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UNIVERSITY OF CALIFORNIA

RADIATION LABORATORY
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January 21, 1957

Captain Kenneth Musick
Test Division
Division of Military Application
U. S. Atomic Energy Commission
1901 Constitution Avenue
Washington 25, D. C.

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Dear Captain Musick:

As you will recall, as part of the Taongi investigation, we requested Commander Dan Rex, who is Officer-in-Charge of the Joint Task Force Seven Meteorological Center, to make a study of the weather. On January 14 we received the report of his analysis. For your information I felt an extract from the report might be of interest. At the outset it is important to point out that there are no direct weather data available from Taongi for comparison. The winds were estimated from streamline charts developed during the course of Redwing and previous test operations.

Using this method, three periods of 15 days each were selected during Redwing and daily Taongi hodographs were prepared. The three 2 week periods covered were 14 April to 1 May 1956, 11 June to 25 June 1956, and 9 July to 23 July 1956. The results of the analysis demonstrated that out of 45 days in these three periods that 32 days were satisfactory for firing at Taongi while only 7 were judged to be acceptable at Bikini. It should be emphasized that these estimates are based on inspection of the hodographs alone and that only a few fallout computations have been made. However, indications are that such calculations will not drastically modify the results.

In addition to the fallout picture the local weather conditions at Taongi may be expected to be somewhat more favorable for air and test operations than at Eniwetok/Bikini; i.e. less rainfall, decreased shower activity, stronger and more constant surface tradewinds.

In view of these extremely favorable results I feel that an upper air staion must be established at Taongi to obtain accurate meteorological information for a period of a year preceding HARDTACK. To accomplish this it will be necessary to establish this station at the earliest possible time and preferably not later than 1 April 1957.

Sincerely yours,

G. W. Johnson

G. W. Johnson
Test Division Leader

GWJ/wl

cc: G. Felt, LASL
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