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FOLDER 900.92 Bikini - Laundry
(6-4-47)

~~CONFIDENTIAL~~
UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D. C.

408663

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10 June 1947

With enclosures

WITH ATTACHMENTS/ENCL

MEMORANDUM TO: Mr. Lilienthal
Dr. Bacher
Mr. Pike
Mr. Strauss
Mr. Waymack

DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW	
SINGLE REVIEW AUTHORIZED BY: <u>A.R.S. Wisgelle</u>	DETERMINATION (CIRCLE NUMBER(S))
REVIEWER (ADD): <u>8-8-94</u>	1. CLASSIFICATION RETAINED
NAME: <u>J.D. Lator</u>	2. CLASSIFICATION CHANGED TO:
DATE: <u>8-15-94</u>	3. CONTAINS NO DOE CLASSIFIED INFO
	4. COORDINATE WITH:
	5. CLASSIFICATION CANCELLED
	6. CLASSIFIED INFO BRACKETED

Subject: Scientific Re-survey of Bikini.

The Navy Department with the approval of the Joint Chiefs of Staff is undertaking a scientific re-survey of Bikini Atoll particularly with respect to Test Baker during the summer of 1947. The expedition expects to leave San Diego July 1 and begin operations at Bikini about July 15 to last approximately six weeks.

Admiral Parsons, Chairman of the Joint Crossroads Committee, has requested the Commission, via the Military Liaison Committee, to approve Admiral Parsons' request for the requirements of the Joint Crossroads Committee. Commander Revelle first approached General McCormack and stated the views contained in memorandum prepared by General McCormack. Commander Revelle was referred to the writer, and the memorandum of Admiral Parsons discussed was supported with names and requirements. On June 6, Mr. Wilson and the writer met with Dr. Stafford Warren to discuss the Bikini expedition. At that time, a conclusion was reached that the Commission should support the expedition by authorizing and underwriting a group from the University of Washington, Dr. Donaldson and about ten of his associates, at a cost of approximately \$25,000. It was not deemed advisable at that time to agree to the inclusion in the expedition of Drs. Overstreet and Jacobson, of the University of California, nor any other radio-chemists from California, Argonne, or Clinton since it was felt radio-chemical analyses could only be carried on adequately at home laboratories in the States. On 9 June, the writer explained the above position to Admiral Parsons who reiterated the need for Drs. Overstreet and Jacobson as essential to the expedition for the supervision of the collection of samples, determination of the locations to take samples, and evaluation of the sampling work done at Bikini. It was not felt necessary to have other radio-chemists join them. The writer reluctantly agreed that if Drs. Overstreet and Jacobson can agree to go, the Commission would probably approve. This opinion was checked with Mr. Strauss who indicated concurrence.

6-10-47

However, Admiral Parsons has now telephoned again, apparently after talking with Commander Revelle, and has requested additional radio-chemists to accompany Drs. Overstreet and Jacobson, namely Mr. Larsen and Lt. Col. Hirsch, of the University of California, the latter of whom is assigned to Special Weapons, and two other technicians from Clinton Laboratory who have apparently indicated they would like to go on the expedition.

12-7-48
9.10

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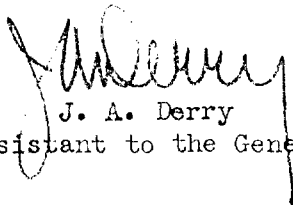
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~~CONFIDENTIAL~~

Dr. Warren strongly recommended again by telephone today against any radio-chemists going on the Bikini expedition because of their lack of value in interpreting anything of a substantive nature at Bikini. Dr. Warren pointed out that considerable work for radio-chemists was necessary this summer to carry the Commission's program forward, such as analyzing samples from Alamogordo, Hanford, and samples being returned from Bikini.

It is recommended that the Commission approve the following with respect to the Bikini Scientific Re-survey for 1947:

- a. Authorize and underwrite Dr. Donaldson's group from the University of Washington to study radio-biological studies of fish and other organisms.
- b. If agreeable to the University of California and Drs. Overstreet and Jacobson, to authorize their participation in the Bikini expedition to supervise collection of samples.


J. A. Derry
Assistant to the General Manager

2 Incl.
Ltr 4 June fm Parsons
w/1st Ind fm MLC
Memo 5 June fm McCormack

UNITED STATES
ATOMIC ENERGY COMMISSION
Washington 25, D.C.

June 5, 1947

MEMORANDUM for Mr. J. A. Derry

From: Brig. General James McCormack, Jr.

Subject: Bikini Expedition - Navy Department

1. I had meant to see you this morning about the new Bikini Expedition, but here is the problem in brief.

2. The Navy is sending out three ships, sailing from San Francisco about July 1, including an APA for personnel, a submarine tender for technical work, and an LCI for something. The expedition will spend about three weeks at Bikini. The project is to see what is left, especially from Test Baker.

3. The Navy would like to have Dr. L. R. Donaldson, of the University of Washington, together with a group of about ten of his people, as members of the party. Since Dr. Donaldson is working on an AEC contract, could this trip be considered a part of the contract and paid for by the AEC? Total cost is estimated at about \$25,000.

4. The Navy also needs a half dozen radio-chemists. They particularly want Roy Overstreet and Lewis Jacobson from the University of California. The University is not enthusiastic. Mr. Forrestal has written to President Sproul. Would Mr. Lilienthal be willing to write to President Sproul? A suggested draft letter is on the way from the Navy.

5. The Navy also needs authorization, and probably some help, in connection with the other four radio-chemists. Particularly they want to proselyte at Argonne and Clinton. In this connection, can the University of California contract accept these half dozen people?

6. Commander Revelle is the interested party in the Navy Department. I have promised to give him answers to his questions. You will see that the time factor is urgent.

cc: Dr. R. F. Bacher
Dr. J. B. Fisk

Classification Canceled
Checked by
By Authority of
By
Date 8-1-77

6-5-47

12-1-47



[REDACTED]

(Basic Memo fm W.S.Parsons, dtd 6/4/47, to Chairman, AEC, Via MLC)
Subject: Scientific Resurvey of Bikini. Ref: JCC/181, File All, Ser: 097

MLC 370.22

1st Ind.

Military Liaison Committee to the Atomic Energy Commission,
P. O. Box 1814, Washington, D. C. 5 June 1947

To: The Chairman, Atomic Energy Commission, Washington, D. C.

1. Forwarded.

2. The Military Liaison Committee has been informed that the procurement of radio chemists is a problem of the greatest urgency. It is understood that the Joint Crossroads Committee has informally approached certain individuals at the Argonne Laboratory who have expressed a desire to accompany this expedition as radio chemists. The Chairman, Crossroads Committee, is extremely desirous that the Commission authorize their participation as quickly as possible in order that they may commence immediately to assemble and ship the necessary equipment.

3. If the proposal in paragraph 7 of the basic letter is agreeable to the Atomic Energy Commission, it is recommended that the Chairman, Joint Crossroads Committee, be authorized to deal directly with the Argonne Laboratory in making final arrangements.

For the Committee:

/s/ F. L. ASHWORTH

F. L. Ashworth,
Commander, USN,
Executive Secretary

C-5-47

12-7-HC
9 JUN

[REDACTED]

In reply refer to:
JCC/181
File: All

[REDACTED]

NAVY DEPARTMENT
JOINT CROSSROADS COMMITTEE
Washington 25, D.C.

Serial: 097

4 June 1947

MEMORANDUM FOR THE ATOMIC ENERGY COMMISSION:

Via: Military Liaison Committee

Subject: Scientific Resurvey of Bikini

1. By a memorandum to the Secretary of the Navy dated 16 May 1947 the Joint Chiefs of Staff requested that a scientific resurvey of Bikini Atoll be undertaken by the Navy Department during the summer of 1947 in order to complete studies and projects begun in 1946 in connection with Operation Crossroads. In a separate memorandum to the Secretary of War, the War Department was requested to cooperate in this resurvey and to furnish such facilities and personnel as might be needed and could be made available. Technical supervision of the project was assigned to the Joint Crossroads Committee and its successor organization.

2. In accordance with this request of the Joint Chiefs of Staff, the Chief of Naval Operations on 2 June 1947 directed the various bureaus and offices of the Navy Department to make arrangements for the resurvey and assigned operational control to the Commander-in-Chief, Pacific Fleet. Three vessels have been made available for the expedition; a large Attack Transport (USS CHILTON APA-38), a Submarine Rescue Vessel capable of deep diving operations (USS COUCAL ASR-8), and a Landing Craft, Infantry (LCIL-615). A target date of 15 July 1947 for commencing operations at Bikini Atoll is proposed. It is contemplated that the work at Bikini will occupy a period of six weeks.

3. It is contemplated that the scientific work of the expedition will include:

a. Determinations of the amount and nature of the radioactivity remaining in the water, the lagoon floor, and the reef and land structures of the atoll, wherever such radioactivity exceeds the normal level of natural radioactivity and cosmic rays. Particular attention will be paid to that portion of the reef between Amen and Bikini Islands, which was covered after test Baker by highly radioactive rain falling from the "Base Surge" cloud, and to the bottom sediments of the target area.

12-7-48
9.15

1-11-47

In reply refer to:
JCC/181
File: All
Serial: 097

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NAVY DEPARTMENT
JOINT CROSSROADS COMMITTEE
Washington, D. C.

4 June 1947

Subject: Scientific Resurvey of Bikini

b. Determinations of the concentration and kind of radioactive materials in the animals and plants of the atoll and the effects of this radioactivity on the organisms.

c. Physiological, geological and oceanographic studies of organisms and reef building processes in order to gain basic information for better understanding of the possible biological effects of Operation Crossroads.

d. Detailed observations of certain sunken ships including the *Saratoga*, *Nagato*, *Pilotfish* and *Apogon*, which could not be adequately examined during August 1946 because of difficult diving conditions resulting from high levels of radioactivity in the bottom muds and from other causes. Attempts will also be made to retrieve three pressure measuring instruments and one time recording ionization chamber from the *Nagato*. Detailed analysis has shown that records from these instruments are highly important to an adequate understanding of shock pressure phenomena and radioactivity concentrations resulting from test Baker.

In connection with the work outlined under sub-paragraph c. above, the U. S. Geological Survey, the Fish and Wild Life Service of the Department of the Interior, the Smithsonian Institution of Oceanography, have all indicated informally a desire to take part in the expedition.

4. The cooperation of the Atomic Energy Commission is requested in planning and conducting this resurvey. In particular it is considered essential that Dr. L. R. Donaldson and his associates of the University of Washington, who are carrying out radiobiological studies of fish and other organisms for the Commission, should participate in the expedition. These scientists took part in the work at Bikini during the summer of 1946; preliminary discussions with Dr. Donaldson indicate that they desire to undertake additional observations this summer in order to study possible long term effects of the radioactive materials released in the underwater burst on the organisms of the atoll.

5. In order to determine the distribution of different fission products and other radioactive materials and

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the processes involved in accumulation and transfer of these materials by organisms it will be essential to have the services of several competent radio chemists on the expedition. The radiochemical investigations should be undertaken under the leadership of scientists competent to deal both with the chemistry of radioactive fission products and with problems of plant nutrition and soil chemistry. Discussions with leaders in these various fields have shown that such a combination of scientific abilities is very rare. From these discussions it is evident that the outstanding specialists in problems of this type are Drs. R. L. Overstreet and Louis Jacobson of the College of Agriculture of the University of California. Dr. Overstreet participated in last summer's tests at Bikini and contributed results of major importance. Accordingly, the Secretary of the Navy has requested President Sproul of the University of California to authorize Drs. Overstreet and Jacobson to take part in the expedition. It would be very helpful if the chairman of the Atomic Energy Commission would endorse this request from the Secretary of the Navy; a proposed draft of a letter for Mr. Lilienthal's signature is enclosed.

6. If Drs. Overstreet and Jacobson can be made available by the University of California it is believed that financial arrangements for their services and procurement of necessary equipment could be most expeditiously handled thru the Atomic Energy Commission contract with the Radiation Laboratory of the University of California.

7. Estimates of the magnitude of the problems involved indicate that approximately four radio chemists in addition to Professors Overstreet and Jacobson will be required at Bikini. The cooperation of the Commission is requested in procuring the services of these scientists and equipment for their use from laboratories under its cognizance. If this request is agreeable to the Commission it is proposed that detailed arrangements be made directly between representatives of the Commission and the Joint Crossroads Committee Project Officer, Captain C. L. Engleman, USN, or his representatives. Captain Engleman's office is in Room T3-2038 of the Navy Department; his telephone extension is 3597.

/s/ W. S. PARSONS
Chairman
