

DOCKET NO. SA-510

EXHIBIT NO. 7G

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ARMED FORCES OF PATHOLOGY (AFIP)
EXAMINATION OF USAir FLIGHT 427
LEFT WING SECTION

Cynthia L. Keegan

Lab Control Number: 94-43 02 December 1994
AFIP Accession Number: Not applicable
Submitting Department: National Transportation Safety Board
Local Case Number:
Type of Evidence: Section of Aircraft wing
Requested Examinations : Examination material for bloodstains.

EXHIBITS:

Exhibit 1. The left wing section of a commercial aircraft



FINDINGS:

1. A field examination was performed at the request of the National Transportation Safety Board on exhibit 1. This exhibit was stored in a warehouse located at the Pittsburgh National Airport. Of concern was a section of the wing that was examined by a Boeing Aircraft representative using an ultraviolet light, who found what he identified as spattering marks, supposed caused by a bird striking the leading edge control surface of the wing. The area in question was examined using the Omnichrome Alternate Light Source unit, using all wavelength spectrums and all optical filters. This examination failed to disclose any luminescence from the surfaces in question. It should be noted that most biological material, if they fluoresce, will fluoresce between the 460 and 560 nanometer range, and not in the 350 nanometer range which is normally the wavelength of ultraviolet lights such as the one used by the Boeing representative.

2. The area in question was subsequently sprayed with a Luminol solution after covering the wing surface with a tarp to preclude light transmission into the area. The application of Luminol failed to demonstrate any luminescence that was consistent with the presence of blood or blood-like substances.

3. The area in question was also tested using Leucomalachite Green solution, which also failed to disclose any presence of blood or blood like substances. An examination of several slides and cotton swab smears that were collected at the scene also failed to disclose the presence of any blood or blood-like material. Several type of fibers, minerals and other fuel and petroleum products were present in the samples collected.

Conclusion: Based on the negative findings of the alternate light source, the negative indication of the Luminal solution, and the negative indication of the Leucomalachite Green solution, it is concluded that no blood or blood-like products are located on exhibit I.



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Chief, Trace Material Analysis Lab
Office of the Armed Forces Medical Examiner

22 NOVEMBER 1994

Lab Control Number: 94-41
AFIP Accession Number: N/A
Submitting Department: NTSB
Type of Evidence: Fragment of aircraft wing
Requested Examinations: Detect the presents of blood stains
and identify species of origin.

EXHIBITS:

Exhibit 1 a small piece of fibrous green material with small reddish brown particles, attached to its surface at various places. Material was submitted to the lab in a plastic 35mm film canister.

FINDINGS:

1. The material was first examined under stereo microscopy to determine the area most likely to contain traces of blood. This area was removed and sprayed with Luminol to determine if there was any blood present. A negative result was obtained with Luminol. A negative result was also noted with Leuco-malachite Green on the particles.

CONCLUSION:

The material submitted contain no residues that are consistent with blood. The areas believed to be blood all tested negative using two separate testing methods. Based on these results, no blood, neither human or non-human, was found on the sample.


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APPROVED:  P.H.D.