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Bikini: 50 Years of Nuclear Exposure

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On July 1, 1946, less than a year after the bombing of Hiroshima and Nagasaki, the United States resumed nuclear testing in the Pacific. In March, 1954 the US forced the 166 inhabitants of Bikini Atoll in the Marshall Islands, part of the United Nations Trust Territory that was among the spoils of victory in world War II, to leave their home island. On July 1, 1954 it conducted the first full-scale test of a Hydrogen Bomb at Bikini. The blast is estimated at 15 megatons, that is the equivalent of 15 million tons of TNT, one thousand times as powerful as the bomb exploded at Hiroshima. The Japanese fishing boat Lucky Dragon No. 5, sailing well beyond the zone demarcated by US authorities for the test, was covered with white ashes, later recognized as radioactive coral dust. The next day all 23 crew members suffered from headache, nausea, diarrhea and other symptoms from exposure to radioactivity. The symptoms were more acute among inhabitants of Longelap Atoll, 180 kilometers East of Bikini and other atolls. On September 23, the Lucky Dragon's chief radio operator died of jaundice, diagnosed as having been complicated by radioactivity. In Japan, the incident sparked a national petition campaign to ban nuclear weapons led by a women's group in Suginami Ward, Tokyo. The twenty million signatures that it collected within months provided a springboard for a national and international anti-nuclear movement. In August 1955 the World Conference Against Atomic and Hydrogen Bombs convened in Hiroshima, the first in a series of annual meetings that became the center of the antinuclear movement. This series of articles, on the fiftieth anniversary of the Bikini test, records the fate of the crew members, the fishing communities that were their homes, and their impact on the subsequent treatment of atomic victims in Japan.

I: A Fishing Master's Pride

Last May at Fujieda City in Shizuoka prefecture, the former "head of refrigeration," age 71, died of liver cancer. His job was to supervise freezing the fish that were caught on the boat. "In the speech at the funeral tomorrow, please do not mention the name of the boat, do not ever say that he was a crew member," the family said. At the wake, after showing his respect with palms together, Misaki Yoshio, 78, the former "head fisherman" of the Fifth Lucky Dragon Boat was told this.
Of the twenty-three crew members of the Lucky Dragon, which was exposed to radiation from the hydrogen bomb experiment by the United States on the Bikini atoll in the Marshall Islands, eleven people are alive. After half a century, more than half the crew is gone. Misaki and eight other former crew members attended the wake and funeral, but hardly anything was said of the experience.

Yakitsu fishing port in Shizuoka, which was known as the leading fishing base in East Asia, received a serious blow from the return of the Lucky Dragon with deadly ashes on the deck. All the boats that returned from the vicinity of the Marshall Islands were examined, and the radiated tuna was destroyed.

"We caused trouble to Yakitsu," Misaki said, "but it is difficult for the crew members to tell the facts because of their families."

Misaki began to talk actively about the radiation experience last year. Six years older than the captain, Misaki chose the route for fishing as the virtual leader. He also made the decision to go near the Bikini atoll.

"Wild people who operated unreasonably in a dangerous area, and didn't bother to contact Yakitsu" . . . even now this kind of critical gaze is directed toward them.

According to Misaki, on March 1, 1954, about one month after leaving Yakitsu, in the Midway Sea, which had been the planned fishing area, an accident occurred in which the fishing longline was cut. Since the catch was small, they went near the Marshall Islands to find a new fishing area for subsequent voyages.

Before dawn the waves were calm, and he calculated the boat's location using Antares, the alpha star of the Scorpius constellation. He was on deck when there was a flash.

With no sound, it turned bright yellow, then reddish. A little less than nine minutes later, a blast and a shock assaulted us.

He knew vaguely that Bikini was a nuclear test site. He wanted to get away quickly, but confusion reigned. So he turned the boat in a circle and calmed the crew. Ashes fell like cotton cake and accumulated on the deck. Some crew members tried to taste it.

"Our operation was nothing unreasonable. We encountered the nuclear test while looking for a new fishing area. We then made a desperate effort to return."

Then why didn't he telegram reporting the urgent situation for fourteen days until they arrived at the port?

"Earlier, we had been searched by local forces at sea near Indonesia. We were forced to moor and our wireless message was tapped. So we feared what would happen if we were heard by the United States and checked by them."

According to the boat's fishing diary, the location of the Lucky Dragon at the time of the radiation was North latitude 11 degrees 55 and East longitude 166 degrees 35. It was approximately 160 kilometers east of the center of Bikini. It was clearly outside the off limit area for the nuclear test which the United States had announced and the Japanese Marine Security reprinted as a warning for the voyage route.

Right after their return to the country, there were voices criticizing the crew members who were hospitalized as "going out to have a good time while still carrying deadly ashes" and as "big drinkers". Misaki says, from his experience of directing group life within a narrow boat, "At sea, fishermen are sitting next to death. We cannot live unless we are disciplined. Thos criticisms hurt the pride of the seamen."

Misaki lives about 1.5 kilometers south of Yakitsu. Many former crew members left the area, but he remained, running a food shop and what not. While being interviewed, a few times he was at a loss for words.

"I think I will talk for the sake of the honor of the fishermen."

The Bikini Victims. In the Cold War nuclear race, on March 1, 1954, the United States tested a large hydrogen bomb at Bikini, despite the fact that the wind was blowing toward Longelap atoll, outside the danger zone. Therefore, the Bikini islanders and many Japanese boats, including the Lucky Dragon in the sea nearby, were directly exposed to radiation from the "deadly ashes". In Japan, people started collecting signatures for a petition to ban hydrogen bombs and this led to an anti-H-bomb gathering at Hiroshima.

II: Muroto: "Bathing in the ashes, we cannot live long"

In Sukumo city, Kochi prefecture in southwest Shikoku, there is a fishing village named Naigai no ura. Twenty percent of residents among the 120 households are women who are living alone. Many of the men who died between their forties and sixties were exposed to the radiation at the nuclear test while fishing for tuna in the Pacific. For a little over nine months after the Bikini incident in March 1954, at major ports, the Japanese government continued to test boats that returned from the sea near the Marshall Islands for radiation. The government made 992 boats discard radiated fish in this period. One third of these belonged to Kochi prefecture.

Like the Lucky Dragon, tuna boats that carried men from throughout the prefecture, including Naigai no ura, were fishing in the area of the Marshalls. These radiated boats bathed in the rain and sea water that were polluted by radiation not only by the test of March 1, 1954 but also by the six hydrogen bomb tests that were conducted that spring.

The 72 tone Shinsei maru carried 7 people from Naigai no ura. Six of the seven died of cancer etc. including three who died in their fifties.

Okamoto Toyoko, 76, who has been living alone for the last five years, says "If a man goes out to fish for tuna, the woman becomes single."

Kiyomi, her husband, was a deck hand on a tuna boat between 1949 and 1970. He was healthy until he started fishing, but several years after he left the boat he started to commute to a hospital. In the summer of 1999, he collapsed and died.

"Because I bathed in the Bikini ashes, I won't live long." This was his habitual expression while he lived.

Yamashita Yukio, a former deck hand who witnessed the nuclear flash on the Shinsei maru, went to sea for the first time when he was 18. He continued fishing for seven years.

"I don't remember the time, but while working I saw the nuclear test which was like an evening glow. The ashes fell. Ashes are scary, so I quickly took shelter in a cabin."

At the outskirts of Naigai no ura is the tombstone of a young man who was exposed to radiation on a different fishing boat.

He encountered Nagasaki bombing in his teens, and in his twenties he encountered the Bikini H-bomb test. After these two nuclear disasters, he took his own life in the summer of 1960. He was twenty nine.

The inscription on his tomb reads "Exposed to radiation in Nagasaki, twice exposed to radiation in Bikini." A poem that he composed, Longing for Home, is inscribed.

"I walk to the sea where little waves foam just as if I'm committing suicide."

The U.S. nuclear experiments in the two Marshall Islands atolls of Bikini and Eniwetok continued from 1946 to 1958. There were 67 tests in all. The total scale of the blasts was the equivalent of 7,000 Hiroshima-type bombs. The number of affected boats and the health damage to their crews during the test period remains unclarified.

Now in Naigai no ura, students of the local self-study circle called the Hata High School Seminar are conducting interviews with the former crew members of the Bikini fishing boats.

For seven years starting in 1985, the seminar's senior members, along with their teacher-advisor, followed affected boats and made clear the situation of this twice-radiated young man. This became a documentary film that was much discussed.

Since last fall, students have again begun following affected boats and conducting interviews.

Yamashita Masatoshi, 59, former high school teacher of Sukumo city, who has served as advisor to the seminar from the beginning, has also been visiting Naigai no ura frequently.

"Former crew members whom we were able to interview died one by one within a little over ten years when we had stopped surveying and we did not have much time for follow up investigation."

Radiation-polluted tuna. In response to the Bikini incident, starting on March 18, 1954, the government required tuna fishing boats to check radiation at the ports of Shiogama, Tokyo, Yakitsu, Misaki, and Shimizu. Measuring at a distance of 10 centimeters from the fish, they discarded those with more than 100 geiger counts per minute. Later they checked radiation at 13 other ports including Osaka and Kochi prefectures. In all, 500 tons of fish was discarded. In the midst of the spreading voices asking for prohibition of atomic and hydrogen bombs, the government stopped checking at the end of the year.

III: The Law for the Protection of Radiated People

123. This is the number of fishermen who, besides the crew members of The Lucky Dragon, received funds for treatment. In April 1955, one year after the Lucky Dragon incident, the Japanese cabinet determined the distribution of medical relief funds for crew members suspected of having acute radiation disease using compensation funds provided by the U.S.

The compensation amounted to 605,000 yen for 123 people. In addition, 37 people received funds for injury and disease as compensation for being unable to work. The total amount was 1,470,000 yen.

One of them, Taira Mitsuyoshi, was the helmsman of the Yahiko maru, a cargo boat owned by Itaya Shipping, whose main office was in Otaru, Hokkaido.

The boat carried to Japan phosphate rock from Makatea Island near Tahiti in the Pacific. Around the time that the U.S. conducted six tests around Bikini in March 1954, this boat made two trips about 1,200 kilometers North of the Bikini atoll.

Yamamoto Kin'ya, 82, who had served as a ship doctor, warned the crew not to bathe in the sea, however, "I could not really stop the crew members, who were covered with sweat."

After returning to Japan, Taira and 47 crew members were examined and six were hospitalized in the Okayama University-affiliated hospital for three weeks to one month. The result of the examination was "Suspicion of decreasing white cells due to radiation."

At that time, the Ministry of Health stated their view that "Even when the decrease in white cells is caused by the H-bomb tests, that can be the basis for compensation." Taira and others received insurance benefits.

Taira returned to Nagasaki prefecture, his home. He had diarrhea, liver malfunction, chronic inflammation of the intestines. Even after returning as a crew member, there was repeated hospitalization. He retired in 1972. When payment that continued until age sixty under the insurance law was terminated, he was left to live on his pension and income from mandarin oranges and vegetable that he grew.

Is there no medical relief from anywhere?

In summer 1975, he applied to the town and the prefecture for an hibakusha health handbook, but he was turned down on the ground that " the law pertaining to hibakusha applies only to victims of Hiroshima and Nagasaki."

Taira died in 1986 at the age of 71. The voice of her husband, who said "we are the same hibakusha," does not leave the ear of his wife, Shimi, 81.

Ironically, it was the Bikini Incident that initially promoted the establishment of the atomic medical relief law. Demand for medical care for hibakusha, which had previously been ignored by the public, came to be supported and momentum for the bill rose.

Nakajima Tatsuni, 76, a Tokyo representative of the Citizens Committee for Hibakusha Residing in South Korea, obtained a memo from the legal office of the Upper House of the Diet, recording the process of establishing the compensation law.

In August 1956, Yamashita Yoshinobu, a socialist member of the upper house from Hiroshima, conveyed orally the contents of a private draft of a memo to the legislative bureau.
In this draft, not just Hiroshima and Nagasaki hibakusha, but those "designated for relief" included victims of all atomic tests in the past and the future. However, within the month, the passage about atomic tests was deleted.

Nakajima assumes "Perhaps there was some kind of deal to make the law pass quickly, leading the ruling party to compromise."

The Atomic Bomb Medical Relief Law passed in March 1957 continued to exclude the victims of the Bikini tests.

The examination group of Bikini hydrogen bomb tests of Kochi prefecture, which followed the Yahiko maru and other boats in the late 1980s, places importance on the fact that "The area declared dangerous was enlarged after the Lucky Dragon encountered the ashes. The series of H-bomb tests spread damage to areas beyond even the enlarged area.

Half a century after the incident the same survey group was reformed, and as early as next month they will propose that the prefectural governor call on the country to extend the victim compensation law to the victims of nuclear tests.

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Translated for Japan Focus by Kyoko Selden.

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