## AIR POWER DEVELOPMENT CENTRE BULLETIN

Issue 29, August 2005

'Pathfinder' is a fortnightly bulletin from the Air Power Development Centre. Its title is a tribute to the Pathfinder Force which operated within RAF Bomber Command from August 1942. The original Pathfinders were an elite navigational group with the role of preceding each raid and accurately lighting up the target area with incendiary fires to permit visual bombing by the main force. The first commander was Group Captain (later Air Vice-Marshal) D.C.T. Bennett, a Queenslander who trained with the RAAF in 1930-31 before transferring to the RAF, and many other Australians also flew with the force.

The emblem we have adopted is 'Fiery Mo', the unofficial insignia carried on No. 6 Squadron's Hudson aircraft in New Guinea during 1943.

## EXPLORING THE NUCLEAR OPTION

For a time during the 1950s, the RAAF explored the idea of becoming a nuclear force. The move to acquire nuclear weapons did not last long, barely two years, and ultimately resulted in the service remaining a conventional force. But the episode is informative for showing the RAAF wrestling with the problem of defining its role in the turbulent and confusing period that followed the end of World War II, and trying to ensure that it possessed capabilities that were relevant and meaningful.

Since 1952 the government led by R.G. Menzies had been supporting Britain's nuclear weapons program by allowing testing to be carried out on Australian territory, partly in the belief that such cooperation would get Australia a foot in the door when it came to acquiring weapons that the RAAF would eventually need. By 1956

Atomic test at One Tree (Maralinga, SA), September 1956

the Minister for Air, Athol Townley—no doubt acting on the advice of the Chief of the Air Staff, Air Marshal Sir Frederick Scherger—believed that the moment had arrived to transform the RAAF into a nuclear force.

The stimulus for this initiative stemmed from belated realisation that the fleet of Canberra jet bombers that Australia acquired from 1953 was actually a limited defence asset. There were only 48 of these aircraft in the RAAF inventory and—considering their small bomb load, the small radius of effect of high-explosive bombs, and the large margin of error resulting from bombing operations at medium and high altitude—it dawned on RAAF planners that an impossibly high number of sorties would have to be mounted to achieve any worthwhile results in real strike operations.

At the time that the Canberra was evaluated for acquisition by the RAAF, it had been noted that the type was capable of carrying either a conventional bomb load or a single 'special' (ie. nuclear) device of between 2300 and 4500 kg. It was not unreasonable, therefore, for Townley to propose to his Cabinet colleagues in September that arming the Canberra with a tactical nuclear weapon was one way of increasing the effectiveness of the bomber force. He also suggested that the RAAF's Sabre jet fighters might be fitted to carry nuclear bombs, too, for use in the ground attack role.

Since it would be years before Australia was in a position to build its own nuclear bombs, it was obvious that any such weapons would have to be acquired from its allies: Britain or the US. An overture to the Americans was forestalled by a policy announcement by Washington that it was willing to supply allies with nuclear-capable systems, such as aircraft, but intended to keep control of

weapons themselves in American hands. Accordingly, Townley was authorised to approach Britain instead, on an 'exploratory, non-committal basis'.

This invitation was taken up by Air Marshal Scherger, who wrote to his RAF counterpart to explore the likely response to an official Australian request to 'purchase some atomic bombs in the kiloton range'. Scherger was personally enthusiastic about the idea, seeing it as an important step towards keeping the RAAF at the leading edge of air power technology. He had also been trying to convince the government to supplement the RAAF's Canberras with a squadron of British-built Vulcan strategic bombers, preferably nuclear-armed, which he envisaged would form part of a Commonwealth deterrent force in South-East Asia.



CAS Scherger ponders the limited strike power of the Canberra bomber, 1959

During 1957, Menzies declared that his government's immediate plans for defence remained in the 'conventional field' only, but there were nonetheless further discussions about the nuclear option during a visit to Australia by Britain's PM, Harold Macmillan, early the next year. Menzies was not persuaded that Australia

needed to enter the strategic nuclear arena, but he did accept that eventual acquisition of some tactical weapons was probably 'inescapable'. It was on this basis that he subsequently wrote to Macmillan, seeking assurance that Britain would, if the need arose, provide Australia with a nuclear capability, by supplying either ready-made weapons or else manufacturing data to enable local production. Even so, his preference was that the RAAF stay conventional for as long as possible, if only out of concern at the likely costs of making it a nuclear force.

Notwithstanding Menzies' reservations, when Scherger visited Britain in September 1958 he was authorised to continue discussions with British defence officials. It was only at this stage that some of the practical problems of the proposal began to emerge. For a start, the dimensions of the only tactical weapons that the RAF had to offer were far too big for carriage on a Sabre. Moreover, these bombs produced a 15–20 kiloton blast, equal to those dropped on Japan in 1945, which meant they were not 'tactical' weapons at all. Finally, at a cost of £500,000 per bomb, acquisition was clearly going to be very expensive. (The budget for the entire RAAF in 1962/63 amounted to only £67.5 million.)

This appears to have been the end of the RAAF's nuclear ambitions, since by 1960 the tide was swinging decidedly against Australia exercising the nuclear weapon option. Changes in geo-strategic circumstances were causing even the existing Western nuclear powers to have doubts about the viability of employing tactical nuclear weapons in any showdown with communist opponents. By June 1961 Australia's Chiefs of Staff Committee formally agreed that there was no immediate need for an independent nuclear capability. The RAAF was accordingly obliged to refocus on improving its conventional capabilities. For the Canberra fleet this meant a shift in thinking from strategic to tactical roles, especially army cooperation tasks.

Nuclear weapons were the answer to the Canberra's limited striking power, as the government and the Air Force both knew. ... The problem was how to get hold of the bomb.

- Dr Alan Stephens, Going Solo (1995)



Air Power Development Centre Level 3, 205 Anketell Street TUGGERANONG ACT 2900

Ph: 02 6266 1355 Fax: 02 6266 1041 Email: airpower@defence.gov.au Web: www.raaf.gov.au/airpower

