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Would you want to whistle at a Hiroshima swimsuit?

It is 35 years since "bikini" entered the language. How it did so, and what has happened since, is not a pretty story, writes W. C. Patterson

In early 1946, the United States moved into the rich and fertile island of Bikini, and uprooted its 167 Marshallese inhabitants. It transported them to the distant island of Rongerik, where food, fishing, and even water supplies were meagre, and left them there. The United States made firm promises that in due course, when the United States Government was finished with Bikini, the Bikinians would be returned to their homes and all would be well.

The Bikinians did not know what was in store for their atoll. The United States had chosen this idyllic setting as the ideal place to explode its two remaining atom bombs.

Some 42,000 people assembled at Bikini to see the US Navy demonstrate that it, too, could produce mushroom clouds. Test Able was fired on July 1, 1946, above the surface of Bikini, test Baker on July 26, deep under water in the lagoon. Both tests showered lethal radioactivity onto the ring of islands.

Operation Crossroads whetted the appetites of the bomb makers, and as soon as they had more bombs they returned. Between 1946 and 1958 the United States set off 23 nuclear tests at Bikini.

One of them, called Castle Bravo, was the first US hydrogen bomb. On March 31, 1954, it released a yield of 15 megatons, twice as much as expected. The radioactive cloud from Castle Bravo laid a swath of fallout over the inhabitants of Rongelap and Utirik islands, more than 100 miles away. Although the US Navy at once spirited the contaminated islanders to Kwajalein for attention, many of them developed symptoms of radiation sickness.

By this time the United States was carrying out so many tests it had also taken over Enewetak (which the Americans then spelled Eniwetok) atoll east of Bikini. In 1952 the Mike test, the forerunner of the hydrogen bomb, took place on the island of Elugelab in Enewetak atoll. When the cloud dispersed Elugelab was gone. By 1958 there had been 43 tests at Enewetak.

In 1958 the United States finally ceased its bombardment of its Trust Territory after having subjected it to 66 nuclear explosions. However despite the US Government's earnest promises, there was no question of letting the inhabitants go home. Their atoll was far too radioactive.

In 1968 President Lyndon Johnson at last announced that Bikini was to be returned to its people. Most of them had by this time been moved from the near desert of Rongerik to the only slightly less spartan isolated island of Kili, 400 miles south of Bikini. In 1969 the US Atomic Energy Commission declared that there was "virtually no radiation left in Bikini" and that "the exposures to radiation of the Bikini people do not offer a significant threat to their health and safety."

However, by 1975, a US Government survey found that the 100 or more people living on Bikini had plutonium in their urine. The Government discounted this as not "radiologically significant." Nevertheless by 1977 the Bikini dwellers had body burdens of caesium 137 which had increased elevenfold. To deal with this problem the US Government proposed to import all the food for the islanders.

Why did they not just take the people away from what was clearly not a healthy environment?

Apparently the US Government looked upon the Bikinians themselves as yet another nuclear experiment. Unfortunately for the experimenters - and their subjects - by May, 1978, most of the Marshallese had radioactive body burdens above the maximum permissible dose allowed in the US. The Bikinians once again departed from their island. US Government officials reported to a Congressional Committee in 1979 that Bikini might not be safe for another 100 years.

But the US Government is nothing if not persistent. Having failed to undo the devastation they had inflicted on Bikini, the Government began to attempt to rehabilitate Enewetak. Why it could have been considered less hazardous than Bikini was not clear; Enewetak had suffered nearly twice as many nuclear bombs. According to Giff Johnson, editor of the *Micronesia Bulletin*, writing in the *Bulletin of the Atomic Scientists*, the US Government claimed that the difficulties were due to the relatively unsophisticated radiological monitoring technically available: that the surveys of Bikini had been far less extensive than those subsequently carried out at Enewetak. Johnson questions this: "In 1972-1973 the United States conducted an exhaustive radiological survey

of Enewetak, which included both ground and aerial surveys of the islands, according to the Department of Energy. It was not done at Bikini, however.

"In fact it was not until the Bikinians filed a Federal lawsuit in 1975, asking for a thorough radiological survey of Bikini and the northern Marshall Islands, that the Government agreed to do it. But because of three years of bureaucratic infighting among the Departments of Energy, State and Interior, the radiological survey was not conducted until after the evacuation of Bikini in late 1978. The United States did have sophisticated techniques for measuring radiation at the outset of the Bikini resettlement; it chose to employ them only at Enewetak."

Meanwhile the medical problems of the Marshallese continued to accumulate. The people of Utirik and Rongelap had been allowed to return to their contaminated islands within six months and three years respectively of the Bravo test. By 1981, 19 out of 22 children exposed at Rongelap required thyroid surgery. Independent reports documented thyroid and other cancers, miscarriages and malformed babies, some on islands which had long been declared free of contamination. Only in 1978 did the US Department of Energy admit that in addition to Bikini, Enewetak and Rongelap, eleven other atolls or single islands has also been subjected to fallout from hydrogen bombs.

But the US Government does not give up easily. In October 1980 it declared that it was now safe for Bikinians to return to a certain island in the Bikini atoll, provided they imported 50 per cent of their food and spent no more than 10 cent of their time on Bikini.

Thus has the US Government discharged its trusteeship of the Marshall Islands. Would you feel slightly ambivalent about admiring a Hiroshima bathing suit? Think about it the next time you admire a bikini.

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