September 10, 1968

THULE STATUS REPORT

Note by the Secretary

The Assistant General Manager for Military Application has requested that his attached memorandum of September 6, 1968, with attachment, be circulated for the information of the Commission.

W. B. McCool
Secretary

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September 6, 1968

Chairman Seaborg
Commissioner Rancy
Commissioner Tape
Commissioner Johnson

B-52 CRASH AT THULE AIR BASE, GREENLAND

This is the tenth in a series of status reports to advise the Commission of the current situation with respect to the Thule B-52 accident.

The underwater search of North Star Bay was scheduled to terminate on August 25, 1968. However, in view of the marked improvement in performance of the submersible STAR III, coupled with reported observation of some small parts related to one or more of the weapons during the operations on August 24 and August 25, the Chief of Staff, U. S. Air Force, granted approval to extend the search through August 28, 1968. The last dive which was scheduled for August 28 had to be cancelled due to bad weather. Commissioner Tape, upon being informed by Dr. Walske that bad weather prevented a dive and all was about to be buttoned up for return, agreed not to try to reverse the proposed action. Dr. Walske also spoke to Major General Glasser of Headquarters, USAF. All agreed that further survey operations could be terminated. With the concurrence of the Secretary of the Air Force, the on-scene commander at Thule was then advised to cease operations, demobilize and return all equipment and personnel involved in the survey to the United States.

The small weapon parts were visually identified as pieces of the external and ballistic case section of a weapon. No parts of a weapon secondary were observed, and none of the weapon-related parts have been recovered, nor do they show up in the photographs presently available.

A briefing on the underwater survey effort was presented in Dr. Walske's office on August 31, 1968. The briefing was presented by the three U. S. Air Force officers who manned the STAR III during the operation. A total of 11 dives was made with an actual search time of approximately 1.5 hours per dive (longest dive was more than 3½ hours). Excellent photographic coverage has been obtained.
which serves to better define the characteristics of the bottom of the bay and to present pictorial evidence of the type of aircraft debris which now rests on the bottom. In view of the fact that the bottom itself has a rather uniform hard surface which is covered by a light layer of fine silt, it has been concluded that most any debris which went through the ice would remain on the hard surface and would have been detected during the survey. Enclosed is a freehand sketch of a chart used by the briefing officers to show the concentrations of aircraft debris and the location of the four pieces of weapon-related parts. Concentrations "A" and "B" each consisted of some 3,000 to 4,000 small pieces of debris which were believed to have been trapped in the ice and then deposited as the ice shifted back and forth during the melting phase. Some of the debris in Concentration "C" consisted of large, heavy pieces of the aircraft such as landing gear structures. The survey was terminated before the details and extent of Concentration "C" could be determined. During the briefing, considerable discussion was generated on the unexpected location of the heavy debris with relation to the impact point. It was further speculated that the missing in view of its ballistic characteristics, may have come to rest beyond the observed concentration of the heavy debris.

One piece of aircraft debris, a canvas (or canvas like plastic) engine intake dust cover, was recovered and contamination readings were taken. The wet reading was 1,500 CPM, and a later dry reading was made and recorded as ranging from 0 to 5,000 CPM over the entire surface of the dust cover with the high readings coming from points of impregnated radioactive material.

Between July 24 and August 26 the Danish radiological health team patrolled the shores of the bay and the islands for debris and collected a large number of samples of animal and plant life from the water, bottom of the bay and shores; these have been taken to Risø for alpha spectrometric analysis. Field instruments indicated no significant contamination; final judgments must await the analyses. The Danes, however, seem satisfied that no biological hazards exist and are said to have reported this to their government.

Removal of the contaminated residue from Thule is proceeding on schedule. The USNS TOWLE departed Thule at 7:00 a.m., September 2, 1968, and should arrive at Charleston, S. C., on September 12, 1968. The cargo consisted of:

a. Two hundred sixty-eight each 1,800 gallon tanks filled with contaminated liquid.
b. Eleven empty 25,000 gallon tanks.
c. One hundred ninety-two containers of miscellaneous debris.

The USNS MARINE FIDDLER arrived at Thule on September 3, 1968. Since all liquid transfer and other packaging operations have been completed, all that remains to be done is to load the MARINE FIDDLER with the following cargo and return it to Charleston, S. C.:

a. Forty-seven each 1,800 gallon tanks filled with contaminated liquid.
b. Fourteen each 1,800 gallon tanks of miscellaneous debris.
c. Eleven each 5,000 to 10,000 gallon containers of miscellaneous debris.
d. Five each 25,000 gallon tanks of miscellaneous debris.
e. Fifty-six empty 25,000 gallon tanks.
f. One belt loader.
g. Two refueling units used for liquid transfer operations.

The original estimated cost for disposing of the residue at Savannah River Operations (SRO) was $365,000 which was in turn based on an Air Force estimate of 350,000 gallons of liquid residue to be processed and disposed of. The estimated volume reduction of the melted ice and snow was in error, and the total amount of liquid now to be returned and disposed of is 550,000 gallons. The Manager, SRO, has submitted a revised cost estimate of $504,000 for the disposal operation. Separate action is being taken to advise the JCAE and the DoD of the increased cost.

Edward B. Gillen
Major General, USAF
Assistant General Manager
for Military Application

Enclosure:
Chart of Search Area

- 4 -
Weapon Pieces Identified

#1 External flat cable raceway without connectors
#2 Section of MC-706 warhead ballistic case (3 x 1\frac{1}{2} ft)
#3 Section of steel polar cap (14 x 14 x 12 in)
#4 Section of steel locking band (6 inch piece)