

DEPARTMENT OF DEFENSE
MILITARY LIAISON COMMITTEE
to the
ATOMIC ENERGY COMMISSION
P.O. Box 1614, Washington, D. C.

By 16 of 25 cys each
of 1 page, series A

22 September 1954

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Date..... 7 JAN 1985
Declassified
Authority EO 12356
Name..... Chief, Declass Br
Rec. Mgt. Div, WHS

INFORMATION ITEM

SUBJECT: USNRDL Proposal for Atoll Resurvey Studies

MLC MEETING: 26 September 1954

- REFERENCES: (a) Letter for Chairman, MLC, from Chief of Naval Operations, dated 16 Sep 1954, subject: "Proposed Project entitled 'Atoll Resurvey Studies (Follow-up Determination of the Extent of Distribution of Fall-out Contamination on Rongelap and other Atolls in the Marshall Group)' "
- (MLC 16719-31.2/Castle x 30.8)
- (b) Memorandum for Chairman, AEC, from Chairman, MLC, dated 22 Sep 1954, subject as above, w/Incl.
(MLC 16727-31.2/Castle x 30.8)

Reference (b), transmitting a request essentially as submitted by reference (a), is furnished for the information of the Members at the above meeting.

Orin S. Richardson
ORIN S. RICHARDSON
Colonel, USAF
Executive Secretary

1 Incl:
Ref. (b)

OK
USK
NAL

WNRC:

RG: 330
ACCESSION#
BOX# 1
FILE NAME:

74-0069
MLC MTE, 9/28/54, TAB 22

**DEPARTMENT OF DEFENSE
MILITARY LIAISON COMMITTEE
P. O. Box 1814
Washington 25, D. C.**

By 16 of 25 cys each
of 2 pages, series B

22 September 1954

MEMORANDUM FOR: The Chairman, Atomic Energy Commission

SUBJECT: USNRDL Proposal for Atoll Resurvey Studies

1. During the period of 21 - 23 April 1954 a survey party under the direction of Commander Joint Task Force SEVEN, which included representatives of AEC, visited Rongelap and Uterik Atolls for the purpose of determining what action had to be taken prior to the return of the native population to these atolls, from which they were evacuated early in March 1954 as a consequence of the initial detonation of the CASTLE test series. By letter dated 5 August 1954, the General Manager, Atomic Energy Commission, indicated to the Chief of Naval Operations that the AEC accepted responsibility for implementing the following recommendations submitted by the survey party:

a. "Periodic medical surveys of the natives and RadSafe surveys of the atolls should be conducted by qualified personnel operating out of Naval Station Kwajalein. Dr. Bugher, DEM, AEC stated that his office would send groups of qualified personnel to Kwajalein for this purpose."

b. "AEC RadSafe personnel resident in the Pacific Proving Grounds, in conjunction with representatives of DEM, AEC, should make periodic inspections of the islands of Rongelap Atoll to ascertain the rate of decay of the contamination. Reports of these inspections should be forwarded to interested agencies; AEC, CINCPACFLT, JTF SEVEN, CO NavSta-Kwajalein."

2. In connection with the above recommendations the Commanding Officer, U. S. Naval Radiological Defense Laboratory (NRDL) has submitted through Department of Defense channels, as inclosure to this memorandum, a project for the resurvey of the contaminated atolls. This proposal is based on discussions between representatives of the Naval Medical Research Institute, the Division of Biology and Medicine, AEC, and NRDL. The objectives of the proposal are as follows:

a. To provide data upon which to determine if and when the evacuated islands will be safe for occupancy by former inhabitants.

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b. To provide information on the distribution of the contamination on a land area which has been heavily contaminated by fall-out.

3. Inasmuch as the objective stated in subparagraph 2.a. relates directly to the responsibility assumed by the Atomic Energy Commission and the objective stated in subparagraph 2.b. is a matter of interest to the Atomic Energy Commission as well as the Department of Defense, the Military Liaison Committee requests that it be informed whether or not the AEC will agree to finance the proposed project to resurvey the contaminated islands of the Marshall Group.

(Signed)

HERBERT B. LOPER
Chairman

1. Incl:
Cy USNRDL Proposal,
dtd 6 Jul 54

cc:
Dir., Div of Biol & Med, AEC
ASD (R&D)

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U. S. NAVAL RADIOLOGICAL DEFENSE LABORATORY
SAN FRANCISCO 24, CALIFORNIA

Cy 16 of 28 cys each
of 2 pgs, ser ~~NLC-1~~

3-905-61
RCL:mjr
6 Jul 1954

AIR MAIL SPECIAL DELIVERY

C O N F I D E N T I A L

From: Commanding Officer, U. S. Naval Radiological Defense Laboratory

To: Chief of Naval Operations

Via: (1) Chief, Bureau of Medicine and Surgery (Code 714C)

(2) Chief, Bureau of Ships (Code 348)

Subj: USNRDL FY 1955 Atoll Resurvey Research Proposal; submission and implementation of

Ref: (a) CO, USNRDL Conf ltr 3-905-62 RCL:sicm of 6 Jul 1954 to Ch, BuMed

Encl: (1) USNRDL FY 1955 Project Proposal entitled "Follow-up Determination of the Extent of Distribution of Fall-out Contamination on Rongelap and other Atolls in the Marshall Group" (Form DD 613)
(2 cys)

1. The proposal herewith transmitted as enclosure (1) has been prepared on the basis of discussions between representatives of the Naval Medical Research Institute, the Division of Biology and Medicine of the U. S. Atomic Energy Commission and this Laboratory, and represents studies proposed by the USNRDL for prosecution during FY 1955.

2. The work described in enclosure (1) is designed to support the continuation of the biomedical studies of the Marshallese Islanders exposed to radioactive fall-out which were initiated by Project 4.1, Operation CASTLE. In addition, it is felt that implementation of the enclosed proposal will furnish valuable supplemental information needed to evaluate the radiological situation on the land areas contaminated by radioactive debris from Operation CASTLE.

3. Since the periodic follow-up medical studies of the exposed Marshallese mentioned above are anticipated to begin by late August 1954, it is proposed that the collection of samples for the studies described in enclosure (1) and also for the related work outlined in reference (a) be arranged to follow the same schedule. This will permit a sharing of logistic support and personnel between the two field projects. In this connection, it is suggested that the following factors be taken into consideration in such logistic planning:

a. The atolls to be visited are approximately one day's run by ship from each other.

b. Several islands of each atoll require visiting. These islands are as much as 30 miles apart.

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3-905-61
RGL:mjr
6 Jul 1954

**Subj: USNRDL FY 1955 Atoll Resurvey Research Proposal;
submission and implementation of**

c. Travel between the islands of an atoll is by way of the lagoon which is not generally navigable by ships or seaplanes beyond limited areas near the lagoon entrance. Pontoon-equipped helicopters or, alternatively, boats suitable for trips of 20-30 miles and operations in surf are therefore necessary.

d. A survey group will consist of three or four people. The scientific gear required is of such weight and volume that it can reasonably be transported by air.

e. Civilian personnel will probably require passports or an equivalent such as the AGO Form 65 used by JTF SEVEN.

f. The surveys will be required at six month intervals. The field phase of each survey will require approximately three weeks of actual operation in the Marshall Group.

g. Of the atolls to be visited quarters ashore are available only at Majuro.

4. In view of the factors described above it is requested that, if this project is approved, arrangements be made for the following:

a. Transportation from San Francisco to Naval Station, Kwajalein, by air, of the personnel and their equipment.

b. Transportation by ship from Kwajalein to the various atolls as required.

c. Helicopters or, alternatively, suitable boats to serve as the secondary means of travel between ship and islands and between islands.

5. It is proposed that the USNRDL carry out these studies in FY 1955 at the 2.6 investigator man-year level, the estimated cost of which will be \$42,000. Since it is envisioned that the program outlined may continue over a period of several years, it is suggested that, while the laboratory analyses will probably be supported by BuMed and/or BuShips, it may be desirable to seek funds from the USAEC to finance collection of samples in the field.

6. As indicated above, there is an early schedule for beginning the follow-up medical studies with which the enclosed project should be coordinated. It is therefore requested that the subject proposal be reviewed and, if it is acceptable, that approval for the work and information on logistic support be given at an early date so that appropriate local planning for the prosecution of the USNRDL FY 1955 Program can be effectively carried out.

R. A. HINNEES
Director

Advance copy to BuShips (Code 348)
Copy to:
NMRI (Dr. Cronkite) (w/cy of encl (1))

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RDB PROJ. CAKw		TYPE OF REPORT PROPOSED (FY 1955 Proposal)		REPORTS CONTROL SYMBOL DD-RDB(A)48	
1. PROJECT TITLE Atoll Resurvey Studies (Follow-up Determination of the Extent of Distribution of Fall-out Contamination on Rongelap and other Atolls in the Marshall Group)			2. SECURITY C		3. PROJECT NUMBER
			4. INDEX NUMBER		5. REPORT DATE 6 July 54
6. BASIC FIELD OR SUBJECT Nuclear Studies		7. SUB FIELD OR SUBJECT Effects of Atomic Warheads and Radiological Shielding		7a. TECHNICAL OBJECTIVE AW-07601-1 Atomic Warfare (Defense)	
8. COGNIZANT AGENCY Navy BuShips		12. CONTRACTOR AND/OR LABORATORY U.S. Naval Radiological Defense Laboratory, San Francisco, Calif. Dr. E.R. Tompkins, Project Leader		CONTRACT/NO. NUMBER	
9. DIRECTING AGENCY Bureau of Ships (Code 348)				17. EST. COMPL. DATES	
10. REQUESTING AGENCY		13. RELATED PROJECTS		RES. Continuing	
11. PARTICIPATION AND/OR COORDINATION				DEV. Continuing	
				TEST -	
19.		14. DATE APPROVED		OP. EVAL. -	
				15. FISCAL ESTIMATES	
				15. PRIORITY	16. MAJOR CATEGORY
20. REQUIREMENT AND/OR JUSTIFICATION		19.		55	42M
				56	42M
				A	42M
21. BRIEF OF PROJECT AND OBJECTIVE					
a. Objective.					
<p>It is proposed that follow-up studies of the extent and distribution of CASTLE fall-out contamination on Rongelap, Rongerik, Ailingnae and Utirik Atolls be made by investigating the amount and kind of radioactive contamination in soil, water, animals and plant life for the following purposes:</p> <p>(1) To provide data upon which a decision can be based as to if and when the evacuated islands will be safe for occupancy by the former inhabitants.</p> <p>(2) To provide information on the distribution of the contamination on a land area which has been heavily contaminated by fall-out.</p> <p>In order to satisfy objective (1), it is necessary to determine the amount and type of contamination located such that it might be an internal hazard to occupants of the Atolls.</p> <p>An unusual opportunity is afforded to study, in an area covered by vegetation, the rates of leaching by rainfall, depths of penetration in soil and the kind of incorporation into plants, etc. An evaluation of the time over which such contamination renders an area uninhabitable, and the feasibility of decontamination is of great importance within the mission of this Laboratory.</p>					
Encl (1) to CO USNRDL Conf ltr 3-905-61 RCL:mjr of 6 Jul 54 to CNO					
22. RDB SN.	23.	24.	IC & P.	X.	l.

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b. Approach.

It is proposed that periodic trips of about 1 month duration each (at approximately 6 month intervals) be made to the Marshall Islands by USNRDL personnel for the purpose of conducting radiological surveys and obtaining samples for analysis. A variety of samples of soil, water, contaminated surfaces, plants, fruits and animals will be obtained from several islands of the Atolls. In particular those plants used as foodstuffs will be adequately sampled. Coconut tree sap, or "jugaroo" will be carefully sampled and evaluated since this material is the main source of nourishment for the small children and babies. Methods of sampling will be investigated to insure that random samples of representative material are obtained.

The initial trip could profitably be accomplished in August or September 1954, to coincide with the first proposed follow-up examination of the exposed Marshallese by Project 4.1, Operation CASTLE, personnel. The USNRDL group for the trips would be constituted from the various Divisions of the Laboratory concerned with these studies and would consist of approximately 3 - 4 investigators.

Responsibility for proper collection of samples should be shared with a group familiar with the flora and fauna of the mid-Pacific. It appears probable that such a group might be made available from the Trust Territories or other government agency represented in that area, and that ship or boat transportation among the islands might be furnished by this group or by the Navy. These possibilities will be investigated. It is also possible that such studies could be carried out in conjunction with the fish surveys carried on by Dr. L. R. Donaldson of the Applied Fisheries Laboratory, University of Washington, Seattle, Washington. This possibility will also be investigated.

The collected samples will be analyzed radiochemically using procedures which have already been established. Birds and other animals which may be found will be subjected to gross radio-analysis following collection; more detailed radiochemical analyses of these samples will be carried out subsequently.

Although the USNRDL will collect and analyze the samples for this project, materials collected can be furnished AEC laboratories that might wish to conduct independent analyses.

c. Subtasks.

None.

d. Background history.

Several shipments of samples of various materials have been received from Rongelap Atoll and processed by USNRDL in connection with Project 4.1, Operation CASTLE. Analysis of these samples showed an increase in levels of radioactive materials in plant samples with progressive sampling time.

e. Future plans.

It is planned that 2 or 3 trips will be made to the Marshall Islands for the

purpose of conducting surveys and collecting samples during the next 12 months. Materials will be treated as indicated under b above.

f. References.

WT - report in process entitled "Study of Response of Human Beings Accidentally Exposed to Significant Fall-out Radiation."

g. Other information.

<u>Est.Prof. Invest. Man Yrs.</u>	<u>Agency</u>	<u>PO/Allot</u>	<u>Recvd. FY 1954</u>	<u>Est. Obligns FY 1954</u>	<u>Est. Reqrts FY 1955</u>	<u>Est. Reqrts FY 1956</u>
0	-	-	0	0	-	-
2.6	Not Determined	-----/55	-	-	42.0M	-
2.6	Not Determined	-----/56	-	-	-	42.0M
			-	-	42.0M	42.0M
		Total	-	-	42.0M	42.0M