

# **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**

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May. 20, 2002*

The National Transportation Safety Board (NTSB) concluded that the probable cause for the crash of TWA Flight 800 was an explosion within the aircraft's center wing fuel tank. Neither the ignition source nor its location within the tank "*could be determined from the available evidence.*"[1] Some evidence that conflicted with the official probable cause for the crash was not adequately investigated or was withheld from the parties to the investigation and the public.

NTSB Reg §845.41(a) states,

*Petitions for reconsideration or modification of the Board's findings and determination of probable cause . . . will be entertained only if based on the discovery of new evidence or on a showing that the Board's findings are erroneous.*

Key findings listed in the NTSB Final Report are erroneous. Physical evidence of "unknown origin" listed in a report formerly classified as "secret" by the FBI may effectively constitute new evidence, since that evidence may not have been thoroughly analyzed by the NTSB, nor made available to appropriate experts or the parties to the investigation. That report is included as Attachment I of this petition, and indicates that appropriate experts were *not* called in to analyze the evidence or its analyses. See Attachment I.

The existence of erroneous findings in the NTSB's final report and the effectively new evidence listed in Attachment I require that the NTSB entertain this petition for reconsideration and modification of the NTSB's findings and determination of the probable cause for the crash of TWA Flight 800.

- The eighth finding listed in the NTSB final report on Flight 800 is erroneous.

*8...[The] streak of light reported by most of [the streak-of-light] witnesses was burning fuel from the accident airplane in crippled flight during some portion of the postexplosion preimpact breakup sequence...[1]*

A careful review of all available witness documents has shown that most witnesses who observed the streak of light said that it ascended.[2] And a large majority of the witnesses who described the origin and/or trajectory of the rising streak of light gave accounts that were inconsistent with every stage of Flight 800's radar-recorded breakup

sequence and its trail of burning fuel. Many said the streak rose straight up from the surface, and others said it impacted with the accident airplane (see item nine below).

The NTSB created simulations that showed Flight 800 climbing sharply after exploding. This alleged climb was purported to represent the rising streak of light the witnesses reported. However, that climb only occurred in simulations. The radar and debris field evidence does not support it (see item five below). The evidence indicates that Flight 800 exploded 2.6 miles above the surface and began an immediate descent to the ocean. It *“was never ascending straight up.”*[3, 4]

- The sixteenth finding also appears to be erroneous.

*16. A short circuit producing excess voltage that was transferred to the center wing tank (CWT) fuel quantity indication system wiring is the most likely source of ignition energy for the TWA flight 800 CWT explosion.*[1]

No conclusive evidence for this “excess voltage transfer” was ever found during the NTSB’s investigation. And the *“most likely source of ignition”* should be part of a crash scenario that accounts for the available evidence. However, the NTSB-proposed short circuit theory leaves a significant amount of forensic, physical, radar, and eyewitness evidence unexplained.

Physical and forensic evidence left unexplained are discussed in items 1 - 3 below. Unexplained radar evidence is displayed in item four. Item nine discusses witness evidence left unexplained. An ignition source and subsequent crash scenario that accounts for all of the evidence discussed in the items referenced above is the most likely source of energy that initiated the destruction of the aircraft. A modification of the sixteenth finding in the NTSB’s TWA Flight 800 final report is needed, wherein such an ignition source is named.

- A declassified FBI report that summarizes a Brookhaven National Laboratory analysis of suspicious debris items is included as Attachment I. The required experts, appropriate NTSB investigators, and the parties to the investigation may not have viewed this report or the evidence listed in it.

The Brookhaven report was classified by the FBI as “secret” and was never made part of the NTSB public docket. It contains the laboratory results of wreckage items of “unknown origin” that were sent to an external laboratory for examination. The secrecy of the Brookhaven report has undermined the NTSB’s ability to conduct a thorough analysis Flight 800’s physical evidence. According to senior NTSB investigator Hank Hughes, Group Chairman of the Airplane Interior Documentation Group, *“there are still unanswered questions concerning evidence sent for examination.”*[5]

The NTSB and the parties to the investigation must be able to thoroughly examine the Brookhaven report and be given access to all of the items tested. Once analyzed by appropriate experts, valuable information regarding this evidence may be obtained.

- A radar analysis conducted by a consultant for the FBI may not have been made available to appropriate NTSB investigators or the parties to the investigation. It is included as Attachment II.

This analysis concludes that a component of the aircraft “*kicked out to the right*” almost immediately after the loss of electrical power. That component evidently impacted the ocean ¼ mile further west than any wreckage listed in the official debris field database—in an area deemed virtually impossible for wreckage to have landed in the NTSB’s short-circuit theory. This analysis challenges the validity of the official probable cause for the crash, which contains no explanation for a significant amount of the radar evidence.

In the official scenario, even debris item CW-504’s (a component of the center fuel tank) recovery location was anomalous. CW-504 was recovered furthest west, officially—so far west that NTSB investigators believed its recovery location may have been “*in conflict with*” the official crash scenario.[6] But multiple radar sites recorded a component of the aircraft landing about ¼ mile further west than CW-504 (see Attachment II and item four below). NTSB investigators have not explained this radar evidence.

- Certain NTSB groups conducted cursory and inadequate analyses of important pieces of evidence and sometimes withheld analyses from the parties and the public. Item six below describes the NTSB’s decision to withhold the results of an analysis that may have determined the type and location of the explosion that caused the crash.

The sound of the explosion that caused the crash was recorded on the aircraft’s cockpit voice recorder (CVR). NTSB investigators learned that such a recording was of great investigative value. Specifically, the recording could tell investigators where the explosion occurred on the aircraft and whether the explosion was high velocity (from an explosive device) or low velocity (from a fuel-air mixture). Thus, the data in Flight 800’s CVR could confirm or put to rest several theories regarding the cause of the crash.

The CVR data was analyzed by sound experts at the University of Southampton, England and some conclusion was apparently reached. However, that conclusion was never shared with the parties to the investigation or the public. Instead, it has been withheld, because releasing it, according to the NTSB, “*would create a safety hazard.*”[7] This issue is discussed in more detail in item six below.

All evidence and analyses must be made available to the appropriate NTSB investigators and the parties to the investigation. A dialogue between the NTSB leadership, FIRO,

concerned NTSB investigators, and the parties should be opened immediately to address evidence that was not adequately tested or reviewed.

Only by reconsidering and modifying the final report will the NTSB be able to correct its investigative errors and explain the significant amount of evidence never discussed in that report, nor apparently made available to the parties to the investigation. Federal regulations[8] require the NTSB to entertain this petition and give the parties to the investigation the opportunity to examine any evidence pertinent to the probable cause of the crash.

***1) Inability to explain a variety of features in the wreckage, including the localized recrystallization of metal (high explosives indicator) at the rear of the center wing tank.***

**FACT:** The center wing tank (CWT) of TWA Flight 800 contained damage that “*was not explained in the breakup sequence.*”[6] Exploding fuel vapors, an onboard fire, ocean impact, nor any other segment of the official crash sequence could be ascribed to the “*localized recrystallization*”[6] of aluminum found at the rear of the CWT.

**FACT:** Former NTSB Director of Aviation Safety Dr. Bernard Loeb stated that the NTSB did not rule out a missile as the cause of this damage.[9] However, the NTSB’s final report makes no reference to any detailed analysis of this wreckage by missile damage experts. The “TWA Flight 800 Missile Impact Analysis” (available in the NTSB docket) is the only report published by such experts, but was “*not a detailed scientific analyses*” and did not mention the recrystallization[9].

**FACT:** The Missile Impact report states that a large, proximity-fused missile would have created “*only occasional high- and low-velocity fragment penetrations.*”[9]

**FACT:** Multiple penetrations directed into the CWT were discovered that contained “*both lower velocity...and higher velocity*” characteristics.[10]

**FACT:** Dr. Loeb stated that even one such penetration would have contained “*more than enough energy to ignite the [CWT] fumes.*”[11]

**ASSESSMENT:** NTSB investigators have little or no experience identifying missile damage, and the recrystallization of the rear spar was apparently never fully tested by missile damage experts. Appropriate experts should immediately analyze any and all evidence that “*was not explained in the breakup sequence*”[6] or that contains characteristics indicative of missile fragment penetrations.

***2) Incomplete and inadequate accounting for the presence of explosive traces found in diverse parts of the aircraft.***

**FACT:** Investigators detected traces of explosives (PETN and RDX) on various wreckage items.[12] Officials attributed these traces to a canine bomb detection exercise allegedly conducted in the jetliner in St. Louis five weeks before the crash.[13] According to investigators, explosive particles were inadvertently deposited on the aircraft during this exercise.

**FACT:** On the day of the of the alleged bomb detection exercise, the aircraft that would become Flight 800 left its St. Louis gate, fully catered, with 435 passengers and bound for Honolulu only fifteen minutes after the exercise was completed.[13] This meant that passengers were aboard or boarding the jetliner when the alleged exercise was taking place.

**FACT:** Another TWA 747 aircraft, adjacent to the Flight 800 aircraft at the time of the bomb detection exercise, left its gate over one hour later.[14]

**ASSESSMENT:** The bomb detection exercise likely took place aboard an adjacent TWA 747 aircraft that left its gate more than one hour after the exercise ended, not inside the Flight 800 aircraft, which was not available for such an exercise at the time. The explosive traces detected onboard Flight 800 can not be attributed to a spill during the bomb detection exercise in St. Louis.

**ASSESSMENT:** The NTSB should immediately gain access to all evidence and analyses remaining in the FBI's possession so that NTSB investigators can complete their investigation by thoroughly and openly analyzing all of the Flight 800 wreckage items.

***3) Avoidance of public access to or failure to conduct necessary laboratory analyses to conclusively determine the source of nitrates found within the center wing tank wreckage.***

**FACT:** A piece of the aircraft's center wing tank (labeled CW-504 during reconstruction) was among the earliest items ejected from Flight 800 after the initial explosion. Its recovery location in the "*earliest part of the [debris field]*"[6] caused investigators to conclude that its location "*might even be in conflict with the proposed [NTSB crash] scenario.*"[6]

**FACT:** The NTSB contracted NASA to test a "splatter material" found on this item's surface. NASA test results[15] confirmed the presence of nitrates (a high explosive indicator) within the splatter material, alarming the scientists conducting the tests who concluded that the nitrate presence warranted "*further investigation.*"[15]

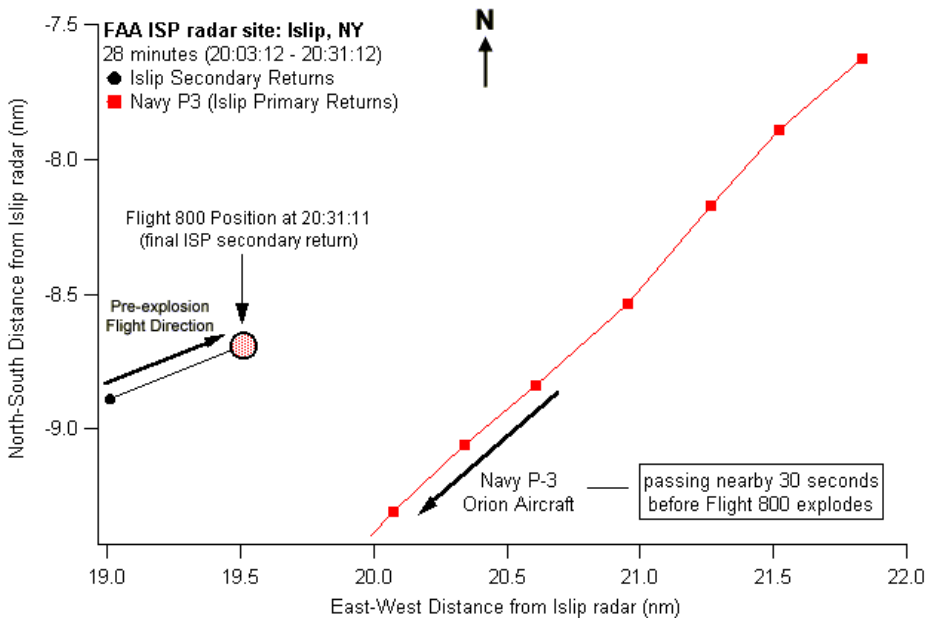
**FACT:** The NTSB failed to request any further testing of the nitrate-laden splatter material by NASA. Ultimately, the source of the nitrates was not determined[16] and the NASA report[15] expressing concern over the nitrate presence was not included in the NTSB public docket.

**ASSESSMENT:** Further testing of the splatter material found on CW-504 is necessary to determine the origin of the nitrates detected. Common laboratory techniques exist that can help determine whether the nitrates came from high explosives or some other source.

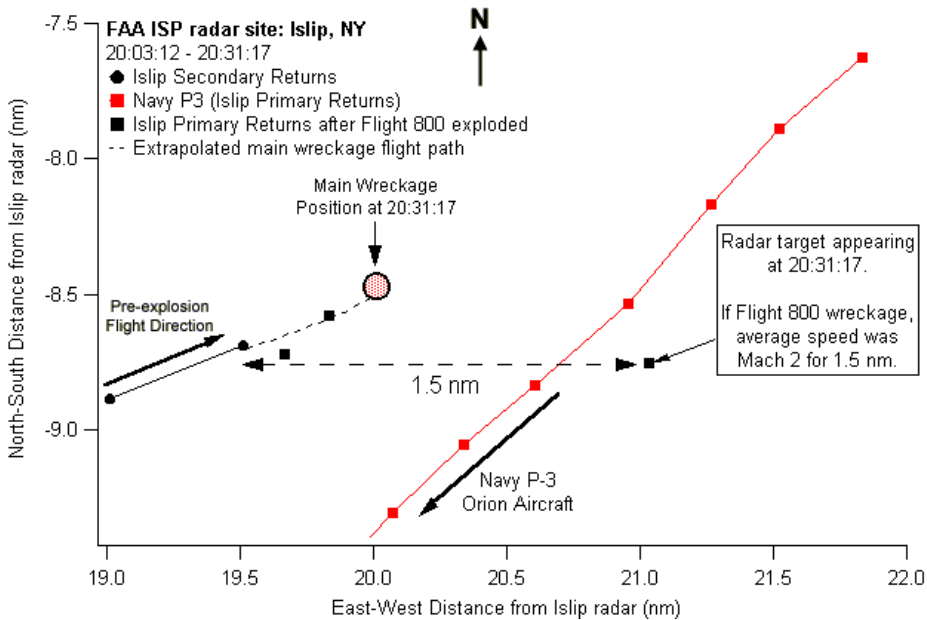
***4) Failure to explain or mention multiple high-speed (Mach 2) radar targets near the aircraft at the time of the accident.***

**FACT:** The McArthur/Islip Airport radar (ISP radar) was the FAA's closest radar site to Flight 800 when it exploded. For approximately 28 minutes up until Flight 800 lost

electrical power, only a Navy P-3 Orion aircraft was tracked by the ISP radar in the airspace near where Flight 800 exploded and fell to the sea (see Figure 1).



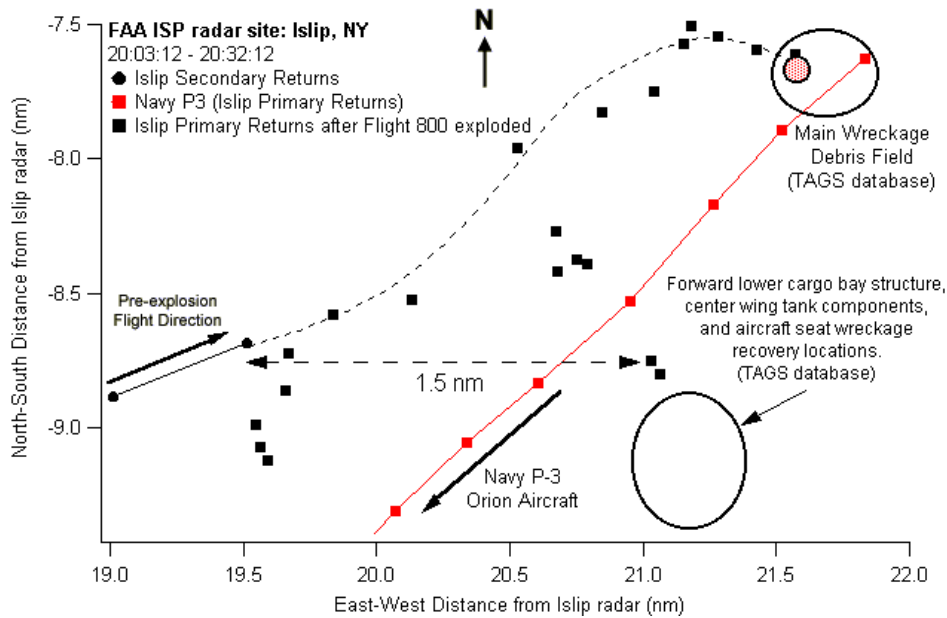
**Figure 1:** Twenty-eight minutes of radar coverage in the vicinity of Flight 800’s crash site from the FAA radar site in Islip, NY prior to Flight 800 losing electrical power.



**Figure 2:** Twenty-eight minutes of radar coverage in the vicinity of Flight 800’s crash site from the FAA radar site in Islip, NY, plus five seconds of primary radar returns after Flight 800 lost electrical power.

**FACT:** Less than 4.3 seconds after a spontaneous midair explosion aboard Flight 800, a target appeared on radar approximately 1.5 nautical miles to the east of the explosion (Figure 2.).

**FACT:** The target was recorded again on the following sweep (4.7 seconds after the first sweep) about 1/10 of a mile further to the southeast (see Figure 3 below). This position was consistent with where right-fuselage, center wing tank and forward cargo bay components were recovered, and was more than 1 nautical mile from where the main wreckage impacted the ocean.[3]



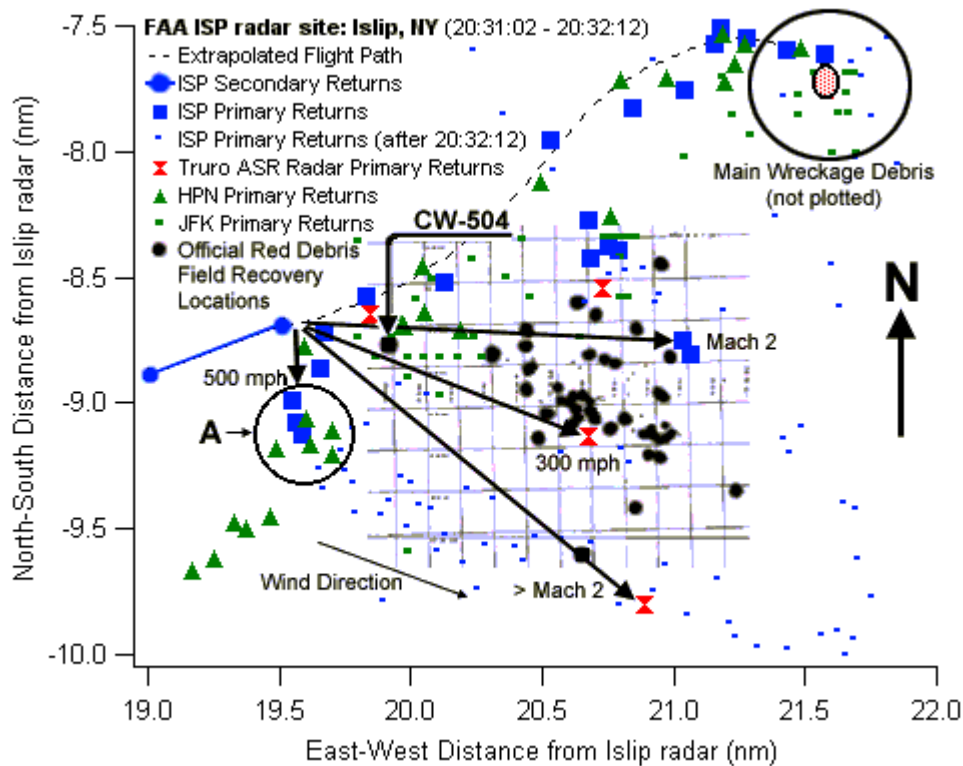
**Figure 3:** Twenty-eight minutes of radar coverage in the vicinity of the Flight 800 tragedy from the FAA radar site in Islip, NY, including one minute of primary radar returns after Flight 800 lost electrical power.

**FACT:** If the above mentioned target was wreckage that exited from Flight 800’s airframe at any time after the loss of electrical power, its minimum average speed was approximately Mach 2 (twice the speed of sound).

**FACT:** The North Truro, MA Air Route Surveillance Radar recorded a radar target approximately 1.7 nautical miles southeast of Flight 800 approximately five seconds after the loss of electrical power. The altitude of this target was 1,000 to 7,000 feet higher than the last known altitude of TWA Flight 800 (13,800 feet).[17]

**FACT:** If the above mentioned target recorded by the North Truro radar was wreckage that exited from Flight 800’s airframe at any time after the loss of electrical power, its minimum average speed was approximately Mach 2. See Figure 4 below.





**Figure 4:** Radar coverage from four radar sites (ISP, HPN, JFK, N. Truro) superimposed onto official wreckage recovery data from the earliest (red) debris field.[3, 18] All speeds listed are averages; if from wreckage, initial exit velocities would have been higher. Recovery locations darkened for clarity.

**FACT:** Another radar target recorded by the North Truro radar 16 seconds after Flight 800 lost electrical power appeared 1.2 nautical miles ESE and within 3,700 feet in altitude of Flight 800 when it lost electrical power.[17] See Figure 4 above.

**FACT:** If this last mentioned target was wreckage that exited from Flight 800’s airframe at any time after the loss of electrical power, its minimum average speed was 300 mph. See Figure 4 above.

**FACT:** Radar expert Michael O’Rourke, contracted by the FBI, concluded that “*some portion or component of the aircraft kicked out to the right nearly immediately after the loss of the transponder signal.*”[19] See circled area (labeled **A**) in Figure 4.

**FACT:** O’Rourke concluded that once the portion of the aircraft that kicked out to the right lost its momentum, “*the parts associated with this debris descended to the ocean nearly vertically,*” and therefore would have landed in the circled area (labeled **A**) in Figure 4.

**FACT:** The official debris field database does not include any items recovered in the circled area (labeled **A**) in Figure 4.

**FACT:** NTSB Exhibit 18 states: “*There is still some significant missing structure in the key wing center section and fuselage red zone [early debris field] areas.*”[6]

**FACT:** Wreckage item CW-504 is labeled in Figure 4. It was recovered so far west that the NTSB concluded that its recovery location “*might even be in conflict with the proposed [crash] scenario.*”[6]

**FACT:** According to O’Rourke’s analysis, aircraft debris should have impacted the ocean approximately ¼ mile further west than CW-504, in the circled area (labeled A) in Figure 4.

**ASSESSMENT:** Many radar targets from at least four separate radar sites indicate that wreckage exited the right side of the aircraft at high speeds. The NTSB has not discussed their appearance or implications in the final report on the crash. One NTSB report does suggest, however, that “*some velocity could be imparted [to wreckage items] from the [initial] explosion.*”[20] But there is no indication that the NTSB ever attempted to determine if a fuel-air explosion (the official cause of the crash) could have imparted sufficient velocity to wreckage items to account for the radar data.

**ASSESSMENT:** A very powerful force was needed to launch wreckage out the right side of the aircraft almost precisely when the aircraft lost electrical power. Some of this wreckage evidently landed in a debris field that was officially never located—a debris field that could have contained the “*significant missing structure*” that officials believe exited the plane early in the crash sequence.[6] But regardless of whether wreckage was officially located or not, the radar evidence is enough to call into question several key findings made by the NTSB.

**ASSESSMENT:** The NTSB Final Report failed to identify any force within the official crash scenario that could have imparted the necessary energy to Flight 800 components to send them out the right side of the aircraft at the very high speeds indicated in the official radar record—a radar record substantiated by at least three independent radar sites (see Attachment II and Figure 4).

**ASSESSMENT:** The NTSB has not adequately investigated the radar evidence or the types of explosions with which that evidence may be consistent. We urge the NTSB to address all of the radar returns discussed above and to propose a crash scenario that can account for their appearance.

### ***5) Failure to produce any evidence or analysis supporting a widely publicized post-failure flight path.***

**FACT:** One month before the first NTSB public hearing on Flight 800 in 1997, the FBI released a CIA-produced animation entitled “TWA Flight 800: What Did the Witnesses See.” This animation was widely televised and promoted a CIA interpretation of about

1/3 of the eyewitnesses to the crash. It showed Flight 800 climbing approximately 3,000 feet after its forward fuselage broke away. *"This may have looked like a missile attacking an aircraft,"*[21] according to the animation's narrator.

**FACT:** The NTSB released a study that conflicted with the CIA animation. Through a series of simulations published in the “Main Wreckage Flight Path Study,”[22] the NTSB found that Flight 800 could have only climbed a maximum altitude that was 1,700 feet less than that depicted in the CIA animation. This conclusion was based upon data that showed the plane turning *“north of the pre-event course line.”*[22]

**FACT:** The NTSB’s 1,700 foot climb reduction was inadequate when compared to the official radar record.

**FACT:** The NTSB Final Report on the crash incorrectly concludes that a simulation displayed in that report *“matched the JFK radar data.”*[1]

**FACT:** No simulation in the NTSB Final Report matches the JFK or any other radar data displayed in that report (see the highlighted data in Figure 5).

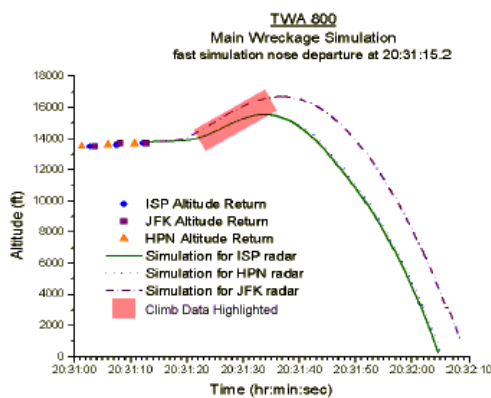


Figure 28c. Altitude for nose off at 2031:15.2 cases.

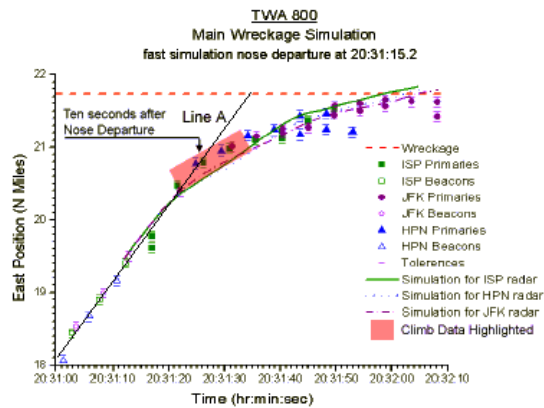


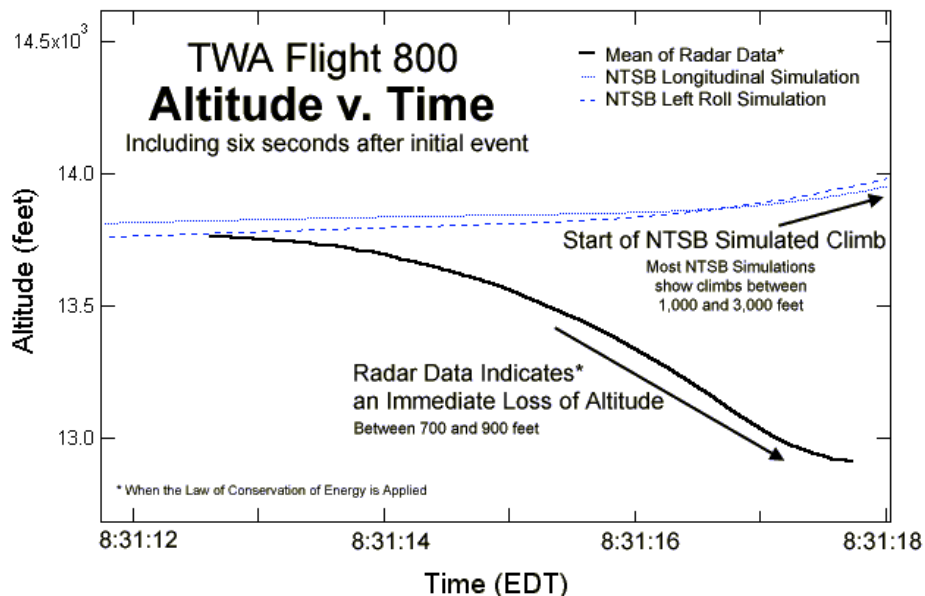
Figure 28d. East position for nose off at 2031:15.2 cases.

**Figure 5:** Figures 28c and 28d from the NTSB TWA Flight 800 Final Report. FIRO added highlights, “Line A,” and labeled radar data points ten seconds after nose departure.[1] Note that the simulation data diverge from Line A (the pre-explosion flight path) well before the radar data indicates such.

**FACT:** The NTSB Final Report’s simulations conflict with the radar data precisely when the simulated climbs begin (see Figure 5).

**FACT:** Each simulation in the NTSB Final Report falls behind Flight 800’s radar-recorded position and speed by approximately ¼ mile and over 100 knots within fourteen seconds of the loss of electrical power.

**FACT:** The official radar record indicates that Flight 800 began an immediate descent after losing electrical power. See Figure 6 and Attachment III.



**Figure 6:** 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 from the mean of the radar data in NTSB Exhibit 13A to calculate the loss of altitude (see Attachment III and the facts below).

**FACT:** The NTSB Final Report contains simulations that show Flight 800 gaining altitude and losing airspeed soon after its electrical power failed. All are in direct conflict with the radar evidence (see Attachment III).

**ASSESSMENT:** A radar-recorded northward (left) turn[22] and the calculated loss of altitude (Figure 6 and Attachment III) could have been caused by damage to the left wing early in the crash sequence.

**FACT:** Debris field data indicates that Flight 800's left wing was damaged early in the crash sequence.[23]

**FACT:** A three foot by nine foot left wing structure containing both “*upper and lower [wing] skin*”[23] was found in an area consistent with it separating from the aircraft within five seconds of the initial explosion[24].

**FACT:** Other fragments of “*internal and external [left] wing structure*” were also recovered from the earliest debris field during trawling operations.[6]

**FACT:** The NTSB apparently disregarded evidence of left wing damage in all published simulations. Simulations were run with both wings and all control surfaces in their original, pre-explosion condition throughout most of the simulated flight. Some wing

components were simulated to have landed in a completely different debris field than where the real components were recovered.[25]

**ASSESSMENT:** Each simulation in the NTSB Final Report and indeed all NTSB simulations published to date do not match the radar data. The radar-recorded flight path of TWA Flight 800 indicates that the aircraft immediately descended and turned left just after losing electrical power. Wreckage recovery locations indicate that the left wing was significantly damaged early in the crash sequence. Left wing damage would have resulted in a change in that wing's aerodynamic properties, which could explain much of the radar evidence.

**ASSESSMENT:** The NTSB simulations were based upon speculative flight characteristics of a 747 after catastrophic structural failure. They were not representative of the radar data or evidence of early wing damage. The existing gap between official simulations and the evidence is significant. New simulations must be conducted that consider all of the evidence—even evidence that may negate proposed altitude gains early in the crash sequence.

***6) Denial of public access to results of testing and analysis of abnormal sound data contained near the end of the Cockpit Voice Recorder record.***

**FACT:** Flight 800's Cockpit Voice Recorder (CVR) recorded a loud sound just before it stopped functioning, which NTSB investigators attributed to the sound of the explosion that caused the crash. Because four different cockpit microphones recorded the explosion[26], a unique sound-signature could be investigated.

**FACT:** The NTSB "Sound Spectrum Group" was formed and studied publications from previous aircraft explosions. The group learned that Flight 800's CVR recording may contain enough information "*to determine the type and point of origin of a rapid, destructive pressure event within an aircraft...[and] to differentiate between an underpressure (decompression) or an overpressure (explosion), as well as determine whether the explosion was a detonation (high explosive) or a deflagration (low order, e.g. fuel-air) event.*"[27]

**FACT:** "*The NTSB and interested parties invested a significant amount of resources in supporting the cockpit voice recorder (CVR) sound spectrum activity.*"[27] High and low order explosions were detonated inside a derelict 747 in Bruntingthorpe, England to gain necessary baseline data. Experts from the University of Southampton, England with experience in determining the type and origin of explosions aboard aircraft from sound data, analyzed the Flight 800 CVR data. But when the experts completed their work, the NTSB leadership refused to release the results.

**FACT:** The parties to the investigation have "*never been briefed regarding the analysis of the data completed by the University of Southampton, nor has the [Sound Spectrum]*

*group met to finalize any type of report of its activities in relation to the investigation of TWA 800."*[27]

**ASSESSMENT:** The CVR data from Flight 800 may contain all the information necessary to conclusively determine the type and origin of the explosion that caused the jetliner to crash—the two most important findings of the investigation that have eluded all other NTSB investigative groups. The NTSB withheld the very analysis that may contain this information. The investigative group charged with making conclusions based upon that analysis has not reviewed or even met with the NTSB to discuss it.

**ASSESSMENT:** The NTSB is urged to immediately release the Southampton analysis (or at least all non-sensitive information from that analysis) to the parties to the investigation and the public, in accordance with Title 49 of the US code.

***7) Incomplete release of radar data and blocking public access to the recorded movement of unidentified targets.***

**FACT:** The NTSB Airplane Performance Study contains radar plots of the immediate vicinity of Flight 800's debris field, showing the paths of various aircraft and surface vessels.[3] The closest surface vessel to Flight 800 when it crashed is shown on one of these plots and was traveling SSE at 30 knots, only 2.9 nautical miles from Flight 800 when it lost electrical power. The sun had set, but this vessel was speeding out to sea. It continued on its original course for at least sixteen minutes. According to the FBI, "*the FBI has been unable to identify this vessel.*"[28]

**FACT:** Many more targets consistent with surface vessels were recorded on radar further to the south. Most of these targets appeared to be in or en route to the military warning zone W-105, which, according to a Navy spokesperson interviewed by Aerospace Daily, was activated for military use when Flight 800 went down.[29]

**FACT:** In an attempt to gain more information about the confirmed and unconfirmed surface vessels, FIRO requested more radar data from the NTSB. Through the Freedom of Information Act (FOIA), FIRO requested data from two hours before until two hours after the crash.

**FACT:** The NTSB initially denied the request and FIRO ultimately filed a law suit for the data in federal court. Before a decision was reached, the NTSB agreed to release the data. Dozens of computer files were sent to FIRO that supposedly contained the data in question. However, much of the data was not included in the release package.

**ASSESSMENT:** Federal investigators have not determined the identity of the closest ship to Flight 800 when it crashed. Its speed (30 knots) and course (out to sea) are inconsistent with most other surface vessels in the area. The investigative value of determining this vessel's identity within the context of one of the three leading theories for the crash can not be overstated. The NTSB, as the lead agency in charge of

determining the cause of the crash, apparently never attempted to determine this or any other surface vessel's identity. Details of an alleged effort by other federal agencies to gain this information were never released. The NTSB is urged to acquire and analyze the details of all alleged investigative efforts by the FBI and any other agency to identify the closest known surface vessel to Flight 800 when it crashed. FIRO is willing to help in this effort and urges the NTSB to release all of the requested radar data.

***8) Failure to collect or analyze a sufficiently detailed database from over six hundred witnesses.***

**FACT:** The NTSB submitted complete authority over eyewitness interviews to the FBI during the first year and a half after the crash, in apparent violation of federal regulations.[8] Instead of interviewing the witnesses directly, they analyzed the sometimes illegible FBI witness summaries.

**FACT:** NTSB Board Member George W. Black described the NTSB Witness Group Study Report as a "*literature review*."[30]

**FACT:** The NTSB Witness Group Study Report contained little or no reference to first-hand sources.

**FACT:** The NTSB never provided a public forum nor set aside time at either of its two public hearings on the crash for firsthand eyewitness testimony.

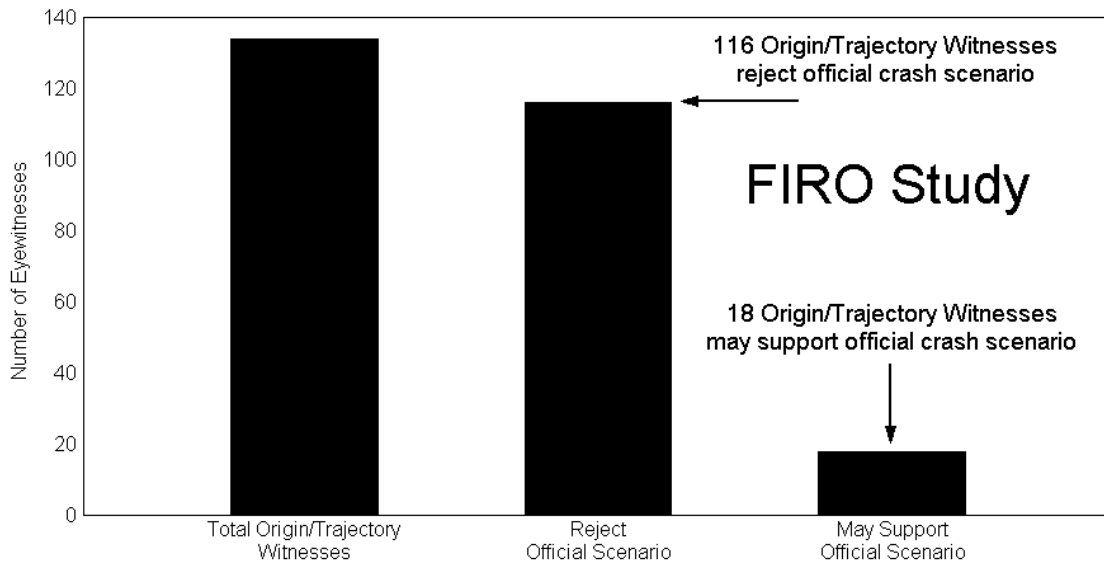
**ASSESSMENT:** Many of the details not included in the FBI witness summaries have been obtained by independent organizations from interviews and an independent public hearing (see Attachment IV). Valuable information from hundreds of witnesses can still be obtained today. The NTSB has the ability and responsibility to interview these witnesses. The NTSB is urged to comply with Title 49 of the US code by carrying out this task immediately.

***9) Inability to explain over 100 official eyewitness accounts.***

**FACT:** 134 witnesses provided federal investigators with detailed descriptions of events early in the crash sequence. These details included the origin and/or trajectory of a rising streak of light.[2]

**FACT:** The NTSB failed to isolate these "Origin/Trajectory" witnesses, but attributed the rising streak to Flight 800 itself, climbing sharply as it headed *east*, to Paris.

**FACT:** The Origin/Trajectory witnesses do not describe the path of Flight 800. Most saw the streak rise from the surface and/or head straight up. Thirty-four watched the streak rise *westward*, a direction the crippled jetliner never traveled. Several others said the streak impacted with Flight 800.[2]



**Figure 7:** Origin/Trajectory witness accounts compared with the official crash scenario.[2]

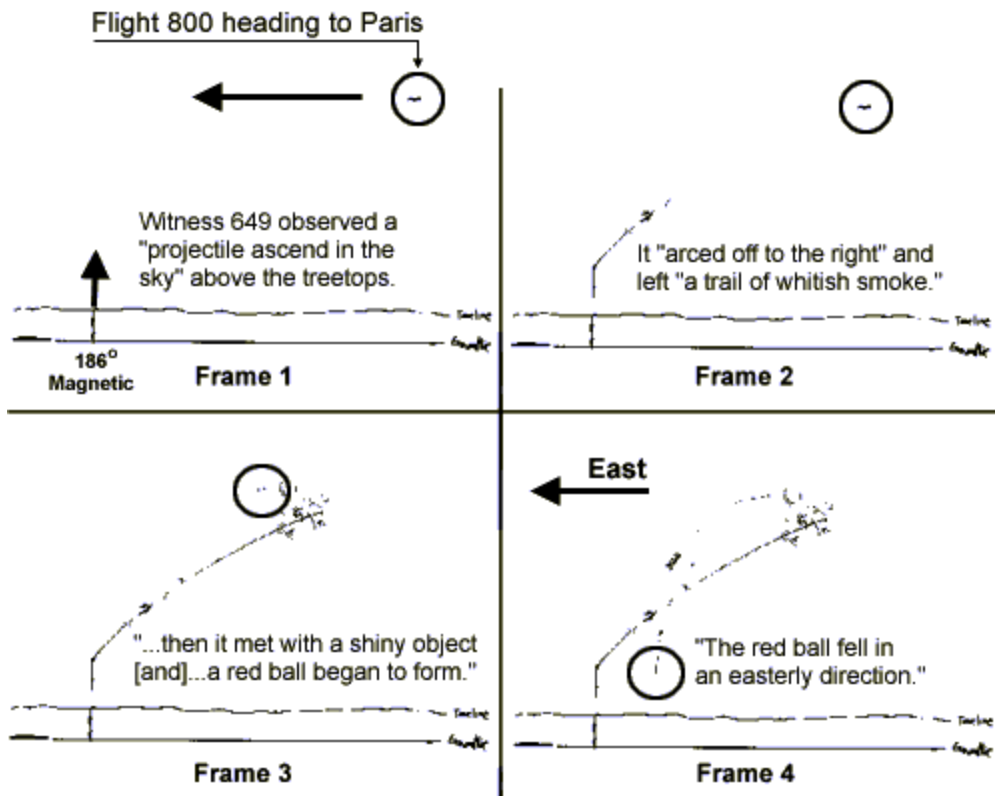
**FACT:** As shown above, 116 (86%) Origin/Trajectory witnesses reject the official NTSB explanation for the streak. These witnesses described the earliest events surrounding the crash of TWA Flight 800, but their accounts were never isolated and studied by the NTSB.

**FACT:** Eyewitness 649 (numbered by the NTSB) is a good example of an Origin/Trajectory witness. He provided investigators with a compass bearing to the object he saw rise into the sky and created a hand-drawing of his observation.

**FACT:** Eyewitness 649’s description of a projectile rising into the sky and meeting a second airborne object is inconsistent with the official crash scenario. See Figure 8 and Attachment V.



## Witness 649's Account of the Crash of TWA Flight 800



**Figure 8:** Frames 1-4 are based upon a hand drawing given to FBI agents by eyewitness 649. Attachment V contains the actual drawing. Flight 800's position shown above was determined from the compass bearing line to the rising projectile and landmarks that witness 649 provided to investigators. Flight 800 was not included in the original drawing, and witness 649 never stated that he recognized an aircraft. His account states that he observed a projectile rise, arc to the right, and meet a "shiny object" in the sky just prior to seeing a fireball erupt. The NTSB concluded that the red ball he saw falling to the surface was Flight 800.[4] All quotations in this figure have been taken from the official FBI witness documents of eyewitness 649.

**FACT:** Witness 649's drawings depict an initial airborne explosion on a compass bearing line and at an altitude consistent with where Flight 800 lost electrical power. See Attachments V and VI.

**FACT:** Witness 649's picture shows debris falling on a bearing line consistent with where wreckage was recovered. See Attachments V and VI.

**FACT:** The NTSB misrepresented witness 649's observations at its final "Sunshine Hearing" held in August 2000 by stating that "*it doesn't appear that this witness was looking in the right location*" to see Flight 800 when it lost electrical power (see Attachment VI).

**FACT:** Neither witness 649's picture nor any other eyewitness drawing was displayed or discussed at any NTSB hearing on the crash.

**FACT:** According to NTSB radar and debris field analyses[13], Flight 800 began breaking up at 13,800 feet (2.6 miles) while heading *east*, to Paris.[13] NTSB Witness Group Chairman Dr. David Mayer said, "*Flight 800 was never ascending straight up; Flight 800 in crippled flight didn't originate at the surface*"[2]

**ASSESSMENT:** The NTSB's conclusion that the rising streak of light reported by over 100 witnesses[2] was Flight 800 itself must be reconsidered in light of the compelling statistics (Figure 7) representing these witnesses' observations.

**ASSESSMENT:** The NTSB's misrepresentation of witness accounts such as that of witness 649 at the NTSB "Sunshine Hearing" is irresponsible given the four years available to investigate the crash and prepare for that hearing. The NTSB must immediately and publicly correct all of the misrepresentations presented at the August 2000 Sunshine Hearing, and reconsider its finding that the well-observed rising streak of light was Flight 800 itself. A detailed accounting of the NTSB's misrepresentation of the TWA Flight 800 eyewitness evidence at the August 2000 Sunshine Hearing can be found in Attachment VI.

***10) Incomplete and untimely response to valid Freedom of Information Act (FOIA) requests by FIRO and members of the public concerning the official investigation.***

**FACT:** From October 1999 to May 2001, FIRO and its members have tracked six FOIA requests that FIRO sent to the NTSB requesting information related to the TWA Flight 800 investigation not available in the public docket. To date, the NTSB has not responded to three of these requests.

**FACT:** On October 4, 1999, FIRO sent a FOIA request (Attachment VII) to the NTSB for all "*associated data and results*" of the full-scale explosion tests carried out in Bruntingthorpe, England.

**FACT:** Some of that data was used by experts from the university of Southampton, England in an attempt to identify the type of explosion that caused the crash of TWA Flight 800. See item six above.

**FACT:** The NTSB took two and a half years to respond to FIRO's Bruntingthorpe FOIA request and ultimately denied releasing any of the requested information (Attachment VIII).

**ASSESSMENT:** The NTSB's Bruntingthorpe denial letter explains that releasing the information requested "*would create a safety hazard, which is in clear violation of the agency's mission and mandate.*" However, while some raw data used in the tests may pose a safety hazard, other data could help determine the cause of the accident (see item 6

above) and lead to safety improvements for the flying public. This data should be released to the parties to the investigation and the public so that all of the evidence and analyses from the crash of TWA Flight 800 may be fully investigated.

**ASSESSMENT:** The NTSB's handling of FOIA requests appears to be unlawful. Title 49 requires that the NTSB make the results of its investigative efforts public and the Freedom of Information Act requires that responses to FOIA requests are sent within twenty days. The two-and-a-half-year delay in sending a two-page denial letter in response to FIRO's Bruntingthorpe FOIA request is unacceptable. The NTSB is urged to respond immediately to all FOIA requests more than 20 days old.

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**For Attachments to this petition, see:**

**[http://Flight800.org/FIRO\\_pet\\_attach.pdf](http://Flight800.org/FIRO_pet_attach.pdf)**