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James E. Reeves, Office of Test Operations, SPOO

18 January 1954

A. C. Graves

STUDY BY U. S. WEATHER BUREAU

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RM

Reference: Your memo of 11 Jan 54, same subject, Symbol: T-7

The referenced memorandum indicates that the U. S. Weather Bureau will initiate a study of possible relationship between nuclear detonations and weather conditions. I, also, endorse this study. However, sufficient experience exists from continental tests to indicate that effects from low yield weapons will be small and difficult to observe. Consequently, I would recommend that the U. S. Weather Bureau concentrate its initial efforts on large yield weapons. The following steps should be considered:

1. Make available to the U. S. Weather Bureau the Pate-Palmer Weather Report for Operation Ivy.
2. Arrange for a conference between the responsible scientist from the U. S. Weather Bureau and Dr. Palmer in Honolulu.
3. Arrange for this same scientist to proceed to Eniwetok to work with the Weather Detachment there, and observe any effects from the Castle detonations.

Original signed by  
ALVIN C. GRAVES

ALVIN C. GRAVES  
J Division Leader

ACG:vw

RG 326 US ATOMIC ENERGY  
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Reviewed by Carl Wilson 6/1/83  
J. Drag 9/4/85 33

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## Office Memorandum • UNITED STATES GOVERNMENT

TO : Dr. A. C. Graves, J-Division, LASL

DATE: JAN 11 1954

FROM : James E. Reeves, Director, Office of Test Operations, SFOO

SUBJECT: STUDY BY U. S. WEATHER BUREAU

SYMBOL: T-7

Enclosed is copy of letter, dated December 23, 1953, from Dr. Machta, U. S. Weather Bureau, requesting information and suggestions on the possible relationship of nuclear detonations and weather conditions.

This office heartily endorses this study, especially in view of the unfavorable public speculation that continental tests had caused the destructive tornadoes of last year.

We will appreciate receiving any information, suggestions, or hypotheses which you or other representatives of the Lab might have which may be of interest to the Weather Bureau in this study. We are making similar requests of Colonel Holzman, UCRL, Dr. Cox, and the Field Command. All information furnished will be passed on to Dr. Machta about January 20, 1954, for his consideration.

Enclosure:  
Cy ltr 12/23/53

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COPY

UNITED STATES DEPARTMENT OF COMMERCE  
WEATHER BUREAU  
WASHINGTON

December 23, 1953

R-3.7

Mr. Carroll L. Tyler, Manager  
Santa Fe Operations Office  
U. S. Atomic Energy Commission  
P. O. Box 5400  
Albuquerque, New Mexico

RM

Dear Mr. Tyler:

The U. S. Weather Bureau has tracked the atomic clouds from the Nevada tests in cooperation with the Atomic Energy Commission. Some unusual meteorological phenomena, coinciding in time with the test series, have suggested to the public that there may be a connection between the two events.

We have examined many of these instances, and have found no basis for believing the atomic detonations or clouds to be related to weather occurrences. However, in view of the importance of the subject, we feel that every effort should be made to investigate it as completely and thoroughly as possible. We are attempting to document, insofar as possible, all relationships which are suggested as being plausible between the firing of atomic weapons, their radioactive debris and weather conditions.

To make sure that no possible relationship between atomic detonations and the weather has been overlooked, we would like to receive possible mechanisms advanced by other meteorologists and scientists. Would you kindly send us any suggestions you, your colleagues or the technical contractors under your office may have on the subject?

Sincerely yours,

/s/ Lester Machta

Lester Machta, Chief  
Special Projects Section

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