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July 29, 1953

Merril Eisenbud, Director  
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CONFERENCE WITH CINCPAC STAFF -- PEARL HARBOR, JULY 24-25, 1953

SYMBOL: HS:ME

On July 24 and 25 I visited CINCPAC Headquarters to discuss the design of the fallout monitoring program to be conducted by the New York Operations Office in the Pacific during CASTLE.

As in the case of IVY, I developed the details of the program with the cooperation of Commander C. R. Deller, Jr., who is on the staff of the Fleet Operations Officer. I also met with Admiral W. K. Phillips, Chief of Staff, Captain Horatio Rivero, Fleet Operations Officer, and Captain H. F. Shim, Air Operations Officer.

I took the opportunity afforded by this visit to brief the above staff members on recent developments related to the fallout problem, including the recent experiences during UPSHOT-KNOTHOLE and the present status of GABRIEL.

Based on the informal concurrence of Captain Rivero and Commander Deller our planning for the Pacific phase of CASTLE survey will proceed as follows: (Modifications of the worldwide network will be dealt with in a separate memorandum)

GROUND MONITORING

Automatic continuous recording monitors will be installed at Truk, Ponape, Kusaie, Majuro, Rongerik and Ujelang. Subject to the availability of equipment, installations may be made at Palau and/or Yap. In all these places the equipment will continuously monitor gamma radiation and will count and record the concentration of airborne radioactive dust.

It is contemplated that the installations will be made by an NYOO representative. In all places except Ujelang (where the equipment will be unattended and battery operated) 110V AC is presumed to be available and the equipment is to be assigned to Weather Station personnel who will report recorded data routinely to the NYOO representative at Task Force Headquarters.

In addition to the above stations, it is known that both HRL and AFOAT-1 operate continuous monitoring equipment at a number of locations in the Pacific area. In order to avoid unnecessary duplication:

CLASSIFICATION CANCELLED

BY AUTHORITY OF DAE 5650.2, III-12 (ADMIN)

BY James A. Gray DATE 11/20/80

BY William H. Stewart DATE 11/21/80

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of installations, as occurred at both Guam and Oahu during IVY, it is desirable that these organizations disclose to us the locations of their stations and cooperate to the extent of reporting their routine observations of gamma background to Task Force Headquarters.

Apart from the inherent value of continuously recorded data per se, ground monitoring will increase the efficiency of the aerial monitoring procedures by eliminating negative flights. By their geographical distribution, the data from the stations will provide an indication of the island groups which have been affected by fallout and the aerial monitoring flights can be scheduled accordingly.

#### AERIAL MONITORING

The basic flight patterns adapted for IVY are unchanged. However, based on the IVY experience, the following operating changes will be made:

1. The radiation measurements will be made by the aircraft crews rather than by NYOO representatives. This change is justified by the relative ease of measurements demonstrated during IVY. The aerial scintillation instruments will be assigned to the squadrons at Guam, Kwajalein and Hawaii. Members of the squadron who will be directly concerned with the use of these instruments will be instructed in their use in advance of CASTLE. NYOO will have provisions at either Kwajalein or Eniwetok for the repair of defective instruments.

2. Monitoring flights will be scheduled according to the findings of the ground monitoring installations described above. Following any given detonation, certain of the prearranged flight patterns may be eliminated if data from the ground installations confirm meteorological predictions that fallout in a given area is unlikely.

#### PLACEMENT OF GUMMED PAPER ON NAVAL VESSELS IN THE PACIFIC

The IVY experience indicates the possibility that major fallouts are going undetected because they occur on the open sea. The relatively small total area of the Pacific islands in relation to the area of open water makes it difficult to understand completely the fallout patterns from the detonation of superbombs. The requirements of GABRIEL and the need to predict fallout patterns for detonations over land masses, makes it desirable that the limited data from the islands be augmented by whatever information that can be collected by ships at sea. CINCPACFLT has

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offered to cooperate with us in placing gummed papers aboard every naval vessel in the Pacific. At any one time there are approximately 300 such ships at sea. They are assigned to three categories:

1. Naval-commissioned vessels.
2. Ships belonging to the Navy but operated by civilians.
3. Ships under Navy charter.

Included in this program would be all such ships plying between the West Coast, Hawaii and the Far East, and the traffic between the Southeast Asia and Japan. To implement the program we would send gummed papers and instructions to naval control shipping offices at 12 ports. They will be authorized by CINCPACFLT to instruct the naval vessels to collect 24 hour samples continuously during the test program.

CINCPACFLT will also arrange to place gummed paper aboard six ocean weather vessels which are stationed at fixed positions in the Pacific.

CC: Division of Military Application, AEC Washington  
Commander In Chief Pacific Fleet  
Commander Joint Task Force #7

