Fiji Royal Naval Volunteer Reserve (FRNVR) sailors aboard HMS Warrior, off Malden Island, May 1957

Chief Petty Officer Inoke Bainimarama is second from the left in the middle row, Acting Petty Officer Viliame Raikuna is second from the right. Viliame Cagilaba stands second from the left in the back row.

Source: Courtesy Cagicmudre Lewenilovo.
Ratu Inoke Bainimarama served in the Fiji Royal Naval Volunteer Reserve (FRNVR) during the Second World War, then joined the prison service in the 1950s. With rumours circulating among senior military personnel about the proposed tests on Christmas Island, he was recalled to duty.

With two NZ frigates scheduled to visit Suva en route to take part in Operation Grapple, there was an opportunity to provide training for young Fijian naval recruits. Needing a Fijian NCO to lead the personnel, Commander Stan Brown of the Fiji Royal Naval Volunteer Reserve (FRNVR) asked Bainimarama to act as an instructor to lead a contingent of 40 sailors on the training exercise.

It was agreed the sailors would travel to Christmas Island on the NZ frigates HMNZS *Pukaki* and HMNZS *Rotoiti*, before transferring to the British aircraft carrier HMS *Warrior* for further training. The Fijians would then return to Fiji aboard the NZ warships after the first series of Grapple tests.

Inoke Bainimarama soon realised why no one else was volunteering to lead the contingent:

> I was aware of what was going on and what the trip was about. I had to think deeply about this. I was already married with children and working. If something went wrong, my family would suffer. There was no insurance cover or anything for them. I knew all this. However, if I never volunteered, it would not do any good either. I would be made to look small and ridiculed for not accepting the challenge.¹

In early 1957, the group of 40 sailors prepared for travel. With one sailor dropping out before departure, the final contingent of 39 men left Suva in March 1957, two months before the first nuclear test on Malden Island. The FRNVR contingent was split into two, with 19 men led by Chief Petty Officer Bainimarama on HMNZS *Pukaki*, and the other 20 on HMNZS *Rotoiti* led by Acting Petty Officer Viliame Raikuna.²

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² Full details of the group can be found in Ministry of Fijian Affairs: ‘Names of Fiji naval personnel who took part in the British nuclear testing at Christmas Island, in 1957 aboard HMS *Warrior*’, 23 March 1990 (copy in author’s files).
One NZ sailor recalled the sombre atmosphere for the departure from Suva:

There were some sad scenes on the jetty, as friends and family bade the Fijian volunteers farewell. The Fiji military band did its best to raise the spirits of all and provide a cheerful atmosphere, but with little success.³

According to Bainimarama, most of the Fijian contingent had no knowledge that the operation involved the testing of nuclear weapons:

One thing to note about the men we took with us on this trip was that the majority had just left school. There were not enough jobs around, and they would take whatever job came their way. When it was said that they would get the chance to go overseas and travel on a British navy ship, they were very eager and excited to go. They had no idea of what lay ahead …

While the training was going on, the boys began to realise that there was going to be a nuclear test. Some came to me asking questions. I said: ‘Weren’t you told in Fiji?’ They replied: ‘No! We were just told that we were going on the ship for exercises.’

I said: ‘This is the military. Whatever order is given, no matter what happens to you, it’s an order. I am sorry.’ Some of the boys cried. You know many of them were just kids. Many were under 19 years of age. Think of it—they just finished high school, and this was the first job ever for them to do. They were very innocent.⁴

Other members of this contingent have confirmed that they were unaware of the purpose of Operation Grapple. Viliame Cagilaba had left a government job to join the Navy for the training exercise. As an Able Seaman (FRNVR 1189), he travelled to Christmas Island on HMNZS Rotoiti:

I did not know that this trip to Christmas Island was to do with the testing of the hydrogen bombs. When we went there, all we knew was that it was for naval training—learning everything about sailing and navigation; training on the use of guns, all different kinds of weapons. We got to like this training trip very much, because we saw and experienced new things. However, when we reached Christmas Island and boarded HMS Warrior, we came to hear of a different story altogether. We were taken there just for the testing of the hydrogen bomb.

³ Gerry Wright: *We Were There* (Zenith Print, New Plymouth, n.d.), p. 45.
⁴ Interview with Ratu Inoke Bainimarama, Suva, Fiji, 1998, for *Kirisimasi*, op. cit.
We were lectured on the hydrogen bomb and how dangerous it was to human life. We continued to be told about the bomb—how it was conceptualised, planned and made, and the possible effects of the bomb on our bodies if it was detonated on Christmas Island. We then realised there the dangers that we were facing. After the training, we were not sure if we would have to face this terrible thing.

Before going, we were never told anything, because it was the army. Whenever one becomes a soldier, one signs away his life and everything to the army. If there was an order that was not right, you just obeyed first. You follow the order and you then complain later. You don’t disobey orders straight on, or you will suffer, because you will be court-martialled. If an order came to do something, you follow and do it, even if you think it’s not right.5

Susitino Lasagavibau (FRNVR 1221) also travelled to Christmas Island with the first naval contingent, working in the sickbay:

I believe if we were told about this terrible weapon, none of us would have gone. We had not experienced or done anything like this before. All we had learnt and had knowledge about was to do with the navy—how to use basic weapons. But not this. We were never told about this very dangerous weapon.6

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In total, from June 1956 until June 1957, 3,515 British personnel were deployed for the initial three Grapple tests on Malden Island. This included 1,722 sailors from the Royal Navy (RN); 638 soldiers from the British army; 1,038 aircrew from the Royal Air Force (RAF); and 117 scientific and technical personnel from the Atomic Weapons Research Establishment (AWRE). These UK forces were complemented by personnel from the Royal New Zealand Navy (RNZN) and Royal New Zealand Air Force (RNZAF), the RFMF and the FRNVR.7

During their deployment, the Fijian contingent witnessed the first three nuclear tests, conducted above Malden Island: the Grapple 1 ‘Short Granite’ atomic test on 15 May 1957, Grapple 2 ‘Orange Herald’ on 31 May and Grapple 3 ‘Purple Granite’ on 19 June.

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7 Data from ‘Number of men involved in each operation, by service or employer’, Table A4.1, Appendix 4 in Lorna Arnold: Britain and the H-Bomb (Palgrave Macmillan, London, 2001), p. 241.
For each test, elements of the naval task force would sail south from Christmas Island to monitor the test off Malden Island. The NZ frigates were deployed to monitor the weather and gather radiation samples. The Fijian sailors were allocated a range of tasks aboard HMS Warrior, which served as Forward Area Control Ship for the trials and the Task Force flagship for the vessels stationed off Maiden Island during the first series.

As detailed in Chapter 9, the Fijian contingent were visited by FRNVR Commander Stan Brown and high chief Ratu Penaia Ganilau, to witness the ‘Orange Herald’ test on Malden Island in June 1957.

Viliame Cagilaba recalled the routine on D-day for each test:

We sailed towards Malden Island about 160 miles from Christmas Island where this bomb was to be dropped. When the day of the test came, no one knew beforehand. There was only a day left before we knew. The daily routine orders came and ‘Today is D-Day’ was written on it. That meant the bomb was to explode on that day.

Three planes brought in the bomb, coming all the way from Christmas Island. They circled the target area where the bomb was to be dropped three times. On the third run we were told to sit with our backs to the area where the bomb was to be dropped. The scientists were also there: those scientists closest to the bomb were about 15 to 16 miles from the target area.

We were all dressed up and ready. No part of your body was to be seen or any clothing to be torn, because you might burn your skin from the heat of the bomb. You wore goggles because of the light given off by the bomb. We then sat down with our backs towards the target area. We were also facing the wind. They called out for us to shut our eyes. We then pressed the palms of our hands against our closed eyes. You should not open your eyes or see any bit of light.

When the bomb dropped, it was being dropped behind us. It took about one minute for the bomb to drop from the sky and reach ground level. Then just before it blew, they called out 10, 9, 8, 7, 6, 5, 4, 3, 2, 1. They called out ‘The bomb has exploded!’ At that instant we were not able to hear anything. We only felt the heat brush past our backs.8

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8 Interview with Viliame Cagilaba, Suva, Fiji, 1998, for Kirisimasi, op. cit.
Able Seaman Filipe Rogoyawa (FRNVR 1178) also recalled the fierce heat, even miles from the detonation:

We could feel the heat on our backs when the bomb exploded. I knew how hot the sun feels, but the heat given off by the bomb was different. The colour of the explosion was really terrifying. What if this bomb had dropped on land? None of us who went there would have survived.9

The sailors aboard HMS Warrior were issued with white overalls and protective gear to avoid flash burns from the heat of the detonation, as Inoke Bainimarama recalled:

We had this thing on called flash gear. You know, it covered our whole bodies. It covered our whole face. There were goggles provided, hand gloves, boots, there was nothing left out. We wore this thing, then they gave us a badge each. They said if anything happened to us this badge will be useful. If our bodies were to vaporise, this badge would not. You know after they said this, who would not be unsettled. I was already mature, so if something happened to one of the boys, or if one of them died, then I would be responsible.

Viliame Cagilaba also reported that he was issued with overalls, gloves and goggles and given a safety briefing:

Not any part of your body was to be exposed. The goggles were so weak because we could see the sun with them. It was like looking at the moon at night. When you are wearing all these things, you don’t know where the other Fijians are, which one was a white man or Englishman. You could not see anyone's skin. If someone spoke to you in Fijian, you could then know that that person was Fijian. However, you still couldn't tell who you were speaking to. Not a single part of your body was visible.

Included in the clothing we wore was a gas mask, cup and your lunch pack. This was a precaution in case they mistimed the bomb. If it exploded too close to us, then we would have to escape below deck. This aircraft carrier had nine decks and you were supposed to run to the 9th deck.10

Later Fijian naval contingents deployed on Christmas Island were not given the same protective gear. Electrical Mechanic Epi Ratu (FRNVR 1257), who witnessed the Grapple Z tests when he served on Christmas Island in late 1958, noted:

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9 Interview with Felipe Rogoyawa, Suva, Fiji, 1998, for Kirisimasi, op. cit., p. 32.
10 Interview with Viliame Cagilaba, Suva, Fiji, 1998, for Kirisimasi, op. cit.
We who were together between ’58 and ’59 did not really have any protective clothing. In the navy we wore long sleeved blue shirts and dark blue long trousers. That was all. There was nothing else to protect us like a safety helmet or something to protect our ears. We wore the ordinary clothes that we wore every day while on Christmas Island.\textsuperscript{11}

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Interviewed decades after the event, the Fijian naval veterans had vivid memories of the day of the Malden Island tests. Even the older leader of the contingent, Inoke Bainimarama, acknowledged the stress of sitting on the deck of the warship, backs to the blast, waiting for the detonation:

Every time I recall this moment, I feel afraid. You know, when you go to war, you fight. You prepare yourself and then you fight. If you are shot, you die. Here you do nothing. You go there and sit down waiting to die.

Then they called that the bomb had been dropped. Ten seconds, think of it. We had our backs to the bomb, our eyes pressed by our palms and we bowed down. No part of our body was exposed. This person called out the numbers. Counting started from 10, 9, 8, 7 \ldots If the count went a bit longer, a person could have fainted. This is the truth.\textsuperscript{12}

Susitino Lasagavibau echoed the same feeling of suspense as the minutes ticked down to the detonation:

I used to joke a lot with one guy from Rewa. We used to joke and tease each other a lot. However, on that morning when I spoke to him, he was wide eyed and never spoke back. I had the same kind of scared feeling he had. We were not sure of what really was going to happen \ldots

The plane that was carrying the bomb was listening for instructions and orders from another plane that was leading it. Then the orders came, about one minute before the explosion. They counted the seconds from 60 to 5, 4, 3, 2, 1. Then they announced that this dangerous thing had gone off.

We were all silent, listening. After a little while, we heard the loud bang. Then the order came allowing us to take our goggles off and turn back to look towards the bomb. After the bomb went off, there was a blackish red

\textsuperscript{11} Interview with Epi Ratu, Suva, Fiji, 1998, for Kirismasi, op.cit., pp. 42–43.
\textsuperscript{12} Interview with Ratu Inoke Bainimarama, Suva, Fiji, 1998, for Kirismasi, op. cit.
cloud like the flames from burning firewood. Our backs were now turned towards the land. At this stage, a British plane flew through the cloud then on towards Britain.

After the explosion we sailed away, but after about 20 hours, we came back to the site on the orders of those in charge. I can remember seeing some dead fish on the sea's surface. If the distance were a bit closer, we would have suffered the same fate as the fish.13

Following the three tests on Malden Island, the Fijian contingent performed a traditional veigaravi vakavanua (ceremony of thanks) for Commodore Hicks and the ship’s company of HMS Warrior, then returned to Suva aboard the Pukaki.

Later in the year, more Fijian sailors were based onshore at HMS Resolution, the name used for the military encampment situated at Port London, on the north-west side of the island, approximately 43 kilometres from the point of detonation.

Another small contingent of Fijian sailors spent five weeks at HMS Resolution in late 1957, without witnessing a nuclear test. Captain Stan Brown and Chief Petty Officer Sakaraia Tabua led the contingent of a dozen men, who were sent to Christmas Island en route to Singapore ‘to collect and effect delivery of the Fiji governor’s new yacht, an 85-foot, twin screw vessel’.14

Peni Kolikata (FRNVR 1267) was just 17 years old:

Our group was not there for the tests. You see, the government was going to get a new ship for the Governor of Fiji. A ship had been ordered from Singapore called the Ramarama. The navy was given the job of delivering the ship to Fiji. We were picked for this task. We left Fiji on a plane destined for Singapore. However, we had to stop over at the military base on Christmas Island. Unfortunately there was a delay in the building of the ship Ramarama. We had to stay on Christmas Island until the ship was ready. We ended up staying on the island for two months.15

13 Interview with Susitino Lasagavibau, Suva, Fiji, 1998, for Kirisimasi, op. cit.
14 Headquarters Information Note, No. 2, 3 January 1958, Gilbert and Ellice Islands Colony. F 76/6/32 (1958), PAMBU document AU PMB DOC 493. The full list of participants in this jaunt can be found in Ministry of Fijian Affairs: ‘Names of naval personnel of the Fiji Royal Naval Volunteer Reserve (FRNVR) who served ashore at Christmas Island from 23/12/57 to 23/2/58 before being transferred to Singapore to take MV Ramarama back to Fiji’, Appendix 2, 23 March 1990 (copy in author's files).
The group was based at the Port Camp between 23 December 1957 and 3 February 1958, while waiting for the next available ship to carry them to Singapore. Excused from standard duties, Kolikata recalls spending many days fishing in the waters of Christmas Island:

Fish, there was plenty of fish. While we were there, we ate a lot of fish. There were a lot of lairo [land crabs] which we caught and ate. Those of us who ate the fish got poisoned once. I think it was to do with the contaminated sea, but it could have been due to our greediness as we caught and ate too much fish.

Other than fish poisoning, we did not suffer from any illness. The only exception was Tevita Matakitoga. After some time on the island, Tevita began to have an unusual behaviour. He got sick. It was not clear what kind of sickness he had. His medical report could not clearly say what he suffering from. He was like brain dead. In his room he used to be seen sitting and staring. All he did was sitting down and staring ahead. He never said a word. He later died when we returned to Fiji.  

In the end, the contingent was transported back to Suva on the only available transport:

We ended up coming back to Fiji after spending two months there. We went from Christmas Island to Fiji, then to Hong Kong and then to Singapore. We still had to finish our job—which was delivering the Governor’s boat, the Ramarama.

Viliame Cagilaba witnessed three nuclear tests during his deployment in 1957, but recognised his service to Empire was part of a much larger project:

In 1957, I witnessed three explosions. I understand that during that time, there were tensions, disagreements and disputes between the big nations over nuclear weapons. At that time Russia did not want to reduce its weapons and the size of its army. I still remember that when the first bomb on Christmas Island exploded, within days Russia agreed to reduce its military and nuclear weapons. The same with the other big nations. This enabled a reduction of weapons. This is one area where the British tests were good.

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16 Ibid.
However, there is one area where the British government failed. Since Britain used people this way when their lives were at risk, it should give compensation for the damage done to the soldiers and servicemen. It was a time of colonial rule with Fiji under British protection. The British government should provide monetary compensation to all servicemen who served on Christmas Island during the hydrogen bomb tests.17

Decades later, however, it became clear that the British Government had kept little information that could be used for ongoing monitoring of the health of the Fijians who’d joined the British naval operations. For example, Cagilaba reported that there had been radiation monitoring of the initial Fijian contingent on board the HMS Warrior:

We wore a film badge that would be returned to the scientists after a bomb was tested. This would help the scientists find out if we had been exposed to radiation or not. We always returned this to the scientists.18

The British Government, however, did not retain any documentation that could confirm whether any Fijian personnel were exposed to hazardous levels of radiation. Years later, responding to parliamentary questions in the House of Commons in 2007, the Under-Secretary for Defence Derek Twigg confirmed:

The Ministry of Defence holds limited information on Fijian nationals who were present at the British nuclear tests in the Pacific. Records held by the Atomic Weapons Establishment (AWE) contain four pages listing the names of Fijian nationals involved, and the tests for which they were present. No radiation doses were recorded for any Fijian national.19

The UK authorities claim that only a small number of service personnel received small doses of radiation and the vast majority of troops deployed on Christmas Island were not exposed to hazardous levels of radiation. Despite this, many veterans who witnessed nuclear tests in the Line Islands developed significant illnesses and have had to live with this uncertainty for decades.

17 Interview with Viliame Cagilaba, Suva, Fiji, 1998, for Kirisimasi, op. cit.
18 Ibid.
19 UK House of Commons Hansard official report, 29 October 2007, col. 979W.