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POISONED LIVES, CONTAMINATED LANDS: Marshall Islanders Are Paying a High Price for the United States Nuclear Arsenal

Zohl dé Ishtar¹

Living on small islands in the middle of the Pacific Ocean, the people of the Republic of the Marshall Islands have borne the brunt of U.S. development of nuclear weapons. The Islands' isolation from the focus of the world's attention has afforded the United States a mantle of secrecy under which it has developed its nuclear bombs, missile delivery systems, and, more recently, space warfare technology. This nuclear playground has violated the health of the Marshallese people, contaminated their ancestral lands and waters, and robbed them of their political and economic freedoms.

In this article, I outline the chronological history of the nuclear testing program and its impact on the Marshallese, which provides a backdrop for the personal narratives of Darlene Keju-Johnson and Lijon Eknilang. Darlene Keju-Johnson was born on Ebeye and grew up on Wotje Atoll. She lobbied internationally for the plight of Marshallese women, and it was her personal testimony that brought the world's attention to "jellyfish" babies, born with no human shape. Before she died of breast cancer in 1996, Darlene directed the Marshall Islands Family Planning Program, and subsequently the Ministry of Health's Division of Adolescent Health. The second narrative belongs to Lijon Eknilang, who is from Rongelap and currently lives on Ebeye. She was living on Rongelap on the day in 1954 when the sky burned from a U.S. nuclear bomb. She represented the Marshallese people internationally, both before the International Court of Justice in its Advisory Proceedings on the legality of the Threat or Use of Nuclear Weapons and before the U.S. Congress.²

I will trace the history of nuclear testing in the Marshall Islands between 1946 and 1958, the development of missile and space warfare technology between 1958 and 2003, and the various impacts of these developments on the Marshallese people. I will also argue that the Marshallese people are caught in a trap of U.S. militarisation, enhanced by the Islands' geographical isolation. The U.S. government has intentionally developed its nuclear arsenal in the Marshall Islands, hidden from the eyes of the world and far from the focus of the global media and the majority of social justice movements. Few people outside the Pacific region are aware that the Marshall Islands exist, or that U.S. preparations for nuclear war and global domination are currently, and have long been, played out upon the lands and lives of a small, peaceful, matrilineal nation.³

THE DEVASTATION AND DESTRUCTION OF U.S. NUCLEAR TESTING ON THE MARSHALL ISLANDS

In the twelve years between 1946 and 1958, the U.S. detonated sixty-six nuclear bombs in Bikini and Enewetak Atolls, small rings of islands in the northern Marshall Islands.⁴ In March 1946, in preparation for "Operation Cross-roads," all 167 residents of Bikini were relocated from their resource-rich atoll to the solitary and infertile sandbar island of Rongerik. In May of the same year, the residents of Enewetak, Rongelap, and Wotho Atolls were also temporarily relocated. The operation began with two bomb tests on Bikini, each equal in size to the bomb dropped on Hiroshima. On June 30, 1946, the world's first post-World War II nuclear bomb was detonated on Bikini Atoll.

A year later, in July 1947, the Marshall Islands (along with other Micronesian nations under U.S. colonisation) became the United Nations' only Strategic Trust Territory under U.S. administration. The Trust obligated the United States to:

Promote the development of the inhabitants of the trust territory towards self-government or independence as may be appropriate...

NUCLEAR PROLIFERATION

and to this end shall . . . promote the economic advancement of the inhabitants . . . encourage the development of fisheries, agriculture and industries; protect the inhabitants against the loss of their lands and resources.⁵

Yet, in December 1947, the U.S. government removed the people of Enewetak from their homelands once again and relocated them to Ujelang Atoll. This cleared the way for “Operation Sandstone,” a series of three atomic tests.

In March 1948—nearly two years after they were relocated to Rongerik—the Bikinians, on the verge of starvation, were finally taken off the island. They were relocated to Kwajalein and then sent to Kili, a single island with no protected lagoon or harbour, which made fishing impossible. More atomic tests were conducted on Enewetak in 1951 and 1952, including the detonation of the first hydrogen device. The hydrogen bomb was 10.4 megatons, or 750 times larger than the bomb dropped on Hiroshima. This test, known simply as “Mike,” vapourised an entire island.

On March 1, 1954, despite weather reports indicating the wind was blowing toward inhabited islands, the United States detonated its first deliverable hydrogen bomb above Bikini Atoll. The bomb, known as “Bravo,” was 1,000 times the strength of the bomb dropped on Hiroshima. Fallout ash covered Rongelap and Ailinginae Atolls, and a fallout “mist” enveloped Utirik and other islands.⁶ U.S. meteorologists stationed on Rongerik were also exposed to the fallout. The United States directed its naval ships out of the anticipated fallout zone prior to the test, but it was forty-eight hours before the Rongelap people were evacuated. By that time, they were suffering from nausea, vomiting, and rashes.⁷ The Utirik people, who were similarly affected, were not removed from their island until another twenty-four hours later. The Islanders were taken to the U.S. naval base at Kwajalein Atoll for observation, where they began suffering from burns, hair loss, and other illnesses.

The U.S. Atomic Energy Commission (AEC) responded to media alarm by releasing a press statement announcing that some Marshallese had been “unexpectedly exposed to some radioactivity. There were no burns. All were reported well.”⁸ On March 7, 1954, however, a secret medical study, the “Study of Response of Human Beings Exposed to Significant Beta and Gamma Radiation due to Fallout from High Yield Weapons” (The Study), was established to monitor and evaluate the Islanders.

In April 1954, The Study advised that the Rongelap people who had been exposed by the Bravo tests had been so heavily contaminated that they should never be exposed to beta and gamma radiation “for [the] rest of [their] natural lives.”⁹ On April 29, a U.S. Department of Defense report calculated that the people of Ailuk Atoll had received a significant dose of radiation, but advised the U.S. government against relocating them because of the difficulties of evacuating 400 inhabitants. In May, the Utirik Islanders returned home after U.S. officials guaranteed that the Utirik islands were only slightly contaminated and safe for habitation.

Seventeen more nuclear bombs, including several hydrogen bombs, were detonated on Enewetak and Bikini beginning in May 1956. In December of that same year, the United States awarded compensation to the Enewetak people living on Ujelang for the contamination of their islands. The Islanders were given \$25,000 (USD) in cash, and a \$150,000 trust fund. The Bikinians living on Kili were given \$25,000 in cash, and a \$300,000 trust fund, yielding \$15 per person per year.¹⁰ Neither atoll was safe for habitation. The Islanders became exiled on inhospitable islands facing food shortages and starvation, struggling to maintain hope of returning to their ancestral lands.

In July 1957, despite lingering radiation, the United States declared Rongelap safe for habitation and encouraged the Rongelap people to return home. The Department of Energy’s Brookhaven National Laboratory released an internal report explaining the logic behind its encouragement:

Even though the radioactive contamination of Rongelap Island is considered perfectly safe for human habitation, the levels of activity are higher than those found in other inhabited locations in the world. The habitation of these people on the island will afford most valuable ecological radiation data on human beings.¹¹

In May 1958, an additional series of thirty-two tests began, including several hydrogen bomb tests. By August 18, 1958, when the United States exploded its last nuclear device in the Marshalls, the Rongelap people were experiencing increasing ill health due to radiation exposure. According to Suliana Sitwatibau of the Foundation of the Peoples of the South Pacific International and Rev. B. David Williams of the General Board of Global Ministries, “in 1958, the rate of stillbirths . . . and miscarriages . . . among Rongelap women rose to more than twice the rate of unexposed Marshallese women for the first four years following their exposure in 1954.”¹² In 1963, Rongelap people exposed to the 1954 Bravo test began to develop thyroid tumors and experience a higher rate of growth retardation among children born after Bravo was dropped. By 1966, 52 percent of the exposed children on Rongelap who were under ten years at the time of the Bravo test, as well as 35 percent of the total population, had developed thyroid abnormalities.¹³

In 1968, the AEC announced Bikini Atoll was safe for human habitation.¹⁴ Despite assurances from the AEC that there was “virtually no radiation left” and an absence of any “discernible effect on either plant or animal life,” in October 1972, the Bikini Council rejected the prospect of returning en masse to their homelands.¹⁵ Several families, however, did return to Bikini, and others progressively followed. In November 1972, Rongelap’s Leko Anjain died of myelogenous leukemia at the National Cancer Institute in Bethesda, Maryland.¹⁶ He was one year old when he was exposed to the Bravo test. In 1973, an AEC draft report, not publicly released, determined that Bravo fallout contaminated eighteen atolls and islands, including Kwajalein and Majuro, the capital island.¹⁷ In that same year, Brookhaven National Laboratory reported that 69 percent of

Rongelapese children (twenty out of twenty-nine) under ten years old at the time of the Bravo test had developed thyroid tumors.¹⁸

Meanwhile, the same medical scenario was unfolding for Bikinians. In June 1975, the U.S. Department of the Interior reported that Bikini had “higher levels of radioactivity than originally thought.”¹⁹ That August, the AEC declared Bikini’s ground wells radioactive and prohibited the consumption of local foods. Low levels of plutonium were found in the urine of Bikinians who had returned to their homelands, but the U.S. Department of Energy (DOE) did not consider this to be “radiologically significant.”²⁰ In October, the Bikinians filed a lawsuit demanding a complete radiological survey of Bikini and other islands. In 1976, the DOE repeated its medical survey of the Rongelapese, again with alarming findings. But once again, it did not alert the Rongelap people.

In July 1976, the U.S. Congress approved a \$20 million budget for a nuclear cleanup of Enewetak Atoll. Beginning in May 1977, the cleanup scraped over 100,000 cubic yards of topsoil off the island. The soil, together with contaminated debris from the testing operations, was dumped in a bomb crater on Runit Island.²¹ The crater was then sealed with a dome of cement.

In June 1977, the DOE found that the radiation ingested by Bikini inhabitants was excessive, yet 139 Bikinians continued to live on Bikini Island.²² According to Marshall Islands journalist Giff Johnson, the United States was unprepared to give up what it considered to be “the only global source of data on humans” regarding plutonium ingestion.²³ The Department advised that the Bikini residents be repatriated from the island “within 90 days.”²⁴ In August 1978, a DOE survey of the northern Marshalls found that, in addition to Bikini, Enewetak, Rongelap, and Utirik, ten other atolls and islands had been contaminated by the larger detonations. In September 1978, the Bikini residents were relocated from their homelands and returned to the site of their decades-long exile on Kili Island.

In March 1980, with the cleanup of Enewetak completed, the Enewetak Islanders began to return to the southern islands in the atoll. The northern islands were still considered too radioactive for habitation. In 1981, the DOE again found the contamination of the Rongelap people to be extreme. Again, the Islanders were not informed.

The Rongelap and Bikini Islanders were not alone in their experiences with the U.S. nuclear program. In December 1984, following a five-year study, the U.S. National Radiological Survey reported that almost half of the Marshall Islands had been contaminated by the U.S. nuclear weapons testing program.²⁵ According to Sitwatibau and Williams:

Radioactive contamination 130 times above normal levels is detected at a testing point 502 kilometres west of Bikini. A Japanese government-sponsored scientific team sampling ocean water and marine life reports that radioactive contaminants are found in the ocean from the northern Marshalls westward almost to the Mariana Islands, some 4,800 kilometres away.²⁶

In May 1985, confronted with an increasing number of illnesses resulting from the nuclear contamination of their islands, the Rongelap people relocated themselves to small Mejjatto Island in Kwajalein Atoll.²⁷ The move was an attempt to secure a future for their children. As Darlene Keju-Johnson said, “Their bottom line is: ‘We care about our children’s future.’ . . . Their children came first. They know that they are contaminated. They know that they’ll be dying out soon. They are dying now—slowly.”²⁸

In January 1994, U.S. Representative George Miller wrote to then President Bill Clinton that the Rongelap people believed they had been used as “guinea pigs” by the U.S. military. Miller added that “the findings of the thyroid survey are disturbing . . . even if only 50 percent of the survey results are verified . . . the incidence rate is still significantly higher, by a factor of one hundred, than the rate of thyroid cancer found anywhere else in the world.”²⁹

KWAJALEIN ATOLL: U.S. MISSILES, SPACE WARFARE TECHNOLOGY,
AND THE MARSHALLESE

The Rongelap people's exodus to the small island of Mejjatto in Kwajalein Atoll was an attempt to give their children a future. However, relocating to Kwajalein was like jumping out of the frying pan and into the fire.³⁰ In 1958, when the United States moved its nuclear testing program away from the Marshall Islands to Kalama (a.k.a. Johnston Atoll), Kwajalein Atoll became "the primary [U.S.] range for testing the accuracy of intercontinental ballistic missiles and developing anti-ballistic missile systems."³¹

The Marshall Islands occupy an unenviable position at the centre of the Pentagon's arc of power, which sweeps across the vast northern Pacific.³² Kwajalein has been so essential to U.S. development of ballistic missile delivery systems that, according to Giff Johnson, it "may have contributed more to the arms race than any other spot on the earth."³³

To make way for the elaborate infrastructure required by the weapons program, Kwajalein's traditional landowners were progressively displaced from their islands within the atoll and resettled on the small island of Ebeye. Though Ebeye was once home to only sixteen people, in 1988 English journalist Jane Dibblin reported, "There are now 9,500 people living on Ebeye, on sixty-six acres or one-tenth of a square mile of land. Britain would have to accommodate twice the world's population to achieve the same density."³⁴

The U.S. military has subsumed Kwajalein Island, the largest island in the atoll. A fine slice of California lifestyle, Kwajalein contrasts starkly with Ebeye, which has been aptly described as the "slum of the Pacific," and a "biological time bomb that could go off at any time."³⁵

In an attempt to deal with increasing overcrowding and poverty, Ebeye Island was extended during the 1990s. Currently, however, over 12,000 people continue to live on less than one hundred acres. An additional 1,000 people have been relocated to Enniburr, where the pattern of substandard

housing and inadequate facilities has been repeated. According to Republic of the Marshall Islands (RMI) Foreign Minister Alvin Jacklick, “Ebeye and Enniburr have become the worst ghettos of the Pacific, and the conditions there are barely humane.”³⁶ Over 90 percent of the Ebeye and Enniburr residents are unemployed. Only 1,200 Marshallese working as “domestic servants, cooks, maintenance workers and groundskeepers for U.S. personnel on Kwajalein Island, commut[e] by boat from Ebeye Island each day.”³⁷ According to Bank of Hawai’i economist Wali M. Osman, foreign aid has been tied to development packages, which have proven unsuitable and have only exacerbated the problems.³⁸

The military importance of Kwajalein increased dramatically on March 23, 1983, when President Reagan announced his ambition to develop the Strategic Defense Initiative (SDI) or “Star Wars”—a space-based system designed as a total ballistic missile defense (BMD) to protect the United States from missile attacks. Overnight, U.S. Army Kwajalein Atoll / Kwajalein Missile Range (USAKA / KMR) became instrumental to U.S. space warfare ambitions. Kwajalein and the Marshall Islands thus became a vital node in the U.S. government’s ambitions to be the overlord of a new world order. This makes the Marshall Islands a place that is—*or should be*—of vast global significance.

Sapping up more than \$50 billion in research costs, the project suffered from fifteen years of repeated failures, while the objective remained unattainable. Packaged as a move to “render nuclear weapons impotent and obsolete,” the program faced immediate global condemnation for being “technically impractical and politically dangerous.”³⁹ Nonetheless, the militarisation of the atoll continued unabated, and on October 1, 1997, the Clinton administration restructured and revamped the program as the U.S. Army Space and Missile Defense Command.

Clinton’s initiative signaled the U.S. withdrawal from the Anti-Ballistic Missile (ABM) Treaty, signed in 1972, between the United States and the Soviet Union. The ABM Treaty banned both countries from deploying

defence systems or shields against long-range missiles, and thus had maintained the policy of Mutually Assured Destruction (MAD). MAD operated as a two-sided deterrence to nuclear war, or so the opposing governments argued in defence of their nuclear arsenals. The threat of imminent U.S. unilateral withdrawal from the ABM Treaty caused widespread alarm that global nuclear disarmament initiatives would be irreparably damaged. In November 1999, the United Nations endorsed a resolution introduced by Russia and China that demanded strict compliance with the ABM Treaty. The resolution recognised the historic role of the ABM Treaty “as the cornerstone for maintaining international peace and security and strategic stability,” and reaffirmed “its continued validity and relevance, especially in the current international situation.”⁴⁰ China warned that the U.S. withdrawal from the ABM Treaty would “cause a new nuclear arms race, including in outer space.”⁴¹

Disregarding this global concern, on May 1, 2001, President George W. Bush delivered a speech at the National Defense University in Washington D.C., signaling his administration’s unilateral withdrawal from the ABM Treaty. Reaffirming the U.S. commitment to developing a “layered” missile defence system that would extend Reagan’s Ballistic Missile Defense (BMD) system, Bush repackaged the anti-missile system as a deterrent to a missile attack from a “rogue nation,” such as Iraq or North Korea, or an accidental or deliberate missile launch by China or Russia.⁴² Going well beyond Clinton’s ground-based interceptor system, Bush’s program is not aimed at protecting the United States against an all-out nuclear attack. Rather, it consists of a plethora of weapons systems that, although they are still in the planning and testing stages, are being developed at great expense to U.S. taxpayers. The program has been estimated to cost \$200 billion, but the greater expense is the threat posed to the non-proliferation of nuclear weapons.⁴³

In December 2001, immediately following the Bush administration’s withdrawal from the ABM Treaty, missile testing at Kwajalein Missile

Range increased dramatically.⁴⁴ In September 2002, Giff Johnson reported from the Marshall Islands:

American missile defense testing at Kwajalein has shifted into overdrive with the election of President George Bush. The Kwajalein range hasn't been this busy since the heyday of the Reagan Administration, when President Ronald Reagan issued his plan to build a "Star Wars" missile defense shield over the United States. In May, three back-to-back missile shots in one week highlighted the stepped up pace of missile defense work at Kwajalein as the Bush Administration presses on to develop a deployable missile defense system by the mid-2000s.⁴⁵

The Bush administration initially intended to have the first elements of the system operational by 2005, but it has been met by consistent failures in its testing regime. Not least among these is the failure of two-thirds of the missiles fired from Kwajalein to intercept incoming missiles and actually hit their targets.⁴⁶ Nonetheless, according to Andrew Lichterman, program director of the Western States Legal Foundation, and M.V. Ramana, a research associate for the Program on Science and Global Security at Princeton University, the Pentagon is dedicated to developing a "full spectrum dominance"⁴⁷ that, as outlined in the *Joint Vision 2020: Statement of the Joint Chiefs of Staff*:

[i]mplics that U.S. forces are able to conduct prompt, sustained and synchronized operations with combinations of forces tailored to specific situations and with access to and freedom to operate in all domains—space, sea, land, and air information. Additionally, given the global nature of our interests and obligations, the United States must maintain its overseas presence forces and the ability to rapidly project power worldwide in order to achieve full spectrum dominance.⁴⁸

THE COMPACT OF FREE ASSOCIATION AND THE U.S. MILITARY

Throughout its history of involvement in the northern Pacific, the United States has incrementally extended its control by drawing the Marshall

Islands into an ever-tightening trap of economic dependency. This dependency has resulted in the signing of a “Compact of Free Association” (Compact), which secures the future of U.S. military facilities at Kwajalein.⁴⁹

The Compact has its beginnings in the Solomon Report commissioned by President John F. Kennedy in 1963. The report advised that the Marshalls (indeed the entire U.S. Trust Territory of the Pacific Islands consisting of the Marshalls, Palau/Belau, the Northern Marianas, and the Federated States of Micronesia) be flooded with money, technology, and personnel through a rapid Americanisation program, while at the same time giving an appearance of self-government.⁵⁰ Once the Micronesians were economically dependent on the United States, it would then simply be a matter of forcing them into an agreement that would bind them militarily to the United States.⁵¹ This covert doctrine of imposed economic dependency has been so successful that today the RMI relies on the United States for 68 percent of its revenue.⁵²

The first Marshall Islands Compact was approved in 1985 by 60 percent of the voting Marshallese and came into effect on November 3, 1986. Although the majority of Marshall Islanders agreed to the Compact, there was considerable opposition to it. As Jane Dibblin explains:

Out of the 60 percent . . . who voted [on the Compact], 59 percent were in favour; meaning that a little over 32 percent actually voted yes. . . . All of the atolls most directly affected by the U.S. military activity . . . voted overwhelmingly against: 70 percent on Kwajalein, 90 percent on Bikini/Kili and 85 percent on Rongelap. In all, ten out of twenty-four [island communities] voted against.⁵³

The Compact contained a lease on Kwajalein Atoll. According to Dibblin, “The Compact has been sold . . . as a fifteen-year bridging arrangement until the islands are ready for complete independence,” but it included an “automatic 15-year extension option on the use of Kwajalein.”⁵⁴ After

this period, however, “an indefinite Mutual Security Agreement automatically comes into force on termination of the Compact, which allows the U.S. military virtually unrestricted access to Kwajalein.”⁵⁵

Dibblin elaborates:

While the Compact promises independence . . . it is in fact a virtual U.S. annexation of the islands for military purposes, a denial of self-determination and a shrugging off of responsibility for past actions. The U.S. has “full authority and responsibility for security and defence matters”. . . . [T]he governments . . . are required to “consult” the U.S. over foreign affairs . . . [T]he U.S. can veto any item of domestic or foreign policy or any business or trade agreement which it deems is threatening to its security . . . U.S. security interests overshadow every other consideration. Self-determination is a mere gloss.⁵⁶

The 1985 Compact also included an espousal provision that freed the United States from any responsibility for the consequences, present or future, of its nuclear testing program. The clause dismissed all court cases pending against the United States and prohibited Marshall Islanders from seeking further compensation.⁵⁷ A trust fund was set up with \$150 million, which, once invested, would provide \$270 million in compensation payments and medical care over the fifteen years of the agreement for the “four atolls” deemed by the United States to have been affected by the nuclear testing (Bikini, Enewetak, Rongelap, and Utirik) and to instigate a Marshallese-wide radiological survey.⁵⁸

By 2000, this trust fund proved to be woefully inadequate in meeting the needs of the Marshallese. The Marshall Islands’ Nuclear Claims Tribunal did not have the funds to pay the compensation due to the fact that most Islanders suffered personal injury as a result of the U.S. nuclear tests, nor did it have the funds to compensate the loss of the use of their land due to contamination. The government’s medical service was unable to cater to the health care needs of its citizens.⁵⁹ The RMI government was thus anxious to renegotiate the Compact to provide its citizens with

compensation for the effects of the nuclear testing program. With the Marshallese denied the option of withdrawing from the Compact when it came up for resigning in 2002, they could only attempt to renegotiate compensation for the consequences of the U.S. nuclear testing program and for an increased rent for the continuing lease on Kwajalein Atoll.

The renegotiation process began on September 11, 2000, when the RMI government petitioned the U.S. Congress to provide adequate compensation for the health and environmental effects of its nuclear testing program. The RMI requested approximately \$3 billion to enable it to fulfil its outstanding compensation obligations. Warning that its request was inadequate over the long-term (although more realistic than the \$150 million paid by the United States under the earlier agreement), the RMI signaled that it retained the right under the terms of the Compact to ask the United States for further assistance, including cleaning up Bikini, Rongelap, and other atolls.⁶⁰

When the renegotiated Compact was signed in 2003, however, the United States had only increased its compensation funding to \$800 million, less than one-third of that estimated by the Marshallese to be a minimum requirement.⁶¹ As for the Marshallese request for increased rent on Kwajalein, the lease under the initial Compact was to expire in 2016, but the United States was determined to keep the facility. The RMI government, for its part, was desperate not to lose U.S. aid.

Thus, in April 2003, the RMI and U.S. governments signed “Compact II,” an agreement that extended the lease on Kwajalein until 2066, with an option for an additional twenty years.⁶² The U.S. Pentagon has thus secured the Kwajalein Missile Range lease until 2086. Under the new agreement, rent on Kwajalein was increased from the previous \$13 million per year to \$15 million per year from October 2003 to 2014, with a further increase to \$18 million per year until 2023.⁶³ In total, the 2003 Compact provides a payment of a mere \$3.1 billion over the twenty-year agreement (2003 to 2023), including rent for Kwajalein of \$2.3 billion.⁶⁴ This total payment is

only slightly more than the amount requested by the RMI for nuclear compensation alone.

Just as they have consistently resisted the Pentagon's control over their lands, the Kwajalein landowners also resisted the terms of the new Compact extension.⁶⁵ Giff Johnson reported that, although the Kwajalein Islanders did not want the United States to leave, they wanted a "new, fifty-year lease that [would take] into account the real value of Kwajalein . . . [or] if the U.S. [was] not willing to negotiate a new, fair lease agreement, then the landowners want[ed] to discuss repatriation of the base now in preparation for the expiration of the current deal in 2016."⁶⁶ In effect, they got neither. Kwajalein Negotiation Commission Chairman Christopher Loeak described the U.S. offer as "insufficient to provide for the people of Kwajalein," and as failing "to account for population growth and inflation."⁶⁷ Even though Kwajalein is "the only facility available to the U.S. for targeting incoming missiles," the Marshallese had little negotiating power to wield against the military monolith.⁶⁸ Since the Marshalls were economically dependent upon the United States, the United States clearly had the upper hand. The Marshallese were faced with no option but to accede to U.S. demands. As *Pacific Magazine and Islands Business* reported in January of 2003:

[The Marshallese] just had another lifebelt thrown grudgingly to them. They can cling to it for twenty years. After that, their former ruler, and still partially so, the United States, hopes to leave them to fend for themselves, although it intends to cling on to a war rocket testing base it has at Kwajalein Atoll in the Marshall Islands.⁶⁹

CONCLUSION

The Marshallese have no word in their language for "enemy," but as the Republic of the Marshall Islands stated in its petition to the U.S. administration in 2000:

The sixty-six atomic and thermonuclear weapons detonated in the Marshall Islands allowed the United States Government to achieve its aim of world peace through a deterrence policy. The Marshallese people subsidized this nuclear détente with their lands, health, lives, and future.⁷⁰

The issue of whether the U.S. administration's intentions are, or have ever been, to achieve peace or global domination through nuclear weaponry is moot, for from a Marshallese perspective, both objectives have had, and continue to have, the same devastating outcome.

¹ Dr. Zohl dé Ishtar is a sociologist who works in collaboration with Indigenous Australian and Pacific peoples on opposing nuclear testing in the South Pacific and promoting cultural revitalisation.

² KATE DEWES & ROBERT GREEN, AOTEAROA/NEW ZEALAND AT THE WORLD COURT (1999).

³ Concerning U.S. nuclear testing programs see Glenn Alcalay, *The Aftermath of Bikini*, 10 THE ECOLOGIST 346, (1980); ROBERT ALDRIDGE, NUCLEAR EMPIRE (1989); ZOHL DÉ ISHTAR, DAUGHTERS OF THE PACIFIC 18–40 (1994); PACIFIC WOMEN SPEAK OUT FOR INDEPENDENCE AND DENUCLEARISATION 15–26 (Zohl dé Ishtar ed., 1998); Zohl de Ishtar, *War, Violence, Terror, Genocide—The Pacific Experience*, Sociological Research Online, 4(2) at <http://www.socresonline.org.uk> (July 29, 1999); STEWART FIRTH, NUCLEAR PLAYGROUND 14–69 (Allen and Unwin 1987); CARL HEINE, MICRONESIA AT THE CROSSROADS, A REAPPRAISAL OF THE MICRONESIAN POLITICAL DILEMMA (1974); GIFF JOHNSON, COLLISION COURSE AT KWAJALEIN: MARSHALL ISLANDERS IN THE SHADOW OF THE BOMB (1984); ROBERT C. KISTE, THE BIKINIANS: A STUDY IN FORCED MIGRATION (1974) Micronesia Support Committee & Pacific Concerns Resource Center, FROM TRUSTEESHIP TO . . . ? (Maka'ainana Media 2nd ed. 1982); GARY SMITH, MICRONESIA: DECOLONISATION AND US MILITARY INTERESTS IN THE TRUST TERRITORIES OF THE PACIFIC ISLANDS. (Peace Research Centre, Research School of Pacific Studies, Australian National University 1991); and HIROMITSU TOYOSAKI, GOOD-BYE RONGELAP! (1986). For England's nuclear program in Australia see DENYS BLAKEWAY & SUE LLOYD-ROBERTS, FIELDS OF THUNDER: TESTING BRITAIN'S BOMB (Unwin Paperbacks 1985); DÉ ISHTAR, DAUGHTERS OF THE PACIFIC, *supra* at 147–151; JOAN SMITH, CLOUDS OF DECEIT. THE DEADLY LEGACY OF BRITAIN'S BOMB TESTS (1985); J. L. SYMONDS, A HISTORY OF BRITISH ATOMIC TESTS IN AUSTRALIA (1985); ADRIAN TAME & F.P.J. ROBOTHAM, BRITISH A-BOMB. AUSTRALIA'S LEGACY (Fontana/Collins 1982); In Kiribati see LOSENA TUBANAVAU-SALABULA ET AL., KIRISIMASI. FIJIAN TROOPS AT BRITAIN'S CHRISTMAS ISLAND NUCLEAR TESTS (1999). For France's nuclear program see ROBERT ALDRICH, GREATER FRANCE: A HISTORY OF FRENCH OVERSEAS EXPANSION (MacMillan 1996); FRANCE, OCEANIA AND AUSTRALIA: PAST AND PRESENT (Robert Aldrich ed., 1991); BENGT DANIELSSON & MARIE THERESE

DANIELSSON, MORUROA: MON AMOUR: THE FRENCH NUCLEAR TESTS IN THE PACIFIC (Penguin Books 1977); BENGT DANIELSSON & MARIE THERESE DANIELSSON, POISONED REIGN: FRENCH NUCLEAR COLONIALISM IN THE PACIFIC (2nd rev. ed., Penguin Books 1986) (1977); DÉ ISHTAR, DAUGHTERS OF THE PACIFIC, *supra* at 186–203; Zohl dé Ishtar, *A Broken Rainbow: Pacific Women and Nuclear Testing*, in GENDER AND CATASTROPHE 117 (Ronit Lentini ed., 1997); DÉ ISHTAR, PACIFIC WOMEN SPEAK OUT FOR INDEPENDENCE AND DENUCLEARISATION, *supra* at 36–42; PIETER DE VRIES & HANS SEUR, MORUROA AND US, POLYNESIANS' EXPERIENCES DURING THIRTY YEARS OF NUCLEAR TESTING IN THE FRENCH PACIFIC (1st ed. 1997); FIRTH, *supra* at 83–119; JULIE MILES & ELAINE SHAW, THE FRENCH PRESENCE IN THE SOUTH PACIFIC 1838–1990 (1990); NIC MACLELLAN & JEAN CHESNEAUX, AFTER MORUROA: FRANCE IN THE SOUTH PACIFIC (1998); BIEDERMANN, ANDY, TESTIMONIES: WITNESSES OF FRENCH NUCLEAR TESTING IN THE SOUTH PACIFIC (1990).

⁴ dé Ishtar, PACIFIC WOMEN SPEAK OUT FOR INDEPENDENCE AND DENUCLEARISATION, *supra* note 3, at 15–26; DÉ ISHTAR, DAUGHTERS OF THE PACIFIC, *supra* note 3, at 19–40.

⁵ JOHNSON, *supra* note 3, at 16 (citing United Nations, 1947).

⁶ Republic of the Marshall Islands, *Nuclear Testing in the Marshall Islands: A Chronology of Events, Nuclear Testing in the Marshall Islands: A Brief History*, Micronitor News and Printing Company, at www.rmiembassyus.org/nuclear/chronology.html (Aug. 1996).

⁷ JOHNSON, *supra* note 3, at 12; Republic of Marshall Islands, *supra* note 6.

⁸ JOHNSON, *supra* note 3, at 12 (citing NEAL O. HINES, PROVING GROUND: AN ACCOUNT OF THE RADIOBIOLOGICAL STUDIES IN THE PACIFIC, 1946–1961, at 169 (1962)).

⁹ Republic of Marshall Islands, *supra* note 6.

¹⁰ *Id.*

¹¹ JOHNSON, *supra* note 3, at 13 (citing ROBERT A. CONARD, MEDICAL SURVEY OF RONGELAP AND UTIRIK PEOPLE THREE YEARS AFTER EXPOSURE TO RADIOACTIVE FALLOUT (1958)); Republic of Marshall Islands, *supra* note 6. *See also* ROBERT A. CONARD, THE RADIOLOGICAL STATUS OF THE BIKINI PEOPLE (1979); ROBERT A. CONARD, MEDICAL SURVEY OF RONGELAP AND UTIRIK PEOPLE FIVE AND SIX YEARS AFTER EXPOSURE TO RADIOACTIVE FALLOUT (1960).

¹² SULIANA SIWATIBAU & B. DAVID WILLIAMS, A CALL TO A NEW EXODUS. AN ANTI-NUCLEAR PRIMER FOR PACIFIC PEOPLE 54 (1982).

¹³ *Id.*

¹⁴ JOHNSON, *supra* note 3, at 15 (citing ATOMIC ENERGY COMMISSION, REPORT TO THE AD HOC COMMITTEE TO EVALUATE THE RADIOLOGICAL HAZARDS OF RESETTLEMENT OF BIKINI ATOLL (1968)).

¹⁵ Republic of Marshall Islands, *supra* note 6.

¹⁶ JOHNSON, *supra* note 3, at 12.

¹⁷ Republic of Marshall Islands, *supra* note 6.

¹⁸ *Id.* For information on the Brookhaven National Laboratory and their study of the Marshallese see KONRAD KOTRADY M.D., THE BROOKHAVEN MEDICAL PROGRAM TO

DETECT RADIATION EFFECTS IN MARSHALLESE PEOPLE: A COMPARISON OF THE PEOPLES' VS. THE PROGRAM'S ATTITUDES (1977).

¹⁹ *Id.*

²⁰ JOHNSON, *supra* note 3, at 15 (citing ROBERT A. CONARD ET AL., A TWENTY-YEAR REVIEW OF MEDICAL FINDINGS IN MARSHALLESE POPULATION ACCIDENTALLY EXPOSED TO RADIOACTIVE FALLOUT (1975)).

²¹ Republic of Marshall Islands, *supra* note 6.

²² JOHNSON, *supra* note 3, at 15 (citing W.L. ROBISON ET AL., DOSE ASSESSMENT AT BIKINI ATOLL I (1977)).

²³ JOHNSON, *supra* note 3, at 15 (referring to Walter Pincus, *Bikini Islanders Want to Stay There*, WASH. POST, Apr. 3, 1978, at A1).

²⁴ *Id.* See also JOHNSON, *supra* note 3, at 15.

²⁵ Republic of Marshall Islands, *supra* note 6.

²⁶ SITWATIBAU & WILLIAMS, *supra* note 12.

²⁷ TOYOSAKI, *supra* note 3, at 37.

²⁸ dé Ishtar, PACIFIC WOMEN SPEAK OUT FOR INDEPENDENCE AND DENUCLEARISATION, *supra* note 3, at 19.

²⁹ Republic of Marshall Islands, *supra* note 6.

³⁰ DÉ ISHTAR, DAUGHTERS OF THE PACIFIC, *supra* note 3 at 35–6.

³¹ JOHNSON, *supra* note 3, at 40.

³² ALDRIDGE, *supra* note 3; DÉ ISHTAR, DAUGHTERS OF THE PACIFIC, *supra* note 3, at 19–114; THE SUN NEVER SETS: CONFRONTING THE NETWORK OF FOREIGN U.S. MILITARY BASES (Joseph Gerson & Bruce Birchard eds., 1991); PETER HAYES ET AL., AMERICAN LAKE, NUCLEAR PERIL IN THE PACIFIC (1987); PETER D. JONES, FROM BIKINI TO BELAU: THE NUCLEAR COLONISATION OF THE PACIFIC (1988); GARY SMITH, *supra* note 3. Belau (a.k.a Republic of Palau), Guam, Ka Pae'aina (a.k.a Hawai'i), Kalama (a.k.a Johnston Atoll), and the Northern Marianas are among those nations adversely impacted by the U.S. Pentagon's ambitions. Belau (or Palau) drafted and voted for the world's first nuclear free constitution in 1979, but because the constitution's nuclear free clauses conflicted with U.S. military intentions, the Belauan people were forced to vote in eleven plebiscites over fifteen years to protect it. In 1994, after immense U.S. pressure, a Compact of Free Association was adopted, nullifying Belau's anti-nuclear aspirations. Belau was declared independent, but the Compact grants the U.S. total military control over the island nation, a veto over foreign affairs, and the right to take any land it determines essential to its military interests with sixty days notice. DÉ ISHTAR, DAUGHTERS OF THE PACIFIC, *supra* note 3, at 41–65; dé Ishtar, PACIFIC WOMEN SPEAK OUT FOR INDEPENDENCE AND DENUCLEARISATION, *supra* note 3, at 70–77. Ka Pae'aina (or Hawai'i) had its internationally-recognised monarchy overthrown in 1893 by sugar merchants backed by the U.S. military in what U.S. President Cleveland described to the U.S. Congress as "an act of war." Hayden Burgess, *A Nation Betrayed*, in TE HUI ORANGA O TE MOANA NUI A KIWA. AOTEAROA 22 (1982). Hawai'i, which was officially annexed by the United States in 1898, harbours 110 military installations, including the command centre for the entire Pacific region. JIM ALBERTINI ET AL., THE DARK SIDE OF PARADISE: HAWAII IN A NUCLEAR WORLD (1980); DÉ ISHTAR, DAUGHTERS OF THE PACIFIC, *supra* note 3, at 101–14. Kalama (a.k.a. Johnston Atoll)

was contaminated when three U.S. nuclear detonations misfired in 1962, and has been used since the 1980s for incinerating decommissioned chemical weapons. It is currently maintained as a Nuclear Testing Readiness Centre. The Northern Marianas, home of the Chamorro peoples, were partitioned from Guam in 1898 by the U.S. at the end of the Spanish-American War. The U.S. then sold the islands to Germany, and they were then assigned to Japan in 1919 by the League of Nations, then granted to the U.S. in July 1947 by the United Nations. Bound to the U.S. by a Commonwealth Covenant on July 17, 1975, the U.S. is able to claim two-thirds of small Tinian Island (where the bombs that devastated Hiroshima and Nagasaki were loaded onto the planes), to use Saipan's harbour and airfield, and the entire island of Farallon de Medinilla for target practice. The islands are instrumental in the Pentagon's Anti-Ballistic Missile (ABM) systems, early-warning program, and back the U.S. pre-positioning fleet to supply the battle-fields of the region including the Middle East. The Covenant, which was for fifty years with an option of a further fifty years, provides the U.S. with eminent domain, that is the ability to take any land at any time in the national interest. DÉ ISHTAR, *DAUGHTERS OF THE PACIFIC*, *supra* note 3, at 67–97.

³³ JOHNSON, *supra* note 3, at 40.

³⁴ JANE DIBBLIN, *DAY OF TWO SUNS. US NUCLEAR TESTING AND THE PACIFIC ISLANDERS* 5 (Am. ed. New Amsterdam Books 1990) (1988).

³⁵ JOHNSON, *supra* note 3, at 21 (citing Mike Malone, *The US Army's Ghetto-Islet in Micronesia*, *PAC. ISLANDS MONTHLY*, June 1976).

³⁶ *The Price of U.S. Security: A Pacific Atoll's Squalor*, *INT'L HERALD TRIBUNE*, June 12, 2001.

³⁷ Pacific Concerns Resource Centre, *Missile Defence: The Price of US Security*, PCRC Background Briefing, at www.pcrc.org.fj/pcrc_docs/missiledefence_briefingpaper.doc (July 2001).

³⁸ *Id.*

³⁹ JOHNSON, *supra* note 3, at 57.

⁴⁰ Bill Gertz, *U.S. Missile Plan Hits Roadblock; Russia, China Join in Opposition*, *WASH. TIMES*, Oct. 22, 1999, at A1.

⁴¹ Pacific Concerns Resource Centre, *supra* note 37.

⁴² *Id.*

⁴³ ABC Radio National, *National Missile Defence: Shooting Stars* (June 24, 2001), at <http://www.abc.net.au/rn/talks/bbing/stories/s317906.htm>.

⁴⁴ Giff Johnson, *A Deal by Summer*, *PAC. MAG. & ISLANDS BUS.* (Feb. 2002), at <http://www.pacificislands.cc/pm22002/pmdefault.php?urlarticleid=0007>.

⁴⁵ Giff Johnson, *How Much is Kwajalein Worth to America? Unique Test Range is Marshalls' Big Bargaining Chip*, *PAC. MAG. & ISLANDS BUS.* (Sept. 2002), at <http://www.pacificislands.cc/pm92002/pmdefault.php?urlarticleid=0006>.

⁴⁶ On July 15, 2001, an interceptor missile was launched from Kwajalein Atoll to shoot down an incoming intercontinental ballistic missile. The Pentagon intended to have the BMD system operating by 2004, but in August 2000, its own Office of Operational Tests and Evaluation concluded that there had been so many failures that this timeline was unrealistic. Pacific Concerns Resource Centre, *supra* note 37. To date, the interceptor missiles launched from Kwajalein have tended to fail in their missions or, where they

have hit, the test has not replicated the scenario of an actual attack. A classified Pentagon report cited numerous problems, including the inability of the interceptor missile to distinguish between armed missiles and decoys. *Id.* The U.S. Ballistic Missile Defense Organisation (BMDO) described the July 2001 test as, “an aggressive research and development program that will lead to the defence of the American homeland as soon as possible against the real threats of the 21st century.” *Id.* Although declared successful, the test did not replicate a real scenario. It involved a dummy warhead and a decoy balloon launched from Vandenburg Airforce Base in California, rather than multiple warheads and decoys, and the hit was made possible because the incoming warhead was carrying a tracking beacon to signal its location during flight. *Id.* As these aids would not be available in real conflict, the BMDO’s claim to success is ill-founded. Further, this test was one of four over the 1999–2001 period, and only the second to reach its target. The first test of a prototype National Missile Defense system had been tested in October 1999—launched from Vandenburg and hit by an interceptor missile fired from Kwajalein. But tests in January and July 2000 both failed to hit their target.

⁴⁷ Andrew Lichterman & M.V. Ramana, *The New Texas Ranger and his Guns*, FRONTLINE (May 26–June 8 2001), at <http://www.frontlineonnet.com/fl1811/18111030.htm>.

⁴⁸ *Id.*

⁴⁹ Compact of Free Association, Pub. L. No. 99-239, 99 Stat. 1770 (1986).

⁵⁰ JOHNSON, *supra* note 3, at 7.

⁵¹ DIBBLIN, *supra* note 34, at 169–88.

⁵² *Hot Spot #2: Marshall Islands, The Battle For More Compact Money Dominates*, PAC. MAG. & ISLANDS BUS. (Jan. 2003), at <http://www.pacificislands.cc/pm12003/pmdefault.php?urlarticleid=0021>.

⁵³ DIBBLIN, *supra* note 34, at 180.

⁵⁴ *Id.* at 182.

⁵⁵ *Id.* The Kwajalein landowners had protested the living conditions on Ebeye since the late 1970s, re-occupying their home islands through a series of “sail-ins.” JOHNSON, *supra* note 3, at 27–38. The biggest demonstration was “Operation Homecoming” in 1982, during which landowners sailed to their home islands. As a result of this protest, the lease for Kwajalein Atoll was reduced from fifty to thirty years, and the Kwajalein landowners received increased funding and development assistance to improve the conditions on Ebeye. In 1985, still unsatisfied with U.S. treatment of their people, the landowners again reoccupied their islands. In September 1985, scores of women, men, and children camped outside the Kwajalein base for four months. The U.S. government insisted that its agreement was with the Marshall Islands government, which in turn claimed “Eminent Domain” over the Kwajalein Atoll in the “national interest”. The protest was broken by the Marshall Islands government arresting the women elders, an event without precedence in the Marshallese matrilineal society. DÉ ISHTAR, DAUGHTERS OF THE PACIFIC, *supra* note 3, at 29–31.

⁵⁶ DIBBLIN, *supra* note 34, at 180–81.

⁵⁷ Republic of Marshall Islands, *supra* note 6.

⁵⁸ *Id.*

⁵⁹ The Republic of the Marshall Islands (RMI) argued that new information concerning the “injuries to persons and property in the Marshall Islands . . . have arisen, been discovered or adjudicated since the Compact took effect on October 21, 1986” which “render the terms of the Section 177 Agreement manifestly inadequate to provide just and adequate compensation.” *Id.* By August 15, 2000, the RMI Nuclear Claims Tribunal had awarded over \$72,634,750 for personal injuries, almost \$30 million more than the \$47.75 million total available for all awards including property damage. *Id.* Over 700 awardees (42 percent) died without receiving their full award. In addition, the Tribunal determined that the people of Enewetak were entitled to \$386 million for the loss of use of their lands, cost of cleanup and restoration, and hardship for being exiled to Ujelang for thirty-three years. After the compensation received by Enewetak under the Compact was deducted, it did not have the funds to pay them. *Id.* The Marshall Islanders’ medical service was also proving to be inadequate, especially given the increasing health problems stemming from the nuclear testing program. Funding for the medical service had remained at \$2 million per year since 1986, resulting in “only \$14 per person per month as compared to an average U.S. expenditure of \$230 per person per month for similar services.” *Id.*

⁶⁰ Republic of Marshall Islands, *supra* note 6.

⁶¹ Giff Johnson & Oliver Wortel, *Marshalls Sign, FSM Signs Later: FSM Slowed by Immigration*, PAC. MAG. & ISLANDS BUS. (June 2003), at <http://www.pacificislands.cc/pm62003/pmdefault.php?urlarticleid=0011>. In 1981, prior to the Compact being signed in 1985, various Marshall Islander communities brought lawsuits against the U.S. for personal injury caused by the nuclear testing program totalling \$4 billion. Republic of Marshall Islands, *supra* note 6. These claims were dropped under the Compact agreement.

⁶² Floyd K. Takeuchi & Scott Whitney, *US Locks In Kwajalein Through 2066 Breakthrough Takes Place At Hawaii Talks*, PAC. MAG. & ISLANDS BUS. (Feb. 2003), at <http://www.pacificislands.cc/pm22003/pmdefault.php?urlarticleid=0017>.

⁶³ *Id.*

⁶⁴ Johnson & Wortel, *supra* note 61.

⁶⁵ *Id.*

⁶⁶ Johnson, *supra* note 44.

⁶⁷ Ema Tagicakibau & Nic Maclellan, *Australia’s missile involvement will alienate Pacific: NFIP*, PCRC Media Release, at www.pcrc.org.fj/Media_releases/austmissille.html.doc (Feb. 28, 2003).

⁶⁸ Johnson, *supra* note 44 (in the late 1990s, the Kwajalein facilities were valued at \$4 billion).

⁶⁹ *Hot Spot #2*, *supra* note 52.

⁷⁰ Republic of Marshall Islands, *supra* note 6.