IN REPLY
REFER TO H

April 13, 1954

Dr. Alvin C. Graves
CTG 7.1
Eniwetok, M. I.

Dear Al:

In accordance with your request I am sending an outline for a proposed study which should form a basis for determining a date at which the Rongelaap natives might return to their home islands. To assist you in evaluating it I believe that some additional explanation is called for. I am supplying this additional information only to you but you should feel perfectly free to make whatever use of it you see fit.

In the first place, the proposed project is the way we would like to see the work done if we were doing it ourselves. We started out with certain main assumptions which are about as follows:

1. From information which we have at hand it seems impossible that the natives can be returned to Rongelaap before September or October at the very earliest.

2. It should be possible by that time to acquire sufficient data and information on which to base an intelligent decision as to the actual date of return.

3. No intelligent decision can be made except on the basis of a series of observations; we can extrapolate from a curve but not from a single point.

4. We feel it essential to get the first observations in the very near future before the start of the rainy season in June or July. Other observations must be made later to determine the effect of heavy rains.

5. It is our feeling that the collection of specimens and their analyses should be done by a single organization. We would strongly oppose having one group collect specimens and ask someone else to carry out the assay.

6. We feel that this project should confine itself exclusively to obtaining an answer for this one question. We feel that this is necessary for the avoidance of delay and confusion. The project should not, for example, be concerned with the present physical condition of the natives other than to give proper consideration to the dose which they have already received.

7. The project as outlined is based on utilizing in so far as possible Holmes and Narver facilities, plus personnel who are already in the Forward Area; the number of people who would have to be transported would be quite small.

8. We feel that we in H-Division have got adequate personnel, facilities, and equipment to do a considerable amount of the work. We would require logistic support from H&N, the assistance of Lauren Donaldson's University of Washington group, and the advice and assistance of Trust Territory officials in providing assurance that we are not overlooking any significant articles of diet or living customs which might be of significance.

9. It is my assumption that the Task Force would like, in so far as possible, to be relieved of this problem. I feel that to a considerable extent this is a responsibility of SFOO and EFO. I also realize, however, that the general problem is one of interest at all levels up to and including the United Nations. For this reason, the Division of Biology and Medicine will in all probability, and quite properly, feel that they should make the decision as to what should be done and by whom. For this reason, this proposal is addressed only to you for whatever purpose you may wish.

10. We would like to do the job. We don't flatter ourselves to think that ours is the only outfit that can do it, but we do think that we have adequate experienced personnel and facilities to provide you and the Trust Territory officials with the answer you want in the shortest possible time with a minimum of logistic effort. Other groups which might be interested in taking this on are NRDL, NYOO, UCLA (Staff Warren), and probably others. All are probably well qualified but all have their own idiosyncrasies. They make uneasy bedfellows and any of the groups named would undoubtedly prefer to carry out the project single-handed according to their own ideas. I am sure that is the case with us. We probably have one advantage in that we know fairly definitely what we would like to do and are prepared to start immediately. We would certainly wish to take advantage of all of the information which has already been collected, but we feel that this information is of little or no value until it is put together with data acquired in the future.

You may wish to let Tom White consider this material and there is no question in my mind but that he will have suggestions of value and he has the advantage of being on the spot at the moment. You might even wish us to go ahead with this quite independent of any other investigations. We will, however, be reluctant to become a part of an unwieldy organization in which we might be thrown a lot of curve balls. If we are to do anything, however, we would like to get started at the earliest possible opportunity.

Very sincerely yours,

THOMAS L. SHIPMAN, M. D.,

[redacted]

PROJECT HARDY (THE RETURN OF THE NATIVE)

[redacted]

A. Purpose

To establish the earliest possible date of safe return of the natives to Rongelaap and Ailinginae Atolls, and secondarily to gain information of considerable value to the problems of Operations Gabriel and Angel.

B. Areas of Study

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1. The home island - Rongelaap.
2. The remaining islands in Rongelaap Atoll.
3. Nearby contaminated atolls such as Ailinginae which are visited by the natives for fishing, etc.

C. Systems Within the Environment for Study

1. General contamination as deduced by gamma ray surveys.
   (a) Indicates external gamma background.
   (b) Indicates regions of varying uptake into plants.
   (c) Indicates something of the reservoir from which activity may be concentrated by biological systems.
2. Sources of internal contamination.
   (a) Water supplies.
   (b) Terrestrial foodstuffs.
   (c) Marine foodstuffs.
   (d) Airborne dusts as indicated by standard dust sampling procedures.

D. Temporal Sequence of Study - for prediction purposes the time rate of change of the contaminating factors is fully as important as the absolute levels found.

1. Information already available - collected from sources of this informatio

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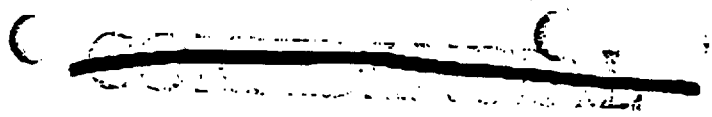

(a) Surface fallout studies from JTF 7 data.

(1) Initial surveys by TG 4 monitor.

(2) Surveys by Scoville and Co. on 8 to 11 March.

(3) Survey by P. Schiavone on 25 March.

(b) Environmental sampling data on various materials.

(1) Soil and H_2O samples collected by Scoville party and sent to NYOO.

(2) Animals (pigs, chickens, cats) collected for and sent to NRDL.

(3) Marine and other samples collected by Donaldson, etc., during 25 March survey activities.

(c) Urine specimens from natives themselves. Collected on 14 to 19 March by LASL.

2. Information needed soon (up to rainy season - starting in June to July).

(a) Climatological pattern. - Present conditions are the last half of the typical dry season which prevails from November to June or July.

(b) The rate of change of the environmental contamination during the remainder of the dry season is extremely important for early prediction purposes.

3. Information needed during rainy season - during this season most of the translocation and decontamination may be realized.

(a) Decontamination - general distributed level of contamination should decrease.

(b) Translocation - increased mobilization of contamination and increased growth rates of flora may cause an increase in contamination levels of potential food supplies.

4. Long-time follow-up - necessity for which may change depending on findings under (2) or (3). The above findings may show that long-time follow-up

E. Plan of Operations

1. General monitoring of all the islands involved for general contamination levels.

   (a) Immediate resurvey, can be done by personnel now at PPG.

   (b) Correlation of data thus gained with present knowledge of C-1-b and C-1-c.

   (c) A series of follow-up surveys at reasonable intervals as determined by the individual responsible for E-1-a.

2. Sampling procedures to be continued periodically during the duration of the study.

   (a) Immediate collection of samples of foodstuffs and other material, to be carried out by personnel presently at PPG.

   (b) Follow-up sample collection by personnel sent to Forward Area, as directed by person responsible for E-2-a.

   (c) Collection of marine foodstuff samples to be carried out by members of Lauren Donaldson's party presently on Parry Island, data thus gained to be correlated with that from samples already collected.

   (d) The selection of foodstuffs to be collected, both vegetable and marine, calls for advice and assistance of Trust Territory officials (Tobin or Marion Wilds) and of natives themselves.

3. Nature of Samples

   (a) Water.

   (b) Vegetable foods.

   (c) Marine foods.

   (d) Domestic animals.

   (e) Soil samples.

4. Analysis of Samples

(a) To be done in ZI by the same organization responsible for the collection.

(b) General analysis for total fission products.

(c) Specific assay for Pu, Sr, Y, Ru, Ce, Nb, Zr, Pr, I, and/or others that may be detectable.

F. Logistics

1. Transport from ZI to PPG.

(a) Air transport for necessary personnel - one or two round trips per month for an estimated 6 months for probably not more than four people.

(b) Air transport of samples to ZI, probably not over 200 lbs. per month.

2. Support at PPG.

(a) Liaison with AEC, EFO, and H&N.

(b) One LCU or LST required to transport initial load of equipment and provisions.

(c) Rongelaap equipment.

1) Camp facilities adequate for 8 men.

2) One DUKW and driver.

3) One LCM and crew.

4) One large rubber raft.

5) One boat with power, comparable in size to whale boat but faster than LCM.

6) The level of contamination on Rongelaap Island may be high enough to prevent use of a camp on the island. In this case, a boat of some sort (LCU) with adequate living conditions to sleep and feed 8 people would be necessary.

(d) PBM transport from Kwaj (or Enivetok or Bikini) to Rongelaap as required.

(e) Personnel at Rongelaap - 8 persons for stays up to 2 weeks.

G. Duration of Project

1. If personnel are not burdened with requests for samples for other organizations, the primary objective should be obtained within 6 months, possibly sooner.

2. Additional studies, including long-term follow-up, should be organized independently.

3. It is strongly recommended that this project be started immediately so that two sets of samples of vegetable foodstuffs and two monitoring surveys be completed before the start of the rainy season. Any delay will delay getting an answer to the main question and will also make this answer less dependable.

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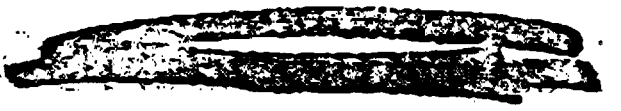

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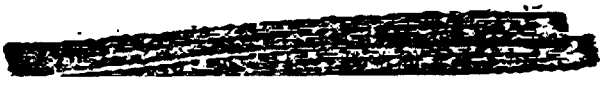

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