shown travelling upward and to the west. Please return this sketch with the above features added when responding to these requests.

For request #15, please refer to witness 649's FBI file in the NTSB Public Docket, which includes compass directions to his initial line of sight and landmarks beneath where he saw an initial midair explosion. This very detailed file contains the information needed to carry out this request. You can also find further reference material at <http://www.multipull.com/twacasefile/second649.html>. The author of this report visited the location where Witness 649 saw the crash.

## References:

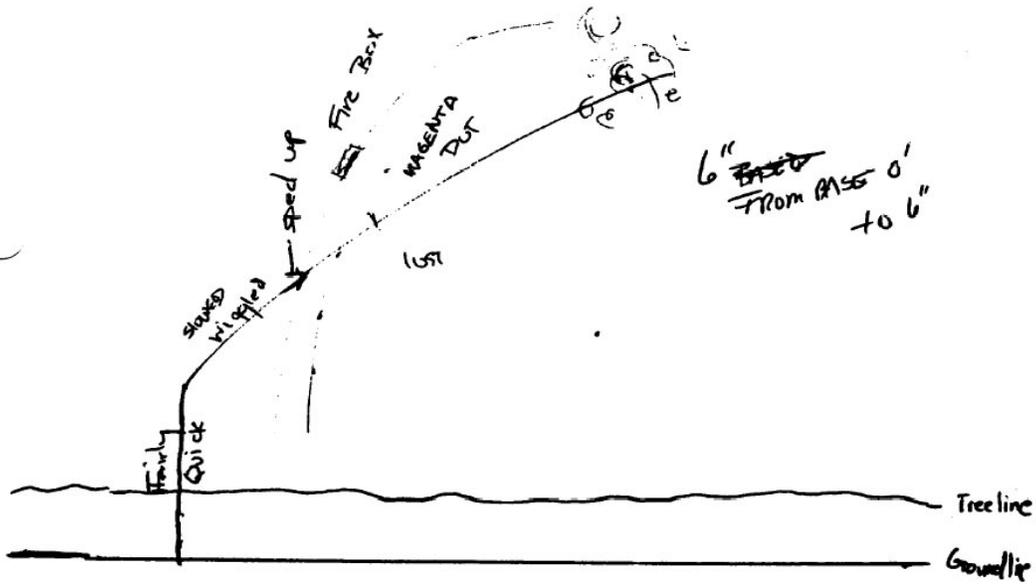
1. Mayer, D., *Witness Group Chairman's Factual Report*. NTSB Public Docket, 2000.
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14. FBI, *Appendix G to Witness Group Factual Report*. NTSB Public Docket, 2000.
15. Meyer, F., *NTSB Interview Transcripts, Appendix N to Witness Group Factual Report*. NTSB Public Docket, 1997.
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17. Goss, R., *Radio Interview*, . 1997, Art Bell Show.
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19. Schiliro, L.D., *Letter in Response to Congressman James A. Traficant, (D) Ohio*, . 1998, FBI.

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ON 5/8/97  
at WHB High School



0076

# **Attachment VII**

**FOIA Request for TWA Flight 800 Bruntingthorpe Test data**

**October 4, 1999**

**Flight 800 Independent Researchers Organization**  
Graeme Sephton, 623 Wendell Rd  
Shutesbury, MA 01072

**October 4, 1999**

Ms Melba Moye  
FOIA Officer  
NTSB  
490 L'Enfant Plaza, SW,  
Washington, D.C., 20594

**Subject: FOIA Request for TWA Flight 800 Bruntinhorpe Test data.**

Dear Ms Moye:

Because of the continuing high level of interest by the public in research on TWA Flight 800, scientists in FIRO are seeking the data from the Bruntinhorpe test series on 747 fuel tanks.

**Therefore, pursuant to the Freedom of Information Act, 5 U.S.C. 552 I hereby request the following information and data:**

1. All reports and summaries of the Bruntinhorpe test series.
2. All the associated data and results.
3. Copies of all photographs and videos associated with the above.

Since most of the above exist in electronic media formats, it would be most convenient and simple to forward them on disk or CD or as email attachments to sephton@admin.umass.edu.

I am requesting these records for non-commercial use as an active member of a public interest research group studying the possible causes of the accident.

We are making all such material available through our web site, <http://flight800.org>, and through our reports, as a free public service.

I request a waiver of fees because my interest in the records is not primarily commercial and disclosure of the information will contribute significantly to public understanding.

If you have any questions about handling this request, you may telephone me at my office (413) 545-6504.

Thank you for your prompt attention to this matter.

Sincerely,

Graeme Sephton

# **Attachment VIII**

**NTSB Denial to a FOIA Request for  
“TWA Flight 800 Bruntingthorpe Test Data”**

**April 17, 2002**

(file copy)

Rcd 4/25/02



National Transportation Safety Board  
Washington, D.C. 20594

April 17, 2002

Mr. Graeme Sephton  
Flight 800 Independent Researchers Organization  
623 Wendell Road  
Shutesbury, Massachusetts 01072

Re: National Transportation Safety Board (NTSB)  
Freedom of Information Act (FOIA) No. 20000042  
July 17, 1996 East Moriches, New York (DCA96MA070)

Dear Mr. Sephton:

This is in response to your FOIA request for information regarding the above accident. Some information responsive to your request is included in what is known as our public docket. The public docket contains board reports and supporting documents and it is available for purchase through our contractor, General Microfilm Incorporated (GMI). You may contact GMI by calling them at (301) 929-8888 or by fax at (301) 933-8676. You also may review much of the public docket on-line through our web site, [www.nts.gov](http://www.nts.gov). From the main screen, click on "Aviation," then "Major Investigations," and scroll down to the TWA Flight 800 selection in the left-hand column.

Your letter also states that you seek records that are not a part of the public docket. A request for responsive records was sent to the members and staff of the Safety Board who reasonably would have such records in their possession or who would be aware of the existence and location of such records. Responsive records were reviewed to determine what could be released under the FOIA. From this review, it was determined that no additional records could be released. The bases for this determination follow.

Some records have been withheld under 5 U.S.C. § 552(b)(2), which exempts from disclosure records "related solely to the internal personnel rules and practices of an agency." According to the court in *Crooker v. ATF*, 670 F.2d 1051 (D.C. Cir. 1981), sensitive materials are exempt from disclosure under this exemption if: 1) the requested document is "predominantly internal", and; 2) disclosure "significantly risks circumvention of agency regulations or statutes." *Id.* at 1074. "Predominantly internal" means that the material sought "need not constitute 'rules and practices' per se; rather, it merely needs to bear upon, or cast light upon an agency's rules and practices." *Schwaneer v. Dept. of the Air Force*, 898 F.2d 793, 796 (D.C. Cir. 1990).

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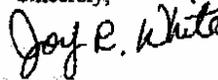
The testing and analysis conducted in Bruntingthorpe was to evaluate investigative theories of the cause of the crash of TWA Flight 800, and more specifically, the explosion that occurred in the aircraft. The materials being withheld describe the NTSB's internal investigative practices, and the tests that were run for internal evaluation purposes. The tests were designed to destroy the test aircraft; an aircraft that was similar to widely used commercial aviation jets. Disclosure of the information being withheld would provide specific guidance on how to cause structural damage, and the ultimate destruction, of an aircraft through a detailed vulnerability assessment of the test aircraft, cargo and passengers. As described in *Crooker*, these materials are not concerned with regulating the behavior of the public; they are not a source of "secret law." *Crooker* at 1075. However, releasing this information would undermine the very purpose in conducting the tests, which was to determine the probable cause of the accident and present safety recommendations to ensure a similar accident doesn't happen again. Further, if the NTSB released this information, it would create a safety hazard, which is in clear violation of the agency's mission and mandate.

5 U.S.C. § 552(b)(3) provides for the withholding of information specifically exempted from disclosure by statute, provided that the statute requires that the matters be withheld from the public in such a manner as to leave no discretion on the issue, or establishes particular criteria for withholding, or refers to particular types of matters to be withheld. In this case we have withheld the recordings from the cockpit voice recorders (CVRs) because of the requirements of 49 U.S.C. § 1114(c). The Board is prohibited from disclosing CVR recordings. However, in accordance with the provisions of 49 U.S.C. § 1114 (c), in the public docket of this investigation, which as noted earlier, you may purchase through GMI or which may be viewed on the NTSB website, a transcript of the CVR has been made available.

Preliminary data are being withheld pursuant to 5 U.S.C. § 552(b)(5), which exempts from disclosure agency records that are preliminary or deliberative. *National Wildlife Fed'n v. Forest Serv.*, 861 F.2d 1114 (9<sup>th</sup> Cir. 1988); *Jowett, Inc. v. Dept. of the Navy*, 729 F. Supp. 871 (D.D.C. 1989). Preliminary materials cannot be guaranteed as accurate or complete, and therefore, release of such information would result in confusion and compromise the NTSB's work. Similarly, material reflecting the NTSB's deliberative process is exempted from disclosure in order to ensure the free flow of information during the course of the agency's investigations. *Mead Data Cent., Inc. v. Dept. of the Air Force*, 566 F.2d 242, 256 (D.C. Cir. 1977).

To the extent I have denied your FOIA request, you may appeal my decision by writing to: Mr. Daniel D. Campbell, Managing Director, National Transportation Safety Board, Washington, DC 20594.

Sincerely,



Melba D. Moyer  
FOIA Officer

