MICRONESIA AS STRATEGIC COLONY

The Impact of U.S. Policy on Micronesian Health and Culture

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June 1984
MAELSTROM IN THE MARSHALL ISLANDS:
THE SOCIAL IMPACT OF NUCLEAR WEAPONS TESTING

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Now I have to take a pill every day until I die. The United States came to our islands and threw bombs on us, and now we are slowly dying.

Ezra Leban (deceased), Utirik Atoll

The island people of Micronesia have been involuntarily and inextricably involved in the unfolding drama that is the Nuclear Age. From Hiroshima to the MX, their involvement continues to plague them — like some long-lived pestilence — after nearly four decades of United States stewardship.

It was from Tinian Island in the northern Marianas that the Enola Gay departed for its unprecedented journey into the nuclear quagmire in which we presently find ourselves. Bikini became a household word for a scant bathing suit, as well as for the awesome power of the new technology possessed exclusively by the U.S. at the end of World War II. The fate of Juda, the "King of Bikini" (a curious malapropism as he was only a local chief) who "gave" his atoll to the U.S., was likened to the Indians trading Manhattan for twenty-four dollars' worth of bangles and beads. Today, Kwajalein Atoll (see Alexander, 1978, for full discussion), which encompasses the largest lagoon in the world, is the splashdown point for the test flight of the MX (and other exotic ICBMs) delivery and inertial guidance systems fired from Vandenberg Air Force base in Lompoc, California, 4,600 miles to the east.

The Marshall Islanders have recently concluded a historical and long-awaited plebiscite which will determine their future relationship with the United States and the international community. One of the more vexing and controversial issues facing the Marshallese concerns the fate of those islanders most directly affected by the nuclear weapon experiments conducted at Bikini and Enewetak between 1946 and 1958. Indeed, Section 177 of the Compact of Free Association, which specifically addresses the radiation and relocation problems, was one of the major obstacles during the thirteen-year-long negotiations which culminated in approval of the Compact by a 58 to 42 percent majority of the Marshallese voters on September 7th, 1983. Hearings are set before the U.S. Congress, and if ratification of the Compact is obtained, the treaty will be sent to the Security Council and the General Assembly of the United Nations for approval.

The United States' nuclear weapons program has tampered with the fragile world of the Marshall Islanders in a manner that will extend perniciously for untold generations.
Environmental and Historical Background

The Marshall Islands are spread over 375,000 square miles (roughly the size of Texas and New Mexico) in the Central Pacific, and are the easternmost island cluster in the larger geographical expanse known as Micronesia. The Marshalls consist of two parallel archipelagogues which run nearly north to south (Ratak or "sunrise" and Ralik or "sunset"); the island group is composed of twenty-nine low-lying coral atolls and five single coral islands. The total land area of the Marshalls is somewhat less than 70 square miles, and it is the vastness of the surrounding ocean and the concomitantly intimate relationship the islanders have with their marine environment that truly characterizes the Marshallese way of life. Indeed, the Marshall Islanders are noted in the annals of Oceanic sea-lore for their long and precarious sojourns across sometimes treacherous open ocean with the use of their famous "stick charts" as navigational aids.

The Marshalls were "discovered" by the Spanish in the 16th century, but because of the paucity of land in the Marshalls, the Spanish confined their colonial pursuits to the Marianas Islands. In 1788 an English sea captain sighted Majuro Atoll (the current administrative capital) and the islands were named for him (Spoehr, 1949:30).

It was not until the arrival of the German whalers and traders in the mid-19th century that the influence of foreign contact penetrated the Marshalls. The Germans taught the islanders to produce copra from the dried meat of the coconut, and in so doing, propelled the once-subsistence islanders into a proto-cash economy.

At the same time, Protestant missionary activity commenced in the Marshalls with the establishment of a mission station at Ebon Atoll in 1857. Missionaries were dispatched by the American Board of Commissioners for Foreign Missions in conjunction with the Board of the Hawaiian Evangelical Association, and in 1869 a native Hawaiian missionary and his wife founded a mission on Majuro Atoll (Spoehr, 1949:31). To this day, Protestantism remains the predominant religion in the Marshalls, and despite the arrival of some Catholic missionaries during the German period, Catholic influence has been confined to only a few atolls.

As a consequence of heavy missionary and trading activity, a German protectorate was established over the Marshalls in late 1885. It was during this period that the German administration put an end to the continual power struggles and accompanying warfare between various rival island chiefs. When the Germans forced a cessation of the often bloody island warfare, they brought a halt to the dynamic Marshallese social system and thereby froze the then-standing social positions and island hierarchies. Ironically, while causing relative social status inertia in the social system, the imposed peace brought increased social, cultural and economic change because of the increased contact and communication between formerly isolated island entities (Spoehr, 1949:31-32).

Japan became interested in the islands at the turn of the century, and just after the declaration of war in October 1914, the Japanese took control of Micronesia from the Germans. It was not until the end of World War I and the Paris Peace Conference of 1920 that the isles of Micronesia were officially
awarded to the Japanese under a Class "C" Mandate of the League of Nations (Gale, 1979:33-34). From 1920 onward, changes occurred rapidly in the Marshalls and in the rest of Micronesia due to economic expansion under the Japanese (Mason, 1954:27). Interestingly, by 1936 Micronesians had become a minority population in their own islands second to Koreans, Okinawans and Japanese who were imported as cheap labor (Gale, 1979:37).

During the latter part of the 1930's, Japan began to militarily fortify a number of its Pacific Island possessions — in violation of the League of Nations mandate; the strongholds created at Kwajalein and Enewetak were among the first to be attacked by invading American forces in 1944 (Kiste, 1974:15). To prepare for invasion, the U.S. pounded the islands of Micronesia with heavy aerial bombardment which caused many deaths and injuries among the indigenous inhabitants. In fact, the most concentrated bombing of the Pacific Theater occurred at Kwajalein when a total of 36,000 shells saturated this strategic Japanese fortress (Gale, 1979:40-41).

The Saga of Nuclear Experiments: Operation Crossroads

At war's end, the United States took possession of more than 2,000 islands — of which only 100 are inhabited — in a strategic expanse of Pacific Ocean equal in size to the continental U.S. According to Gale (1979), it had already been predetermined at the Allied summit meeting in Cairo in 1943 (and further discussed at Potsdam) that Japan would be relieved of its Mandated Islands acquired after 1914 (1979:40-41). Even The New York Times lobbied on behalf of the U.S. building permanent military bases in Micronesia, and editorialized that the "islands are as important to the United States as the Hawaiian Islands" (5 April 1945).

At the first session of the General Assembly of the United Nations in London in 1946, President Truman, through a State Department Radio Bulletin on January 15th, "...declared that those [islands] we do not need will be placed under United Nations Organization Trusteeship, and those we need we will keep..." (Gale 1979:56).

On January 24, 1946, the United States announced that it had selected Bikini Atoll in the Marshall Islands for the public spectacle known as "Operation Crossroads" to demonstrate — especially to the Soviet Union — the destructive capability of its new weapon on a fleet of WWII naval vessels, signalling the de facto onset of the rehearsal for waging a limited nuclear war against an adversary's navy with tactical nuclear weapons. The Joint Staff Planners, a group within the Joint Chiefs of Staff, had been making preparations for Crossroads since November 10th, 1945 (Hines, 1962:21-2). Bikini had been designated because it met the several criteria for a nuclear test site: (1) the atoll was in an isolated part of the world, far from large population centers, as well as air and shipping lanes; (2) it was one of the northernmost atolls in the Marshalls, and the prevailing winds would carry any fallout to the north; (3) there was an excellent and protected natural deep-water harbor within the atoll to accommodate the massive naval fleet of Crossroads; (4) it was within the 1,000 mile range of the B-29 bomber that would be flown from Kwajalein to air-drop "Able," the first atomic bomb in the series; (5) Bikini had a miniscule and politically weak population of 166 people in 1946 which made it rather convenient to dispense with the original
inhabitants; and most importantly, (6) the Marshall Islands were under U.S. control.

On February 10th, 1946, the deputy military governor of the Marshalls, Commodore Ben Wyatt, arrived at Bikini by seaplane immediately following the Sunday church service. Capitalizing on the moment and alluding to the Bible, Wyatt

...compared the Bikinians to the children of Israel whom the Lord saved from their enemy and led unto the Promised Land (Kiste 1974:27).

Wyatt told the Bikini people about the bomb that scientists in America had made and the destruction it had wrought upon the enemy. In what may be one of the 20th century's greatest selling jobs, the Commodore further explained that scientists were experimenting with nuclear weapons "for the good of mankind and to end all wars." After some discussion among his people, Juda, the "iroij" (or chief) of Bikini replied that

If the United States government and the scientists of the world want to use our island and atoll for furthering development, which with God's blessing will result in kindness and benefit all mankind, my people will be pleased to go elsewhere (Mason 1954:263).

Chief Juda, accustomed to deferring to the authority of the Almighty and to the Japanese, must have felt tremendous psychological pressure from the recent vanquishers of the once-formidable Japanese who had occupied the island for decades. Moreover, Wyatt's account of the A-bombed Japanese cities surely forced the hand of the islanders into compliance with the wishes of the U.S. Also, it is likely that Juda believed the relocation of his people to a still-unspecified place would only be a temporary inconvenience: Wyatt had neglected to brief the chief about the permanent contamination of his atoll with long-lived radioactive isotopes from the upcoming atomic and thermonuclear blasts (Kiste 1974:28).

On March 7th, less than a month after the Bikinians had learned of the United States' plan to use their island for nuclear testing, the 166 islanders were packed off to Rongerik Atoll, one hundred and thirty miles to the east of Bikini. Rongerik was chosen among alternatives because of its familiarity to the Bikini people — they made frequent food-gathering visits — and because it had been uninhabited.

A sad lesson in atoll ecology was learned when the Bikinians moved to Rongerik, viz., where land is the most scarce resource there is usually an excellent reason why an atoll would remain permanently unpopulated. Rongerik was uninhabited because it was uninhabitable. With about one-fourth the land and lagoon size of Bikini, the scant recourses and poor quality of the local food supply of Rongerik could not permanently sustain the exiled Bikinians (Alcalay 1980:347).

Meanwhile, back on Bikini, Joint Task Force One assembled 42,000 military and scientific personnel, 250 ships, and 150 aircraft in preparation for "Operation Crossroads," the first post-War series of atomic tests. In the word of Admiral William H. Blandy, who headed the Task Force,
The Atomic Age is here. It is no myth. Nor is the atomic bomb 'just another weapon.' It is the most lethal destructive agent yet devised by man. Its energy release is staggering; its radioactivity is slow killing poison....In the face of this new knowledge, these recently discovered truths concerning the atom, so suddenly thrust upon an already chaotic world, not only warfare but civilization itself literally stands out at the crossroads. Hence the name of this operation (Blynd 1946:2).

On July 1, 1946, a B-29 named "Dave's Dream" lobbed a twenty-one kiloton plutonium bomb, code-named "Able", from high over Bikini Lagoon and onto a target array of 93 moth-balled ships from WWII. "Baker", the world's first underwater nuclear blast, was detonated on July 25th amidst the remaining ships of the target fleet. The Radiological Safety Section, directed by Col. Stafford L. Warren, M.D., had predicted that if the radioactive column from Baker did not rise more that 10,000 feet, radiological conditions would be "extremely dangerous" (U.S. Congress, 24 May 1983:326). In fact, the column from the second and final Crossroads explosion only rose to a height of 6,000 feet and completely contaminated the target fleet of ships as well as the entire Bikini Lagoon and surrounding islands with such long-lived radioactive isotopes as plutonium, americium, strontium and cesium (U.S. Congress, ibid:328).

Concurrently, the ex-Bikini islanders on Rongerik were having problems of their own. Several food staples, including some species of reef fish, arrowroot, pandanus, and coconuts proved to contain toxins, which lent credence to the Bikini myth about the spirit ("akejab") Liibokra who long ago poisoned Rongerik and provided the rationale to the Bikinians about why Rongerik had never been permanently settled (Mason, 1954:286-7). When Commodore Wyatt returned to Rongerik to check on rumors of ill health among the islanders, he responded to their frequent requests for help by saying the people were tending to rely too much on American aid and were losing their self-reliance (Mason 1954:290).

The exiled Bikini islanders remained at Rongerik despite increasingly severe food shortages, and in July 1947 a Navy medical corpsman visited the islanders and confirmed that they were visibly suffering from malnutrition (Mason 1954:314). An editorial in the Honolulu Star Bulletin blasted the U.S. during this time:

We could spend tens of millions for the Bikini experiment....But we couldn't spend the tiny time and the trivial money to see that 160 natives were properly cared for where we ordered them to go. We were more interested in promoting death than in sustaining life (4 October 1947).

In London, members of the international community convened a series of meetings for the purpose of establishing the United Nations and delineating the post-War world order. Henry Stimson, the U.S. Secretary of War, issued a memorandum to the Secretary of State which said that the islands of Micronesia "...must belong to the United States with absolute power to rule and fortify them" (Stimson 1947:60). On April 2, 1947, the Trusteeship Agreement was
approved by a unanimous vote in the Security Council. The U.S. was given the authority to administer the formerly Japanese Mandated Islands under a "strategic trust" agreement, the single exception under the new trusteeship system which placed several territories under foreign supervision. Under Article 76(b)(2) of the United Nations Charter, the United States pledged to "...protect the inhabitants against the loss of their lands and resources..." and under Article 76(b)(3), the U.S. promised to "...protect the health of the inhabitants..." (Heine 1974:189).

As in the game of "musical chairs," the Bikinians were once again shuttled from Rongerik to Kwajalein for a temporary layover, and then finally to the single island of Kili six hundred miles to the south of Bikini in November 1948. Serving as pawns of the Atomic Energy Commission for the development of nuclear weapons, the Bikinians suffered extreme hardships at lagoonless and desolate Kili, where the majority of the 1,000 present-day Bikini population remain today due to the contamination of their atoll. As Admiral Wright, then deputy High Commissioner of the Trust Territory, said about the move to Kili: "If the Bikinians do not adjust to Kili, the United States will have a new headache. The Navy is running out of deserted islands on which to settle these unwitting, and perhaps unwilling, nomads of the atomic age" (Mason 1954:359).

Strategic planners in Washington decided to designate Enewetak Atoll as the second nuclear test site at the Pacific Proving Ground: Bikini was determined to be too radioactive after the very dirty Baker test and needed a cooling off period. On December 21, 1947, the 145 people of Enewetak were moved to Ujelang Atoll to the southwest of Enewetak to make way for "Operation Sandstone," the 1948 series of nuclear tests that were preparatory to the development of Edward Teller's "super" or hydrogen bomb. Like their neighbors before them, the Enewetak exiles now living on Ujelang suffered severe hardships associated with their move to a much smaller and less hospitable environment. Tobin's (1967) doctoral dissertation is a mirror-like chronicle of the events at Ujelang which parallel the Bikini experience in terms of documenting the difficulties of adjusting to a new pattern of land tenure and exploitation of a less fecund habitat.

**BRAVO: The United States' Largest and Dirtiest Hydrogen Bomb**

On March 1, 1954, the earth shook when a fifteen megaton hydrogen bomb (roughly 1,000 times the size of the Hiroshima atomic bomb) was detonated near the surface of a small islet in the northern portion of Bikini Atoll. The international uproar about the perils of radioactive fallout officially began with the BRAVO detonation, as several inhabited atolls and the Japanese fishing trawler (the not-so-"Lucky Dragon") were caught in the dangerous path of what has come to be known as the "Bikini bomb."

John Anjain was magistrate of Rongelap Atoll at the time of BRAVO, and during a 1981 interview at Kwajalein he recounted how BRAVO had forever changed his life:

> I was magistrate on Rongelap in 1954. Before that time while I was in Majuro, a fellow who worked with the AEC [Atomic Energy Commission – now Department of Energy, DOE] — stuck out the tip of his finger — about a half-inch or so —
and said, "John, your life is just about that long." When I asked him what he meant, he explained that they were setting off a bomb on Bikini soon. I asked why they did not move people from Rongelap first [as they had done in preparation for "Operation Crossroads" in 1946], and he told me that they had not gotten word from Washington to evacuate the people beforehand.

On the morning of the bomb, I was awake and drinking coffee. I thought I saw what appeared to be the sunrise, but it was in the west. It was truly beautiful with many colors — red, green, and yellow — and I was surprised. A little while later the sun rose in the east. Then sometime after that a strong and warm wind — as in a typhoon — swept across Rongelap and filled the entire sky with smoke. Then all of the people heard a great sound of an explosion. Some people began to cry with fright. Some hours later the powder began to fall on Rongelap. We saw planes fly overhead, and thought that perhaps they had dropped this powder which covered our island and now stuck to our bodies. The visibility decreased to less than one-half mile at that time due to the haze in the sky.

The next day, early in the morning, I looked at all of the water cisterns with Jabwe, the health aide, and we noted that the water had turned yellow. I then warned the people not to drink from these water catchments, and then told them to only drink coconuts. The people began to get sick with vomiting, aches all over the body, eye irritations, and general fatigue and weakness.

On the morning of the third day a Navy destroyer came and an officer told me, 'John Anjain, you have to leave this island at once or you and your people will die.' At this time most of the people were feeling quite dizzy, as if drunk, and were also very weak. From Rongelap we went to nearby Ailinginae to pick up the 18 people there, and then we went to Kwajalein.

In Kwajalein we were very sick and in much pain, with body burns and bleeding on our necks and feet. After a week, the doctors came from the U.S., Drs. Cronkite, Conard, and a medical team. They made us bathe three times a day because they said our illnesses were of a new type and there was not medicine for us.

After some time they moved the people of Utirik over to Ebeye [Kwajalein] and said they had "no poison," and that we had "just a little poison"... We were moved to Ejit Island in Majuro. The United States caused us much misery and discomfort at that time, and we all suffered much illness and weakness.
Then in 1957 they returned us to Rongelap. At the time of our return the High Commissioner and some representatives of the United National Trusteeship Council came to our island. We asked them if it was safe to return to our island and they all agreed that there was still a little bit of radiation left on Rongelap, and that it might injure our health, but not very much. With that slight reassurance, we returned, but we had much fear then.

After our return, many women began to have problems with childbearing. On several occasions, women gave birth to creatures which did not resemble human beings: some of these creatures looked like monkeys, some like octopi, and some like bunches of grapes. One baby was born, and though it was very large, it did not have a complete head. After three days it died. The people complained repeatedly about these deformities, we were really scared, but the ABC doctors told us not to worry because 'there was just a little bit of radiation left on Rongelap.'

In 1963 the thyroid problems started to occur. In 1969 the ABC took my son Lekoj and two other children to New York City for their thyroid problems. In 1972 they noticed that the white blood cell count of my son was very low. They took him to Honolulu for blood transfusions and Dr. Conard told me that he would be all right. Then they notified me to go to Washington, D.C., where they had taken my son. I arrived at the hospital and saw that my son's condition was very serious and that he was weak. I will never forget being in Washington with my son--I have never felt such sadness in all of my life. He died a day later of leukemia.

After this I went to Hiroshima and Nagasaki with members of the Congress of Micronesia to request help from independent doctors, but the Trust Territory government [administered by the U.S. Department of the Interior] would not allow these Japanese doctors to visit Rongelap or Utirik, and this made me very suspicious. Later on, these same doctors from Japan reported that we should not have moved back to Rongelap in 1957 so soon after the fallout.

At the present time the people of Rongelap are forbidden to use the northern part of their atoll [where it was learned from a DOE survey that there is ten times as much radioactivity as in the southern portion of the atoll]. They are really scared up there at Rongelap and wonder if perhaps they should move away from that place entirely. Many Rongelap and Utirik people refuse to return and live in their former islands and choose instead to live in Ebeye and Majuro.

From the beginning of the testing program in our islands, the United States treated us like animals in a scientific
experiment for their studies. They come and study us like
animals and think of us as 'guinea pigs.' We are the
'guinea pigs' (Alcalay, 1981 interview).

When the 23 crew members of the "Lucky Dragon" returned to their home port
of Yaizu, an international furor over the effects of radioactive fallout
commenced. Indeed, BRAVO taught the world about the new perils associated with
thermonuclear weapons which could take out a city and fill the northern
hemisphere with radioactive fallout. Moreover, because much of the Japanese
tuna was fished from waters in or near Micronesia, the bottom soon fell out of
the Japanese fish market (Congress of Micronesia, 1973:Chapter IV).

On Rongerik Atoll, 130 miles to the east and downwind of Bikini, thirty
U.S. military personnel (mostly Air Force men) were stationed as part of the
BRAVO test. Comprising a meteorological detachment in order to provide the
Task Force with data about wind activity prior to BRAVO, the Rongerik unit
persistently warned the Task Force commander about the winds which were heading
from Bikini to Rongerik. According to the unit commander, Gene Curbow, "The
wind had been blowing straight for us for days before the test" (The New York
Times 20.9.82).

Until very recently, the Department of Energy (successor to the Atomic
Energy Commission) had maintained that only the inhabited atolls of Rongelap,
Aliin islands, Rongerik, and Utirik had been caught in the fallout of BRAVO.
Because of that claim, only the populations from Rongelap and Utirik have been
included in the follow-up medical studies performed by Brookhaven National
Laboratory under contract with the DOE. The thirty military personnel from
Rongerik were quickly re-assigned to regular duty back in the U.S. in lieu of
any medical follow-up program. Yet, in a 1978 DOE document, it was publicly
revealed for the first time that at least fourteen atolls (instead of only
four) had been caught in BRAVO's path, and that the contaminated area was far
greater than previously believed (DOE, 1978).

Even more intriguing is the recent revelation by the Defense Nuclear
Agency of the DOD that a wind report for BRAVO obtained just six hours before
the sunrise blast revealed that "Winds...were headed for Rongelap to the east"
(Defense Nuclear Agency, 1982).

Immediately after BRAVO, there was a sharp criticism raised at the
newly-formed United Nations about the U.S.' nuclear program in the Trust
Territory. At the July 15th, 1954, meeting of the Trusteeship Council, Mr.
Tearapkin of the Soviet Union made the following speech:

The Council has been confronted with a case absolutely
unparalleled in history. An Administering Authority, acting
in its own selfish interests, had allowed the basic
principles and purposes of the Trusteeship System to be
violated. It had transferred and was continuing to transfer
the indigenous inhabitants from their homes to other
islands, and over the protests of the indigenous population,
had turned the Trust Territory into a Proving Ground for
atomic and hydrogen bombs. As a result of that policy, the
sorry situation of the indigenous inhabitants had
deteriorated still further. The nuclear tests had not only
caused property loss, they had also injured the health of the population. Whole areas of land, sea and air had been poisoned and the Marshallese people were undergoing incredible suffering (UN Trusteeship Council, 15.7.1954).

Aside from the 82 people from Rongelap, the 157 people from Utirik Atoll 300 miles downwind and to the east of Bikini were likewise caught in the BRAVO fallout. According to the Brookhaven researchers in their 26-Year report, the 239 irradiated Marshallese included in the BNL medical program "...provide the only knowledge about the effects of radioactive fallout on human beings from detonation of nuclear devices" (Conard 1980:15). Knowledge about the late-occurring thyroid effects, including tumors and thyroid dysfunction with concomitant growth abnormalities, as well as blood changes and chromosome aberrations, adverse birth outcomes, and the effects of ecosystem contamination and the uptake of radionuclides in the foodchain, has been scrupulously gathered in the aftermath of BRAVO and other thermonuclear weapons of megaton range detonated in the Marshall Islands (Conard 1980:1-138). Also, it is a little known fact that data from the Marshalls suggests that low levels of ionizing radiation may cause as much cancer as higher levels over a long period of time. This hypothesis is borne out by the fact that the Utirik group with its lower radiation exposures (14 rads of whole-body gamma) has the same rate of thyroid cancer as the highest dose Rongelap group (175 rads) (Conard 1980:104). The explanation for this concerns the cell-killing effect at higher doses, whereas at the lower doses the cells are spared for later malignancy.

It is interesting to reflect upon the fiery accusation of Ataji Balos, then representative from the Marshall Islands to the congress of Micronesia, made before an international human rights conference in Ireland in 1976. As a descendant of both Rongelap and Bikini, Rep. Balos charged the U.S. with "knowingly and consciously allowing the people of Rongelap and Utirik to be exposed so that the United States could use them as guinea pigs in the development of its medical capabilities to treat its citizens who might be exposed to radiation in the event of war with an enemy country" (Balos 1976:7-8).

In 1969, the Atomic Energy Commission and the Brookhaven medical team formed an "ad hoc committee to evaluate the radiological hazards of resettlement of the Bikini Atoll." In their report, the committee stated that "the exposures to radiation...of the Bikini people do not offer a significant health threat" (Conard 1978). However, by 1978, after more than 100 Bikini Islanders had moved back home to participate in the clean-up of their atoll, it was determined that they had absorbed dangerous levels of cesium and plutonium through the foodchain, and once again, the Bikini people were evacuated from their home.

Similarly, Enewetak Atoll was given consideration for a radiological clean-up in the early 1970's. In 1974, Dr. Edward Martell, a noted radiation expert, was asked whether it was feasible to rehabilitate Enewetak by the legal counsel who represented the Enewetak people at that time. Martell, who had been at several of the nuclear tests as a government scientist, wrote,

In my judgment, Enewetak and other nuclear explosion sites have been rendered unfit for human habitation, and the resettlement of such sites is extremely likely to have
tragic consequences, particularly for the younger members of the inhabitants. Progressively worse consequences are to be expected for each successive generation in the affected population group.

Ignoring the advice of Martell, the Enewetak clean-up proceeded. At a cost in excess of $120 million, more than 100,000 cubic yards of highly radioactive topsoil were mixed into a slurry and poured into an atomic bomb crater on Runit Island at Enewetak Atoll. The crater was then capped by a 370 foot diameter concrete dome. Unfortunately, because the bomb crater was extremely porous due to its coraline composition, the radioactive topsoil cannot be contained within the dome, and consequently leaks during every tidal action. Nonetheless, a portion of the 550 Enewetak Islanders were allowed to return home in 1980, and it has been learned recently that these people have evacuated Enewetak and are living once again on Ujelang, their atoll of exile (O'Rourke, personal communication 15.4.84).

The people of Rongelap were given a warning about the dangers of remaining on their home atoll by an eminent health physicist. In a radiological assessment of the northern Marshalls, Karl Z. Morgan, former Director of Health Physics at Oak Ridge National Laboratory, recommended that the people of Rongelap should seriously consider evacuation of their home atoll (Morgan 1982:1-4, 28-9). I have just learned that the Rongelap Council is seriously considering evacuation and has named a small islet in the Kwajalein Atoll as a possible site for relocation (O'Rourke, personal communication, 15.4.84). If the Rongelap Islanders decide to evacuate their home atoll, it will have the most profound effect on the upcoming Congressional hearings concerning the possible ratification of the Compact of Free Association.

Conclusion

As mentioned previously, Section 177 of the Compact of Free Association deals specifically with the radiation-related problems in the Marshalls. Certain shortcomings in this Section make this a less than perfect agreement, and will, if ratified by Congress, leave the Marshall Islanders affected by nuclear weapons testing in an extremely vulnerable and precarious position in the years ahead.

The Section pertaining to the espousal of pending lawsuits by the more than 3,000 litigants in the Northern Marshalls (which total nearly $4.5 billion for the health and environmental damage done to an entire culture) will become null and void if the Compact clears the Congress. This denial of a basic right to sue for redress mirrors the judicial block of the atomic veterans barred by the 1950 Supreme Court ruling known as the Peres Doctrine which precludes former service personnel from suing the U.S. government for injuries sustained while in the service.

Although the $150 million to be paid to the people of Bikini, Enewetak, Rongelap, and Utirik over a fifteen-year period seems generous, it is difficult to understand the rationale of assigning a fixed dollar amount for a population having an uncertain prognosis, as is the case for Rongelap and Utirik (Conard 1980:85-7). In light of the espousal of claims and the nullification of
pending lawsuits, it is clear that if the Compact is ratified, it will leave the affected Marshallese without judicial redress in the future.

As evident in the following interview with Ezra Leban formerly of Utirik Atoll, the Marshall Islanders do not trust the Brookhaven medical researchers:

After our return from Kwajalein three months after the bomb, things began to change. We resumed eating our own food after we ran out of the food and water the AEC gave us.

Some of the women gave birth to creatures like cats, rats and the insides of turtles. Most women had miscarriages, including myself who gave birth to something unlike a human ("ejab armij"). Some women gave birth to things resembling grapes (a clinical condition known as hydatidiform mole), and some women even stopped having children, including me. Things are not the same now, and people are not as active and healthy as before the bomb.

The AEC doctors try to reassure us, but even now I am nauseous and very tired most of the time, and I know this is from the bomb. The AEC doctors tell us that this is unrelated to the poison. I now know that the poison will not go away from our islands. The AEC doctors treat us as if we were animals for their use, and they do not tell us the truth about our problems. I now believe that the AEC doctors have been keeping secrets from us for many years about our condition (Alcalay 1981).

A provision in Section 177 provides for the Marshallese to contract with only United States medical professionals and agencies at the termination of the Trusteeship. Given the history of the U.S. medical program in the area, it is at least curious that the U.S. seeks to prevent the Marshallese from contracting with independent physicians and radiation specialists of their own choosing. This very important point should be given the utmost consideration during the Congressional debate on the Compact (Johnson 1980:29).

In light of the nearly four decades of U.S. bungling in administering the Trust Territory, it seems rather sad to consider the cynical remark made last year by Col. Al Short, the director of the Micronesian Status Negotiations. In a Washington Post (286.83) interview following the initialing of the Compact for the Marshalls, Short said, "We have paid our tab."

This same cynicism is evident in the following passage by John Dorrance (1980:67) of the National Defense University, a Pentagon-funded "think tank".

Despite costly, massive and well-publicized U.S. government clean-up efforts, many displaced inhabitants have been unable to return to their islands. Today, they are portrayed by South Pacific anti-nuclear groups as martyrs of superpower rivalry.

The "martyrs" in the Marshall Islands and in the rest of Micronesia must be scratching their heads in amazement as they ponder how their lives have been forever tainted by United States administration under the auspices of a United Nations "trust agreement"...