

UK nuclear tests

Another Australian inquiry

Canberra

GROWING public disquiet that either the Australian or British Government is concealing politically sensitive atmospheric nuclear fallout data has prompted the Australian Minister for Resources and Energy, Senator Peter Walsh, to recommend that a Royal Commission be set up to inquire into the conduct of the British nuclear tests in Australia between 1952 and 1963. This move follows a procession of government-sponsored investigations into the tests, with each successive report revealing discrepancies in the last, and punctuated in recent months by sensational newspaper revelations, the most startling being the claim from an anonymous source that mentally-retarded adults were used as guinea pigs in tests at Maralinga in 1956.

On 31 May, an expert committee headed by Professor Charles Kerr, which had only sixteen days to review the available fallout data, reported to Senator Walsh that it was extremely critical of what it saw as obfuscation, oversimplified assumptions and a tendency to present best-case interpretations of data in the January 1983 report of the Australian Ionizing Radiation Advisory Council (AIRAC 9). The Kerr committee had used the AIRAC 9 document in its review of data collection methodology, but could not dismiss the possibility that the "black mist" described by the Pitantjatjara aboriginal people may have represented a deviant fallout pattern from a test at Emu in 1953. It also cast doubt on the statistical assumptions underpinning a November 1983 Department of Health study which rejected associations between illness and irradiation of personnel at the test sites.

On 7 June, Senator Walsh tabled another document, a chronology of the British tests prepared by Dr J.L. Symonds and gathered mainly from official Australian sources. Among many other facts never officially admitted before, it made clear that the second, very dirty, trial of the 1956 Monte Bello series, Mosaic G2, had involved lighter atomic elements and could be described as an H-bomb trigger. (The UK H-bomb test took place at Christmas Island the following year.) The chronology indicates that the Australian Government was well aware that the yield would be 60 kilotons, yet in 1983 AIRAC 9 reported the government's 1956 claim that the yield was "in the kiloton range". The hundreds of minor trials conducted at Maralinga went virtually unreported in AIRAC 9. The Symonds chronology, on the other hand, highlighted the deeply-felt Australian ignorance of the minor trials known as Vixen A and B, which were meant to simulate the accidental detonation of plutonium weapons due to damage or misfiring, and could result in a

nuclear blast. Begun during the 1958-61 moratorium, the Vixen tests were discontinued in 1963 since, as Symonds reports, they might have been classified as violations of the test ban.

Soon, however, gaps were to be found in the Symonds report. Later in June, newspaper stories claimed that the specially-prepared warship HMS *Diana* had sailed deliberately into a fallout cloud after a 1956 Monte Bello explosion, and that mentally-retarded people had been placed in bunkers one mile from one of the 1956 Buffalo series of blasts at Maralinga, a story later amplified by Mr Terry Toon, the national secretary of the Maralinga and Monte Bello Atomic Ex-Servicemen's Association, who

so far has not named the others able to corroborate his claim to have heard a scream from one of the forward bunkers.

On 5 July, Senator Walsh announced the Royal Commission, which will focus on the measures taken to protect personnel at the sites and aboriginals in the surrounding area. The British Government has agreed to cooperate fully and to guarantee immunity from prosecution for ex-servicemen and civilians who give evidence in Australia. In dealing with five compensation claims already launched against it, the Australian Government has waived the statute of limitations, and since the Menzies government had indemnified the British Government at the outset against claims by Australians, the present Australian Government is now liable for compensation claims.

Jeffrey Sellar

Japanese research

Call for industrial university

Tokyo

CONCERN that Japan's international competitiveness may soon suffer because of a shortage of trained researchers — particularly in biotechnology — has led the Ministry of International Trade and Industry (MITI) to back a proposal that it should set up its own "high-technology" university partnership with private industry.

The proposal comes in a report commissioned by the National Institute of Research Advancement (NIRA), a semi-private body that advises the prime minister's Economic Planning Agency. MITI hopes that action can be taken quickly and that the new university, provisionally called the Institute of High Technology, can begin life as a research institute in Tsukuba Science City before the massive Tsukuba International Science Expo comes to an end in September next year.

Higher education has always been the responsibility of the Ministry of Education, Science and Culture (MESC), and the universities are already awash with unemployed research workers (see *Nature* 21 June, p.659). The problem is, however, that relationships between industry and the universities are generally poor. Very few university laboratories take up joint research with industry (although there are notable exceptions), and there are no Western-style high-technology parks built alongside universities to encourage a close research relationship.

The problem is aggravated by the legal status of academics as "civil servants" employed by MESC, who may not receive payments from nor involve themselves in consulting activities for non-government organizations. Although there have always been ways to avoid direct involvement — inter-university computer centres, for example, received their computers at low prices in return for helping manufacturers

to solve new networking problems — only in the past few years has MESC begun vigorously to encourage university-industry links and to make it easy for those in industry to spend time in the most advanced university laboratories and research institutes.

To complete the picture, industry has often taken a rather dim view of university research. A survey conducted for the 1978 white paper on science and technology showed that more than 60 per cent of industrial respondents felt that university research was of no use to them. A corollary is industry's suspicion (now apparently fading) of holders of doctoral degrees — those with a bachelor's or a master's degree are felt to be much better material for entry into industrial research laboratories.

The head of the team that produced the report, Emeritus Professor Keichi Oshima of Tokyo University, also criticized existing universities for their lack of flexibility in responding to technological innovations. The university professorial "chair" system, with its hierarchical structure, has often been attacked for insulating professors from changes in the outside world.

The new university called for by the report would be supported entirely by private industry and would receive no subsidies — and presumably little influence — from the Ministry of Education, Culture and Science. Its staff will mainly be drawn from the 16 research institutes of MITI's Agency of Industrial Science and Technology which together employ around 2,700 researchers, most of them in brand-new institutes in Tsukuba Science City. Other staff will be provided by private industry. If the new university gets the go-ahead, it will begin life as a research institute, then a graduate school, eventually recruiting direct from high-school students aiming at becoming "top-notch high-technology researchers". **Alun Anderson**