

PROPOSAL AND AUTHORIZATION
FOR RESEARCH OR DEVELOPMENT

726345

NYO-149

1. Project Title: Civil Effects Test Program - Marshallese Survey F. Y. 1958			2. Date: August 1957	
3. Budget Activity No: 6600	4. Budget Item No:	5. Contractor's No:	6. Method and Time of Reporting Progress: Quarterly & Special Reports	
7. Contractor: Associated Universities, Inc. Brookhaven National Laboratory		8. Working Location: Upton, N. Y. & Marshall Islands	9. Contract No: AT-30-2-GEN-16	
10. Person in Charge: R. A. Conard, M. D.		11. Starting Date: September 1, 1957		
12. Background: In March 1954, following detonation of a nuclear device, 239 Marshallese people were accidentally irradiated with fallout. These people have been taken care of and studied initially and annually by AEC-Naval medical teams under the auspices of the Division of Biology and Medicine of the AEC. Dr. C. L. Dunham of that Division has requested Dr. Robert A. Conard of the Medical Department, Brookhaven National Laboratory to take charge of the continuing annual medical surveys of the exposed Marshallese and accordingly since 1956 these surveys have been sponsored by BNL. Much valuable information has been and is being obtained on the effects of fallout radiation on human beings and is being made available to the medical profession through publications. These studies are greatly facilitated by the fact that a large group of unexposed Marshallese living under the same environmental conditions, are available for comparative studies.				
13. Related Projects: See General Statement of Integrated Medical Department Program, Brookhaven National Laboratory.				
14. Status as of August 1957: Report is being written on the three year post exposure medical survey which was completed in the Marshall Islands in April 1957. This report will contain results of extensive clinical and laboratory examinations on these people.				
15. Program for F. Y. 1958 and F. Y. 1959: Plans are underway for the next annual medical survey to take place in March 1958 at four years post exposure. The scope of the examinations will be enlarged. Extensive studies will again be carried out, similar to those of the last survey, with considerable emphasis on hematological investigations and on growth and development studies in the children as well as studies on long term effects of radiation. An X-ray machine will be needed at Rongelap in order to carry out the growth and development studies as well as for use in diagnosis. In addition, special studies on whole body gamma spectroscopy and radiochemical analyses of the urine to determine body burdens of radioisotopes in the people will necessitate the acquisition of a whole body gamma counting facility to take to the Islands. It is anticipated that this device will be used repeatedly on the Marshallese in future annual surveys. Personnel to be affiliated with the 1958 program will be: BNL Regular: Dr. Conard, Dr. Robertson, Dr. Wolins (3/4)*, Mr. Greenough				

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BNL Regular: Dr. Conard, Dr. Robertson, Dr. Wolins (3/4)*, Mr. Greenough

BNL Temporary: Dr. Meyer, Dr. Wolins (1/4)*, Physician to be attached, Mr. Sipe, Mr. Jones.

NMRI: Col. Lowrey, Mr. Eicher, Mr. Clutter, Mr. Hechter

NRDL: Mr. Hamby, Mr. Murray

NIH: Dr. Rall

Navy: Dr. Roth, Dr. Nolan, Dr. King

It is anticipated that similar annual medical surveys will take place in 1959 and indefinitely.

*Regular Laboratory appointment for Dr. Wolins is 3/4 time only.

Project Title: Civil Effects Test Program - Marshallese Survey (F. Y. 1958)

17. Operating Costs	Estimated 1957	Estimated 1958	Estimated 1959
Labor	\$ 2,665	\$ 4,900 ⁽²⁾	To be
M/S	4,389	6,300	Detailed
Travel	6,363	9,000	After
Purchased Services	166	11,300 ⁽³⁾	Completion
Special Procurement and Contingency against loss	(1)	48,500 ⁽⁴⁾	Of
Technical Services (BNL)	215	1,000	F. Y. 1958
General & Administrative	7,087	6,000 ⁽⁵⁾	Program
Total:	\$20,884 <i>~ 19,000</i>	\$87,000	

- (1) Miscellaneous items furnished from Laboratory Capital Equipment.
- (2) Salaries and wages of temporary personnel hired by BNL. Does not include labor costs for permanent BNL employees or personnel from military establishments.

- (3) Allotments to other agencies:
- | | | | |
|-----------------|---------|---|--------|
| NMRI | \$6,200 | } | 11,300 |
| N MRDL | \$2,000 | | |
| N. Y. Navy Yard | \$3,100 | | |

- (4) Equipment and other special procurement - not to be capitalized.

X-ray for use at Rongelap	\$ 8,500
Shielded facility for use on LST	16,000
2 one 100 channel analyzer (spare required because of remote use)	9,000
Sub Total -	\$33,500
 Contingency to cover BNL supplied whole body counter if damaged or lost	 15,000
Total -	\$48,500

~ 72,000

- (5) Based on Labor, Materials and Supplies Procurement, and Technical Services.

18. Cost of Plant and Equipment Directly Required:

Basic equipment items required for whole body counter, which will have continued use at BNL, will be supplied from regular Laboratory equipment funds. Equipment destined for this study only is not to be capitalized as noted above.

19. Direct Man Power	Estimated 1957	Estimated 1958	Estimated 1959
<u>No. of Man Years</u>			
Scientists & Engineers	1.5	1.6	
Technical	1.0	.6	
Administration & Service			
Total:	2.5	2.2	

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Total: \$20,884 \$87,000
14,000

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Note: These are total man.years contributed by all organizations supplying personnel for this work.

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