

Office Memorandum • UNITED STATES GOVERNMENT

TO : Dr. Walter D. Claus, Chief, Biophysics Branch, Division of Biology and Medicine, Washington

FROM : Merrill Eisenbud, Director, Health and Safety Division, New York Operations Office

SUBJECT: MOBILE FALLOUT STUDIES FOR "BUSTER" AND "JANGLE"

SYMBOL: HS:ME:srm

DATE: August 23 1951

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We are proceeding to develop plans for the mobile ground-air fallout studies for two clouds from Buster, and two from Jangle. This memorandum will list certain questions which I would hope could be answered within the next week or ten days in order to make it possible for us to develop the final details of the operational plan.

1. Will AFOAT or some other branch of military provide air support? The operational success of this project may well depend on whether or not we are successful in obtaining planes and crews with the equipment and experience to facilitate cloud observation. In this connection I might recapitulate our concept of the kind of air reconnaissance that would be required:

a. By 0200 of each day, we should have a report giving the dimensions of the cloud (or the principal cloud fragment in the event the original cloud becomes fractionated), the location of the cloud mass and its direction and speed of travel.

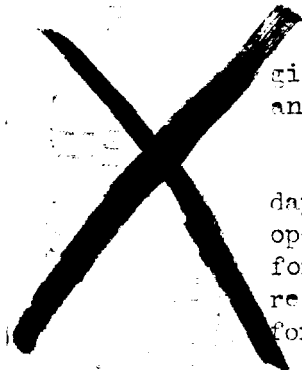
b. Preferably no later than 0600, a member of the AEC monitoring group assigned to this project should be delivered at an airport located approximately two hours (cloud travel time) in front of the cloud nose. It is desirable that this location be as near as feasible to a point below the anticipated forward axis of the cloud.

c. Observations aloft should begin immediately following delivery of the ground observer. This phase of the reconnaissance should be designed to obtain the best possible record of the cloud characteristics in passing above the observation station. We should record the time of arrival of the cloud mass and the total time of transit. During the period of transit, we should have a log of the cloud behavior as regards vertical and horizontal geometry and levels of radioactivity.

d. The above operation should be repeated by a second observer beginning 1600. This would presumably involve a duplicate of equipment and personnel required for "c".

e. To facilitate the above operation and in order to assure that its day to day planning is consistent with the ultimate objectives of the operation, it would be desirable for a member of my staff to be assigned for liaison purposes to the AFOAT headquarters. This would be helpful regardless of which organization provides the actual personnel and equipment for the above reconnaissance.

CLASSIFICATION CANCELLED BY AUTHORITY OF DOE/OC
 Jose Diaz 4/7/81
 REVIEWED BY DATE
 Wilbur A. Strauser
 By: W. Tenet 6/8/87



John #882

MILITARY RESEARCH & APPL - 7-1
Opes. Reister Jangle

- 2.* What is the anticipated ratio of beta-gamma activities within the clouds?
3. What is the range of beta and gamma activities that may be anticipated in a traverse through the center of the cloud at 1000, 2000 and 3000 miles?
4. What are the best available estimates of the anticipated specific activities of the dust from (a) Buster and (b) Jangle?
5. What beta and gamma spectrum may be anticipated at 1000, 2000 and 3000 miles?

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*The answers to this and the following questions are necessary that we may plan for the eventuality that we provide our own instrumentation for the aerial phase of reconnaissance.