OCKET NO. SA-510

EXHIBIT NO. 71

# NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

### FEDERAL BUREAU OF INVESTIGATION (FBI) AND FEDERAL AVIATION ADMINISTRATION (FAA)

EXAMINATION OF USAir FLIGHT 427 WRECKAGE

Cynthia L. Keegan



## Memorandum

Federal Aviation Administration

Subject: INFORMATION: Investigation by

Aviation Explosives Security Unit

(ACS-50) of USAir 427 Accident

From: Special Agent Edward C. Kittel, Aviation Explosives Security Unit,

ACS-50

Date: December 13, 1994

Reply to Attn. of:

Kittel:

FAX: (202) 267-5628

To: Chairman USAir 427 Structures Group, National Transportation Safety Board

Investigator in Charge, USAir 427, FAA Office of Accident Investigation (AAI-100)

At the request of the National Transportation Safety Board (NTSB) and the Federal Aviation Administration's (FAA) Office of Accident Investigation (AAI-100), the FAA's Civil Aviation Security, Aviation Explosives Security Unit (ACS-50) provided support to the investigation of the crash of USAir Flight #427 which occurred on September 8, 1994, near Pittsburgh, Pennsylvania.

I provided the initial Aviation Explosives Security response on the morning of September 9, 1994 with the first group of NTSB and FAA accident investigators and was later joined by Special Agent (S/A) Calvin K. Walbert on Monday, September 12, 1994. We remained at the scene until Tuesday, September 20, 1994, when the Structures Group took its first break in the investigative process.

The involvement of FAA's Aviation Explosives Security Unit is fairly routine in accident investigations when there are "suspicious" circumstances surrounding an accident and any possibility of a bomb exists. This practice is particularly prudent today in light of the new requirements to decontaminate aircraft wreckage prior to its removal from the accident site because of biological hazards (BIO-HAZARDS). Standard operating procedures now require contaminated parts to be washed in a water/bleach solution which could destroy explosives residues or other critical evidence if an explosion had taken place onboard the aircraft.

Due to the time required to travel to the scene and organize the groups of the NTSB investigation, only a cursory initial entry was made on the first day of the investigation (September 9, 1994). I also assisted in the design and construction of the decontamination stations for both personnel and equipment at the accident site using my experience as a former military explosive ordnance disposal officer where I was trained in nuclear, biological, and chemical (NBC) disposal operations which utilize similar procedures.

The first several days of our investigation involved major aircraft parts identification and scene diagram preparation and documentation. I served as a member of the Structures Group which was chaired by NTSB Investigator Cynthia Keegan. I took a series of photographs during this investigation and have provided copies to Ms. Keegan to show not only the process, but some of the areas of concern and focus of the explosives investigation. I personally inspected every major piece of aircraft wreckage prior to any movement from its initial location for any signs of explosives effects. No indications of an explosion or explosive device were found.

By Sunday evening (9/11/94), it became apparent that no immediate findings of cause would be forthcoming from any of the working groups and that I needed additional assistance in processing the scene from an explosives security perspective. This decision was based upon the volume of material to be inspected and not on suspicions of an explosion onboard USAir 427.

At this point, my presence was required nearly full time at the parts staging area to make a final inspection of all debris prior to it being decontaminated. As this was the first major investigation to require gross decontamination of the wreckage, this was new ground for all of the parties. Since I became almost totally involved at this one particular "choke point", the presence of a second explosives investigator became critical to ensure that other critical elements of the investigation were covered.

S/A Calvin K. Walbert arrived on Monday, September 11th, 1994 to focus on baggage, personal effects, and parts removed from the victims, the other major time consuming part of the explosives investigation process. At our request, all human remains were completely X-rayed and every piece of foreign matter was removed for examination

by an explosives specialist for the possibility that a victim could have "captured" a component of an improvised explosive device (IED) if one were present or a fragment that might exhibit explosives effects. Buckets full of debris removed from the body parts were examined and no signs of an IED or an explosion were revealed. All of the baggage, clothing, and personal effects recovered from the scene were examined and no evidence of an IED or an explosion were found. This phase of the investigation continued until September 20, 1994, when every piece was removed by the Coroner and examined by S/A Walbert.

Another concern from an explosives investigator's perspective, was that if an explosion had taken place on USAir 427 at 6000 feet, debris would likely be scattered from the aircraft prior to its impact. In response to that scenario, the NTSB created a profile of where that debris would likely be found based upon altitude, winds, ground track, etc. A team of approximately 140 members was organized to search that entire "footprint" and nothing was found.

The only parts of USAir 427 that were recovered outside of the immediate accident site (a 400 ft. by 400 ft. square area) were pieces of aircraft insulation which, in my opinion, were scattered into the air by the plume of the post-incident fire that occurred following impact. All of the insulation pieces recovered away from the impact area were submitted to the Federal Bureau of Investigation's (FBI) Laboratory Division, Explosives Unit for analysis and no traces of explosives were found.

The very few identifiable pieces of the forward cargo door that were recovered during the investigation was an additional concern. Since one eyewitness described a brownish orange smoke on the right side of the aircraft forward of the wing's leading edge prior to impact, the possibility of a fire or explosion in the forward cargo hold was another area of focus. The forward cargo hold on USAir 427 held relatively few bags (13) but nearly 2000 pounds of magazines shipped as cargo. No baggage or magazines were recovered outside of the crash site. Sections of cargo hold liner were submitted to the FBI Laboratory for analysis and those results were also negative for explosives residues. Additionally, there was no evidence of any pre-impact fire in either cargo hold discovered this investigation.

After the wreckage was removed from the accident site to the "A.I. Hanger" at Pittsburgh International Airport (PIT), our efforts shifted to inspection of the aircraft parts laid out in a flat reconstruction on the floor of the hanger. As the debris was pieced together, it gave us the opportunity to look at fracture patterns and attempt to determine whether or not a "hole" might have been blown out of (or into) the aircraft. All findings were negative using this approach as well. Most large metal fractures observed are related to impact with either the ground, trees, or other aircraft parts. Many tears followed rivet lines and others could be traced to obvious tearing by impact crushing, or twisting of the fuselage.

On Thursday, November 17, 1994, I returned to PIT at the request of the NTSB to take another look at the wreckage of USAir 427. Of particular interest was the floor and cable reconstruction that had recently been completed. There were no indications of any explosive effects on anything observed during this review of the aircraft parts. The investigators who have worked this reconstruction have done a remarkable job piecing the aircraft parts back together in the proper locations and the damage viewed by this investigator was all mechanical in nature.

No evidence of pitting, cratering, radial streaking, gas washing, or other explosive effects were observed during any observations by either me or S/A Walbert (who has read and concurs with this report). In summary, we have found no evidence to date which indicates the presence of an explosion or IED onboard USAir 427.

At the request of the NTSB, the FBI Explosives Unit will also have an four Agents survey the wreckage on December 19, 1994, to obtain a "second opinion" and see if there is anything that may have been overlooked. We welcome this opportunity and will assist them in any way possible.

Edward C. Kittel

cc: ACS-1/ACO-1/ACI-1



# FEDERAL BUREAU OF INVESTIGATION WASHINGTON, D. C. 20535

Date:

December 27, 1994

To: Ms. Cynthia L. Keegan

National Transportation and Safety Board

490 L'Enfant Plaza East, S.W.

Room 5305

FBI File No.

95D-HQ-1077938

Washington, D.C. 20594

Lab No.

41222002 S ZL

Reference: Evidence Receipt dated December 22, 1994 and FBI Laboratory Report Number 40914036 dated September 20, 1994 and Number 40919043 dated October 3, 1994
Your No.

Re: CRASH OF U.S. AIR FLIGHT 427, ALIQUIPPA, PENNSYLVANIA SEPTEMBER 8, 1994

Specimens received:

December 22, 1994

Specimens:

Fragmented remains of a Boeing 737

### **BACKGROUND INFORMATION:**

On September 8, 1994, U.S. Air flight 427, a Boeing 737 crashed at Aliquippa, Pennsylvania killing all aboard. The National Transportation and Safety Board requested the FBI Laboratory, Explosives Unit to examine the fragmented remains to determine whether an explosion occurred which caused this aircraft to crash.

- 2 FBI, Pittsburgh
- 2 Federal Aviation Administration (Hand Delivered)

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### **EXPLOSIVES EXAMINATIONS:**

Examinations for evidence of an explosion on the fragmented remains of a Boeing 737, which had been U.S. Air flight 427, was conducted on December 19 and 20, 1994 at the A.I. Hanger, U.S. Air facilities, Pittsburgh, Pennsylvania by the following: Supervisory Special Agent Wallace L. Higgins, FBI Laboratory, Explosives Unit, Washington, D.C.; Special Agent William Davitch, FBI Bomb Technician, Columbus Resident Agency, Cincinnati Division; Special Agent Michael Hughes, FBI Bomb Technician, Niagara Falls Resident Agency, Buffalo Division; and Speical Agnet Leo West, FBI Bomb Technician, Chicago Division.

The examiners considered the possibilities that: (1) an explosive device was placed or carried on board and was inside the air craft when it detonated, and that (2) an explosive device, such as an air to air or surface to air missile, may have detonated outside the aircraft.

Thousands of aircraft fragments were examined by the forensic examination team for indications of explosive damage, explosive related phenomena, and components of various explosive devices.

#### CONCLUSION:

Based on the forensic examinations of the investigating team, no evidence was found on or among the items examined which would indicate that an explosion occurred internally or externally to the Boeing 737 which was U.S. Air Flight 427 prior to its crash.