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# US chemical and biological warfare tests in the Pacific - and Australia?

## Introduction

Nic Maclellan of the Nautilus Institute at RMIT writes that a recently revealed United States request to the Australian government in the early 1960s to allow nerve gas testing in Queensland "was part of a much wider program of testing chemical and biological weapons during the Cold War" about which much remains unknown. Maclellan notes that under Project 112 and SHAD, weapons with sarin, VX and other chemical and biological agents were tested in Hawai'i, Panama, and the Marshall Islands in the 1960s. These experiments "involved about 4,300 US military personnel, mostly from the Navy." Maclellan concludes: "the Australian government must call on the United States to release further details, to clarify whether any such tests were actually conducted in Australia or other locations in neighbouring Pacific island countries."

## Essay: US chemical and biological warfare tests in the Pacific - and Australia?

American military proposals to test nerve gas in Australia during the 1960s, by dropping it on soldiers in a remote Queensland rainforest, have been uncovered in Australian Government archives by Channel 9's *Sunday* program. [According to journalist Ross Coulthart:](#)

Newly declassified Australian Defence Department and Prime Minister's office files show that the United States was strongly pushing the Government for tests on Australian soil of two of the most deadly chemical weapons ever developed, VX and GB - Sarin - nerve gas. The plan called for 200 mainly Australian combat troops to be aerially bombed and sprayed with the chemical weapons - with all but a handful of the soldiers to be kept in the dark about the full details of the tests.

The [Sunday program website](#) has links to the documents, obtained under FOI, including:

- The [original request](#) from the US Defence Secretary Robert McNamara in July 1962 for nerve gas testing in Australia.
- [A 1964 cable from the Australian Embassy in Washington](#) detailing to the Australian Government what the US wanted to do with nerve gas testing in Australia, including the two cover stories which would be told to the Australian public to cover up the real nature of the tests.

The request to conduct chemical weapons testing in Australia during the 1960s - at the time of the US invasion of South Vietnam - was part of a much wider program of testing chemical and biological weapons during the Cold War. Between 1963 and 1970, under a US testing program called Project 112, 109 tests of chemical and biological weapons were planned. Project SHAD, an acronym for 'Shipboard Hazard and Defense', was part of the larger program. Project 112 included tests on land while Project SHAD encompassed tests at sea designed to identify U.S. warships' vulnerabilities to attacks with chemical or biological warfare agents and to develop procedures to respond to such attacks while maintaining a war-fighting capability.

Proposals for testing chemical and biological weapons in the Australian bush must be seen in the light of US weapons tests that actually took place in forests in Hawai'i and Panama during the 1960s, under Project 112 and SHAD. For example, Test Red Oak was conducted to evaluate the effectiveness of 155mm artillery shells and 115mm rocket warheads filled with Sarin nerve agent, fired into a jungle environment. Phase 1 of this test was conducted in April - May 1967 on the island of Hawai'i and in the Panama Canal Zone, testing the M55 rocket warhead and the dissemination of Sarin from an M121A1 chemical projectile in the upper Waiakea Forest Reserve on the island of Hawai'i, southwest of Hilo. The Green Mist test was held in March 1967 to evaluate the effective dosage area coverage that could be expected if M-139 bomblets filled with Sarin were dropped from four different weapons systems over a rainforest canopy. Under Project SHAD, the US Navy conducted six tests in the Marshall Islands and off the coast of Hawai'i between 1964 - 68. Pentagon documents released in 2002 show the US Defense Department sprayed live nerve and biological agents on ships and sailors, and sprayed a germ toxin on Enewetak Atoll in the Marshall Islands.

These Cold War-era experiments to test the Navy's vulnerability to toxic warfare involved about 4,300 US military personnel, mostly from the Navy. Most were never informed that the tests were being conducted, breaching all ethical principles about informed consent for test subjects.

Of the six SHAD tests where details are available, three used the nerve agent Sarin or the nerve gas VX, while one used the biological toxin Staphylococcal Enterotoxin B (SEB). Sarin and VX are both highly lethal and the other agents used in the tests included known carcinogens. A 1964 test named Flower Drum Phase I, conducted off the coast of Hawai'i, sprayed Sarin and a chemical simulant onto a US Navy cargo ship and into its ventilation system while the crew wore various levels of protective gear. Another SHAD test in 1965, code named "Fearless Johnny," sprayed VX nerve agent onto the same cargo ship, southwest of Honolulu. Another experiment, Desert Test Center Test 68-50, was intended to determine the casualty levels from an F-4 Phantom jet spraying SEB, a crippling germ toxin. The test was done in the Marshall Islands in 1968, with a jet spraying the deadly mist over part of Enewetak Atoll and five Army light tugs.

Further details of Project 112 and Project Shad, with declassified documents on some of the tests, can be found on a [US Department of Defense SHAD website](#). Copies of other documents about Project SHAD and the possible medical impacts on US military personnel are available on the [SHAD website of the US Department of Veterans Affairs](#).

Australian Defence Minister [Joel Fitzgibbon has called for a full briefing](#) on the proposal for such tests being held in Australia. Channel 9 [quoted former prime minister Malcolm Fraser](#), who was minister for the army from 1966 to 1968, as denying any knowledge of the US proposal.

If anything like that had ever been put to me as army minister, I would not only have said no, I also would have queried ... with the American president, 'What the hell are your people doing?'

As the full history of Project 112 and Project SHAD has yet to be declassified, the Australian government must call on the United States to release further details, to clarify whether any such tests were actually conducted in Australia or other locations in neighbouring Pacific island countries.

## About the author

Nic Maclellan has worked as a journalist, researcher and development worker in the Pacific. He is the project researcher for the Nautilus Institute Australian Forces Abroad Briefing Books [Australia in Solomon Islands](#), [Australia in Tonga](#), and [Australia in the Pacific Islands](#). He is the author of *La France dans le Pacifique - de Bougainville a Moruroa* (Editions la Decouverte, Paris, 1992), [After Moruroa - France in the South Pacific](#), (with Jean Chesnaux) (Ocean Press, 1997), [Louise Michel: Rebel Lives](#), (Ocean Press, 2004), and *Kirisimasi* (with Losena Tubanavau-Salabula and Josua M. Namoce and Pacific Concerns Resource Centre, (PCRC, Suva, 1999), a history of the Fijian soldiers and sailors who witnessed Britain's nuclear tests in the Pacific in the 1950s. Email: [nicmaclellan@optusnet.com.au](mailto:nicmaclellan@optusnet.com.au)

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