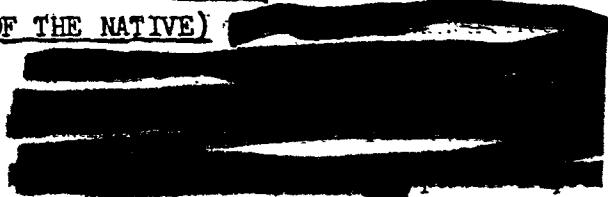


Location LANL  
Records Center J-DO  
Collection JC-2 D-44  
Folder Bravo Fallout

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PROJECT HARDY (THE RETURN OF THE NATIVE)



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

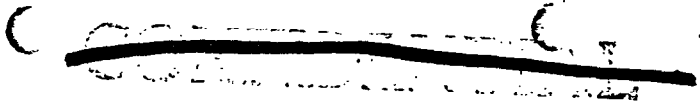
1. General contamination as deduced by gamma ray surveys.
  - (a) Indicates external gamma background.
  - (b) Indicates regions of varying uptake into plants.
  - (c) Indicates something of the reservoir from which activity may be concentrated by biological systems.
2. Sources of internal contamination.
  - (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 informatic

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*Carroll* 8/16/85  
REVIEWED BY *J. Diaz* 10/16/85



- (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<sub>2</sub>O 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 studies are unnecessary.

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**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.

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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.

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(d) PBM transport from Kwaj (or Eniwetok 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.

April 14, 1954