

BY AUTH
CMDR TG 132.4

24 Nov 52 *JGL*
(Date) (Init)

HEADQUARTERS
TASK GROUP 132.4, PROVISIONAL
Kirtland Air Force Base, New Mexico

J-3
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AGDO 700

29 NOV 1952

SUBJECT: Permissible Radiation Exposure Levels for
Operation CASTLE

RG 374 DEFENSE NUCLEAR AGENCY 410498

TO: Commander
Joint Task Force 132
Washington 25, D. C.

Location WVRC
Access No. 59-A2644 Box 3/4
Folder PERMISSABLE RAD. EXPOSURE
LEVELS FOR OPERATION CASTLE

1. A new interpretation of permissible radiation exposure levels is required for the planning of Operation CASTLE.
2. In Operation IVY the permissible level was substantially increased to allow for any over-exposure. It was found that in all cases the operation was conducted within this level. In Operation CASTLE a new problem presents itself in that a larger number of detonations is planned and the requirement still exists for cloud sampling with manned aircraft.
3. A solution to this problem is to increase the number of crews required for each aircraft to coincide with the number of shots. This is unsatisfactory from the USAF point of view because of the lack of qualified personnel and from the AEC point of view in that crews will be unable to accomplish the desired amount of training.
4. An alternate solution is to analyze the amount of radiation considered safe with a view toward increasing this level. This headquarters is using a figure of six (6) Roentgens per six months period for planning purposes which allows for a more frequent participation of fewer qualified pilots who have cloud sampling capabilities.
5. It is therefore requested that the radiological hazard, as pertains to this problem, be re-evaluated and a permissible dosage level be determined which will allow more flexibility in this type of operation.

FOR THE COMMANDER:

BEST COPY AVAILABLE

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F-4
CLASSIFICATION CANCELLED*
BY AUTHORITY OF DOE/OC
J. Diaz 7/23/90
REVIEWED BY DATE
*LTR DNA SWISHER TO
DOE MA-225, 3/28/96

Kenneth D. Kienth
KENNETH D. KIENETH
Lt. Colonel, USAF
Chief of Staff

Q - 8062

2-44065

Mr. Lajohn Matan, Assistant District Administrative Representative, Kwajalein Atoll (Ebeye Island)

CDR Wm. E. Calder III, USN, J-3 Advance Headquarters

2. The itinerary was as follows:

	Arrived	Departed
Kwajalein		21 Jan
Likiep	22 Jan	22 Jan
Utirik	23 Jan	23 Jan
Bikar	24 Jan	24 Jan
Rongerik	25 Jan	25 Jan
Rongelap Atoll	25 Jan	30 Jan
Rongerik	30 Jan	30 Jan
Alinginae	30 Jan	30 Jan
Kwajalein	2 Feb	

3. The purpose of the survey was to obtain samples and data necessary to reach a decision as to whether and when the Rongelap Island natives could be returned. Also, the Hq JTF was represented to ascertain whether the remaining JTF funds were sufficient to defray the expenses which would be incurred when returning the natives.

AOG?

4. Of the 14 islands visited, only two were inhabited. These were Likiep and Utirik. The customary greetings were exchanged with the local magistrates in both of these places, but no aid was required from them. Originally the itinerary of the survey party included 24 islands where readings, sampling and general observations were to be made but due to extremely high winds, very rough seas and resultant hazardous small boating conditions many cancellations were made. Whenever the USS RIO GRANDE (AO-3), the ship assigned to transport the survey party was able to anchor inside a lagoon or stand by outside the lagoon in the lee of an island, the scheduled islands were successfully surveyed. Although all sites were of some importance, the greatest importance and effort was placed upon the islands forming the Rongelap Atoll. The same procedure was carried out at all other sites, but in greater detail. The detailed survey, as carried out in the Rongelap Atoll, was to land the complete NFDL party ashore by motor whaleboat early in the morning and recover them before darkness... although one night was spent ashore on Rongelap Island to insure an early work day. The physical survey was made in the following manner. LTJG Kauffer, accompanied by Mr. F. L. Taylor and CDR Calder, made a general surface survey of the entire island with radiac instruments. This was accomplished by placing markers in a recorded map position and by following compass courses from one side of

the island to the other in a sawtooth fashion. Mr. R. W. Rinehart, accompanied by Lajohn Matan, upon landing, immediately placed recorded markers and commenced the recovery of samples which consisted mainly of coconuts, arrowroot plants, squashes, any native fruit, water supply and soil samples. The soil samples were recovered down to the solid coral level which was to a depth of from 2½ to 3 feet in some cases. Mr. Evans and Mr. Cong recovered marine life and bottom samples, sometimes using rotenone to poison and recover the fish. Mr. F. G. Lowman and Mr. A. H. Seymour also collected specific marine life, vegetation, birds and bird eggs. Mr. Murry, the photographer, was very busy taking pictures of the samples acquired by all members of the party. All samples were returned to the ship with the returning party upon completion of the days work. On the ship, the samples were classified, processed and preserved as necessary. Most of the specimens were off-loaded at Parry Island. Some were the processed there, but most were returned to the states by air for further processing by NRDL and the Applied Fisheries Laboratory, University of Washington. At this time it should be mentioned that although the survey was considered very successful, it is my opinion that choice of a different time of the year and the utilization of a large landing craft instead of an ACG would have permitted a landing at all of the islands originally scheduled. As mentioned before, the Rongelap Atoll was of the greatest importance and the following islands in that atoll were surveyed: Rongelap (both villages), Busch, Eniastok, Labaredj, Kaballe, Lomuilal, Gafen and Lukuen. These islands extend from the southernmost point of the atoll to the northernmost point. Five islands in this atoll had to be by-passed because of the unsafe boating conditions, but sufficient data and sample procurement were obtained from the other islands to permit a definite analysis and subsequent decision as to whether the natives can be returned or not. Numerous photographs verify the fact that a great amount of renovating and replacement in the villages will be necessary to return the natives to an island with living conditions comparable to those when they were removed."

5. Upon completion of the survey the AEC Resident Engineer (Eniastok) was consulted with regard to the most favorable method and cost of transporting the natives back to Rongelap Island. It was his opinion that the most practical and inexpensive method would be to furnish the natives the necessary tools to disassemble their present habitat and load them aboard the IST (or whatever ship is utilized) and transport these materials back to Rongelap at the same time the natives are returned. Although the first few days upon their return would be rough living, they could reassemble their former huts, etc. and probably end up with a more improved village than when they departed."

It is my recommendation that, in conjunction with the cognizant Trust Territory representative, a type package or kit be issued to each family. This package should consist of staple foods, adequate amounts of clothing, bedding, material, miscellaneous tools, household utensils, and matting. Such items as the two outrigger canoes, which have deteriorated beyond repair, could be replaced by furnishing the necessary materials to construct new ones, or possibly a monetary allowance would permit them to replace them as they desired.

6. The total expense of the transfer and rehabilitation of the Rongelap natives should not exceed the available JLF SEVEN funds (\$15,000) plus the money allocated to the AEC for that purpose (\$30,000).

\$14,848 3/9/8

W. F. CALDER,
CDR, USN.

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Radiation levels at islands, according to Calder
BOK

<u>Place</u>	<u>MR/HR.</u>	
LIRIAP	.1	WEST SIDE AVENUE
UTIRIK	.3	
RONGELAP	.45 - 1.2	
Northern Rongelap Atoll	12	
BIKAR	0	
RONGERIK	3-4 (est.)	

MPE = .3 R/week = 3.9 R/13 weeks
 Rongelap non-gies .2 R/week
 North Rongelap gies 2 R/week

CDR Calder/Walling/J-3/Adv
2/17/55