

**Interim Report
on the
Crash of TWA Flight 800
and the
Actions of the NTSB and the FBI**

By

Cmdr. William S. Donaldson, USN Ret.

In cooperation with

Associated Retired Aviation Professionals

For The

Committee on Transportation & Infrastructure

Subcommittee on Aviation

**U.S. House of Representatives
Washington, D.C.**

July 17, 1998

Table of Contents

INTRODUCTION.....	4
SUMMARY.....	5
SCOPE	8
WHY THE MECHANICAL FAILURE THEORY IS WRONG	8
PROPERTIES OF THE FUEL & NTSB PROPAGANDA	8
THE NTSB USED MISLEADING FUEL QUANTITIES – Updated 8/18/98.....	10
CENTER WING TANK EXPLOSION TESTING AT BRUNTINGTHORPE.....	11
EYEWITNESS ACCOUNTS POINT TO A MISSILE.....	12
EVIDENCE SUPPORTING A MISSILE.....	16
THE DEBRIS FIELD DATABASE.....	16
AIRCRAFT BREAK-UP SEQUENCE.....	17
DEBRIS DAMAGE PATTERNS	18
<i>Nose Gear Doors.....</i>	18
<i>Seat Locations in the Debris Field.....</i>	19
<i>Vital Evidence, the First Breach of Aircraft Cabin</i>	19
<i>Separation of the Tail Section.....</i>	20
<i>Horizontal Stabilizer & Nose Tire Impact.....</i>	22
<i>Previous Damage to Aircraft #17119.....</i>	23
THE 105MS LOUD SOUND.....	24
FLIGHT DATA RECORDER PROVIDES ABSOLUTE PROOF OF WEAPON AIRBURST.....	24
SHRAPNEL EVIDENCE.....	25
THE UNIVERSAL CAUSE OF DEATH.....	26
FORENSIC EVIDENCE IGNORED	27
HOSTILE OR FRIENDLY FIRE?	27
THE FRIENDLY FIRE THEORY	27
TERRORIST CONNECTIONS	29
EVIDENCE POINTING TO A COVER-UP.....	30
THE SALVAGE OPERATION	30
RECOVERY OF THE FLIGHT DATA RECORDERS.....	30
FINAL DEBRIS COLLECTION.....	32
INVESTIGATION OF RED RESIDUE AND OTHER EXPLOSIVE RESIDUES	33
<i>Professional Conduct of NTSB and FBI Personnel</i>	35
FBI'S BOGUS MISSILE TESTING	36
NTSB INACTION	38
INFLUENCE OF THE GOVERNMENT OVER BOEING & TWA	38
THE CIA VIDEO	38
EXHIBITS.....	40
EXHIBIT 1 - FUEL QUANTITIES AND WHAT THEY TELL US	40
EXHIBIT 2 - FLIGHT DATA SIGNATURE OF A B747 CENTER TANK EXPLOSION	41
EXHIBIT 3 - 1964: THE ROME CENTER TANK EXPLOSION.....	42
EXHIBIT 4 - CENTER WING TANK SCAVENGE PUMP – Updated 8/18/98	43
EXHIBIT 5 - DEBRIS FIELD PLOT.....	44
EXHIBIT 6 - THE AIRCRAFT DESTRUCTION BREAKUP SEQUENCE.....	45

EXHIBIT 7 - WING SKIN FRAGMENTATION	47
EXHIBIT 8 - THE 105 MILLISECOND LOUD SOUND ON THE COCKPIT VOICE RECORDER	49
EXHIBIT 9 - SEAT RESIDUE TEST RESULTS	51
EXHIBIT 10 - ELECTRICAL POWER FAILURE AND INSTRUMENT READINGS	52
EXHIBIT 11 - NTSB IGNORES LAST LINE OF THE FLIGHT DATA RECORDER	54
EXHIBIT 12 - ANALYSIS OF FLIGHT DATA RECORDER (FDR) 12-SECOND LINE	55
EXHIBIT 12A - FLIGHT DATA WORD LOCATION	57
<i>Longitudinal and Vertical Acceleration - LONGACC</i>	57
<i>Rudder</i>	58
<i>Roll</i>	59
<i>Engine Pressure Ratio - EPR</i>	60
<i>Altitude and Airspeed - T/A/S</i>	61
<i>Heading</i>	62
<i>Angle of Attack</i>	63
<i>Elevator</i>	64
<i>Pitch Trim Stabilizer - Added 8/12/98</i>	65
EXHIBIT 13 - MEGADATA SYSTEMS, INC. TRANSPONDER PLOT @ 20:31:13	66
EXHIBIT 14 - ANALYSIS OF MISSILE FIRING POSITION #1	67
EXHIBIT 15 - ANALYSIS OF MISSILE FIRING POSITION #2	68
EXHIBIT 16 - TRIANGULATION OF WITNESS BEARING LINES – Updated 8/12/98	69
EXHIBIT 17 - NTSB SURFACE RADAR TARGETS	70
EXHIBIT 18 - A CRITICAL FBI ASSUMPTION ERROR	71
<i>Actual Guidance Requirements</i>	71
EXHIBIT 19 - DOPPLER LOCATION OF FIRST SHOCKWAVE	73
<i>Airburst Top View</i>	74
<i>Airburst Side View</i>	75
<i>Airburst Front View</i>	75
<i>Overpressure vs. Burst Radius</i>	76
EXHIBIT 20 - LOCATING THE MISSILE AIRBURST	77
<i>Gross Airburst Indicators:</i>	77
<i>Precision Indicators:</i>	78
<i>Estimated Position of Airburst</i>	79
<i>Airburst effect on Lift and Acceleration</i>	80
<i>Airburst Shockwave impingement on wing and engines</i>	81
EXHIBIT 21 - LOCATIONS OF RECOVERED SEATS IN THE DEBRIS FIELD	82
EXHIBIT 22 - LOCATIONS OF RECOVERED BODIES IN THE DEBRIS FIELD	83
EXHIBIT 23 - PHOTOGRAPHS	84
EXHIBIT 24 - EYEWITNESS ACCURACY PROBABILITIES	87
EXHIBIT 25 - EYEWITNESS REPORTS OF TWA FLIGHT 800	88
EXHIBIT 26 - OTHER REPORTED MISSILE SIGHTINGS	97
EXHIBIT 27 - LETTER TO DEPUTY DIRECTOR KALLSTROM	101
EXHIBIT 28 - AVIATION TRAINING AND EXPERIENCE	104
EXHIBIT 29 - AFFIDAVIT OF NAVAL AVIATOR V25283	106
EXHIBIT 30 - STATEMENT OF PAUL J. ANGELIDES – Added 8/6/98	107
EXHIBIT 31 - FBI RESPONSE TO QUESTIONS FROM REP. TRAFFICANT – Added 8/6/98	110
EXHIBIT 32 - 9/24/96 LETTER TO LOUIS J. FREEH	112
EXHIBIT 33 - 9/25/98 LETTER TO LOUIS J. FREEH	115
EXHIBIT 34 - 9/26/98 LETTER TO LOUIS J. FREEH	118
CONCLUSION	121

INTRODUCTION

This report has been produced for the Aviation Subcommittee of the House of Representatives and Accuracy in Media, who has funded some of the expense and research.

Like most Americans, I was very concerned when TWA Flight 800 mysteriously exploded on July 17, 1996 off the coast of Long Island, just two days before the start of the Atlanta Olympics. I followed the developments in the media with interest because it was so unusual for something like this to happen to a Boeing 747 without an obvious external cause. However, having experience as a naval aircraft accident investigator, I was confident that the NTSB would quickly discover the cause. The NTSB plays a vital role in assuring the safety of the commercial airline industry and discovering the causes of past crashes is paramount in preventing future accidents.

It was with some dismay, in April 1997, that I read a letter to the Wall Street Journal by Mr. James Hall, Chairman of the NTSB. In that letter he signaled that the NTSB was leaning toward a determination that TWA FL800 exploded due to some undiscovered mechanical failure, rather than some external cause, such as a bomb or missile. This, despite the known safety properties of modern Jet Fuel and the fact that there were hundreds of eyewitnesses who saw something streaking up from the surface which ended in the explosion of TWA FL800.

As a Naval aviator and crash investigator, I was very familiar with anti-aircraft missiles as well as the properties of Jet-A fuel and did not believe it possible that the fuel would explode spontaneously. In fact, the fuel, which is very similar to regular kerosene, will not easily light with a match, unless the fuel is misted in the atmosphere or aerated by a fuel injector. After reading the Aviation Fuels Handbook and conducting some simple experiments with Jet-A fuel, I became convinced the Center Wing Tank did not explode without some external cause. I wrote to Chairman Hall of my concerns about the course of the investigation and was immediately rebuffed.

This report contains the work product of many very concerned aviation professionals who similarly believe that the NTSB and FBI's handling of this investigation has been less than open and honest. The refusal to allow any eyewitness testimony at the Baltimore Hearings and the controlled agenda which would not allow discussion of anything other than the CWT explosion theory, made it evident that the NTSB and FBI were not interested in the truth. They appeared to only be interested in selling their story to the media and the public. Unfortunately, they seem to have succeeded. However, there are thousands of aviation professionals who do not believe the "official" version of the tragedy and there are hundreds of eyewitnesses on Long Island who know what they saw and do not appreciate the government telling them they were wrong.

I would like to join the former Chairman of the Joint Chiefs of Staff, Admiral Thomas Moorer, in calling for Congressional Hearings into the cause of the crash of TWA Flight 800. I would ask the Congress to read this document with open minds and that they examine objectively the actions of officials in the Executive, Judicial and Transportation Departments of our government. I would further encourage the vigorous application of common sense. If you have 2 or 3 eyewitnesses to a murder, you have a very strong case in a court of law. In this case, there are hundreds of eyewitnesses who are convinced they saw a missile shoot down Flight 800. They deserve to be heard and not be summarily dismissed.

William S. Donaldson, Cmdr. USN Retired

SUMMARY

The preponderance of facts in this report support the following conclusions:

1. That TWA FL800 was intentionally destroyed by a powerful, proximity fused, airbursting, anti-aircraft weapon launched from a position approximately one nautical mile off shore and three nautical miles east of Moriches Inlet, Long Island, New York.
2. That TWA FL800 was also engaged seconds later by a second missile fired from a closer position to the south of TWA FL800's track.
3. That senior FBI Agents were close eyewitnesses to the shoot down. That those FBI Agents believed the aircraft was shot down and that those FBI Agents did not file eyewitness reports, FBI 302 forms.
4. That no evidence has yet been developed that implicates the US military as participants in the loss of TWA FL800.
5. That the United States Justice Department moved on 24 July 1996 to suborn Title 49 U.S. Code by denying access of Parties to the Investigation and NTSB Investigators to eyewitness and real evidence.
6. That the White House's early public statements, made without justification, impugned or ignored eyewitness statements to discredit missile sighting reports.
7. That terrorists communiqués in the Mideast that predicted the time of the attack on the United States, were also treated with contempt as being totally unfounded by White House spokespersons.
8. That United States was under specific threat of terrorist attack against airports and airliners in the New York area in retaliation for the conviction of World Trade Center conspirators.
9. That the Administration was aware that a sighting of a probable unguided missile was made on the evening of 17 November 1995, by two airline crews from Lufthansa and British Airways at altitude near Long Island.
10. That FBI Agents have not specifically identified surface radar targets that were at the geographic points eyewitnesses indicate as the source of the missile fire.
11. That one unidentified surface radar target fled the scene of the shutdown at 30 knots. When TWA FL800 exploded, the contact was only 2.9 nautical miles (nm) away.
12. That the 30-knot surface target avoided visual contact with other surface targets on a heading of 203°T, and did not stop or turn to provide assistance.
13. That FBI counter-terrorism Agents briefed the NTSB Operational Factors Group, including the Parties to the Investigation, in January of 1997, specifically pointing out where a missile was launched.
14. That the FBI is in possession of eyewitness testimony that proves, without doubt, TWA FL800 came under missile attack and refuses to release this information.

15. That the FBI is in possession of high explosive chemical residue evidence on interior and exterior parts first identified by bomb sniffing dogs at Calverton then verified as a specific high explosive by chemical sniffers at Calverton.
16. That the FBI leadership attacked the validity of their own chemical residue findings after using the same FBI Laboratory personnel who were responsible for falsifying laboratory evidence in hundreds of previous cases.
17. That the FBI is in possession of shrapnel removed from the bodies of victims and is holding laboratory findings secret.
18. That the FBI contrived a plausible excuse for the presence of high explosive residue in the aircraft as having been contaminated by bomb sniffing dog training alleged to have been done in St. Louis on 10 June 1996.
19. That the FBI had no answer as to why the dog handler's placement of training samples in the aircraft did not match the locations where the contamination was found on aircraft parts.
20. That the NTSB leadership began a public media campaign in April 1997, despite overwhelming evidence to the contrary, that a center wing tank explosion caused the mishap.
21. That NTSB officials directed a NASA laboratory to immediately stop testing when nitrates (explosive residues) were found on critical early debris.
22. That a TWA employee caught an NTSB official falsifying the Debris Field data record in the placement of aircraft seats.
23. That when evidence of this act was provided to the Chairman of the NTSB (including pictures taken by the NYPD), in a letter written by TWA attorneys, Mr. Hall insisted the TWA employee be removed and that she be targeted for investigation and indictment.
24. That NTSB officials have been relentlessly and persistently eliminating or rewriting findings in the database that can not be explained in their theory.
25. That the NTSB refused to accept the testimony of Captain Mundo, the flight engineer on the flight previous to FL800, who stated that he left ZERO fuel in the center wing tank.
26. That the tail of the aircraft failed shortly after the nose came off, which proved a massive outside force brought down FL800.
27. That the NTSB refuses to release Debris Field information or the Bruntingthorpe explosive test data to the parties of the investigation, because both contain powerful exculpatory evidence refuting a center wing tank initiating event.
28. That because of the results of the Bruntingthorpe tests, the NTSB leadership has refused to allow the CVR Analysis Group to reconvene.
29. That the NTSB leadership, now in possession of redacted eyewitness forms from the FBI, refuses their own investigators access to them.

30. That the NTSB leadership has oddly shown absolutely no interest in eyewitness testimony despite the fact eyewitnesses have information vital to the airborne breakup sequence and placement of floating debris.
31. That there is the appearance the Justice Department delayed seven months to file frivolous criminal charges and arrest Captain Stacey and Mr. & Mrs. Sanders in order to threaten and subdue disgruntled investigators immediately prior to the Baltimore NTSB Public Hearing.
32. That there is an appearance the FBI intentionally tried to arrest the Sanders family while they were outside of New York in order to place them in the limbo of the criminal transportation system.
33. That there is the appearance of prosecutorial misconduct in the Sanders and Stacey cases that include a threatened raid of CBS headquarters in New York and seizure of exculpatory evidence by the FBI as well as the removal of similar evidence from Calverton.
34. That non-government investigators who are members of the Principal Parties cannot go to Calverton without Government escort.
35. That the Government refused the help of professional ocean salvage operators who had equipment on site on 18 July 1996. Even though Weeks Marine and AT&T, who both routinely contracted with the Government in the past, had equipment to support divers, robot submarines, lift and storage capability far superior to the Navy's, already on-site, their assistance was refused.
36. That the CIA contrived with the FBI a knowingly false crash scenario, alleged to have been drawn from eyewitness statements, produced a false video and released it to the mass media.
37. That FBI officials are now refusing to release eyewitness statements back to the eyewitnesses who gave them and that these eyewitnesses are now filing Freedom of Information requests in hope of obtaining their own statements.
38. That the White House, by categorizing the shutdown of TWA FL800 as a potential crime, instead of a political act of war, has been able to keep military experts totally isolated from the case.
39. That the White House has ignored a call for a congressional inquiry by a past Chairman of the Joint Chiefs of Staff.
40. That this report provides "clear and credible evidence" that officials in the Clinton Administration are guilty of criminal wrongdoing and that Attorney General Reno should be compelled to appoint a Special Prosecutor to investigate the actions of the NTSB and FBI in covering up evidence that a missile shot down TWA Flight 800.

SCOPE

This investigation has been intentionally narrowed to focus primarily on physical evidence, witness testimony and the actions of officials in the Justice and Transportation Departments that have had a direct impact on the historical record of the TWA Flight 800 incident. In these areas, our investigators have superb credentials in crash investigation, both in types and numbers of cases solved, as well as bringing 100s of years of military and commercial aviation experience not held by FBI and NTSB staff.

It is the intent of these Associated Professionals to remain focused on the facts until the Congress and the American people fully understand what actually happened in this incident. In pursuing these facts we have elected to concentrate in this Interim Report on circumstances and evidence not previously reported in the media. Sadly, at this second year anniversary of the Federal Investigation, two inexplicable and unprecedented circumstances remain: The Federal Government, to this day, has refused to allow its own trained air crash investigators to interview eyewitnesses, and primarily because of this, the investigation remains dead in the water, stuck in the preliminary stage with no end in sight.

WHY THE MECHANICAL FAILURE THEORY IS WRONG

PROPERTIES OF THE FUEL & NTSB PROPAGANDA

Fact: In the history of aviation, there has never been an in-flight explosion in any Boeing built airliner of a Jet-A Kerosene fuel vapor/air mixture in any tank, caused by mechanical failure.

Fact: In congressional testimony and in statements repeatedly made in the media, the NTSB leadership cited the loss of an Air Force 707 and 3 KC135 air to air tanker aircraft, to fuel tank explosions as examples of mishaps similar to TWA Flight 800. Col. Dougherty's office of the Air Force's safety center says, "there is no record of a 707 loss and all three KC135's were fueled with JP4, a fuel as volatile as automobile gasoline". "Since switching to the military equivalent of FL800's Jet-A fuel the Air Force has not had a problem."

Fact: In Congressional testimony and in statements repeatedly made in the media, the NTSB leadership characterized the only example of a fuel tank fire involving a Jet-A fueled airliner, a Philippines Air 737 in 1990, as a center fuel tank explosion. Video and still photography, taken after the fire was out, show the center wing tank did not explode.

Comment: The undercarriage, wheels and center wing box (tank), were structurally sound enough to carry the load of engines and fuel weight in the wings with the aircraft under tractor tow. The gross fire damage to the cabin appears more indicative of a cabin fire, exacerbated by ignition of emergency oxygen canisters, interior plastics, etc. The Philippine crash investigators could not prove a source of ignition for that fire. Had the Center Wing Tank actually exploded in the manner the NTSB leadership suggests the aircraft would have dropped on the ramp and the tons of fuel in the wing would have immediately been involved.

Fact: The NTSB leadership is on record before Congress and the American people professing "we know little about the flammable properties of Jet-A fuel."

Comment: The above statement is absolutely incredible. It describes the leaders of an industry that puts millions of lives and billions of dollars of equipment at risk everyday as being foolhardy gamblers. What the Chairman should have said was “what we know about Jet-A fuel doesn’t fit our theory.”

Fact: Despite the millions NTSB spent in testing Jet-A Fuel after the TWA FL800 incident, the new data has shown Jet-A Fuel to be safer than previously described in the Aviation Fuels Handbook. In other words, the inference that Jet-A fuel posed some heretofore-unknown risk factor has proven to be totally false.

Fact: The amount of fuel vapor, and therefore the potential flammability in a tank, is primarily dependent on the temperature of the liquid fuel in the tank.

Fact: The B747 center wing fuel tank liquid fuel temperature can be taken any time through the low point drain. When the aircraft is on the ground, samples are taken routinely to check for water/ice or contaminants in a simple two-minute procedure at virtually no cost.

Fact: The NTSB went on record in writing in December of 1996 with multiple safety recommendations that would have cost Billions if implemented by FAA. All were based on the assumptions that B747 lightly fueled center wing tanks are dangerously flammable during warm weather and that FL800’s loss was initiated by a spontaneously exploding tank.

Fact: The NTSB leadership kept all fuel temperature test figures secret until the Baltimore Public Hearing. Not once have they recommended carriers take CWT residual Fuel Temperatures to actually detect a potentially flammable tank, using the simple procedure outlined above, or any other procedure for that matter.

Comment: The NTSB senior leadership’s behavior is an unfortunate paradox in this area and leads to reasonable questions as to motive. If they sincerely believed TWA FL800 was lost due to a hot tank, why didn’t they move to an immediate recommendation to have carriers check tank temperatures? The answer may be they didn’t want the carriers to fully understand how cool those tanks really were.

Fact: In October 1997, this investigator took the temperature of a B747’s center wing tank from an aircraft turning around at JFK for return to Europe. The temperature was 69° F, one degree hotter than ambient air temperature, despite the fact all the air-packs had been running for the hour the aircraft had been on the ground.

Fact: Reliable aircraft maintenance sources at JFK airport have told this investigator that similar NTSB/FBI tests were done at JFK after the procedure outlined above was described in my correspondence to Mr. Hall.

Fact: An FBI Special Agent, familiar with the above fuel tests, has stated to me “NTSB people were very surprised at how cool the fuel temperatures actually were.”

Fact: As of the date of this writing and after the expenditure of scores of millions in the recovery and examination of mishap artifacts, and exhaustive laboratory testing, there has yet to be found one piece of physical evidence that supports the NTSB’s contention that Flight 800 was brought down by an initiating event of an explosion of air and aviation kerosene vapor caused by a mechanical failure in the aircraft’s center wing tank.

Fact: As long ago as April of 1997, Chairman Hall and Dr. Loeb of NTSB began a public relations campaign in the mass media assigning blame on a mechanical (electrically initiated) failure, center tank explosion.

Comment: Prior to TWA Flight 800, there has been no such glaring breach of air crash investigatory procedure, scientific protocol or common sense in the history of the NTSB.

THE NTSB USED MISLEADING FUEL QUANTITIES – Updated 8/18/98

Fact: The core theory of the NTSB is based on the assumption that there was sufficient fuel and fuel volatility in the center wing tank of TWA Flight 800 on takeoff to cause an explosion. That assumption is contravened by the testimony of TWA Captain Albert Mundo, a fully qualified TWA 747 Captain and Flight Engineer. He was the assigned Engineer on the mishap aircraft's non-stop flight from Athens to New York immediately before TWA FL800's takeoff for the return flight to Europe.

Fact: Captain Mundo conveyed his actions and observations clearly to both the NTSB and FBI investigators when he and the aircrew of the previous flight were interviewed three days after FL800's loss. Somehow, Captain Mundo's statement of a near "0" fuel quantity in the center tank was converted to 600 pounds of fuel by NTSB Investigators. (The aircraft gauges can read as much as 300 lbs. when the tank is completely empty and still be within accepted limits for accuracy).

Comment: The Fuel Quantity Indicating System (FQIS) indicated the center wing tank fuel quantity was 300 pounds at takeoff. The cockpit gauges showed 640 pounds when found in the wreckage. This anomaly must be explained by the NTSB before a higher fuel figure is used. See Exhibit 1 on page 40.

Fact: Captain Mundo conveyed both to this investigator and NTSB Investigators that on the prior flight, he depleted the fuel to near zero in the following sequence: (1) Turning on both Center Wing Transfer Pumps transferring center wing tank fuel directly to the fuel manifold until blinking transfer pump lights (indicating low pump output pressure) indicated the tank was almost empty; (2) at that time, he turned off the transfer pumps; and (3) to be sure he got every drop available from the center wing tank, he turned on the Center Wing Scavenge Pump. This has the effect of transferring the little remaining fuel (about 300 lbs.) directly to the number two main tank; (4) he then turned off the scavenge pump after the scavenge pump light came on steady, indicating zero fuel pressure (no fuel left) on the output side of the scavenge pump. There was still some residual fuel left on the bottom of the tank that could not be picked up by the scavenge pump. See the diagram of Scavenge Pump at Exhibit 4 on page 43.

Fact: The fuel in the center wing tank was depleted to near zero about 3 ½ hours into a ten-hour flight. The center wing tank of B747's have 2 large vent channels, one going out each wing venting to the atmosphere. For about 6 hours, at high altitude, the aircraft's center tank was exposed to a ¼ normal atmospheric pressure with a .8 Mach slipstream passing over each wingtip vent mast. This environment generates a strong purging airflow from one wing to the other through the tank anytime the aircraft was not in perfect lateral trim.

Fact: For several flights prior to the incident, the mishap aircraft was missing the number two Canoe (an aerodynamic fairing that fits over the number two-flap track to reduce drag in flight.) The missing part is not required for safety but its absence in flight causes a slight asymmetric drag (pulling left wing back) which is proportional to speed in flight. Captain Mundo had complained about this because the extra drag costs fuel and in-flight it required slight right rudder (lateral) trim to balance the aircraft. FL800 had .72 right rudder trim set when it was lost. This asymmetric condition would further intensify the purging airflow in the mishap aircraft center wing tank. This situation also existed as Flight 800 took off from JFK on its final flight, thereby causing a constant flow of fresh air through the center wing tank as the plane climbed to 13,800 feet.

Fact: At ground level, 2400 cubic feet of air (approximate tank volume) @ 80° F and 70% humidity contains 37 pounds of water vapor. In flight, as the aircraft descends into the warm moist air in the lower atmosphere, the

super chilled tank containing about 2,000 square feet of very cold aluminum interior walls and structure is filled with moist air circulating in from wing vents. Frost and then liquid water condensate form on the inner surface and fuel, eventually going to the bottom of the tank since the water is heavier than fuel.

Comment: 600 lbs. of fuel in the center wing tank is about 7/10 of one percent of its volume. It appears the NTSB preferred erroneous readings (within limits) on the maintenance or cockpit gauges, which enabled the genesis of the Chairman's theory. Captain Mundo's assertion could be verified any time 747s make the Athens to New York crossing! Had the NTSB followed simple logical investigation protocols, by using Captain Mundo's method in flight tests, this investigation might have proceeded on the right track. The NTSB's failure to use this method to determine the actual amount of fuel in the center tank and also determine the amount of water content of that fuel, invalidates any previous testing or simulations of volatility done to date.

It is this investigator's opinion that additional fuel did eventually enter the TWA FL800 center wing tank through the CWT left side body wall (RIB) brought about by the same over pressurization that occurred in the entire left wing tank system by a detonation of a full sized, proximity fused, anti-aircraft warhead. See Exhibit 6 on page 45.

Recommendation: Congress should call Captain Albert Mundo to testify in Public Hearings.

CENTER WING TANK EXPLOSION TESTING AT BRUNTINGTHORPE

Fact: The results of explosive tests conducted on a B747 center wing tank in the United Kingdom at the behest of the NTSB and the FBI are effectively classified secret and being withheld from the Parties to the Investigation and the public.

Fact: Reliable inside sources have informed Cdr. Donaldson of the reason why the explosive tests have been withheld. They state that when the propane-filled center wing tank exploded the damage was so severe that, had the tanks and the cargo containers been installed in the test hull, it would have severely lacerated the water tanks and cargo containers forward of the CWT with shrapnel generated from the tank hardware.

Fact: Not one single piece of center wing shrapnel has been located in Flight 800 baggage containers, water tanks or anywhere forward of the center wing tank.

Fact: Neither the NTSB nor any of its contractors has been able to practically demonstrate a Jet-A kerosene vapor/air explosion.

Fact: In practical ignition tests done with Jet-A fuel, (taken from a 747 center tank after a transatlantic flight) heated to produce vapor in closed containers, this investigator has demonstrated that the vapor will not ignite until the Jet-A fuel is heated to 185°. The igniters produced temperatures in excess of 3,000 degrees and were located 12 inches above the fuel surface.

Fact: Cal Tech scientist, Dr. Sagebiel, testified in the Baltimore Hearings, based on his finding concerning fuel vapor/air data taken from the Evergreen flight-test series at 14,000 feet. Theoretically, in layman's terms, if the tank were ignited at the right place with a very hot ignition source, the burn in the tank might reach a singularly unimpressive 60 pounds per square inch (PSI).

Fact: A 60 PSI burn in the center wing tank is unimpressive because it could not produce the level of destruction and airborne breakup evidenced in the fuselage structure forward of the wing to the nose of the aircraft.

Recommendation: Boeing engineers should testify under oath to Congress on this issue.

EYEWITNESS ACCOUNTS POINT TO A MISSILE

Fact: On 17 July 1996 Special Agent (SA) George Gabriel and another FBI agent from the Mellville offices of Long Island, NY were fishing offshore and were witnesses to the FL800 incident. SA Gabriel described something streaking up, leaving a thin smoke trail, a white flash, then the air crash. He also was heard to state the aircraft had been shot down by a missile.

Fact: Neither SA Gabriel's nor his companion's comments or observations were contained in the list of redacted FBI 302 Forms eventually shown to some of the NTSB Investigators.

Fact: FBI Agents, interviewing eyewitnesses that I interviewed, failed to establish a meaningful database on the objects seen streaking through the sky. Agents did not take GPS fixes or electronically record testimony. FBI Agents did not take bearing lines, ask questions about relative motion of the objects observed, or in some cases even go to the observation point with the witness.

Comment: Because witnesses ashore were stretched along 20 miles or more of sea or bay front, had agents taken bearing lines of where people first saw the object, a missile firing position could have been quickly established or debunked.

Had original testimony been taken properly and recorded, allegations of changed stories could be proven or refuted on their own merit without depending on the availability and the reliability of an FBI 302 Form transcribed by agents devoid of aviation training.

Comment: The FBI seriously jeopardized the investigation with their handling of eyewitness statements and their refusal to allow professional crash investigators to participate in the interviews. There is no possible justification for this action. Even if the FBI believed that a criminal act was involved, the NTSB has the responsibility under Title 49 of the US Code to determine the cause of the crash. Eyewitness observations are the best possible evidence as to the actual aircraft breakup sequence and the FBI has refused to release their detailed notes to the NTSB, even after they have concluded there was "no evidence of a criminal act." Why are these notes considered top secret if there was no criminal act involved?

Fact: In January 1997, the FBI was very much aware that a missile had engaged TWA Flight 800 because of eyewitness testimony and bearing information. At one point, SA Steve Bongart and another Agent provided a briefing to the NTSB Operations Working Group. No one was allowed to record the event or take notes: SA Bongart, a fully qualified military tactical fighter pilot prior to his joining the FBI, showed the group a chart on which the various eyewitness bearing lines were depicted. They converged on a very small area. Pointing to that spot on the chart SA Bongart announced, "that is where the missile came from!"

Fact: At 20:31 on 17 July 1996, Roland Penny, a retired tug boat captain, his wife and several others observed a missile streak up vertically on a 120° magnetic bearing line from their position on a pier on the bay side of Fire Island. A bright white flash followed this observation. The Penny group did not observe the aircraft. The missile launch bearing was 33° left of the aircraft bearing.

Comment: Mr. Penney's distance to the estimated missile launch point was 7,500 yards.

Fact: At 20:31 on 17 July 1996, Vincent Bilodeau and Joseph McBride observed the missile streak skyward estimated on an east bearing at a fast speed from their position on the jetty at Moriches Inlet.

They did not see the aircraft until after the missile exploded and pieces began to fall. Both reported to police that they heard a deep thunderous rumble during the explosion.

Comment: A 090° visual bearing to the missile is 55° left of the actual bearing to the aircraft. Both men heard the missile launch and fly-away noises. Distance to the estimated missile launch point is 6,000 yards or 17 seconds at the speed of sound. Estimated missile time of flight based on their testimony was 20 seconds.

Fact: At 20:31 on 17 July 1996, Richard Goss observed the missile streaking skyward on a 170° magnetic bearing from his position on the north shore of Moriches Bay. The missile climbed vertically from where he first saw it near the horizon. It seemed to level off and fly away south to seaward. Mr. Goss saw the missile turn hard left and explode followed by a second explosion farther to the East. He heard no noises because of ambient loud-speaker music.

Comment: Distance to the estimated launch point 4,200 yards.

Fact: At 20:31 on 17 July 1996, Paul Angelides first observed the missile when he stepped out on his ocean beach patio deck on Dune Road on the barrier beach. The missile was already 50° to 60° high on the horizon. It appeared to level and fly to the south out to sea on a 170° bearing for 15 to 20 seconds dropping to 10° above the horizon. He lost sight momentarily then observed two bright white flashes a few seconds apart going West to East, then about 10 seconds later, farther East, a huge petroleum explosion and a fire ball angling down to the horizon. Some time before the first explosion a sonic boom hit the house, followed by a continuous roll of thunder that lasted 15-20 seconds, followed by two explosions. Then 10 seconds later, another explosion. Many seconds later, two more booms were heard. The initial sound was strong enough to shake the kitchen floor and be felt by his wife.

Mr. Angelides carefully noted the clouds formed by the incident on the horizon. There was a black smoke cloud remaining angling down from the point of the petroleum fireball to the horizon, but also a tubular or cigar shaped white cloud running from the point of the first explosion to the black cloud. He also noted a parabolic projection of cloud that came out of the white cloud top, as if something passed through it climbing, traveling East to West in the opposite direction. Mr. Angelides opined to me, “the aircraft must have been really smoking after the first explosion.

This witness is a professional who was visited only once by the FBI at work after he called the 800 number. He provided them with drawings but they didn't go with him to the house, nor did they respond when he asked to speak to them 6 months later after becoming very concerned at inaccurate news coverage. Mr. Angelides has voiced to me concern for the safety of himself and his family because of what he knows and the government's position on this incident and wishes to remain anonymous at this time. He would, however, be willing to come forward and testify to Congress.

Comment: This eyewitness is important for multiple reasons. Because he was positioned 2,000 yards closer to the probable launch position and exactly on Mr. Goss's visual bearing line to the missile, his replication of line of sight bearing information, agreeing with Goss, magnifies the credibility of both witnesses. His elevation angle and audio observations allow reasonable estimates to be made of missile altitudes, launch position and time of flight. Additionally, the white tubular cloud he saw form after the first explosion is exactly what would be observed when the top left wing skin of TWA FL800 was blown open by a warhead detonation described in detail elsewhere and at Exhibit 7 on page 47. Distance to missile launch point is 2,000 yards, by sound 6 seconds.

Fact: At 20:31 on 17 July 1996, Major Fred Meyer, the pilot in command of an Air National Guard HH60 was 200-300ft above ground level. His copilot was flying a practice precision approach to RW 24 at the Francis Gabreski Airport. Major Meyer first observed a streaking light on a bearing line of 223° T. He described it as transcribing a smooth, slightly descending arc from right to left streaking across the sky terminating in a “hard or high velocity ordinance explosion”, followed by a second “bright white ordinance explosion”, followed some seconds later by a petroleum fireball that grew to a very large dimension.

Comment: Major Meyer is another vital eyewitness who is in possession of unique training and experience. He holds the Distinguished Flying Cross, awarded while serving as a navy combat search and rescue pilot (credited with over 40 saves) flying from warships off the North Vietnam coast. Major Meyer has significant experience in making rescues under fire and has seen virtually every type of anti-aircraft ordinance explosion both in combat and later while towing airborne targets for US Navy warships. Meyer is on record stating, “what I saw that evening, I swear to God, were ordinance explosions.” Major Meyer was 19,000 yards from the estimated missile launch point. It should be clearly noted that Major Meyer most probably picked up the missile after it leveled off. Because it was flying almost directly away from him at supersonic speed toward the horizon, it would appear exactly as he describes in a descending arc, although the missile could actually have been level or even in a slight climb as it approached its target. TWA FL800 was approximately 28,600 yards from the HH60 at missile intercept.

Fact: Captain Baur was Major Meyer’s copilot sitting in the aircraft’s left seat (Helicopter Commanders, unlike fixed wing plane Commanders, occupy the right seat). Captain Baur has been quoted as seeing a streaking object moving from left to right, exploding when hitting an object moving from right to left (TWA 800). He agrees with Meyer on 3 explosions observed.

Comment: Captain Baur’s description of a second missile is of critical importance because it agrees with other witness statements, the debris pattern and number of ordinance explosions. It is vital that Congress call Captain Baur to testify about his observations.

Comment: Because of physiological and psychological predispositions, most people when confronted with a streaking light in the sky, will fixate on the object until it disappears to the detriment of other possible observations such as aircraft or other objects.

Fact: The HH60 helicopter cockpit design imposes significant outside visibility problems for pilots trying to see out the other pilots’ windows.

Comment: It is entirely possible that both pilots could have seen two separate streaking objects without either pilot being capable of seeing his partner’s object until they converged and exploded on the target.

Fact: Sven Faret and Ken Wendell were flying in a private aircraft on a heading of 090° magnetic at 8,500 feet approaching Riverhead Long Island. They reported 50 mile plus visibility above the haze layer that topped out at 6,500 feet. Sven saw a white light steady in the low sky at a two thirty position. His first impression was of aircraft landing lights pointed north, directly at them. Ken saw two lights close together. A short pin flash appeared on the surface, ground or perhaps water, then the white light exploded instantly into a huge fireball. Their visual bearing was 170° magnetic to the white light(s) in the sky.

Comment: These witnesses’ contributions are significant in several ways. They later determined the petroleum clouds to at 7,700 feet by over-flying the area. More importantly, they were over 32,000 yards (16nm) from FL800 when it exploded looking at a steady bright light(s) on a 170° magnetic bearing (the outbound course of the missile). There are several problems with the idea they were confusing a burning

747 with the white light(s) they observed. (1) A kerosene fire would rarely be confused with aircraft landing lights 16nm away, (2) the lights were low, and TWA FL800 was 5,300 feet above the private aircraft's altitude. It was 8,200 feet above their horizon if you believe the CIA video tape, (3) There was no perceived relative motion, although the private aircraft and FL800 were within ten degrees of each others course, TWA FL800 had 285 knot ground speed advantage that would have translated into a slow right to left drift of the light on the horizon, (4) Ken saw two lights!

Fact: Tom Dougherty, walking with friends in the parking lot of Dockers Restaurant on the barrier island, heard a crackling thunder-like noise, followed, after a few more paces, by another thunder-like noise at which time they observed a missile rocketing up on a 223° magnetic bearing and arcing out to sea. After losing sight of the missile, they saw a bright white light or glow above the cloud or haze layer at sea followed by the observations of burning pieces of aircraft "flopping out of the sky."

Comment: This witness is important because he heard what could be described as two distinct launch noises prior to seeing a missile in flight and because of his great distance from the aircraft crash site. Mr. Dougherty was 25,600 yards or 67 seconds by speed of sound from the aircraft explosion point. Contrary to the rather simplistic CIA Video, Mr. Dougherty and his party couldn't have observed anything except smoke if he looked up the first time 67 seconds after the initial event. This testimony also adds credence to the observations of 2 ordinance explosions by other witnesses and two lights or streaks by other witnesses.

Fact: Fred Sherman was operating the Patchoque to Davis Park (Fire Island) ferry about half way across Patchoque Bay in route to Fire Island when he observed TWA FL800 explode. He was 17 ½ nm from the incident. When Mr. Sherman landed at Davis Park on the back side of Fire Island, several boys playing on the dock asked him if he had seen the distress flare go up. He had not. The boys were 15 nm from the incident.

Fact: About 8:29 p.m. on 17 July 1996, Lisa Perry stepped out on the beach front deck of her father's house located on East Walk at Davis Park, 15 nm west of the TWA FL800 incident. Ms. Perry first observed TWA FL800 going east, then after she turned facing south east to gather up some towels, she saw what she described as a missile flying horizontally from north to south over the dunes east of the house. The missile angled up, "on a beeline" for FL800. Mrs. Perry told the FBI she thought it must have hit the aircraft on the left side, behind the wing.

She provided a detailed description and drawing showing the aircraft breakup sequence, including the loss of nose, tail and left wing. Her description of the aircraft rolling right and the break-up into sub-components only a few days after the incident were an uncannily accurate description considering the distance. Mrs. Perry believes the missile was close, but she didn't hear any launch or in-flight sounds. She has excellent eyesight.

Mrs. Perry was very friendly and comfortable with both the male and female FBI Agents she gave her statement to. Both agents had agreed with her that what she had seen had brought down TWA FL800 and that it was a missile. Over the months, Mrs. Perry maintained contact with these agents, who were highly supporting, assuring her that they were working the case and not to pay attention to the news. At the time of Mr. Sanders and Captain Stacey's arrest, Mrs. Perry became very anxious and called her agents. This time they were cool towards her. Telling her there wasn't much else they could do, explaining that an analyst had said she was too far away to have seen what she said she did. Mrs. Perry's magnetic visual bearing line to where she first observed the missile was 084°. The bearing line to where the aircraft went down was 112°M, 28° along the horizon to the right of where she first saw the missile.

EVIDENCE SUPPORTING A MISSILE

THE DEBRIS FIELD DATABASE

Fact: The NTSB has not released the TWA FL800 Debris Field database to the public or to Parties to the Investigation.

Fact: NTSB Chairman Hall, at the Baltimore Hearings, refused to allow US Navy Captain McCord to answer any questions after his presentation about surface and sub-sea operations, debris location or anything about the recovery operation a sea.

Fact: US Navy officers are subject to the Uniform Code of Military Justice. Truthfulness is not just an officer corps tradition, but is rigidly enforced by force of law. Officers caught in lies are separated from the service.

Comment: The Public Hearing on 8 December 1997 was a non-flexible, pre-scripted event. Questions to Captain McCord pertaining to recovery of flight recorders, specific debris locations, etc., by Parties to the Investigation would have to be answered truthfully, whether he was under oath or not. It is doubtful Captain McCord's testimony could be influenced by the NTSB or the FBI. Once again, the question goes to motive. Why wasn't Captain McCord allowed to answer questions?

Recommendation: Call both Captain McCord and Admiral Kristainsen to testify before Congress.

Fact: The Debris Field Database that was current as of December 1996 clearly shows the center wing tank explosion was the last event in the breakup sequence, not the first. See Exhibit 5 on page 44.

Fact: The only reason outside investigators have access to a Debris Database is because investigators inside the investigation lost all faith in the integrity of the investigation and leaked it to them.

Fact: The majority of the actual center wing tank parts, that you would expect to be ejected in a tank explosion, were found 4,000 feet farther east than any other significant aircraft structure.

Comment: Had the aircraft been flying from east to west (from Paris to New York) the distribution of center tank debris would fit the NTSB scenario.

Fact: Early in the debris recovery effort at Calverton, a party investigator identified a piece of right wing leading edge from near the wing root that had been holed from the outside - inward. The investigator had the part checked for explosive residue by the chemical sniffer team and it tested positive. The part was seized by the FBI before it could be entered into the NTSB database and it was flown to the Washington FBI lab. FBI Special Agent Joseph Valiquette has officially claimed that the part tested negative for residue and was returned to Calverton. The NTSB has no record of the part and has been unable to locate it.

Comment: It appears the Debris Field database was not released to the public because the NTSB could not explain the wide separation of debris (18,000' long and 8,000' wide) and the amount of damage to the aircraft that is indicated by the distribution of debris. See Exhibit 5 on page 44.

AIRCRAFT BREAK-UP SEQUENCE

Fact: The NTSB scenario has the entire aircraft less the nose, falling almost vertically when it exploded passing 7,700 feet shedding the left wing. If that scenario were correct, the tail should have evidenced in-flight sooting and surface fire damage (neither occurred), as well as, more severe impact damage than is seen..

Fact: TWA Flight 800 was at 13,800 feet making 380 knots true airspeed, less than 6/10 the speed of sound, when the nose of the aircraft was destroyed, breaking into hundreds of pieces.

Fact: The speed and density altitude of the aircraft alone at breakup could not possibly have supplied the amount of energy required to break up the nose into such small pieces.

Fact: The forward bulkhead (number three spanwise beam) of the center wing tank is 22 feet aft of the piece of the lower left cargo compartment (STA 800) that separated after the cabin integrity was first breached.

Fact: The large aircraft water tanks closest to the center tank and some of the large aircraft cargo containers located between the center wing tank and station 800 (first large piece separation failure) were found virtually undamaged in the Debris Field.

Fact: NTSB metal experts have determined the fuselage bottom skin at station 800 and various other locations on the lower forward fuselage failed in tension (pulled apart) and the top skin on the nose section failed in compression (pushed together). These indications are the opposite of the normal in-flight loading.

Fact: If it were possible for an explosive pressure wave to bypass the huge obstacles in its way (forward spar, forward pressure bulkhead, water tanks and cargo containers) and cause the aircraft skin to fail at station 800, the skin would be bulged outward and would have failed in shear. Neither are in evidence.

Fact: Prior to the time of the incident, TWA FL800's airframe was under normal aerodynamic loads. The wings and vertical and horizontal stabilizers were all holding the aircraft rigidly stable on the three axes. Only deflection of flight controls or lift devices would normally cause the aircraft to leave its previous flight path. Any outside force acting to push the aircraft away from its three dynamically stable flight axes will be instantly countered by a stronger aerodynamic counter force, restoring the aircraft to its previous path.

Comment: The dynamic forces described above are very strong. The 747 in flight is much like a locomotive engine on a track. Most people can visualize that it would take a force much like another train striking at an angle to dislodge the first engine. The aircraft, however, is not made of iron & steel, its sub-components will structurally fail long before the plane is pushed very far off its flight path by an external force.

Fact: Modern, full sized, anti-aircraft missiles use these very characteristics of aerodynamic stability of the large aircraft to ensure the target's destruction. The weapons are designed not to hit the target, but to fly close and with a proximity fuse, detonate a blast warhead. The blast wave strikes a blow, somewhere on the aircraft structure, that is resisted by tons of in-flight restorative dynamic forces supplied by wings or stabilizers. If the warhead detonates in lethal range, the airframe is whiplashed between two extreme forces and is destroyed.

Comment: The best way to illustrate this concept is to imagine a smaller passenger jet parked on the ramp with its brakes off. If this jet were to be hit by a slow moving truck perpendicular to the side of its nose, the jet might not suffer much damage, if the nose gear pivoted and the plane turned with the blow. Now imagine the same situation with the plane's tail and wings locked in an immobile vice! When the same force is applied, the fuselage skin will fail in tension on the side of the blow and in compression on the opposite side. Even more noteworthy, if the blow were strong enough, the fuselage would fail all the way back to the wings in the same manner, as did Flight 800. For further analysis, see Exhibit 6 on page 45.

Fact: The nose of TWA FL800, forward of the wings, was shattered into thousands of pieces by a huge force striking low forward on the left side. Large pieces came off immediately in compression high on the right side. Large pieces came off immediately in tension low on the left side.

DEBRIS DAMAGE PATTERNS

Nose Gear Doors

Fact: The nose gear doors were forced into the gear well before the aircraft hit the water. See NTSB Exhibit 7A. Three of the four nose gear doors separated from the aircraft in-flight and landed in the early debris field, well away from the nose wreckage.

Fact: A part of one nose wheel was recovered 5,200 feet short of where the wheel well landed. The nose gear door hinges failed by being pushed into the wheel well bay to the point of failure.

Fact: The nose gear assembly was pushed up beyond its normal travel, a hydraulic actuating cylinder was found ruptured. Hydraulic cylinders are very tough, routinely handling 3,000 PSI hydraulic fluid.

Fact: The nose wheels of a 747 in flight are tucked up 62 feet forward of the front wall of the center wing tank. It is literally impossible for a center wing tank explosion of any magnitude to produce the damage in evidence on these components.

Fact: The landing gear on a B747 are extremely tough. They can be extended at speeds up to 320 knots Indicated Air Speed (IAS), or .82 mach, and can be raised at speeds up to 270 knots IAS, or .82mach. Flight 800's airspeed was 298 IAS and .6 mach! This means that even if the Captain had intentionally lowered the landing gear in flight @ 13,800 feet, nothing in the landing gear or gear door assemblies would have failed.

Comment: The NTSB's claim that these doors were torn from the aircraft by the slipstream is not supported by its design, the damage pattern on the doors or their location in the debris field.

Fact: Item CO91 "Part of Tire" was found in the early Red Zone @ 40 38 26.58 / 72 39 06.48, is listed in the NTSB Debris Field database printed on 13 November 1996. (Red Zone is the early debris field, first parts to leave the aircraft, Yellow Zone is the Cockpit debris and Green Zone is the remainder of the aircraft, 18,000 feet from the first debris).

Fact: Item A206 "RH Nose Gear wheel door" was found in the Red Zone @ 40 38 35.92 / 72 38 44.95 on 6 Aug 1996. Item B002 "RH Nose Wheel and tire" was found in the Yellow Zone @ 40 39 03 / 72 38 32.

Fact: Item B297 "Nose Wheel FS 340 LH Side" was found in the Yellow Zone @ 40 39 04.7 / 72 38 26.8 on Aug 8 1996.

Fact: Item B231 (LF11H) nose gear wheel well FWD bulkhead w/actuator was found in the Yellow Zone @ 40 39 04.30 / 72 38 27 on Aug 7 1996.

Fact: The following is quoted from the Systems Group Chairman's Factual Report, NTSB docket SA 516, Exhibit no 9A, page 129, par. 3, "The nose landing gear was reported to have been found floating with the tires attached, although one had been loose and was not on the Landing gear when examined. When examined, neither of the nose gear landing tires were found burst. Each tire was found with a note. The tires had been deflated after recovery. One of the nose tires had shallow burn damage to the rubber."

Comment: Notice the Chairman's, "was reported to" Statement is at direct variance with the recovery database pertaining to what condition and where the nose gear was found and statements in NTSB Exhibit 7A. Nowhere in the Chairman's report is an explanation for the "part of tire" found in the earliest red Debris Field. In layman's terms, the entire nose gear area was blown apart. Six major components fell along a path 5,200 feet long and 2,000 feet wide. The lack of discussion or even acknowledgment of these facts, by the NTSB or FBI is not understandable. See Exhibit 5, Debris Field on page 44.

Seat Locations in the Debris Field

Fact: The armrest for the last two seats aft on the right side, from row 54, seat 8/10, was found in the same early Debris Field as the aircraft cockpit @ 40 39'04"N, 71 38'27"W. The armrest for Row 45 Seat 8 and the seat 45-10 were found at the same location. Row 45 is nine rows forward of the tail.

Fact: The above geographic location, where the seat was found, is almost precisely one nautical mile southwest of the wing/fuselage impact point, which corroborates with Captain Adams description of where he encountered the huge floating piece of vertical stabilizer. Seat row 54 is normally 150 feet behind the cockpit and located under the vertical stabilizer.

Fact: Horizontal stabilizer fairings were found in the Red Zone.

Fact: The aft seat and tail debris locations, coupled with the stabilizer's clean (no soot) condition, coupled with eyewitness accounts, prove the rear fuselage integrity was breached (aft most seats left the aircraft) and the vertical stabilizer failed some time after the first warhead detonation at 13,800 feet, but before the petroleum fireball at 7,700 feet.

Vital Evidence, the First Breach of Aircraft Cabin

Fact: The first body to fall into the Debris Field was a passenger seated in row 10, seat 2. That person was found over 3,000 feet closer to JFK airport than the first aircraft part, CW504.

Fact: Row 10 is located at frame 615, 43 feet back from the tip of the nose. Seat 10-2 is on the left side.

Fact: Early media reports from confidential sources indicated that passengers sitting on the left side, forward, were hit with shrapnel that evidenced high velocity gas pitting. CNN 29 July 1996.

Fact: Frame 615, left side, is at the leading edge of the high energy damage, low left side, forward fuselage.

Fact: NTSB Docket SA-516 Exhibit 2A, the Operational Factors Factual Report, page 41, indicates the cabin pressure differential (between inside/outside) at the time of the mishap was 3.5 pounds per square inch.

Fact: The shock wave from a 90 lb. Blast warhead, bursting from proximity fusing, 20 feet from the fuselage, would deliver a 30,000 pound hammer blow to each square yard of skin. At 30 feet away, frame 615 would still be subjected to a 4 ½ ton overload per square yard of skin.

Comment: Modern blast warhead weapons do not rely on fragmentation to kill a target, consequently they are designed without steel or heavy metal cases in order to maximize the high explosive payload. Aluminum alloy casings fragment into very small pieces that decelerate in air rapidly and would be nearly indistinguishable from small aircraft fragments. The aluminum alloys used in missile designs are very close or identical to those used in aircraft.

Fact: The NTSB has a large pile of very small aluminum parts that remain unidentified.

Fact: Aircraft Station 615 and seat 10-2 are 35 feet forward of the leading edge of the 747 wing tank.

Comment: The loss of the first victim ejected through a breach in the pressure hull at aircraft Station 615, low on the left side, proves a center wing explosion could not have initiated this incident. That person, along with objects from the interior cabin, clothing, etc. hit the surface as much as 3,000 feet before CW504, the first significant metal fragment from the aircraft.

Separation of the Tail Section

Fact: A large section of the Tail (horizontal & vertical tailpieces) was found floating without evidence of fire damage or sooting.

Fact: The NTSB scenario would have us believe that the fuselage aft of the center tank was intact until water impact.

Comment: Considering the huge fireball seen plunging to the sea by eyewitnesses, the gross fire damage and sooting on the fuselage, aft of the wing, it would appear the tail separated prior to the fire.

Fact: In the early recovery effort multiple seats from the aft most section of the aircraft were found in the Red Zone (early Debris Field).

Comment: When considering these seats as forensic evidence, it is a logical assumption that either the cabin integrity aft was lost much earlier than previously reported (tail off or cabin ruptured open) or the multiple seat tags were in error.

Fact: NTSB officials deliberately falsified this evidence by changing the database to reflect the seats as being found in the Green Zone.

Fact: When TWA employee Linda Kuntz, a member of the Cabin Interior Group investigation team, confronted her NTSB superior as to why such a change was made, the paraphrased answer was, “we wouldn’t have been able to explain it to the Chairman (Hall).”

Fact: When Linda Kuntz reported the falsification of evidence to the TWA attorneys, they promptly reported the problem by letter to Chairman Hall explaining Ms. Kuntz has color photographs that proved the sequence of events. Those involved were surprised to find that instead of taking appropriate remedial action to vouchsafe the integrity of the database, Mr. Hall turned Ms. Kuntz’s name over to the FBI for

investigation because she had taken pictures! Ms. Kuntz was removed from the investigation and threatened with indictment.

Comment: Inside investigators believe Ms. Kuntz was not indicted by the US Attorney's office in New York because they did not have the courage to indict the two New York Police Officers who helped her set-up their camera and establish the evidence.

Fact: On the night of the crash, about 9:30 p.m., Mr. Roland Penny along with others aboard his 40' boat was searching for survivors and came upon a large Scallop boat attempting to winch aboard a huge section of the 747's tail that was floating. By 11:30 p.m., when Mr. Penny re-encountered the Scallop boat, most of the wreckage was on deck, a piece estimated to be 40' high.

Fact: Mr. Penny encountered this event upwind (southwest) of the surface fire of burning jet fuel.

Comment: Had the tail section been intact with the burning fuselage on impact and separated from the main debris and floated to the surface, several things would have been evident: (1) it would have surfaced in the fire; (2) it would have been sooted; (3) it would have shown extensive water impact damage. None of those things are in evidence.

Fact: One of the strongest pieces of metal in the entire B747 aircraft is the very large (about 3 ½ inches in diameter) Jack Screw that drives the tail plane up and down in flight. It was found snapped in two like a twig.

Fact: Captain Randy Adams of the fishing vessel B.J. O'Neil, out of Seaford, Virginia, was trawling for scallops about 8 miles ESE of TWA FL800's fuselage and wing impact area. He was in his galley aft of the pilot house when something caught his eye. He looked out and observed the front ¾ of the aircraft on fire and tumbling end over end. The tail, estimated as the back ¼ of the aircraft, was seen fluttering down separately with no fire.

Comment: Captain Adams is under the impression he saw the aircraft almost immediately after it exploded because the black smoke trail started in the sky just about where he first observed the event. He also observed what he thought was an exhaust or smoke trail that seemed to cross the aircraft's flight path, but couldn't determine the direction of travel. Captain Adams was dredging in an off shore direction and was approximately 25,000 yards from the estimated missile launch point.

Fact: Captain Adams proceeded to the crash scene to render assistance in the search for survivors. About one mile southwest of the upwind leading edge of the fire spreading out from the wing & fuselage impact area, Captain Adams encountered a huge floating piece of the tail he had seen flutter down. Moving on, he encountered and recovered the body of a mid twenties male who had suffered a massive back and head wound.

Fact: Surface winds were estimated from 240° at 4 knots, the sea current was estimated by the Navy coming from 090° at ½ knot. Jet-A fuel has about 80% the density of sea water so it will float on the moving surface riding with the wind and current while spreading from its center point at a rate proportional to the thickness of the fuel layer.

Comment: The wind and the current were acting almost in opposition on both the spreading fuel fire and the floating tail. In a no-wind situation and a very large fuel spill, the fire would eventually overrun the tail. When light wind is considered, the tail surface projecting high above the surface, would be expected to push the tail at the fire faster than the fire away from the tail. Accordingly, when Captain Adams

encountered the floating tail, an estimated ¾ hour after it hit the surface, it is entirely likely the tail's actual impact point was at least a mile short of the main fuselage & wing sections.

Comment: If the tail fell a mile short of the main wreckage, it would be about abeam, almost on top of the nose and cockpit section, which were also blasted apart, not whole as depicted in the CIA & NTSB videos. This would also explain aft section seats located in the Red Zone as well as horizontal stabilizer fairings found in the same field.

Fact: Although the FBI interviewed Captain Adams early in the investigation and the floating tail was one of the first pieces of debris recovered, its position was not entered into the working database as of Nov/Dec 1996.

Fact: The following is a quote from petty officer Ken Seebeck, Commanding the first 41 ft. Coast Guard boat to arrive at the crash scene, "we saw what we thought was the big tail section to the south of the wall of flames. There was a pretty good gap there, so we started approaching the flames, and my intentions were to go in between the flames and the tail section, I thought maybe there would be some people there." Seebeck's boat propellers became entangled in wire debris and the engines stalled. What little current there was began drawing them into the flames (1/2 knot east). Petty Officer Seebeck managed to restart engines and move away.

Comment: These quotes were reported on world-wide media. The idea that the NTSB leadership has ignored these and dozens of other witnesses sightings that could immediately place the locations of the tail pieces that are so vital to understanding FL800's break-up sequence, is unconscionable.

Horizontal Stabilizer & Nose Tire Impact

Fact: Page 33 of NTSB Exhibit 7A indicates the horizontal stabilizer fractured in six large sections, with the skin failing in compression on top and tension on bottom.

Comment: This means the horizontal stabilizer failed in overload from a force pushing up from below the stabilizer.

Fact: Horizontal stabilizers are normally loaded the opposite of the wing in flight. In other words, the tail is always pushing down, not up.

Fact: Page 33, of the above report, pertaining to the horizontal stabilizer, "the leading edge was severely damaged". Some of the items found in the stabilizer are sections of Seat Track, a Stator Blade from turbine sections (of engines) and glitter.

Fact: The engine stator blade cited in the above quote penetrated the upper aft surface of a piece of the right horizontal stabilizer, which had separated from the tail assembly. This same piece of stabilizer, quoting page 34, "the outboard leading edge was crushed aft and outboard. This area exhibited black rub marks on the leading edge skin in the lateral direction."

Fact: The facts stated above are critical clues as to what happened to FL800 in the breakup sequence. There are no plausible explanations as to how an engine blade could penetrate the top rear skin of the horizontal stabilizer at water impact or in normal flight conditions, if the stabilizer was intact.

Fact: Engine turbine stator blades are contained near the center or heart of the engine, which is surrounded by a very strong engine case. The engine case is specifically designed to internally contain these blades if

they break loose during catastrophic engine failure. The most common engine failure that breaks loose stator blades is catastrophic failure due to engine ingestion of foreign objects. When engines are running, ingestion of metal objects at the intake may cause compressor blade failure which, in turn, causes turbine and turbine stator blade failure going aft in the engine, until these parts are ejected, often at great velocity, out of the tail pipe area.

Fact: This piece of outboard right horizontal stabilizer is normally situated above and well behind engines 3 and 4 on the right side. In order for the blade to impact the top aft edge of the stabilizer, two preconditions must exist: (1) Engine three or four must first suffer catastrophic engine failure; and (2) This piece of horizontal stabilizer must separate from the empennage leading edge down, so as to position itself to receive the blade.

Fact: The outboard most 12 inches of this same piece of right horizontal stabilizer leading edge was crushed aft eight inches and outboard with black “witness marks” on the crushed skin.

Fact: Impact of an aircraft tire, or piece of tire, would produce the damage cited above.

Fact: NTSB docket number SA 516, exhibit 7A, page 38, And Par. 6.2.1, “ Three out of four nose landing gear doors were found in the Red Debris area. ...the right tire, wheel and outer hub separated from the nose gear assembly.”

Fact: One half of an aircraft tire was found in the very early Debris Field. There is a black witness-mark, halfway back, in line, on the fuselage above the R-3 door!

Fact: In order for an aircraft nose tire to hit the horizontal stabilizer where it did, the aircraft must yaw right approximately 6 degrees and pitch up to 8.5 degrees. The 12-second line of the Digital Flight Data Recorder (DFDR) (now removed from the database by NTSB) depicts the nose pitched up to 8.3 degrees.

Comment: The apparent lack of interest as to what the black mark was on the right horizontal stabilizer & fuselage by NTSB and FBI investigators is of particular concern. As of this date, no one has taken samples of the black marks for testing.

Comment: It is highly probable that the missile warhead overpressure not only ejected the right nose tire out of the nose gear well, but also provided metal debris from the wheel well to be ingested by the number 3 engine. Foreign object damage of the number three engine is the most probable source of the turbine stator blade that impacted the top of the right horizontal stabilizer. The organized and systematic denial of the importance of the nose gear evidence, by the leadership of the NTSB, is unprecedented.

Recommendation: Congress seize the subject named parts and have them analyzed by both government and independent laboratories for tire material on the stabilizer, and stabilizer leading edge material on the tire.

Previous Damage to Aircraft #17119

Fact: On Good Friday, 1995, the B747 destined to become TWA FL800 (aircraft 17119) was hit by lightning on approach to Rome Airport. The right wing suffered significant metal damage requiring about 25 square feet of right wing tip skin to be replaced. The lightning caused the surge tank fire protection bottles to fire (ironically, a wing tip safety system almost unique to TWA Aircraft designed to stop fire from reaching tanks through wing tip vents.) Lightning also coursed down through the wing and blew the circuit breakers to the wheel brake overheat warning system.

Fact: The NTSB had not discovered this fact until Captain Mundo pointed it out to them. They also had assumed any soot in the right wing vent was from the TWA crash.

Fact: The surge tank protector bottles (4 in each wing tip) did not fire in the TWA FL800 incident. This indicates that either the flash from a fire didn't reach the wing tip or electrical wiring was severed to the bottles before fire reached the surge tank. The surge tank system is powered any time the aircraft battery is on line.

Comment: In the above incident approaching Rome, lightning traversed the #4 reserve tank, the #4 main tank, the #3 main tank and the center wing tank. All were empty or near empty at the time and nothing happened. Lightning represents a multi-thousand fold ignition potential over any conceivable electrical source from aircraft power.

Comment: It is also troubling that the NTSB Investigators (especially considering their one in a billion CWT mechanical failure theory) didn't bother to even screen maintenance records for unique problems back 15 months.

THE 105MS LOUD SOUND

Fact: The blast effect of an anti-aircraft warhead bursting at flight 800's altitude is limited by the speed of sound in the atmosphere, about 1,088 feet per second, or 1.09 feet per millisecond.

Fact: The speed of sound in the various metal components of a Boeing 747 range from 10,000 fps to 16,000 fps (aluminum to steel).

Fact: A reasonable assumption can be made that warhead shock wave impingement on any metal surface of a B747 would travel through the airframe at 10,000 fps and would register on the cockpit voice recorder as a loud sound.

Fact: NTSB documents indicate a very loud sound was registered on the cockpit voice recorder of 105 milliseconds duration, then the recording stopped.

Fact: From NTSB Exhibit 5a: "An acoustic expert in the area of explosions who was at the meeting noted that the sound of the explosion as noted in witness accounts is not consistent with an explosion only of the center fuel tank. The data he has analyzed indicates that the explosive force, as determined by witness accounts, is equivalent to about 1 ton of TNT. This is many times more than what would be expected in only a center fuel tank explosion. An explosion external to the airplane is theorized."

Comment: The 105ms loud sound is evidence of an anti-aircraft weapon airburst. See Exhibit 8 on page 49.

FLIGHT DATA RECORDER PROVIDES ABSOLUTE PROOF OF WEAPON AIRBURST

Fact: The NTSB is on record insisting power failed in the aircraft at 20:31:12.26, therefore the last data line recorded at 20:31:12 could not be successfully recorded to tape on the digital flight data recorder because of inherent delays in the recorder design.

Fact: There are four forensic pieces of physical evidence that prove, beyond doubt, that power was actually on until 20:31.13.15.

Fact: The pilot and copilot's electrically driven altimeters were found in cockpit debris, reading 13,800 feet and 13,820 feet. TWA FL800 could not have achieved those altitude readings prior to 20:31:13.15.

Fact: Mega Data System, Inc. of Long Island NY maintains a passive aircraft transponder receiver system electronically synchronized to Islip New York ASR8 radar. They provide precision, real time, tracking services for commercial airlines. Mega Data Systems received a transponder transmission from FL800 at 20:31:13 showing a true airspeed of 380 kts and an altitude of 13,800 ft., agreeing with the pilot's altimeter.

Fact: The digital flight data recording itself shows power was on until 20:31:13. The early data words were properly synced, check stroked and transcribed on tape on the 20:31:12 line. All clearly depict a catastrophic overpressure event struck the aircraft from the low left. Altitude, airspeed, angle of attack, G force, Pitch and Roll sensors all agree. Random or garbled numbers would not agree and also, these numbers could not have been from another flight previously recorded because the aircraft would have crashed. See Captain Howard Mann's analysis at Exhibit 12 on page 55.

Comment: Any investigator seriously looking for evidence of outside weapon engagement would check the altimeter and airspeed readings for overpressure and the angle of attack for blast direction. These indicators are not only present but are of the magnitude and force to explain how the nose was destroyed and fits exactly with all other forensic evidence.

Fact: The first version of the digital readout of the flight data recorder the NTSB published on the Internet was correct. It showed data record ending at the beginning of the 13 second line. The second version, handed to reporters at the Baltimore Hearings, had the 12-second line panned out. The third version on the Internet, altered April 8, 1998, has now totally deleted the 12-second line.

Comment: In layman's terms, what the NTSB has done would be equivalent to a prosecutor refusing to allow a security video tape into evidence which clearly depicted a bludgeoning murder of a mini-mart employee because the prosecutor's theory (not the defense attorneys' theory) was the victim slipped on a wet floor. When challenged, he would insist the video camera failed before the incident and the video of a murder was that of a previous unreported crime.

Recommendation: Congress should require sworn testimony from all that would promote the current NTSB theory and provide industry experts to reexamine both flight recorders rigorously.

SHRAPNEL EVIDENCE

Fact: Dr. Wetli, the medical examiner on Long Island, has stated, "the universal cause of death of the people aboard TWA Flight 800 was cranial cervical ligament separation."

Fact: Dr. Wetli is on record with congressional staff stating, "the victims x-rays light up like Christmas Trees from metal contamination."

Fact: Dr. Wetli is on record using the word "shrapnel", during his testimony at the NTSB Public Hearings in Baltimore, while describing the victims. FBI Agents stood by and collected the metal fragments as autopsies were being done by Dr. Wetli's staff.

Comment: No one at Baltimore seemed to notice, Mr. Hall was far more concerned as to when Dr. Wetli might be able to provide death certificates to surviving family members.

Fact: On 29 July, 1996, CNN reported “Sources within the law enforcement community report that metal fragments removed from FL800 victims bodies had evidence of high velocity gas pitting” (from bomb or missile casings?). Those passengers were sitting on the left side forward.

Fact: Only one-dimensional x-rays were taken of the bodies. Depth of fragment penetration cannot be determined on the one-dimensional x-rays.

Fact: Dr. Wetli has stated to this investigator there was unusual (severe) wounding and deep fragment penetrations of First Class passengers. One First Class passenger was found to have a particularly deep chest penetration by a large piece of metal from a seat armrest.

Fact: There are no rational theories as to how a seat armrest can be broken up and a piece propelled at high velocity without accepting the notion that high velocity metal passed through the First Class cabin.

Fact: When Dr. Wetli inquired as to what FBI Lab reports showed on “shrapnel” removed from victims, he was told all the metal was determined to be from aircraft parts, therefore not evidence of a criminal act.

Fact: Although the FBI had massive presence on Long Island and were ostensibly intensely looking for forensic evidence of a crime, they did not require 3 dimensional x-rays or attempt to correlate clothing penetrations to body wounds.

Comment: This depressed initiative by FBI Agents failing to capture and preserve vital physical evidence from the autopsies when compared to the maniac reaction then displayed around the country in pursuit of a few square inches of aircraft seat fabric being examined by outside people, appears schizophrenic. In other words, paranoia about the possible existence of exculpatory evidence in the hands of civilians was of far more concern than establishing and preserving an accurate real evidence file.

THE UNIVERSAL CAUSE OF DEATH

Fact: The almost instantaneous yaw to the right and pitch up to 8.5° discovered by this investigator when reviewing NTSB Data and confirmed by the DFDR (discussed elsewhere in this report) that initiated FL800’s breakup sequence, is also a probable cause of the fatal neck injuries - cranial cervical spine separation.

Fact: A person sitting forward in First Class would be displaced about 17 feet right and 12 feet up by the yaw and pitch induced by the detonation. These displacements in space would be of no consequence if caused by turbulence acting over a period of a second or more. However, in FL800’s case, the blast wave passes over the fuselage imparting its entire force vector up and right in about 10 milliseconds or 1/100 second.

Fact: The passengers described above would be subjected to an instantaneous 60g transverse acceleration force. In other words, for a fraction of a second the normal person’s head weighing 11 pounds, would become 660 pounds, snapping the head down and left. Almost instantly, the aircraft’s huge vertical and horizontal stabilizers would attempt to abruptly bring the aircraft back to its original flight path. This would cause a snap back acceleration in the opposite direction, compounding the damage to both the aircraft and the victims.

Fact: Passengers in the tail section would be subject to a force vector acting in the opposite directions, head snapping up and right relative to the cabin interior.

Fact: The first passenger that came from the aircraft was assigned to seat 10-2, left side, aircraft station 615. If the pressure bulkhead and aircraft skin opened first at that point from the warhead blast, the cabin pressure differential would be greatly augmented by the 60g (gravity) acceleration pushing that victim directly out the seam. A 160 pound individual would get the equivalent of a 9,600 pound ejection push!

FORENSIC EVIDENCE IGNORED

Fact: “Evidence of fire was found..... in a fuel tank located outboard of engine 4 on the right wing (#4 reserve)material from that fuel tank was found more than a mile down tract from initial debris.”¹

Fact: “The electrically driven altimeters of the Captain and First Officer were found to display 13,800 feet and 13,820“² when power went off.

Fact: Paraphrasing paragraph 4³, The left wing tanks 1R, 1M, 2M, contained 82,800 pounds of fuel and the right wing 3M, 4M, & 4R contained 90,700 pounds of fuel, a 7,900 pound difference! The center wing tank showed 640 pounds which was 290 pounds more than the estimated 350 pounds in the tank on take off.

Comment: Regardless of the actual quantity in the tank at takeoff, the almost doubling of the CWT fuel quantity indications at electrical power-off also reinforces the notion that hydraulic ram from a warhead detonation breached the left side body wall between number 2 main and the center wing tank and sprayed fuel into the center wing tank. See Exhibit 1 on page 40.

Fact: There is an unexplained loud sound lasting 105 milliseconds on the cockpit voice recorder at the end of the tape. A sound which could not be duplicated by the Bruntingthorpe tests when they exploded a center wing tank.

Fact: At TWA FL800’s velocity (633 ft/sec), an airbursting, anti-aircraft warhead shock wave striking the aircraft first, low left forward, between aircraft stations 667-740, will produce a 105 millisecond loud sound in the cockpit. See Exhibit 8 on page 49.

Fact: Strong forensic evidence exists that the cabin integrity was lost first at aircraft station 615, left side. A passenger sitting in row 10, seat 2, landed in the first Debris Field, well before any aircraft structure. Row 10, seat 2 is immediately above the left side baggage compartment at aircraft Station 615.

HOSTILE OR FRIENDLY FIRE?

THE FRIENDLY FIRE THEORY

The James Sanders book, “The Downing of Flight 800” describes a complex military exercise gone awry, where missiles fired from US combatants during an over the horizon test, accidentally bring down the aircraft. Press releases and comments by Pierre Sallinger asserted a similar accidental engagement by U.S. Forces.

Additionally, random interviews with Long Islanders that were close to the incident leave one with the impression a majority firmly believe US military forces must have been responsible. Those suspicions

¹ Systems Group Chairman’s Factual report, NTSB docket SA 516, Exhibit no 9A, page 5, par. 2.

² Systems Group Chairman’s Factual report, NTSB docket SA 516, Exhibit no 9A, page 6, par. 3.

³ Systems Group Chairman’s Factual report, NTSB docket SA 516, Exhibit no 9A, page 6, par. 4.

were soundly reinforced when the White House ordered in the Navy instead of Commercial sources to salvage the aircraft and the Justice Department flooded the island with FBI Agents.

This investigator is intimately familiar with Navy live fire missile exercises, both air-to-air as well as surface-to-air. I have interviewed the Navy Chief of Staff who runs Atlantic exercises and warning areas as well as the officer who maintains operational control and radar coverage in those areas. Neither records of Operations Areas schedules nor Navy ships logs support these theories.

Simply put, there was no large Live-Fire exercise scheduled or conducted in warning areas adjacent to Long Island on 17 July 1996. It is the discovery of that fact which turned the media against a missile possibility. When the media's own Pierre Sallinger linked missile downing to Friendly Fire and Friendly Fire was not discovered by the media, the missile theory crashed with it.

There are three unexplained circumstances listed in ascending order of importance that point to possible Military involvement:

1. Drone pieces. A fax from a target drone manufacturer intended for the FBI was misrouted to a civilian that revealed that possible remains of a target drone were found in the debris field. This hardware was not positively identified. However, even if it was Drone hardware, it should not be assumed to have participated in the event. The FBI's apparent attempt to identify the metal debris would suggest no prior knowledge of Drone involvement and the close proximity to military Warning Areas would explain the presence of Drone artifacts.
2. A Surface Combatant Sighting was made by a former Naval Flight Officer from the beach at Gilgo Park located about 35 miles west of the incident. He reported the vessel was 3 miles or so off shore heading West about 4 hours before the shutdown. Eyewitness Lisa Perry believes she saw a warship close to shore moving slowly East about 2 hours before the shutdown from her beach front vantage point about 15 NM West of the incident.
3. Islip's ASR Eight Radar recorded a 30 knot surface target only 2.9 nautical miles from TWA FL800 when it exploded. This is further complicated when radar antenna height, over the horizon, calculations are made, they indicate (during normal atmospheric) that this radar contact would have to be at least 58 feet tall to be recorded by Islip's radar.

The identity of this vessel is critical. It is at the firing point of missile # 2. As Flight 800 crashed, the track of this vessel continued off shore at 30 knots, avoiding the visual range of all other surface contacts until it went off the Islip radar. This is a normal military tactic and not the actions of someone who just witnessed a plane crash and who would be compelled by the Law of the Sea and human compassion to stop and help.

Could the warship seen at Gilgo Park have repositioned to the 30-knot surface contact's position prior to the shutdown? The answer is yes. Is there any public record of a US Navy ship in that position? The answer is no. Could it have repositioned to the nearest reported US surface warship position at 20:31? The answer is no.

In the opinion of this investigator, the shutdown of TWA Flight 800 appears to be a deliberate act. Based on the in-shore firing position of missile #1 and the shallow water (60 feet) at that location, a warship or surfaced submarine missile launching would have been seen by hundreds of people.

However, because of the missile firing geometry observed by witnesses, one possible military scenario has not been ruled out. If unaccounted for in-shore surface combatant patrol sightings are valid, it would indicate the possibility that the Navy was in a classified Air Defense posture patrolling in the area of previous missile launchings or sightings.

Is it possible the 30-knot surface target was such a combatant attempting to intercept a hostile shot? The answer is yes. Missile #2 was fired about 13 seconds after missile #1 and both arrived at FL800 within 1 ½ to 3 seconds of each other. Are US Navy surface combatants capable of intercepting hostile missile fire in such short notice. The answer is yes. The yes answer is predicated on the following conditions: 1) it is AEGIS equipped, 2) the ship is expecting a hostile launch, 3) the ship is in an advanced state of alert and in range.

Arguments against this theory.

1. The unlikely probability of keeping a large crew silent two years after the event.
2. Why only one combatant to cover the entire Long Island coast?
3. It is extremely unlikely a Navy combatant would run from an Air Sea Disaster.

The fact is, while we believe that there is considerable forensic physical evidence that conclusively proves that TWA Flight 800 was shot down by one or more missiles, we have no proof of who fired the missiles.

TERRORIST CONNECTIONS

We have discussed the possibilities of friendly fire. There is equally compelling, and I believe more credible circumstantial evidence that the shutdown was a deliberate Act of War by state sponsored terrorists. For this theory, we also have no forensic evidence, but there is a large body of information on the public record which indicates motive, means and the political desire to strike an American target just days before the Atlantic Olympics. See Other Reported Missile Sightings at Exhibit 26 on page 97.

Fact: The White House, the CIA, the FBI and the Justice Department have said there is no link between TWA FL800 and terrorism.

Fact: Al Hayat, an Arab newspaper in London, received a letter on the day of the TWA attack citing an intention to strike an American target from an alleged Saudi Group called the Movement of Islamic Change. They had previously taken credit for a bombing in Saudi Arabia that killed 5 Americans.

Fact: An Arabic Newspaper in Beirut received a fax from the Movement of Islamic Jihad / the Jihad wing of the Arabian Peninsula, at 11am New York time the morning Flight 800 was shot down. It stated, "Tomorrow morning we will strike the Americans in a way they do not expect and it will be very surprising to them." The FAX goes on to say, "The Mujahadeen will respond harshly to the threats of the stupid American President. All will be shocked....." TWA Flight 800 was shot down at 8:31 p.m. EDT, which was 5:31 am the following morning on the Arabian Peninsula.

Fact: The Israeli newspaper, Yediot Ahronot was quoted by the London Times that, "Israeli intelligence had warned US intelligence that there was a specific terrorist threat against this particular aircraft before the event."

Fact: Authorities in New York received an anonymous threat to specifically attack a New York airport or jetliner in retaliation for the conviction of the blind radical Islamic Sheik Omar Abdel Rahman on 1 October, 1995 for masterminding the February 1993 World Trade Center bombing.

Fact: On the evening of November 17, 1995, 47 days after Rahman's conviction, and 8 months before the attack on TWA FL800, a Lufthansa 747 en route from JFK to Frankfurt and a British Airlines flight, both saw a bright, fast moving object, pass within 2,000 to 3,000 ft., trailing smoke and not registering on FAA radar. Both aircraft were off the Long Island coast. See Exhibit 26 on page 97.

Fact: On Wednesday, 26 June 1996 exactly three weeks before the shutdown of TWA Flight 800, at almost precisely the same time of evening, the Coast Guard received a report of three red flares launched 25 miles south of Shinnecock Inlet. An air and surface search found nothing. See Special Agent Kuhlman's letter on page 101.

EVIDENCE POINTING TO A COVER-UP

THE SALVAGE OPERATION

Fact: Weeks Marine operates the largest and most capable marine salvage equipment on the western shore of the Atlantic Ocean. The Coast Guard rescue log shows a request for assistance was made to Weeks Marine within an hour of the crash.

Fact: Purely by coincidence, Weeks Marine was transiting the largest revolving crane salvage barge in the western hemisphere off the Long Island shore when FL800 went down.

Fact: By dawn on 18 July 1996, it was at the crash site ready to operate. It was capable of supporting 50 hard hat divers with multiple cranes, precision grid positioning equipment as well as precision anchoring system. The barge not only was a heavy lifter, but had huge storage capacity for debris.

Fact: Phone calls between Weeks Marine executives and FAA officials in Washington the night of the crash led Weeks Marine to believe the FAA was extremely anxious to recover the tail of the aircraft in order to get the flight recorders.

Fact: Weeks Marine kept the barge on site until it became obvious they were not going to be used.

Fact: AT&T had a state-of-the-art Cable Laying ship on site on 18 July. It was equipped with high tech underwater surveillance equipment and even a robot salvage submarine.

Fact: Despite the large capability advantage and more importantly professional salvage experience over the military units which eventually arrived at the scene, both AT&T and Weeks Marine were shouldered out of the way and never used.

Comment: The decisions made by the Government concerning the marine salvage effort are difficult to understand. When a conscious choice is made to reject the best equipment and personnel for such a hazardous and complex job, the question arises as to why.

RECOVERY OF THE FLIGHT DATA RECORDERS

Fact: The pingers from the Flight Data Recorder and the Cockpit Voice Recorder were heard night of the crash. By the next day the pingers suddenly stopped. They were not recovered for another 7 days.

Fact: Professional marine divers and salvage personnel enjoy full civil and personal rights while on or off the job. Navy divers and military personnel do not. The military chain of command, including the Commander-in-Chief, can and sometimes does abridge the civil liberties of military personnel. For example, the soldier or sailor can be ordered to remain silent pertaining to classified operations under penalty of the Uniform Code of Military Justice (UCMJ).

Comment: Mr. Clinton apparently thought the UCMJ wasn't quite strong enough however, after he brought in the Navy salvage effort. On March 11, 1997, Mr. Clinton signed Executive Order 13039, that removed the personnel in the Navy units assigned to the TWA FL800 recovery mission, from the protection afforded by Chapter 71, Title 5 of the United States Code. This particular law is commonly referred to as the "whistle blower protection act". The reason cited for the Executive Order was "National Security".

Comment: It is the opinion of this investigator that on or about March 10, 1997, after public allegations surfaced of a friendly fire shutdown of the TWA FL800, high political officials in the Executive, Justice and Transportation Departments entered into a conspiracy to subvert both the civil and criminal investigations into the loss of TWA FL800. Despite the total lack of evidence, the unified position would be to support a finding of Center Wing Tank explosion caused by mechanical failure. The media blitz to that end is on-going and has been supported by numerous officials of this administration.

Fact: On 24 July 1996, Valorie Caproni, Deputy US Attorney for New York, informed the NTSB through the NTSB's Operations and Eyewitness Group Chairman that the FBI would not allow the NTSB to interview eyewitnesses, or share witness lists or even physical evidence with Parties to the Investigation.

Fact: A special FBI (forensic) dive team was used to prescreen high interest parts located at sea, prior to their recovery by navy divers. The dive team was the Naval Special Warfare Development Group (SEAL Team 6).

Fact: Major Fred Meyer, flying an HH60 helicopter, repeatedly flew over the crash scene on 17 July 1996, utilizing precision satellite navigation equipment on board, radioed the exact position where the wreckage containing the flight recorders could be found, back to the C130 crew that was airborne. They then relayed the information to the command center

Fact: In a meeting with senior NTSB people present, Congressman Forbes, the Representative from Long Island, NY was told the wreckage containing the flight recorders had been located and recovery of recorders was imminent on 18 July 1996.

Fact: Parties to the Investigation, TWA crash investigators, Boeing investigators, ALPA investigators, etc. were not allowed aboard recovery ships. The Coast Guard rescue log shows the motor vessel Pirequette towed an underwater pinger locator device for several hours on 20 July and again on 21 July without luck.

Fact: The Coast Guard log also shows a major effort to map the Debris Field with underwater side scan sonar and laser devices beginning 21 July.

Fact: On 24 July 1996, USS Grasp executed a three point mooring directly over the flight recorders. At 2330 that night navy divers were lowered down almost within arms reach of the flight recorders.

Fact: Party Investigators are on record complaining that the NTSB opened the recorders without Party investigators present. This is a violation of normal protocol.

Fact: TWA FL800 Ducane underwater pingers, attached to the recorders, were found to be operating normally when examined in the NTSB Laboratory.

Comment: The circumstances surrounding the recorder's recovery are very unusual.

Recommendation: Congress should take sworn statements from all parties concerned.

FINAL DEBRIS COLLECTION

Fact: In November of 1996, 4 scallop boats were contracted to dredge the bottom for remaining debris. The FBI placed 2 agents on each boat to “Tag and Bag” all evidence. Two boats from New Jersey and two from Massachusetts were contracted through Dive Master, Oceaneering International, Inc. and the US Navy Supervisor of Salvage. These operations were curtailed on 30 April 1997, even though Debris was still being found, according to the owner of “Kathy Ann”, Mr. Jimmy Kitowski. The boat owners were told the operations were being curtailed because of lack of funding.

Fact: Scallop boats normally dredge pulling two 15 foot wide steel nets with a 15 foot wide gap between the nets. These steel nets are constructed of 3 ½ inch wide steel loops linked together. The wide loops are designed to allow undersized scallops to escape capture.

Fact: The FBI supplied the boats with “special nets” constructed of 2 inch wide loops. Scallop boat owners would expect that net size would capture pieces down to the size of 1 ½ inch in diameter.

Fact: The FBI agents came aboard with GPS and Grid measuring equipment. The dredge pattern was overlapped to cover the middle gap and repeated in high interest areas.

Fact: This dredging operation netted “small wing pieces” recovered in the early Red Zone.

Comment: There is no rationale within the NTSB’s center wing tank theory that explains small wing pieces in the early Red Zone.

Fact: 70% of the left side of body wall (the sealed rib that is the tank wall between the center wing tank and the #2 main tank) was still missing after the dredging operation ended.

Comment: It is reasonable to assume many of those rib parts were too small to be captured. Once again, this points to a high-energy event associated asymmetrically with the left wing. In air crash debris, small parts equal high-energy, as do spiked edge fracture faces on aluminum. The NTSB has consistently ignored this forensic evidence.

Fact: High tensile strength aluminum alloys that are used for aircraft wing skin, missile bodies and flight surfaces are stronger than pure aluminum. However, with the strength comes brittleness. A severe shock, such as close proximity to high explosive detonations, will shatter some alloys like glass.

Fact: Military high explosives detonate at velocities above 25,000 ft/sec and produce pressures that can be as high as 1.5 million pounds per square inch. This kind of shock will shatter the steel casings of general purpose bombs into shards.

Comment: It is hardly likely that the aluminum sub-components of a full sized anti-aircraft missile would be either recognizable to a layman after detonation, or large enough to be captured by the scallop boat dredges.

Recommendation: Military archives should be searched for fragmentation data on a broad range of large anti-aircraft missiles to determine what recognizable pieces should be expected to remain after detonation.

INVESTIGATION OF RED RESIDUE AND OTHER EXPLOSIVE RESIDUES

Fact: After 24 July 1996 Parties to the Investigation⁴ were removed from the recovery operation at sea, denied access to physical evidence, denied access to FBI laboratory reports, denied access to eye witnesses, by order of the Justice Department.

Fact: The procedures cited above are at variance with Title 49 of the US Code and common sense. These aviation experts were the Parties to the Investigation.

Comment: By segregating the Investigators from free access to all evidence, these aviation experts were effectively segmented into compartmentalized working groups, unable to examine and evaluate the larger picture. Consequently their Working Groups produced more questions and anomalies to the central theory than they did answers. Those anomalies appear as findings of fact in this document.

Fact: Captain Terry Stacey is a senior TWA check pilot and was a member of the investigation's Operations Factors Group and Eyewitness Group. He ultimately lost confidence in the integrity and competence of the Justice Department investigation and provided small samples of a suspicious residue to an outside investigative journalist, Mr. Sanders, for testing. After that event, the FBI began threatening Captain Stacey, Mr. Sanders and those corporations, which were a Party to the Investigation, with Federal Obstruction of Justice prosecutions.

Fact: The Justice Department was well aware of the identities of the investigative journalist, Mr. Sanders, his wife, a senior TWA flight attendant, as well as Captain Stacey. Their roles in the above incident were known seven months in advance of the announcement of their indictment.

Comment: Arrest warrants appear to have been delayed to coincide with the beginning of NTSB Public Hearings in Baltimore on 8 December 1997.

Fact: When Mr. & Mrs. Sanders turned themselves in, FBI Agents handcuffed both behind the back and purposefully paraded them in front of media cameras. A junior FBI agent present had requested they not be handcuffed and be allowed to avoid the media, his request was denied.

Fact: The alleged Federal crime that generated the unusual prosecutorial behavior cited above was the theft and receipt of (worthless) government property (stained aircraft seat fabric) by an authorized aircraft crash investigator and a published investigative journalist who had previously testified before congress as an expert witness on other matters (POWs).

Fact: The red seat residue taken by Captain Stacey was given to Mr. Sanders for outside testing and was processed by West Coast Analytical Services (WCAS) in California. Laboratory findings of the sample given WCAS showed a high concentration of metals that is not consistent with the seat material or with the seat repair adhesive. See Exhibit 9 on page 51.

Fact: The remaining sample of residue in Sanders possession was given in good faith to CBS in New York for further independent outside testing. CBS New York turned the sample over to the FBI.

⁴ Parties to the Investigation are officials designated by the NTSB to assist in the investigation. They are experts from the affected companies who provide expert assistance in evaluating and determining the cause of aircraft accidents. The official Parties to the Investigation include: The FAA, Boeing Commercial Aircraft Company, the Airline Pilots Association, Trans World Airlines and the International Association of Machinists and Aerospace Workers.

Comment: CBS was reported to be under threat of a pending FBI raid.

Fact: Both the NTSB and the FBI maintain the red residue Captain Stacey gave Mr. Sanders was 3M 1357 Scotch Grip Adhesive (Listed at NTSB Docket 5A-516 Exhibit 20C). That adhesive is used by TWA to refurbish aircraft seats.

Fact: The Lab results produced by WCAS are entirely different from the test results done on TWA Seat Backing Adhesive by Dr. Bassett's laboratory at NASA and two other independent laboratories. Because Dr. Bassett was not allowed to lift the red residue from the seats at Calverton himself, he is not sure he tested the same residue. See Mr. Stalcup's statement at Exhibit 9 on page 51 and proffer of Laboratory evidence.

Fact: Dr. Bassett of NASA, an ex US Marine, had several conversations with Dr. Birky, NTSB Fire and Explosives Group Chairman, prior to and after Dr. Bassett ran tests. Dr. Bassett first requested he go to Calverton to lift residue samples himself to ensure chain of custody of the sample and to see what he was testing. Dr. Birky denied that request.

Fact: Later, after Dr. Bassett had run tests on CW504, the first metal aircraft part found in the western Debris Field, he called Dr. Birky saying he had detected nitrates on the part (possible explosive residue) and recommended immediate further testing for specific explosives. Dr. Birky directed Dr. Bassett to stop testing and in a later phone call Birky informed Bassett, "we now have a plausible explanation for the nitrates, it was cigarette smoke residue from air-conditioning ducts". Dr. Bassett informed Birky he had already tested A/C ducts and found them free of nitrates.

Comment: Dr. Birky's failure to follow scientific protocol, lack of normal curiosity and his proactive move to shutdown the inquiry once vital clues were being developed, has an appearance of suppression of evidence.

Recommendation: Both Dr. Bassett and Dr. Birky be placed under oath in Congressional Hearings.

Fact: Deputy FBI Director Kalstrom wrote a letter to NTSB Chairman Hall prior to the 8 December 1997 Public Hearing specifically requesting public reference not be made to: Eyewitnesses; the CIA video tape (that was released to discredit eyewitnesses); or any reference to residue testing.

Comment: The conduct of the Justice Department and the FBI in the matter of residue on aircraft seats and parts warrants close scrutiny. In any just forum, the public assault on Captain Stacey's motives by Federal authorities would constitute libel, if not prosecutorial misconduct. Do US attorneys in New York actually believe the Senior Check Pilot for TWA in New York, having just lost 43 fellow employees in this incident, was motivated by anything other than finding the truth?

Recommendation: Congress should provide the opportunity for Captain Stacey to return to Calverton, identify the residue he was suspicious of and have the appropriate scientists lift the residue for outside laboratory analysis to resolve this matter. Captain Stacey should also have the opportunity to testify before a congressional committee to clear his good name.

Fact: At Calverton, bomb-sniffing dogs were used to identify contaminated parts. They were then sent to chemical sniffers for determination of specific high explosives.

Fact: The EGIS 3000 chemical sniffer used by the FL800 debris recovery teams on Long Island was the best equipment available.

Fact: Various media have reported the chemical sniffer processing teams identified at least a dozen pieces of debris from both inside and outside the aircraft with specific high explosive residue contamination. This was after saltwater immersion, washing, and identification as explosive residue by bomb sniffing dogs.

Fact: The possibility of a false positive reading on a EGIS 3000 when testing bare metal is approximately 1: 10,000.

Fact: Explosive experts are on record stating that high explosive residues (nitrogen compounds) are very soluble in water.

Fact: A significant amount of debris was pressure-washed by NTSB personnel when it was brought ashore prior to chemical screening for explosive residue at the Calverton hanger by FBI agents.

Fact: The Justice Department decided to have the FBI laboratory in Washington DC verify each positive residue finding. Only two samples were reported to have made it through the FBI Lab tests as positive.

Fact: Normal scientific protocol requires different methodology or equipment be used to confirm a finding by an original test. If the original identification was done on a EGIS 3000, then the confirmation procedure would have to use less sensitive equipment.

Fact: The explosive unit chief at the FBI Lab, J. Thomas Thruston, was the individual involved in the TWA FL800 investigation.

Fact: In testimony pertaining to faulty FBI laboratory procedures in the fall of 1997 before the Senate, Inspector General Michael Bromwich testified “Hundreds, if not thousands, of cases are implicated”. Former crime lab unit chief James Corby singled out the explosives unit chief as a particular problem stating, “Special Agent Thurston did alter reports intentionally.”

Professional Conduct of NTSB and FBI Personnel

Fact: Special Agent Joseph Valiquette is on record lying to this investigator about the TWA FL800 case. On a Thursday in November, late in the day, Congressional staff informed me the FBI intended to conduct a press conference announcing their withdrawal from the case, expected sometime after Congress recessed on Friday. I called SA Joseph Valiquette in New York to check the time and place. Valiquette informed me congressional staff was wrong. There was not a press conference on the schedule or even on the calendar! When I pressed him as to how congressional staff could possibly be so misinformed, he opined, “A New York paper recently carried a false story to that effect. Point of fact, the story was true, on Tuesday morning, after two working days, Deputy Director Kalstrom, SA Valiquette’s immediate supervisor, conducted one of the largest press conference’s in the history of the FBI!

Fact: An FBI Agent grabbed a TWA captain by the throat and slammed him against a wall at the Calverton hanger. The TWA captain was an authorized, Title 49 investigator who had asked the agent why he brought his wife into a closed, air-crash investigators group meeting. Neither the FBI Agent nor his wife was a member of the group. This was in violation of security procedures.

Fact: Early in the investigation, Captain James Spear, a conscientious crash investigator representing ALPA, was removed from the investigation on verbal orders from Jim Hall. Captain Spear had previously complained to Special Agent George Andrews about crash debris showing up at the hangar not being tagged. Special Agent Andrews was an assistant to Deputy Director Kalstrom, but Captain Spear assumed when he was introduced he was talking to George Andre, a TWA employee he had not previously met.

Comment: I believe it is fair to assume the order to remove Captain Spear went from Kalstrom to Hall to the ALPA. The question once again goes to motive. Why would the political leadership be motivated to fire conscientious investigators?

Fact: Dr. Elizabeth Loftus of the University of Washington was the expert on memory that was canceled by request of Deputy Director Kalstrom prior to her scheduled appearance at the NTSB's Baltimore Public Hearing on 8 December 1997. When asked by outsiders what her presentation was to have covered, she replied, "basically to the concern as to why people thought they saw missiles when there weren't any".

Comment: It is difficult to understand the NTSB leadership's logic in scheduling an expert to rebut testimony not on the public record and to insult hundreds of credible eyewitnesses that the NTSB didn't even have access to.

FBI'S BOGUS MISSILE TESTING

Fact: Definition of streak, Funk and Wagnalls Standard Desk Dictionary, "to move at great speed". American Heritage Dictionary "**streak** (strek) *n.* **1.** A line, mark, smear, or band differentiated by color or texture from its surroundings. (*n.*) A sudden quick light: a flash".

Fact: Since the 1970's, at least 26 civil aircraft have been shot down by man-portable air defense systems (MANPADS) commonly known as shoulder fired missiles. None of these aircraft were US Carriers.

Fact: TWA FL800 was too high (13,800 feet), too fast (380 knots true airspeed), to be hit by these systems. The B747 is also too big and too tough to be brought down by MANPADS. They have minuscule rocket engines (relative to a full sized anti-aircraft weapon) of short duration burn and very low visibility.

Fact: MANPADS are heat seeker, contact-fused, weapons that display erratic flight paths. They are effective against helicopters and light aircraft, but not a B747.

Fact: The FBI were keenly aware of the operational limitations of MANPADS. That the eyewitnesses described missile characteristics entirely different than MANPADS and the catastrophic destruction pattern of FL800 would immediately eliminate MANPADS as a probable cause. Despite these facts, for some reason, they purposely limited the outside consultant, Mr. Richard Boti, on loan from Naval Air Warfare Center, China Lake, to specifically look for proof of a MANPADS system engagement on TWA FL800.

Comment: It appears, as in many other aspects of this investigation, the Justice Department, through the FBI, purposely set the burden of proof bar far too high. By specifying you must find proof of a MANPADS engagement, contact explosion, 4,000 ft/sec fragment hits, etc. before you can conclude a missile was the culprit. This completely rules out a finding of a missile attack by a full sized system. The characteristics of full sized, proximity fused, blast warheads are entirely different and far more deadly.

Fact: In the 1980's, the cruiser USS Vincennes, while under surface attack by Iranian Gun Boats, was threatened by a Jet-Aircraft flying directly at Vincennes after it took off from Tehran. The aircraft's transponder was off and the Navy Captain, in defense of ship and crew, fired two full sized Standard ARM

missiles at the aircraft. Both missiles successfully engaged. Eerily, the pictures of floating bodies and aircraft debris from what turned out to be an Iranian Airbus would be replicated with Flight 800.

Fact: The two baggage containers in the forward left cargo compartment of Flight 800, AKN 7415 and AKN 9737, were recovered in the Red (early) Debris Field and were not severely damaged, with all sides intact and no fragment holes.

Fact: The wing root leading edge fairing pieces A449 and A551 were recovered in the Red Zone.

Fact: The following is a quote from page 10 of the unclassified report on the TWA Flight 800 missile impact analysis, NAW CWPNS8126. “The kinetic energy of the missile body, and the explosive energy of the detonating warhead would create a significant hydrodynamic ram event that could cause severe damage to one or more of the following structures:

1. Upper / lower wing skins.
2. Wing spar webs.
3. Side-of-body ribs separating CWT from main tanks.
4. Wing leading edge fairings.”

Fact: The above quote was addressing a hypothetical damage expected if a small MANPADS missile penetrated a wing tank and detonated.

Fact: All four of the damage patterns cited in NAW CWPNS 8126 are strongly in evidence.

Fact: The report immediately discounts these obvious damage patterns as being caused by a missile because NTSB and FBI documentation do not show evidence of penetration of a full tank with a MANPADS missile. The obvious unasked or answered question is “what caused the damage in evidence?”

Fact: An airburst of a full sized, proximity fused, anti-aircraft blast weapon outside the tank would produce the exact same damage pattern.

Fact: A 90 pound warhead bursting 30 feet in front and 19 feet below the left wing would hydraulically load the fuel in the No. 1 tank to above 40 PSI and would apply a force more than 125 times greater than normal to the underside of the upper wing skin.

Fact: The same hydraulic force would collapse the No. 2 main/CWT side body wall into the center tank, dislodge the leading edge fairing, shred the left wing upper skin and spray fuel into the center tank. See Exhibit 7 on page 47.

Fact: The gross asymmetrical damage to the left side body wall of the CWT and left wing upper skin can not be explained by a center wing tank explosion. Any overpressure in that tank should be an equal opportunity destroyer to both sides of the aircraft.

Fact: The center wing tank lower skin shows a distinct pattern of an implosion, not an explosion! NTSB Docket SA-516 Exhibit 7A, Structures Group Factual Report, Page 30, 31, describe the lower tank skin, “pillowing on the skin between stringers in an upward direction,” and later, “this section (of bottom skin) has the general shape of an upward deflected dome, that is as high as 14 inches in relation to the adjacent structure.” The sections around this area, including CW232, CW231 and CW201 exhibit this same general domed shape. A spiked tooth fracture occurred at RBL 39 just forward of S-9!

Fact: Spiked tooth edge fractures of aluminum are evidence of high-energy fractures.

Fact: There are several holes in the CWT structure that exhibit 2,000-3,000 ft/sec punctures.

Fact: 60-PSI fuel vapor/air explosion will not produce 2,000 - 3,000 ft./sec. projectiles.

Comment: The center wing bottom skin clearly shows an implosion occurred to this tank from a force coming from below the wing. The NTSB's insistence this tank exploded as a cause of this incident, in the face of this physical evidence is disturbing. See photograph at Exhibit 23 on page 84.

NTSB INACTION

Fact: The investigation into the crash of TWA Flight 800 is at a standstill. As of this writing (22 months after the mishap), the chairman of the NTSB has yet to call for formal reports from the parties to the mishap.

Comment: The above situation is unprecedented and dangerous to flight safety. Not only do the parties have the majority of real expertise on the aircraft, but also normally, once reports are filed, the gloves come off and they are able to provide a useful reality check on conclusions.

INFLUENCE OF THE GOVERNMENT OVER BOEING & TWA

Fact: The Principal Parties to the Investigation, Boeing and TWA, are both prohibited by Federal law from publicly commenting on the investigation while it is still on-going.

Comment: The Federal Government has enormous power to influence the actions of both Boeing and TWA. They have the power to selectively enforce regulations, award contracts and make rules that could cost millions in expense. With this leverage, it would be reckless for either company to speak out about their belief on the cause of the crash.

Fact: After Boeing Aircraft Corporation sent a team of attorneys to Long Island to independently interview TWA FL800 eyewitnesses, Boeing 737's came under intense scrutiny by NTSB and the FAA.

Comment: Although incidences of wire chaffing were found, none has led to any fuel tank fire, much less an explosion. The 747 does not have wire bundles running through the CWT like the 737. Although it served to scare the public and reinforce the notion that TWA FL800 was the result of a CWT explosion, in fact, it shows to the informed investigator that it is even less likely that FL800 was the result of a CWT initiating event.

THE CIA VIDEO

At their Press Conference in November of 1997, the FBI essentially said "we found no evidence of a criminal act, but we are keeping the evidence secret anyway". The official line from assistant FBI Director Kallstrom was that his Agents had "turned over every rock 10 times" and had finally enlisted analysts from the CIA to explain what the hundreds of eyewitnesses observed. Mr. Kallstrom implied CIA Agents conducted active interviews to verify and check witness statements. This appears to be yet another fabrication. None of the witnesses I've talked to had a phone conversation with a CIA agent, much less a personal interview.

The CIA produced a video, which ran intensely for a day on national television until the hoots of derision by aviation professionals and eyewitnesses began to be heard in the Government. In the short few weeks between the video's debut at the FBI press conference and its scheduled run at the NTSB public hearing in Baltimore, beginning 8 December 1997, Mr. Kallstrom requested the Video not be shown. Not only would the video be scraped, but expert testimony scheduled by the NTSB Chairman, designed to further impugn eyewitnesses, was also cancelled. Actual witness testimony was never welcome at Baltimore and not placed on the agenda. The national media, apparently satisfied with the dramatic video, never once questioned the validity of a Public Hearing in which the term witness was not mentioned.

In order to discredit eyewitnesses the video had to depict the aircraft in some way visually performing like a streaking missile. Also because one of the missiles was launched near the shore and the launch noises and rocket burn were clearly heard early in the sequence by some observers, the contrived Video scenario had to cover that aspect as well.

Defying the laws of physics, aerodynamics, and jet engine mechanics, the video has the aircraft center wing tank mysteriously exploding, the plane flying along for awhile as the explosion sound makes its way toward shore. The nose falls off and the plane climbs vertically 3,000 feet trailing fire just in time for observers ashore to hear the sound and look seaward to observe a large, slow moving, Boeing 747 morph into a streaking anti-aircraft missile!

It would be easy to understand why 10 year olds watching this cartoon on Saturday morning would believe it on face value, but it is perplexing to think network news producers, who are responsible for providing national news, would be suckered without checking the facts first. Any student pilot could set them straight by discussing aircraft weight and balance. Aircraft that are loaded nose heavy (beyond the designed forward center of gravity) can not takeoff because the nose will not lift off. Aircraft loaded tail heavy, beyond limits, will over rotate at takeoff, stall and crash, despite the best efforts by the crew. The Video depicts a situation (nose falling off) that would be the mother of all AFT center of gravity problems. The aircraft would not only stall and begin falling immediately, it would stall violently. Boeing is on record distancing itself by indicating its engineering figures were not evident in the video.

The faults in this propaganda piece are myriad and obvious when compared to physical evidence, facts and real witness statements contained elsewhere in this report. Eyewitness accounts indicate the aircraft broke up almost immediately. There is also the question as to why the CIA was asked to perform a function (analysis of witness statements) that by law belongs to the NTSB. What experience does the CIA have in aircraft crash investigation? Why is the CIA involved at all in a domestic civilian airplane crash when there is purportedly "no evidence of a criminal act"? Why have the NTSB investigators still not been allowed to interview eyewitnesses, two years after the crash?

It is disturbing to see powerful elements of the Justice Department and the CIA conspire to intimidate witnesses by first ignoring them, then impugning their detailed statements and ultimately libeling these citizens through publication of a false video. Congress should carefully and thoroughly examine the circumstances that lead to this gross federal breach of trust.