

# Australian nuclear weapons: the story so far

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# Australian nuclear weapons: the story so far

**Richard Broinowski** \*

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## Introduction

Richard Broinowski, former diplomat and author of the 2003 study *Fact or Fission - the Truth about Australia's Nuclear Ambitions*, writes that "in his call for a 'full-blooded' nuclear debate, Prime Minister Howard probably doesn't wish to see such a taboo subject raised."

But, says Broinowski,

"for more than three decades Australian politicians and military, scientific and cabinet officials conducted a campaign to persuade the government of the day to acquire or develop nuclear weapons. The fact is that Australia has the resources and technology to develop its own nuclear weapons."

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## Essay - Australian nuclear weapons: the story so far

Most Australians are unaware that for more than three decades Australian politicians and military, scientific and cabinet officials conducted a campaign to persuade the government of the day to acquire or develop nuclear weapons. Many of their considerations were carried out in secret, although there was some vociferous public debate in the press and on university campuses as well. This short review of the hidden, or forgotten, history of Australian moves to acquire or develop nuclear weapons is based on my earlier book [Fact or Fission - the Truth about Australia's Nuclear Ambitions](#) (Scribe, 2003). Primary sources were almost entirely the classified files of the then Commonwealth Department of External (later Foreign) Affairs. In these files were cross-references to the thinking of many other Departments, which taken together showed a strong inclination on the part of Cabinet and the Canberra bureaucracy to acquire nuclear weapons for Australia.

In 1956, the Australian Minister for Air, [Athol Townley](#), asked the Minister for Defence, [Philip McBride](#), to try to acquire nuclear weapons from the British to arm Australia's new squadron of Canberra medium jet bombers. But McBride's approach was hampered by a reluctant Prime Minister, [Robert Menzies](#), head of the Liberal-Country party coalition government. Menzies thought that such weapons should be left in the hands of the three great powers that already had them - the United States, United Kingdom and the USSR - and in those of no other.

In 1961, the British Prime Minister, [Harold Macmillan](#), asked Menzies whether the Soviet Union could establish seismic listening posts in Australia to enforce the provisions of the [Partial Nuclear Test Ban Treaty](#) then being negotiated between the nuclear powers. Menzies retorted that in exchange, he wanted either British nuclear weapons on demand, or at least the blue-prints to make them. But this was his sarcastic response to a bizarre request. He later reconfirmed his fears about nuclear proliferation and his reluctance for Australia to acquire such weapons.

Menzies' reluctance did little to inhibit the nuclear enthusiasm of the Australian military. In the late 1950s and early 1960s the Chief of Air Staff Sir [Frederick Scherger](#), later backed by other senior military officers such as Rear Admiral G. J. B. Crabb of the Royal Australian Navy argued the case to their Ministers for purchasing British-made atom bombs and leasing British 'V' bombers - Victors, Valiants or Vulcans - to deliver them, at least as far as Jakarta. The British prevaricated about the bombs, but saw a marketing opportunity for their new super bomber, the TSR-2, and urged Australia to buy a squadron or two. In 1963, Menzies killed their campaign by deciding to purchase a new American ground-hugging swing-wing bomber, the [F-111](#) - which in its [US Air Force version](#) was capable of carrying up to four nuclear bombs. The RAAF thus anticipated acquiring a modern delivery system for nuclear weapons (the planes were not delivered until 1970), but had as yet no nuclear weapons with which to arm them.

Throughout the 1960s, the pro-nuclear weapons lobby in Australia continued to grow and become more assertive. It comprised right-wing elements of the Liberal-Country Party Coalition, the [Democratic Labor Party](#), and lobby groups such as the Returned Servicemen's' League. Liberal Party backbenchers Dr Malcolm Mackay and Jeff Bate were among a number of vociferous, if not particularly well-informed advocates.

The parliamentary debate spilled over onto university campuses. At a crowded public seminar at the Australian National University in September 1964, an ANU international relations specialist, Professor [A. L. Burns](#), suggested that either Britain or America should hand over immediately 'for our sovereign disposal' a stockpile of atomic or thermonuclear bombs. He said that any one, or a combination, of three possible situations would justify their use: either a Cuban-type dispersal by

Russia or China of nuclear weapons in Indonesia, Soviet or Chinese attempts to blackmail Australia, or direct acquisition of such weapons by Indonesia.

In November 1964, the Australian Financial Review speculated that Indonesia was likely to go nuclear, a claim which prompted the Democratic Labor Party leader, Senator Cole, to assert that Australia must have a nuclear deterrent against both China and Indonesia. In March 1965, the Canberra Times editorialised that the formula earlier suggested by Professor Burns could be improved. It argued that no nuclear power would be willing to hand over nuclear weapons without a veto or control over their use, and that Australia should therefore let the United Kingdom or United States station nuclear-equipped forces on Australian territory. United States' Polaris-type submarines should also be encouraged to visit and refuel in Australian ports. 'After all', said the editorial, 'the United States already has a communications base in the North West, and the nuclear-powered carrier Enterprise has recently visited Australian ports'.

Pro-nuclear academics and newspapers were joined by public officials. Sir [Philip Baxter](#), head of the [Australian Atomic Energy Commission](#) (AAEC) and his colleague, Sir [Ernest Titterton](#), led the charge. Trading on the ignorance of nuclear technology of their ministers, Baxter and Titterton presented seductive arguments for Australia to acquire nuclear reactors, ostensibly to generate electric power, but also, without acknowledging the connection, to make plutonium for nuclear weapons. During the same period, the AAEC embarked on a secret project at its [Lucas Heights](#) establishment to enrich uranium in the isotope U-235 for nuclear weapons.

Meanwhile, Federal Cabinet had persuaded itself that Australia should have the option to use nuclear weapons. While reserved about actualities, it ponderously pronounced in October 1964 that 'Our military thinking does not exclude the possible contingency in the longer term, that, due to advances in military technology or to the development of a more serious threat of a direct attack on Australia ... our forces should have as far as possible a potential capability to operate with nuclear weapons and in the face of nuclear opposition.'

By now however, the emphasis had shifted from purchasing nuclear weapons from abroad, to manufacturing them in Australia. W. C. Wentworth, Liberal parliamentarian and former Chairman of the AAEC, advocated a home-grown weapon 'because the United States could not be trusted to come to our defence'. He wanted a nuclear reactor to be built in the Snowy Mountains to generate plutonium. Baxter spoke glowingly to Australian public servants in Canberra about different types of nuclear reactors, and the best one for Australia (he opted for a heavy water reactor using graphite as a moderator, to be built in South Australia).

Bureaucratic support grew for advancing nuclear technology and the weapons that it could produce. The Commonwealth Departments of Defence, Supply, Prime Minister and Cabinet, and National Development were among the leaders. National Development wanted seven or eight reactors to be built in Victoria and New South Wales between 1975 and 1980. The plan was modified by the Department's Minister, [David Fairbairn](#), who proposed to Cabinet in June 1965 that a heavy-water moderated reactor of 250 MW be built at a cost of £32 million 'to produce considerable quantities of plutonium out of un-enriched or slightly enriched uranium in the isotope U-235.'

State premiers pushed their own agendas for reactors. Sir [Thomas Playford](#) wanted a reactor built on the northern tip of Spencer Gulf in South Australia. Sir [Joh Bjelke-Petersen](#) and his cabinet considered reactor sites in central Queensland and on the northern outskirts of Brisbane, and a uranium enrichment plant adjacent to the Shoalwater Bay military training area north of Rockhampton. The Queensland premier was particularly captivated by all aspects of nuclear technology and wanted to increase the export of Australian uranium. As he brilliantly informed the press on one occasion: 'We won't be able to sit on uranium, firstly because it would not be right and

secondly because it would be wrong.'

As the debate proceeded, a key Commonwealth government department, External Affairs, vacillated. Its officers initially tended to take the middle ground between supporting the acquisition of nuclear weapons and opposing them. But its officers later reacted strongly against what they saw as pro-nuclear bullying from the AAEC. Sir Philip Baxter wanted the bomb, and derided External Affairs for pussy-footing around. In March 1968, the Commission strenuously opposed Australia signing the [Nuclear Non-proliferation Treaty](#) (NPT). It resentfully asserted to Cabinet that materials Australia would have to safeguard included natural uranium, depleted uranium, weapons-grade uranium 235 and plutonium, together with associated 'trigger materials'. The cost of nuclear inspections and record-keeping would be high. All this would destroy the potentially lucrative nuclear trade, and inhibit Australia's efforts to make its own bomb.

External Affairs, however, had its mind on broader issues. China had joined the nuclear club in September 1964. Could Japan, Indonesia, India, Pakistan or South or North Korea be far behind? Should India, especially, be pressured not to go nuclear? Or should it be encouraged to do so in an effort to contain China? How far should the non-proliferation argument be advanced by Australia? Would it dilute America's ANZUS commitment to Australia? What if the United States wanted to use tactical nuclear weapons in Vietnam?

Above all, would the United States approve or disapprove of Australia developing its own nuclear force? There had been mixed signals. In 1963, Defence Secretary [Robert McNamara](#) had told the Minister for External Affairs [Garfield Barwick](#) in Washington that it would be natural for Australia to develop nuclear weapons if China did. In 1968, Secretary of State [Dean Rusk](#) told Cabinet in Canberra that the United States supported Australia 'advancing to a point just short of final manufacture'. But by now it was firm American policy that all countries should sign the NPT and be prepared to adhere to the developing safeguards regime of the International Atomic Energy Agency.

Menzies retired from federal politics in 1966. His cautious successor, Harold Holt, had disappeared while swimming at Cheviot beach in Victoria in December 1967. The new prime minister from January 1968, was [John Grey Gorton](#), a former RAAF pilot and a maverick who believed that Australia, like Israel, could and should be militarily strong and sturdily self-reliant. He wanted to avoid signing the NPT, or joining any safeguards system that would inhibit Australia's defence options, including its discretion to acquire or make nuclear weapons. He also wanted to build a nuclear reactor at Jervis Bay on the east coast of New South Wales south of Sydney that would produce weapons-grade plutonium as well as electricity for the New South Wales grid.

Gorton knew that American pressure to sign the NPT would grow. But, said his advisers, signing did not mean ratifying, a step that could be delayed until much further down the track. Maybe Gorton could have his cake and eat it too - appease the Americans who wanted Australia in the NPT regime they had devised, but finish constructing the Jervis Bay reactor to provide the AAEC with weapons grade plutonium for future use before safeguards could apply. Besides, plans for the reactor were by now well advanced. By 1970, tenders had been received from seven reactor construction companies in the UK, US, Canada and West Germany, and four of these were being actively considered by the AAEC and its American consultant, [Bechtel](#). \$1.25 million had also been spent on access roads, power and water services and houses at the Jervis Bay site.

However on 10 March 1971, Gorton's nuclear plans came abruptly unstuck when he was defeated as leader of the Liberal Party in an internal coup. His successor was the hyper-energetic but not particularly competent [William McMahon](#). During an earlier stint as Minister for Foreign Affairs, McMahon had come to support Australia joining the NPT, and was not in favour of building a power reactor as a cover for a bomb program. As Treasurer, he had been persuaded by officials that the

'cover' devised for the Jervis Bay reactor lacked credibility, since electricity generated there would be double the cost of electricity generated from Australian coal.

On 18 August 1971, McMahon ordered his minister for National Development, [Reginald Swartz](#), to carry out a rigorous cost analysis of the Jervis Bay project. Swartz found the capital costs were much higher than expected, and the project was shelved.

But while delaying the reactor's construction, McMahon did not ratify the NPT, leaving that to his successor in December 1972, the first Labor Prime Minister in twenty three years, [Gough Whitlam](#). Whitlam quickly ended any ambitions harboured by the pro-nuclear lobby to develop an Australian bomb. He ratified the NPT and committed Australia to the IAEA safeguards regime.

Before his short incumbency ended in 1975, Whitlam also commissioned a comprehensive study of the environmental impact of uranium mining in the Northern Territory. The recommendations of the [Ranger Inquiry](#) did not surface during Whitlam's incumbency. But his successor, Malcolm Fraser, used them to shape a new [safeguards regime for the export of Australian uranium](#), which he announced in Parliament in May 1977.

Despite these developments, Australian ambitions to develop a broad range of nuclear technologies did not go away. In 1987, the AAEC was abolished by Labor Prime Minister Bob Hawke and replaced by the [Australian Nuclear Science and Technology Organization](#) (ANSTO). ANSTO had none of the sweeping powers of its predecessor for mining and marketing uranium, but it did have similar responsibilities for operating nuclear facilities. In summary, its four main tasks were, and remain,

- to provide advice across the nuclear fuel cycle and support Australia's strategic and nuclear policy objectives
- operate nuclear facilities in Australia and overseas
- undertake research on specific (but unspecified) nuclear topics
- apply its findings to increase the competitiveness of Australian industry and improve the quality of life of all Australians.

The earlier secret enrichment research of the AAEC was terminated, but it was later substituted by an equally secret project conducted by a private company called 'Silex' using leased premises at Lucas Heights to [enrich uranium by lasers](#). And a new [light water research reactor](#) of 20 MW power designed by the Argentine firm [INVAP](#) has almost been completed to replace the aging [HIFAR](#) reactor.

Officials from ANSTO and the Department of Foreign Affairs and Trade avoid any suggestion that the INVAP reactor has anything to do with weapons technology. They claim that as an up-to-date research vehicle, it will give Australian diplomats more credibility to pursue Australia's nuclear interests (and non-proliferation credentials) in international forums. Also, that it will improve public health in Australia by producing a guaranteed supply of nuclear diagnostic and radiation treatment generators for use in hospitals, and allow sophisticated research in many areas of nuclear science.

But some of these claims are dubious. Australia's nuclear hardware has never been a criterion for access to international nuclear councils. Good diplomacy and an abundant supply of uranium are indeed the main reasons why Australia retains the South East Asian seat on the [IAEA Board of Governors](#). And isotopes for nuclear medicine are readily available to Australian hospitals (and are sometimes cheaper than those made at Lucas Heights) from makers in Canada and South Africa. In any event, many Australians are dying from cancers requiring therapy from alpha-emitting isotopes,

which can't be obtained from reactors. And as at least one prominent nuclear academic has remarked, more funding for his PhD program in nuclear physics at a prominent Australian university would better advance nuclear science in Australia than a new reactor built mainly as a source of neutrons for other industries.

The fact is that Australia has the resources and technology to develop its own nuclear weapons. In his call for a 'full-blooded' nuclear debate, Prime Minister Howard probably doesn't wish to see such a taboo subject raised.

## **Information about the author**

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Richard next APSNet policy forum is [Australia's New Nuclear Ambitions](#), 24 July 2006.

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## **Nautilus invites your response**

The Austral Peace and Security Network invites your responses to this essay. Please send responses to the editor, Jane Mullett: [austral@rmit.edu.au](mailto:austral@rmit.edu.au). Responses will be considered for redistribution to the network only if they include the author's name, affiliation, and explicit consent.

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