



BNL file H29

BROOKHAVEN NATIONAL LABORATORY
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Medical Department

May 9, 1986

Mr. Joseph H. Dryden
Director
Pacific Area Support Office
U. S. Department of Energy
P. O. Box 29939
Honolulu, HI 96820

Dear Mr. Dryden,

The eventful March-April, 1986, mission of the Brookhaven National Laboratory medical team to the Republic of the Marshall Islands is now history. Given the circumstances surrounding the trip, I feel that we can consider it a particularly successful effort even though certain tasks were not completed.

A total of 353 adults received complete examinations. The various island and exposure categories are presented in Appendix A. It was notable that a number of exposed persons who had not appeared for examinations for some years did show up for this mission. In addition to the usual examinees, our physicians saw 18 persons referred from the Marshall Islands health care system, and 70 persons, mostly children, were seen during sick call on Utirik and Mejjatto. Thirty persons, including many diabetics or persons 65 years or older, received immunizations against influenza and pneumonia.

ACTION A / moco
INFO _____
R.F. _____
AMA _____
AME & S _____
AMO ✓

HARRY BROWN'S Files, NV
BNL Medical FY 1986
General Correspondence

The variety and number of procedures and tests performed are as follows:

Electrocardiograms	33
Mammography	48
Other x-rays	82
Sigmoidoscopies	42
Blood counts	383
Platelet counts	383
Urinalysis, routine	352
Urinalysis, microscopic	126
Bacteriologic culture	41
Stool examinations	20
Blood sugar tests	68
Hb A _{1c} levels	63
Liver function tests	19
Uric acid levels	16
Creatinine levels	34
Blood urea nitrogen	7
ESR	13
Other	15
Serum sent to Bioscience	72
for other tests	
TOTAL	1817

In addition most women had a Pap smear taken, and many were cultured for chlamydial organisms, agents which can cause, among other problems, eye infections in the newborn. Chlamydial culture was possible because of the availability of the new -70°C freezer on Liktanur III. Finally, because of the presence of a dermatologist on the medical team, about 30 persons were able to be tested for skin fungal infections or to have skin biopsies taken for suspected diseases.

There were three problems which stood out from the rest. One was the occurrence of a heart attack in our x-ray technician, Mike Stravino, which was diagnosed after our arrival at Utirik. It was a great blessing that his course was completely uncomplicated during the period of observation before we were able to evacuate him by airplane. Furthermore, he is now at home and doing very well, you and your staff will be very glad to hear. With our medical team watching him throughout the night, and with our monitoring and defibrillation equipment functioning perfectly on the 12 volt battery arrangement by Monroe Wightman, we were prepared for most eventualities. Fortunately, neither defibrillator nor emergency drugs had to be used.

As a consequence of the air evacuation of Stravino, we were short an x-ray technician. Fortunately, again, we were able to acquire the services of Kalman Gideon from Majuro. He did a fine job, as usual, but he was not able to use the mammography unit. Nevertheless, his presence allowed the basic mission to continue without difficulty. At this point I would like to thank your

team, and in particular Mr. Bill Jackson and Mr. Reynold deBrom, for getting us through this troubling time by contacting appropriate authorities, making transportation arrangements, and being generous with helpful suggestions.

The second major difficulty arose from the inability to examine the Mejjatto patients on board the Liktanur (except for those few requiring x-rays or special procedures). Therefore we had to work ashore in the assembly hall, a situation which was far from ideal in terms of privacy and convenience. This particular difficulty was unavoidable because it would have been too dangerous to bring many of the patients out to the Liktanur in the presence of the high winds and waves at the west end of Kwajalein lagoon. Once again the mission was accomplished as well as could have been expected under the circumstances, and for this I wish to thank the crew of Liktanur III. It was their extra effort in safely transporting patients, the medical team, and specimens that made the examinations possible. Fortunately the unavailability of the second whaler at Mejjatto did not hinder their job.

The last big problem was the power supply on the Liktanur. During the mission last autumn it had appeared that line fluctuations did not impair the performance of our laboratory equipment. Unfortunately, that was not the case on this trip. Numerous blood tests were either delayed or not done because of power fluctuations.

Since some of our examination procedures could not be completed on the March-April trip, I hope we can schedule another mission in August-September. This is very important, especially with regard to mammography, a procedure we have promised to provide annually. In the near future the final decision as to the feasibility of the trip will be made. I have been in touch with Bill Jackson regarding this, and will not go into any details of the mission at this time.

It is critical to our missions that we have a dependable laboratory backup for our clinical effort. I have discussed with Ed Lessard the possibility of using his uninterruptible power supply. He feels that it is not a particularly good idea to dismantle one of his units. The answer seems to be to have a unit large enough to handle all laboratory items installed on line in the Liktanur itself. Alternatively, another one could be purchased just for our purposes. I will leave it to you to decide on the best solution to this problem.

It was a pleasure to have you with us on part of the survey, and we would welcome any future visit. We enjoyed meeting Curt Schrier, and we welcome him to the PASO. Should you have any questions regarding the medical end of the team visits, I would be happy to try to answer them.

We thank the PASO team again for its fine effort. Mr.

Reynold deBrom, who fills so many roles during these trips, continued to give us the excellent assistance on which so much depends. Lance Yamaguchi and Darlene Koenig provided excellent support during our stay on Kwajalein. And last, but not least, we appreciated reading the up-beat Marshall Islands Journal article on our team that Mr. Harry Brown was able to arrange.

Sincerely,

Bill Adams

William H. Adams, M.D.
Director, Marshall Islands
Medical Program

cc: Dr. A Chanana
Mr. H. Brown
Mr. E. Lessard
Dr. R. Aronson

APPENDIX A

NUMBER AND DISTRIBUTION OF MEDICAL EXAMINATIONS, MARCH-APRIL 1986

Island of examination	Group				Total
	Rongelap	Utirik	Comparison	Other	
Ebeye	18	12	20	-	60
Majuro	11	36	20	3	70
Utirik	-	46	-	86	132
Mejatto	21	-	25	45	91
<u>TOTAL</u>	<u>50</u>	<u>94</u>	<u>75</u>	<u>134</u>	<u>353</u>

146 exposed

$$\begin{array}{r} 5 \\ 170 \\ 80 \\ \hline 14600 \end{array}$$

$$\begin{array}{r} 94 \\ 50 \\ \hline 144 \end{array}$$
25