



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
 PUBLIC HEALTH SERVICE  
 FOOD AND DRUG ADMINISTRATION  
 ROCKVILLE, MARYLAND 20852

July 31, 1972

Senator Olympio T. Borja  
 Chairman, Special Joint Committee  
 Concerning Rongelap and Utirik Atolls  
 Congress of Micronesia  
 Saipan, Marianna Islands 96950

Dear Senator Borja:

The attached document represents my report to you as an invited radiological consultant from the United States Public Health Service during the visits of your Committee to Majuro, Utirik, Rongelap, and Kwajalein (Ebeye) Atolls on July 16-20, 1972.

In order to condense the subject matter, I have made my observations and recommendations on the findings on Rongelap and Utirik although we interviewed some of these people on Majuro and Ebeye.

My report will be released to you through the office of Surgeon General Jesse L. Steinfeld, U.S. Public Health Service, as you requested at the Executive Session of your Committee on July 20, 1972.

I trust my report will be of assistance in the preparation of your official report to the Special Session of the Congress of Micronesia on August 15, 1972.

Sincerely yours,

William S. Cole, M.D.  
 Associate Director  
 Bureau of Radiological Health

Enclosure

REPORT OF FIELD TRIP TO THE MARSHALL ISLANDS, TRUST TERRITORY OF  
THE PACIFIC ISLANDS, AS A RADIOLOGICAL CONSULTANT TO THE SPECIAL  
COMMITTEE CONCERNING RONGELAP AND UTIRIK ATOLLS, CONGRESS OF  
MICRONESIA, ON JULY 16-20, 1972

Introduction

This is a report of my observations and recommendations based on a field trip in the Marshall Islands, Trust Territory of the Pacific Islands, with the Special Committee composed of the following individuals:

Senator Olympio T. Borja, Chairman  
Representative Timothy Olkeriil, Member  
Representative Hans Wiliander, Member  
Representative Ataji Balos, Interpreter  
Dr. Masao Kumagai, Deputy Director of Health, Trust Territory  
Mr. Brian M. Farley, Researcher, Trust Territory  
Dr. William S. Cole, Radiological Consultant  
Mr. Henry Moses, Majuro Atoll, Interpreter

The purpose of the visit to Rongelap and Utirik Atolls was to interview those people living on those Islands at the time of the detonation of the thermonuclear device at Bikini Atoll on March 1, 1954. This resulted in exposure to fallout radiation of those people due to an unpredicted shift in winds at the time of the explosion. Sixty-four persons on Rongelap received an estimated 175 rads of whole-body radiation and severe contamination of the skin; an additional 18 Rongelap people on a fishing trip received an estimated 69 rads of whole-body radiation; and 157 people on Utirik received an estimated 14 rads of whole-body radiation. Twenty-three Japanese fishermen aboard the vessel, the Lucky Dragon, also received significant whole-body radiation. These data are reported by the Brookhaven National Laboratory Medical Survey Team.

In the 18 years following the radiation exposure, an undetermined number of the exposed persons have died and others have moved to different atolls. The Committee for this reason interviewed people on Majuro and Ebeye. The four sessions were attended by approximately 300 people including exposed persons, families of deceased exposed persons, and numerous persons in the control groups. Although the interviews were carried out through Marshallese interpreters, there was little difficulty in following the proceedings.

The Chairman of the Committee, Senator Olympio T. Borja, presided at each of the four sessions. At the onset of each session, he stated the purpose of the visit of the Committee was as follows:

1. To determine the extent of personal injury to the people of Rongelap and Utirik Atolls as a result of the radiation exposure.
2. To determine the extent of the damage to the land and trees.
3. To obtain additional medical examinations and treatment.
4. To obtain reasonable and just compensation for personal injury and damage to the land and trees of Rongelap and Utirik Atolls.

### Observations

#### A. Medical Problems:

The examinations conducted by the medical team from the Brookhaven National Laboratory are now resented by the involved people, both exposed and control groups. I am deeply concerned that the Marshallese have apparently lost confidence in the medical examinations and the aborted effort in March 1972 did little to restore it. I am of the opinion that a major source of trouble has been a lack of understanding by the people of the purpose of the examinations. At all four sessions, it was repeatedly asserted by the people that they were not informed of the findings and that treatment and medications were not available. The people attribute any and all sickness to the effects of the radiation and believe that the medical team should treat them. The control groups appear to most resent the examination because of the lack of understanding as to its purpose. For example, the people from Utirik asserted they were told they were not injured and therefore not entitled to compensation, yet were forced to submit to the examinations. As a result, many refused to be examined. They resent the taking of large samples of blood and feel that they should receive compensation for this procedure.

I repeatedly heard that the involved people will submit to additional examinations in September or October only if independent physicians from Japan, WHO, and the U.S. Public Health Service accompany the team.

The Health Aides of Rongelap and Utirik have difficulty in administering the prescribed thyroid medication due to the lack of written records on the patients. The Aide on Rongelap stated he thought the records were in the trailers but were not available to him. There are apparently no records in Marshallese for the use of the Health Aides or Medical Practitioners that periodically visit the Atolls.

At all four sessions, the women repeatedly stated that there have been more miscarriages and abnormal babies on both Utirik and Rongelap since the explosion. Those from Utirik stated this occurred during the first year after the return to their Island. Specific dates and instances could not be determined. Apparently there were four abnormal babies born to the exposed women of Rongelap who were not pregnant at the time of exposure. After much discussion among themselves, the spokesman for the women stated that there continues to be an increase in the number of miscarriages on Rongelap.

According to statements made at the sessions, approximately 19 exposed persons living on Rongelap at the time of the explosion, who were under the age of 10, have developed thyroid nodules requiring surgery. Although biopsy reports indicate only 2-3 of these to be malignant, the involved patients believe that all have cancer. They are not able to distinguish between benign and malignant lesions. It is apparent that some of these patients are not taking thyroxine as instructed. I emphasized at all four sessions that the prescribed medication was necessary for their health and welfare.

In summary, the apparent lack of communication and understanding between the people and the medical team has been a major problem. There have been difficulties with interpretation between English and Marshallese in the past but it is not a major factor.

**B. Compensation:**

Although I did not actively participate in the sessions devoted to compensation, the following complaints were registered:

1. The exposed people of Utirik Atoll believe that they have sustained physical injury from the radiation and are entitled to just compensation. Those now living on Majuro and Ebeye stated they wanted to return to their home but were afraid of the radioactivity that remains.
2. The exposed people of Rongelap do not believe that the compensation paid to them in 1964 was adequate because of the thyroid abnormalities that have developed since that time. The Rongelapese now living on Majuro and Ebeye will not return to their home because of the residual radioactivity and the fear of related sickness.

3. The people of both Atolls believe the land and trees were damaged by the radiation and that they should receive just compensation for this damage. They would agree to have such compensation placed in trust funds for the good of both groups.

4. The control groups believe they should receive compensation for submitting to the medical examinations.

C. Recommendations:

As a physician concerned with the health and welfare of the exposed people, I urge that the next medical examination proceed without further delay. In order to have the examination proceed without difficulty, the following recommendations should be seriously considered by the Special Joint Committee:

1. Independent physicians from Japan, WHO, and the U.S. Public Health Service should accompany and make individual reports to the Special Committee.

2. The physicians from Japan should be -

Dr. Haruo Ezaki, University of Hiroshima  
Dr. Toshiyuki Kumatori, National Institute of  
Radiological Sciences

The importance of the presence of these two physicians cannot be overemphasized. In my opinion, if they are not present the involved people will refuse to be examined. Due to possible complications in clearance of these physicians, the proposed date of September 7, 1972, may have to be delayed.

3. The Director of Health, Trust Territory of the Pacific Islands, should be requested to send Medical Officers with the examining team to treat local diseases. Such treatment would be advantageous from a public relations standpoint and should lead to more cooperation by all concerned.

4. Every effort must be made to improve communication between the physician and the people under study. A better understanding of the purpose of the examinations would remove an apparent major source of resentment now evident. A written translation of the major findings into Marshallese should be made for the use of the Health Aides and the Medical Practitioners.

Page 5

5. The Trust Territory should provide additional medical examinations and treatment to the people of Utirik and Rongelap. This would supplement that provided by the annual surveys by the Brookhaven National Laboratory Medical Team.