

## Bikini and the Hydrogen Bomb: A Fifty Year Perspective

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by Senator Tomaki Juda and Charles J. Hanley

2004 is the fiftieth anniversary of the Hydrogen Bomb test at Bikini that has rendered the island and nearby atolls uninhabitable ever since. Two earlier Japan Focus articles (<http://japanfocus.org/094.html> and <http://japanfocus.org/097.html>) portrayed the impact of the blast on the crew of the Japanese fishing boat Lucky Dragon, and the subsequent course of the anti-nuclear movement. The two articles presented here detail the consequences of atomic and hydrogen bomb testing on Bikini and neighboring atolls, including the consequences for displaced people, the continued failure of the U.S. government to clean up the radioactive islands, and the long stalled negotiations with the U.S. government to compensate the people of Bikini.

**"If Bravo had been set off in Washington and the fallout headed northeast, everyone from Washington to Boston would be dead": Statement by Senator Tomaki Juda on the 50th**

### Anniversary the H-Bomb Test on Bikini



Today, March 1, is the 50th anniversary of the Bravo shot – the largest U.S. nuclear test in history. It is a sad day for us and for our friends and relatives all around the Marshall Islands. That test, that day – like radiation itself – still lingers in the Marshall islands after half a century, and, like radiation, it will not go away.

Most people here know the story of our people. It is in history books, government reports, and films. Next Saturday, March 6, will mark the 58th anniversary of the day that we were moved off our islands by the U.S. Navy for Operation Crossroads, the first tests of atomic weapons after World War II.

We were first moved to Rongerik, where we nearly starved to death, then to Kwajalein, and then finally to Kili in 1948. Sadly, Kili remains home to most Bikinians, and life there remains difficult. Kili is a single island, while Bikini Atoll has 23 islands and a 243-square mile lagoon. Its

land area is more than nine times bigger than Kili. To make matters worse, our population is 15 times larger today than what it was in 1946. Kili has no sheltered fishing grounds, so our skills for lagoon life are useless on Kili. In the past, we sailed our outrigger canoes to lands, fish and islands as far as the eye could see. Today, we are prisoners, trapped on one small island, with no reef and no lagoon.

Meanwhile, between 1946 and 1958, the United States tested 23 atomic and hydrogen bombs at Bikini, including the 1954 Bravo shot, which was, at the time, the largest manmade explosion in the history of the world. It is hard to imagine the deadly force of Bravo:

\* It was equal to the force of nearly 1,000 Hiroshima bombs.

\* It created a fireball four miles wide that vaporized the entire test island and parts of two others, leaving a hole in Bikini's lagoon one mile wide and 200 feet deep.

\* It destroyed most of the buildings on an island 14 miles across the lagoon to the south.

\* It was so powerful that it caused the concrete detonation bunker on Eneu Island, 24 miles away, to move off its foundation.

\* At Kwajalein, 250 miles away, there were high winds, and the buildings shook as if there had been an earthquake.

\* As we all know, there was a so-called "unexpected" shift in the winds, sending fallout east instead of north, right over Bikini Island and downwind to Rongelap and Utrik.

\* The deadly fallout covered an area of 7,000 square miles. How large an area is that? Let's put it this way: If Bravo had been set off in Washington and the fallout headed northeast, everyone from Washington to Boston would be dead.

\* In fact, President Eisenhower told a press conference in late March of that year that U.S. scientists were "surprised and astonished" at the size of the Bravo shot.

And what about our people? We have been exiles from our homeland since 1946, except for a brief period after President Lyndon Johnson announced in 1968 that Bikini was safe and the people could return. Many of us returned and lived there until 1978, when medical tests by U.S. doctors revealed that we had ingested the largest amounts of radioactive material of any known population.

History sadly repeated itself in late August 1978, as U.S. ships once again entered our lagoon and the Bikini people packed up and left. What went wrong? AEC scientists estimated the dose of radiation we would receive on Bikini, but they made an error in arithmetic, which threw off their calculations by a factor of 100. "We just plain goofed," one of the scientists told a reporter at the time.

Only one good thing resulted from Bravo. It was so awful and frightening that it set off a huge international debate that eventually led to the U.S. moratorium on atmospheric nuclear testing and the U.S.-Soviet Union Limited Nuclear Test

Ban Treaty signed by President Kennedy shortly before he was killed in 1963.

The tragedy of Bravo continues to haunt our people today. Fifty years have gone by, but Bravo is still with us. From March 1, 1954 until today, our islands remain heavily contaminated with radiation. We wait and we wait, not knowing when we can return home.

Now you know why March is a time of sadness and memory for the people of Bikini. Thank you.

*This article appeared at YokweOnline February 28, 2004.*

*Senator Tomaki Juda, youngest son of King Juda, who was the traditional Bikini leader, was elected Mayor in 1972 and served until 2000 when he was elected Senator.*

**"The megatonnage [of U.S. nuclear tests in the Marshall Islands] was equal to exploding 1.6 Hiroshima atomic bombs a day for 12 years": Bikinians Hope to Return Home after Fifty Year Exile**

By CHARLES J. HANLEY

EJIT, Marshall Islands. A harmony of soulful voices and hopeful words drifted up from the whitewashed church and out over the island.

"Standing ... Standing ... I'm standing on the promises of God."

Women with flowers in their hair, men in neat Sunday shirts, joined in the hymn to a promised

future. Children crowding the concrete floor listened. Beneath a pew, in the morning heat, a dog lay panting.

The pastor, stepping up to his pulpit, commended the 100-strong congregation for their undying faith. We are like the children of Israel, Lannij Johnson told the people of Bikini.



But outside, in the church's shadows, another Bikinian sounded a less faithful note.

"The children of Israel wandered in the desert for only 40 years," Alson Kelen, 36, reminded a visitor. Already the people of Bikini \_ "the children of America," they call themselves \_ have wandered for 58, and their journey, more than ever, looks like an exodus without end.

On March 17 in Washington, 7,000 miles east of here, the U.S. House of Representatives unanimously adopted a resolution hailing the half-century "strategic partnership" with these people of the mid-Pacific, a partnership in which they lost their home islands to U.S. nuclear bomb tests, and from which they fear Washington may soon walk away.

The resolution noted "the cost of preserving peace." But the U.S. government, after \$191

million disbursed since the 1970s, is offering nothing new to the Bikinians, no further compensation to revive hopes that Bikini atoll might be purged of lingering radioactivity, and Bikinians might return to the abandoned islands.

Jack Niedenthal, Bikinian by marriage and a spokesman for the islanders, believes that Washington, while spending billions elsewhere around the world, has not repaid its debt here.

"When you look at what they're doing in Iraq, in Afghanistan ..." He paused. "We're their friends, and here we sit a half-century later. We're sitting here."

The House resolution commemorated the day, March 1, 1954, when the United States set off a hydrogen bomb test, dubbed Bravo, at the western end of Bikini atoll — 23 coral islands ringing a 25-mile-wide lagoon in the northern Marshalls. It was the biggest U.S. nuclear blast in history.

The islanders had been evacuated eight years earlier, at the start of the U.S. testing program. Their chief, known by the single name Juda, said then they were agreeing to it because he'd been told that the bombs would produce "kindness and benefit to all mankind," and his people could return after the tests.

Because of shifting winds, and because U.S. bomb-makers had vastly underestimated the power of the monstrous Bravo explosion, it unexpectedly dumped heavy fallout on the main island of Bikini, and even farther away on inhabited atolls, Rongelap and Utrik, whose

people have been afflicted by severe medical problems ever since.

In all, between 1946 and 1958, the United States detonated 67 nuclear tests in the Marshall Islands, then a U.S. protectorate under the United Nations. The megatonnage was equal to exploding 1.6 Hiroshima atomic bombs a day for 12 years. Twenty-three tests took place at Bikini, and four of its islets were vaporized.

By 1948, the wandering Bikinians had been settled on rockbound Kili, a tiny, undesirable island in the southern Marshalls, where they grew dependent on U.S. handouts of canned food. In the 1970s, reassured by U.S. scientists, some returned to Bikini, but they were re-evacuated in 1978, having absorbed dangerous amounts of radioactive cesium. The Americans had mistakenly judged Bikini to be safe.

Many of those evacuees landed here on uninhabited Ejit, a palmy, half-mile-long island in Majuro atoll, capital of the Marshalls, which today are an independent nation closely tied to the United States.

By island standards, life here is comfortable — telephone, electricity, even \$25-a-month cable television for those who can afford it. But the water supply, via catchment rainwater, often runs low, and the simple cinderblock housing is cramped, in a settlement one can walk across in three minutes.

Because of a high birthrate and marriages to people from other islands, the count of "official" Bikinians has exploded, to more than 3,000, since

Chief Juda led 167 off the island in 1946. About 1,000 live on isolated Kili, some 400 on Ejit, and others on the main island of Majuro or in the United States, where 300 students are in schools. In exile, a culture of atomic victimhood has evolved.

Ejit's schoolchildren, in their rudimentary classrooms, sport orange T-shirts emblazoned with an atomic bomb's mushroom cloud, a Bible, and the trusting motto ascribed to Juda: "Men Otemjej Rej Ilo Bein Anij," Marshallese for "Everything is in the hands of God."

Those hands will lead them back to Bikini, islanders believe. And "if it is cleaned completely, they would go back 100 percent," said the late chief's son, Tomaki Juda, 60, the Bikini senator in the Marshalls' legislature.

Younger generations hear almost mythical tales of a pristine Bikini, where fish abounded in the lagoon, and outer islands covered with coconut, pandanus and breadfruit trees fed the people.

"Yes, I'd like to live there," Rosalina Jakeo, 25, told a visitor to Ejit, where she was found idly strumming a ukulele outside her house. "Compared to this" \_ she gestured around crowded Ejit \_ "it's a nice place."

After church, Jake Risino, 19, said she'd often heard from her parents about Bikini, 500 miles away, and she'd like to go there. "It's my home." But what about the 1-year-old daughter on her hip? No, she said, "I want her to get educated and go to America."

Younger Bikinians, like Risino, are quick to

discard the dream and recall the reality when asked about the future.

"It would be kind of scary to live there," said a Bikinian schoolteacher, Berman Caleb, 25. "I don't know if it's safe."

More and more, America is the promised land.

A few Bikinians have congregated \_ for work, through family connections \_ in such places as Springdale, Ark., and Costa Mesa, Calif.

But people here say the shy, poorly educated islanders aren't likely to emigrate individually in great numbers, even though Marshallese have open access to the United States and even minimum-wage jobs there might multiply their incomes.

Over the years, Washington financed a patchwork of compensation funds for Bikinians and other Marshall Islanders affected by nuclear testing, including years of medical monitoring and care for Rongelap and Utrik islanders who developed high rates of cancer and other medical problems.

One remaining trust pays \$220 a quarter to each Bikinian \_ \$4,400 a year for a family of five.

That trust was drawn from \$75 million in reparations payments made under a "compact of free association" that the Marshall Islands negotiated with Washington in gaining independence in 1986. This was to be a "full and final" payment on all nuclear claims.

Other U.S. money enabled the Bikinians in the mid-1990s to do preparatory work for a "big scrape" \_ removal of 15 inches of cesium-laced

topsoil from 100 acres of Bikini island, the atoll's main living area. But that work halted when the Bikinians opted for a strict U.S. standard for decontamination, a more expensive approach.

Then, in 2001, a Majuro-based Nuclear Claims Tribunal, created under the compact, held that the Bikinians should be awarded an additional \$563 million in damages, including \$251 million for restoring Bikini.

Because that tribunal had less than \$10 million available, the Marshall Islands government petitioned Congress, asking that the U.S. government make those payments. In 2002, Congress asked the Bush administration to review the request.

The administration is expected to finally report on the issue this summer, said Brian Kennedy, spokesman for the House Resources Committee, which has jurisdiction. He said the committee would then decide "how and if" to take action.

A State Department official, speaking on condition of anonymity, said the petition had been put aside for two years as government experts dealt with a higher priority: renegotiating general financial aid for the Marshalls after the 15-year accord expired in 2001.

Niedenthal sounds pessimistic. "It looks like the U.S. is walking away from things," said the 46-year-old Harrisburg, Pa., native and one-time Peace Corps volunteer in the Marshalls.

He said he also was worried by another new development: The U.S. Energy Department has cut funding for its field missions to check

radiation and the environment in Bikini.

"They shut it down without telling us," said Hinton Johnson, an Ejit member of Bikini's governing council.

Energy Department spokesman Jeff Sherwood confirmed in Washington that environmental sampling at Bikini was suspended, saving \$1.5 million this year, while a backlog of earlier work is analyzed. But he says it will be resumed at some undetermined point.

A leading champion of the Bikinians is the president of the Marshalls, Kessai Note, a Bikinian himself, first elected in 2000 to lead this nation of scattered atolls and 57,000 people.

The Americans "could have done more to help the Bikinians," Note, 53, said in an interview at his Majuro office. At a Bikinian funeral the night before, he said, "I spoke of injustice. These are people who have been away from their homeland for 50 years. That's a lifetime. And it doesn't look like they'll return anytime in the near future."

Kelen Joash, 74, a Sunday regular at Pastor Johnson's church, has more faith.

"America can do it," said Joash, who was 16 when taken from Bikini. "Maybe it can't be Bikini, but maybe the U.S. can find someplace else for us \_ big enough for a growing population."

After all, he added, reaching back to hopeful words first heard when he was young, "we're the children of America."

*This Associated Press report was filed April 25, 2004*