

COMMANDER IN CHIEF PACIFIC
and
United States Pacific Fleet
c/o Fleet Post Office
San Francisco, California

SECRET
SECURITY INFORMATION

26 June 1953

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My dear Dr. Bugher:

Thank you for your letter of 15 May 1953, and the two copies of Report NYO-4522 containing the results of the work of the Health and Safety Laboratory of the New York Operations Office on measuring the fallout from IVY in various parts of the world. The rapid acquisition of evaluated data and the wide coverage of the Pacific Area made possible by the new aerial survey instruments certainly provided the type of documentation essential for adequate safety measures incident to the potential hazards introduced by the first thermonuclear detonation.

From IVY experience in regard to fallout distribution in the Pacific Area, it appears that the extensive aerial survey conducted during IVY could be greatly reduced during CASTLE. Specifically, I have in mind aerial survey of only those areas in the predicted trajectory of significant radioactive clouds and the capability for such survey in other areas similar to the IVY plan. Naturally those atolls in the Marshall Islands and possibly the Eastern Carolines that lie within a potentially hazardous radius from the test site will require individual surveillance by the aerial technique. Of course, such tentative thinking presumes that the Atomic Energy Commission will have available sufficient ground recording methods such as "fly paper" trays or air samplers for efficient coverage in regions of lesser concern. It also assumes that laboratory analysis in lieu of immediate evaluation of fallout data will suffice for areas exposed to insignificant hazard.

For planning discussions, I suggest meeting at my Headquarters any convenient date after 15 July 1953. Although I will have departed for my new assignment by that time, I feel it would be best to arrange future planning details with my successor since any matters related to CASTLE will fall within his purview.

I deeply appreciate the fine services which you and your Staff rendered to the Pacific Command during Operation IVY. The recently developed aerial survey equipment not only contributed greatly to operational safety during IVY, but also has marked another great gain in the field of science.

Sincerely yours,

/s/ A. W. Radford

Dr. John C. Bugher
Director, Division of Biology and Medicine
United States Atomic Energy Commission
Washington 25, D.C.

PLEASE REPLY TO THE HEAD
OF THE AUTHORITY OF THE
W. S. Bugher, J. D. B. DATE
REVIEWED BY
Carl Wilson 8/12/85
By: W. Trench 6/8/87
DRAFT 6/12/82
Niles/Hawthorne

MILITARY RESEARCH & APPL.

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