

**Exhibit 33 - Letter to Louis J. Freeh dated 9-25-98 - Added 10-2-98**



**William S. Donaldson, III - USN, Ret.**  
Associated Retired Aviation Professionals  
P.O. Box 90, Clements, Maryland 20624

September 25, 1998

Mr. Louis J. Freeh - Director  
Federal Bureau of Investigation  
The J. Edgar Hoover Building  
935 Pennsylvania Avenue, N.W.  
Washington, D.C. 20535-0001

Subject: TWA Flight 800: The Missile  
Reference: Interim Report to the House Aviation Subcommittee, July 17, 1998

Director Freeh,

After careful study of witness provided characteristics, speed, range, launch and staging sounds, sustainer motor burn out time, launch position, optical guidance flare, etc. coupled with warhead burst characteristics, aircraft damage in evidence, our missile experts are in agreement:

***The weapon used against TWA Flight 800 was most probably a modified Soviet SAM 6.***

NATO code-named Gainful; the SA6 is a two staged, solid fuel missile. It has the following characteristics:

- Weight = 1,320 lbs.
- Length = 18 ½ feet.
- Warhead = 123 lbs. - Blast
- Fusing = Proximity & Contact
- Maximum Range = 12.9 NM
- Maximum Ceiling = 36,000 ft.
- Guidance = Radar or Optical
- Speed = Mach 2.6

The SA6 is normally carried on a TEL with three missiles loaded. Designed as a mobile air defense system for soviet armor and troops, the TEL with missiles loaded could easily be carried aboard any ocean going vessel and transported as covered deck cargo.

***EVIDENCE OF AN SA6:***

**Witness Testimony – The red flare.**

- Numerous witnesses observing the missile from behind describe various shades of red color from pink white to bright red in the missile exhaust.

- Paul Angelides, possibly the closest witness ashore at # 6 Dune Road, looking directly into the missile exhaust as it initially climbed out over the ocean to 60° or 70° above the horizon, said it looked like an “iridescent red meteor”.
- The SA6 has a red flare in the second stage exhaust of the sustainer motor.
- The flare augments visibility from directly behind the SA6 for its optical tracker, red light penetrates the lower atmosphere better than any other visible color.
- Richard Goss observing from about 1.2 NM behind Paul Angelides describes the exhaust as “red to pink white”.
- As the observation angle moves away from directly astern the red flare becomes less visible.

#### **Witness Testimony – Missile Speed.**

- From the missile 1 launch point (see ref. A, page 68) to its burst point at FL800, witnesses closest to the launch estimate the missiles’ time in flight at between 15 and 20 seconds.
- Witnesses Bilodeau and McBride, on the rocks at Moriches Inlet, were 3 nm west of the launch point that was directly south of witness Angelides. Their recollection of hearing rolling thunder (missile launch & fly away) start at the same time as seeing the weapon burst at Flight 800 establishes the most accurate time of flight, 17.5 seconds. (See Ref. A, Page 66)
- Using the above time and dividing it into the distance establishes an average missile velocity from launch to intercept of Mach 2.36.
- The SA6’s first stage takes it rapidly to Mach 2, and then the second stage boosts and sustains it to Mach 2.6. When acceleration time is considered its average speed would be approximately Mach 2.36.
- The SA6’s velocity profile exactly fits FL800 witness observations.

#### **Witness Testimony – Sustainer Motor Burnout.**

- The SA6 Sustainer second stage rocket motor burns approximately 15 seconds.
- Witnesses like, Goss, Penny, Meyer, McBride and Bilodeau who watched the missile go outbound, either had difficulty seeing or lost sight of the missile in the last second or two prior to the first explosion (after rocket motor burnout).

#### **Witness Testimony – Staging.**

- Heard from a distance, the SA6 on launch and in flight will produce a loud crack and a few second rumble (first stage), followed by another loud crack, followed by 15 seconds of rumble (second stage) terminating after a variable time in a sharp crack (warhead detonation).
- Witnesses, for example at Dockers Restaurant, describe the staging noises precisely.

#### **Modified Guidance – The Scott Grady Incident**

- In 1994 Capt. Scott Grady, Flying an F16 in company with a wingman was shot down over Bosnia.
- Grady’s aircraft was hit by a modified SA6 who’s warhead failed to fuse. Even though the weapon didn’t explode, it guided precisely enough to cut the F16 in half. Captain Grady was able to safely eject.
- That SA6 visually identified by the wingman, as it broke through clouds below the flight, was guided by neither radar (No radar threat received in either aircraft) or optically. (They were above a cloud deck)
- The SA6 that hit Captain Grady appears to have guided to the belly of the aircraft to one of two types of active antennas, the DME transponder or the IFF Transponder.

- The missile that destroyed TWA Flight 800 was seen to veer hard left one second prior to exploding (witness Goss). A maneuver like that is indicative of precision terminal guidance.
- A B747-100 has two DME antennas and two IFF antennas (listed as ATC antennas, See Ref A, page 71) located aft of the nose gear on the belly centerline. The first missile airburst at flight 800 was in close proximity to all four antennas.

### **Proximity Warhead Type and Size**

- The 123 pound blast warhead precisely fits. (See Ref, Exhibits 7, 12, 19 and 20)

### **Weapon Availability – SA6**

- Our Russian contacts indicate the SA6 was exported to twenty-two countries, of these nations the following could be considered potential black market source risks: Bulgaria, Cuba, Czech Republic, Hungary, Poland, Romania, Tanzania and Yugoslavia.
- The following states could be considered high risk for transfer / support of rogue operations: Libya, Syria, Angola, Chad, Iraq and Iran.
- The transfer of eight SA6's to Iran from Russia in 1995/1996 is of particular note in that the Iranian leadership stands accused of authorizing strikes by surrogates against various American targets in June of 1996.

### **The Shinnecock Red Flare Incident – 26 June 1996**

- See Separate correspondence dated 26 September 1998.

### **Prior Terrorist Warnings**

- Mr. Timmerman of the Iran Brief informs us that three separate warnings were provided to our Government of terrorist targeting of US airliners prior to Flight 800's loss.

Mr. Freeh, why would the FBI mislead the American public and the Congress by arbitrarily ruling out Full Sized anti-aircraft weapons? Its doubtful you could find any missile expert in this country who would point to MANPADS (Stinger type weapons) as a suspect in this incident because they are not even capable of bringing down a 747.

Mr. Kallstrom tested only contact fused, miniscule MANPADS warheads and finding no evidence of its use very theatrically announced missiles were ruled out. That is like testing a BB Gun and announcing that a Shotgun homicide victim died from something other than gunfire.

The only way you are going to convince the skeptical public that you have conducted a thorough investigation is to actually test for weapons that have the capability to bring down Flight 800, not weapons which could not possibly have been used, unless of course if you are trying *not* to find evidence of a missile.

Sincerely,



William S. Donaldson, Cmdr. USN Ret.

Web Address: <http://members.aol.com/fl800/index.html>