TO: Brig. Gen. Edward B. Giller, USAF  
Director of Military Application, HQ  

FROM: W. Lee Hancock  
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DATE: FEB 26 1958  

SUBJECT: AEC OBSERVERS' INTERIM REPORT OF THULE ACCIDENT  
WDW: HK(ST52-68)  

Enclosed is the AEC Observers' interim report covering the first 30 days after the accident.  

Enclosure:  
Report, as stated ( ), Cys 162A .
A10 OBSERVERS' INTERIM REPORT
OF
THULE, GREENLAND, ACCIDENT

This interim report covers the period from the time of the accident on January 21, 1968, to February 20, 1968, and is submitted to comply with AL Appendix 0526-03.

Description of Accident

A B-52G aircraft from the 380th Strategic Wing, USAF, departed Plattsburgh AFB, New York, January 21, 1968, at 9:29 A.M. EST, on an airborne alert mission. The estimated date of return to Plattsburgh was January 22 at 6:34 A.M. EST.

About 42 miles from Thule AFB, Greenland, a fire occurred in the navigator's compartment. Smoke filled all crew compartments and obscured instruments. An emergency was declared, and an attempt was made to reach Thule. While descending through 19,000 feet electrical power was lost. The pilot directed bail out. Of the crew of seven, six survived with minor injuries. There was one fatality. The aircraft crashed 7.5 miles west of Thule on North Star Bay January 21 at 3:40 P.M. EST. Control tower personnel at Thule witnessed the crash and estimated the aircraft impacted at an angle of approximately 50 degrees. A loud explosion was heard and a fire was observed immediately.

The aircraft was carrying four bombs.

Significant Events Occurring During Report Period

On January 21 at 2:45 P.M. MST., AEC/ALO personnel were notified of the accident through the AEC JNACC 'hot line' (264-4667) by the Directorate of Nuclear Safety (DNS), Kirtland Air Force Base. Appropriate AEC personnel were notified and an ALO representative was stationed at the DNS Command Post. A decision was made to send a DNS Technical Assistance Team to the accident scene. The Acting Director of DNS requested that AEC advisors be sent to the accident and invited AEC personnel to utilize transportation provided for the DNS team. AEC Headquarters (DMA) approval to send advisors was obtained and an AEC team composed of the following members was formed: Paul R. Smith, ALO; John C. Kinker, LASL; and R. P. Lambert, SC. The AEC group departed KAFB aboard an Air Force C-141 on January 21 at 11:15 P.M. MST, and arrived Thule on January 22 at 2:27 P.M. (Greenland Time). Also responding were EOD teams from Griffiss AFB and Wright-Patterson AFB, the DASA NRT team, a SAC Disaster Control team under Maj. Gen. Hunziker, and an aircraft investigation team under Brig. Gen. Bowley.

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RESTRICTED DATA

THE DOCUMENT CONTAINS RESTRICTED DATA AS DEFINED IN THE ATTACHED DIA FISCAL YEAR 1969, ITS TRANSMISSION, DISCLOSURE OF ITS EXISTENCE IN ANY MANNER TO UNAUTHORIZED PERSON IS PROHIBITED.
Upon arrival, AEC and AEC contractor personnel immediately aided in weapons search and identification. The aircraft impact point was indicated by a circular area of crushed ice approximately 200 feet in diameter. Extending from the impact point in a southerly direction was a burned and blackened area 470 feet long by 2150 feet wide. A "zero contamination line" was established. It extended three miles south from the impact point and was about one mile wide.

Search problems were increased by cold and lack of daylight. Originally, flashlights provided the only illumination. Flashlight batteries performed poorly and only for short periods of time. Power supplies in the PAC-1S radiation monitoring equipment failed similarly. Development models of monitoring equipment were offered by LRL primarily to gain test data on operation in a cold environment. The LRL equipment proved to be quite reliable and has been invaluable in field operations. Five sets of equipment are in use. Weather permitting, search operations have continued to the present. Search coverage includes all the area within the zero contamination line and other selected areas. The hours of available daylight have increased considerably. To keep bomb and aircraft debris separate, EOD personnel have accompanied each search team.

Upon request, the AEC provided packaging experts from the Pantex production facility to package bomb debris for shipment to an AEC facility. The facility selected was the Pantex Plant. Three shipments containing all bomb debris collected to date have been shipped. The four bomb reservoirs which comprised a portion of the first shipment were later delivered to LASL for inspection.

Because of limited facilities available at Thule, the AEC representative requested further inspection and identification of bomb fragments upon return to the AEC. That operation is under way at Rocky Flats.
The Situation as of February 20, 1968

Search for bomb and aircraft debris on the surface of the ice is considered complete. The next phase of the operation consists of the collection of contaminated snow and ice from the burn area and storage in 25,000-gallon steel tanks. Forty pounds of borax will be mixed with the contaminated material in each tank to minimize possible criticality problems.