

REPOSITORY DOE/PASO  
 COLLECTION DOE/NV  
 BOX No. 1236  
BNL FOLDER # 2  
 FOLDER BIOASSAY/WHOLE BODY  
COUNTING FY 1979

402064

SEP 24 1979



Safety & Environmental Protection Division

W. J. Stanley, Director  
 U.S. Department of Energy/PASO  
 P.O. Box 29939  
 Honolulu, HI 94690

Dear Bill:

Recently, members of the Brookhaven National Laboratory Safety and Environmental Protection Division participated in our fifth Marshall Islands field survey for fiscal year 1979. The survey began August 16, 1979, and concluded September 7, 1979.

Our trip objectives, as outlined in an August 14, 1979 correspondence with Harry Brown, were to provide personal monitoring services to the Rongelap and Utirik populations, conduct environmental sampling at several specific locations at each atoll and repair the wind-powered air sampling stations. During our eight-day stay in Kwajalein, our group rebuilt the whole body counting trailer, set up our electronics, assembled all the supplies necessary to repair the windmills and commenced the bioassay-whole body counting program by counting nine former Rongelap Atoll residents and two former Bikini Atoll residents who currently live on Ebeye. We also determined that a low voltage level problem existed and our a.c. line conditioner was not properly working. Chuck Otterman worked with us to determine where the line conditioner was malfunctioning, and crew members determined that the lower deck air conditioning systems were the cause of the voltage dips. The problem was solved by reducing the sensitivity of our equipment to low voltage and by turning off the air conditioners. By the time we arrived at Rongelap, we were well on our way towards a workable power use scheme.

The ship arrived at Rongelap on Monday, August 27. Harry held a people's meeting where all aspects of our activities were discussed. Harry also reinforced a former BNL statement that the windmill apparatus would be given to the people in working order after we collected data for one year. By Thursday, August 30, a total of sixty-seven persons had been whole body counted and sixty-three persons had returned their bioassay sample bottles. In addition, the windmill generated electricity and was charging the battery bank plus we had collected coconut, pandanus and breadfruit from our selected sample sites. At the Thursday closeout meeting, Harry informed the Rongelap people that in general everyone's body burden of <sup>137</sup>Cs had decreased from the last measurement and that objections to claims payment or the new schedule for payment would be reported to the Marshall Islands government. After the meeting we departed

PASO COUNTING SLIP		SEE	DATE
BROOKHAVEN NATIONAL LABORATORY			
ASSOCIATED UNIVERSITIES, INC.			
DIRECTOR	<i>WJS</i>		
Admin. Assistant			
		Upton, New York	11973
PROJECT ENGINEER			
ADMINISTRATIVE OFF.		(518) 344-1000	
PROJECT ENGINEER OFF.			
September 19, 1979			
SEND COPY TO:			
NAME	<i>Brush</i>	<i>9/25</i>	
DATE MGT. REP.			
DATE MGT. REP.			
OTHER	<i>Chuck Otterman</i>	<i>9/25</i>	
	<i>(in Honor)</i>		
REMARKS:			
<i>Judy - (to) send cc to R2</i>			
<i>hnt</i>			
<i>10/9/79</i>			

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for Utirik and arrived on Friday, August 31. We followed the same basic operations plan at Utirik as we did at Rongelap. Initially we encountered some resistance due to a past difference of opinion between Dr. Pratt, Mr. Matthew (Utirik Nitijela Representative) and the magistrate. Fortunately, Harry and Reynold were able to settle the problem immediately. The people's meeting was held shortly after we arrived, and the people were informed about the new medical compensation agreement, the future ownership of the windmill, and the BNL project activities. The Utirik people readily agreed to help us in any way possible. They also suggested that future medical compensation agreements be made in the presence of a representative from each affected atoll.

With the meeting over, we commenced work on all aspects of the project. By the morning of September 4, we had added ten feet of tower to the windmill, collected all required environmental samples, whole body counted eighty-eight persons and had received eighty-three urine samples. At the closeout meeting, Harry was able to announce that in general everyone's  $^{137}\text{Cs}$  body burden had decreased from the 1977 level. He assured everyone that their comments concerning the new medical compensation plan would be transmitted to the appropriate Marshall Islands government officials. The people expressed their appreciation for our efforts and our concern for their health and well being.

The trip concluded on Tuesday, September 4, with the return of the Liktanur II back to Kwajalein. Due to cooperation and hardwork of all persons aboard the ship, we were able to conclude this mission several days ahead of schedule while accomplishing all of the objectives.

In addition to the outlined objectives, we prepared a sketch of a new body counting trailer which would maximize our use of available equipment, minimize the discomfort to the Marshallese and eliminate many of the previous trailer design difficiencies such as constantly leaking roofs, power regulation and weight distribution. Harry has this sketch and will present it along with all of the interior design criteria and programatic justification in his report. If the design and construction of all components proceed on schedule, we hope to use the new trailer on our proposed March 1980 trip to Ujelang.

We would like to express our gratitude to all persons who assisted us. As usual, Wilfred Koga managed to expedite our scientific equipment to Kwajalein even though he was given a minimum of time to perform his job and the shipment was not consigned properly. Jim Watt's aid in Kwajalein permitted us to install new air sampling equipment, obtain needed materials for the construction of our whole body counter, count Marshallese currently living on Ebeye, perform preventative maintenance on our equipment and depart Kwajalein for the mainland several days earlier than anticipated. For all of this and more we owe Jim a heartfelt thanks.

Dr. Pratt's cooperation in permitting us to use one of his medical trailers was deeply appreciated. Hopefully, the trailer will remain as water tight for him as it was during our voyage.

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September 19, 1979

In addition to his functions as spokesperson and disbursement officer for medical related subsistence claims, Harry Brown contributed to our program in many ways. First, prior to August 16, he had engaged the services of Reynold Debrum as interpreter during the Rongelap and Utirik segments of our trip. Reynold was very helpful because of his personality, his understanding of our program and his status as an official representative of the Marshall Islands government.

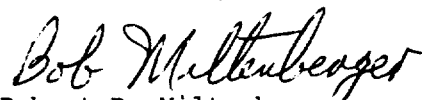
Secondly, Harry assisted us by working diligently on each island seeking persons participating in the BNL whole body counting-bioassay program. Thanks to his efforts, every possible attempt was made to meet our program requirements. We greatly appreciated the skill and assistance rendered to us by Harry Brown.

Finally, we wish to acknowledge the outstanding cooperation and assistance that we received from the Liktanur II management and crew. While in Kwajalein, the crew helped us to initiate our bioassay-whole body counting program by constructing a gangplank for safe entry to the ship from Echo Pier and assisting in the construction of the whole body counter. While in the field, the crew transported persons to and from the ship, erected a canopy over the exterior waiting area, provided food and beverages to the Marshallese as they waited to be whole body counted, and performed countless tasks which allowed our work to progress quickly and efficiently.

A special note of gratitude is due Mr. Otterman. Chuck spent the better part of two days working with us to define an electronic problem with our a.c. line conditioner. The line conditioner could not be fixed aboard ship; consequently, we had to regulate manually the ship's power by turning off the below deck air conditioners in order to minimize voltage fluctuations. In addition, Chuck spent considerable time on shore at each island trying to find persons to participate in the bioassay-whole body counting program. For all his efforts and those of the crew, we are deeply appreciative.

This concludes the report on activities during R. V. Liktanur II Voyage No. 7. We believe that the trip was very successful and that the interactions between persons from BNL, PASO and the Liktanur II were constructive and cooperative. We thank all parties for their participation and look forward to future voyages.

Sincerely,



Robert P. Miltenberger  
BNL Crew Chief-R. V. Liktanur II  
Voyage No. 7

RPM/jwe

cc N. Greenhouse  
A. Hull  
H. Pratt  
W. Weyzen  
B. Wachholz  
T. McCraw

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