

# Oral Testimonies Fact-Check the Official Narrative of the British Nuclear Tests in Australia

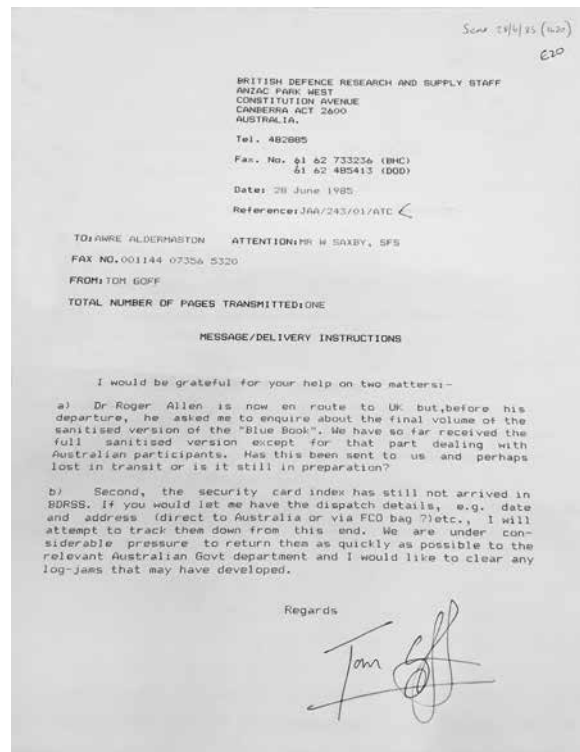
There are important discrepancies between oral testimonies transcribed from a Royal Commission into the British nuclear tests and the documentary evidence in Australian and UK national archives.

*Sue Rabbitt Roff*  
University of Dundee

There is a wealth of material—much of it oral testimony still publicly accessible but not yet examined—about how the United Kingdom field-tested the components for its hydrogen bomb in Australia despite its assurances that it would not escalate the program from fission-based nuclear weapons to more powerful fusion bombs. Conspicuously, what has been totally ignored in official narratives is why Prime Minister Robert Menzies and his Cabinet permitted the tests to take place up to a month before the 1956 Olympic Games opened downwind of Maralinga.

## How the Aboriginal Community's Oral Witness Triggered a Royal Commission into British Nuclear Testing in Australia

In 1984, Yankunytjatjara man Yami Lester travelled to London as head of an Aboriginal delegation to lobby the British government to take responsibility for the consequences of its nuclear tests. He met with high-ranking British government officials and received assurances that the British would fully cooperate with the judicial enquiry set up by the Australian government. The



**Figure 1.** A document from the UK National Archives referring to 'sanitised' data on Australian participants in the nuclear weapons tests. The National Archives, UK

Aboriginal delegation told investigators they had been caught in the path of what came to be known as the 'black mist' after the first 'Totem' test at Emu Field in South Australia on 15 October 1953.<sup>1</sup>

The Royal Commission into British Nuclear Tests in Australia published its three-volume report in November 1985.<sup>2</sup> It is based on oral testimony transcribed from participants including the Aboriginal community, military servicemen, scientists, politicians and settler inhabitants. At least 5000 indexed pages of the transcripts of these submissions can be read and downloaded from the National Archives of Australia.<sup>3</sup> They are remarkably unstudied by researchers.

Seventy years after the tests, many of the documents relating to the British weapons tests in Australia are marked in the Australian National Archives catalogue as 'not yet examined', and haven't been opened to the public. In recent years some of the material held in the UK has been removed from public access.<sup>4</sup>

Even so, we can detect important discrepancies between the oral testimonies of participants and the documentary evidence that has accumulated in the Australian and UK National Archives and other depositories.

### Did Lord Penney Lie to the Royal Commission about the Black Mist?

The Australian government commissioned an official *History of British Atomic Tests in Australia* that was submitted to the Royal Commission in 1985.<sup>5</sup> In a section headed ‘Strange Phenomena after Totem 1’, its author J. L. Symonds wrote:

Of recent years, there have been claims of strange phenomena after the explosion of Totem 1 such as ‘a rolling black smoke or mist’ and ‘big coiling cloud-like thing like a dust-storm.’ At the time, no such reports appeared in the newspapers nor were they announced by radio stations.

However, prior to the staff meeting at Emu on the evening of 25 October [1953—in preparation for the second Totem detonation], Sir William Penney was informed that the Totem 1 cloud had been seen from Oodnadatta [directly due east of Wallatina]. At the meeting Sir William raised the question of mass reaction to the sight of the cloud by the civilian population and informed those present that the cloud had been seen at Oodnadatta. He is reported as suggesting that it had probably been seen from an aircraft. The report of the meeting recorded that ‘It was agreed that should there be any reactions arising from reports of the cloud having been seen, the Meteorological Service should announce that normal clouds were within the quoted region and the observed cloud was probably a rain cloud.’<sup>6</sup>

So it is clear that Penney misspoke—or lied—to the Royal Commission in his oral testimony in 1985 when he said:

I did not hear at the time, nor did I hear in the next few months. The first that I ever heard of it was perhaps two years ago when I read it in the British newspapers.<sup>7</sup>

### Were Thermonuclear Materials Tested for the British Hydrogen Bomb in Australia?

The 1953 Totem tests and ‘Kittens’ trials began the escalation from atomic to hybrid boosted nuclear devices, culminating in the British hydrogen bomb tests off Malden Island in the central Pacific Ocean in 1957 and 1958.<sup>8</sup> This occurred despite repeated public statements that the testing in Australia would not move from fission to the far more powerful fusion devices.

The Australian government permitted more than 100 Kittens trials at Emu Field and Naya in South Australia from 1953. They were tests of the trigger detonators or ‘initiators’ being designed for the hydrogen bomb. Essentially the tests were to determine how much fission energy would be necessary to trigger a fusion explosion. In other words, they were working out how an atomic bomb could become ‘a mere detonator’ for a thermonuclear hydrogen bomb.<sup>9</sup>

It is possible to use TROVE’s collection of digitised newspapers to trace the oral statements to the press of Menzies and Howard Beale, the Minister of Supply who was responsible for Australia’s contribution to the British testing program. For instance, a report on 27 November 1954 stated: ‘Supply Minister Beale said there was no question of a hydrogen bomb being tested on Australian territory.’<sup>10</sup> On 22 February 1955 it was reported that Beale ‘concluded by repeating his earlier assurances that no hydrogen bomb tests or any tests of that character would be carried out’.<sup>11</sup>

In contrast to this, a British memo dated 20 April 1955 stated:

As far as we know the initiator programme is still unchanged. ... It has already been announced here that these minor tests are to take place. Originally Mr Beale hastily assured the press that these would not be in any way related to the hydrogen bomb. This was incorrect and he has since covered himself by saying that there will be no hydrogen bomb test or tests of that nature and magnitude.<sup>12</sup>

- 1 ‘Meeting Yami Lester,’ Black Mist Burnt Country, <https://blackmistburntcountry.com.au/index.php/2014/09/29/meeting-yami-lester>; <https://www.blackmistburntcountry.com.au/wp-content/uploads/2019/03/BMBC-catalogue-web.pdf/>
- 2 Justice J. R. McClelland, *The Report of the Royal Commission into British Nuclear Tests in Australia* (Canberra: Australian Government Publishing Service, 1985).
- 3 ‘British Nuclear Tests at Maralinga,’ National Archives of Australia, <https://www.naa.gov.au/explore-collection/first-australians/other-resources-about-first-australians/british-nuclear-tests-maralinga/>
- 4 Chris Hill, ‘Nuclear History and the Archive,’ [https://youtu.be/WAIPbZYc5dk?t=18323/](https://youtu.be/WAIPbZYc5dk?t=18323)
- 5 J. L. Symonds, *A History of British Atomic Tests in Australia* (Canberra: AGPS, 1985).
- 6 *Ibid.*, 177.
- 7 William Penney, ‘Transcript of Proceedings, Royal Commission into British Nuclear Tests in Australia,’ National Archives of Australia, A6448, 4348.
- 8 Sue Rabbitt Roff, ‘Making the British H Bomb in Australia: From the Monte Bellos to the 1956 Melbourne Olympics,’ Vol. 2, *The Rabbitt Review*, <https://www.rabbittreview.com/home/>
- 9 Otto Frisch, *What Little I Remember* (Cambridge: Cambridge University Press, 1991), 175.
- 10 ‘1955 A-Test at Woomera Likely,’ *The Daily News*, 27 November 1954, <https://trove.nla.gov.au/newspaper/article/266258109?searchTerm=beale%20hydrogen%20bomb%201955/>

Seventy years later, many of the documents relating to the British weapons tests in Australia are marked in the Australian National Archives catalogue as ‘not yet examined’, and haven’t been opened to the public.

- 11 National Archives of Australia, Series A6455, Control Number RC 559 Part 3, Item ID 190516, <https://recordsearch.naa.gov.au/SearchNRRetrieve/Interface/ViewImage.aspx?B=1905216/>
- 12 Ibid.
- 13 Ibid.
- 14 Symonds, *A History of British Atomic Tests*, 321.
- 15 National Archives of Australia, File A6455 RC 559, Part 3.
- 16 ‘Royal Commission into British Nuclear Tests in Australia,’ online transcript, National Archives of Australia, A6448, 14.
- 17 R. W. Brisbane and L. B. Silverman, *Photographic Dosimetry: An Annotated Bibliography* (n.p.: United States, 1959).
- 18 E. W. Titterton, ‘Slow Neutron Monitoring with Boron- and Lithium-loaded Nuclear Emulsions,’ *Nature* 163 (1949): 990–991 <https://www.nature.com/articles/163990b0>.
- 19 E. W. Titterton, ‘Slow Neutron Health Monitoring with Nuclear Emulsions,’ Atomic Energy Research Establishment Report AERE G/R-362, June 1949.

On 21 July 1955, a memo from the Commonwealth Relations Office in Downing Street to the UK High Commissioner in Canberra instructed: ‘We certainly wish knowledge that there will be full scale tests in 1957 and connection between them and subject of Mr. Menzies’ message be limited to absolute minimum number of individuals.’<sup>13</sup> The reference was to a June 1955 message about the Monte Bello ‘Mosaic’ tests to be held in May and June 1956.

By 1956—only weeks before the Olympic Games opened in Melbourne—even Menzies’ advisers realised that the testing had moved to ‘something approaching an H-bomb’.<sup>14</sup>

Another British memo states:

We had agreed with the Australian Government that we would not test thermo-nuclear weapons in Australia but Mr. Menzies has nevertheless agreed to the firings taking place in the Monte Bello Islands (off the north-west coast of Western Australia), which have already been used before for atomic tests. As already explained, the Australians are very sensitive on the question of thermo-nuclear explosions, and although the true character of these tests is understood by the authorities immediately concerned, knowledge of the trials is restricted to a very small circle and no public statement has so far been made; when it is made, it will therefore require very careful handling.<sup>15</sup>

### Did the Australian Government’s Safety Advisor Lie to the 1985 Royal Commission?

One of the first questions asked of the Chair of the Atomic Weapons Tests Safety Committee for most of the detonations, Professor Ernest Titterton, in his initial appearance before the Royal Commission in May 1985 was whether he had ‘done any work which today would be described as health physics work? Had you done anything in relation to radiation and human biology?’<sup>16</sup>

He replied: ‘I had, of course, because any time one is involved in radioactivity and

its possible health effects, so essentially I began at the beginning and grew up with this thing.’ But when he was asked, ‘Did you ever publish anything in relation to health effects?’ Titterton replied, ‘No. It was no ambition of mine. I was interested in publishing in relation to radioactivity and nuclear physics; the other was incidental.’

In fact, several papers Titterton published in the late 1940s at the UK’s Atomic Energy Research Establishment (AERE) related to the invention of personal radiation dosimeters for atomic workers. A 1959 bibliography lists four articles in 1949 and 1950 alone, before Titterton left the UK to take up the Foundation Professorship of Physics at the Australian National University.<sup>17</sup> In 1949 he reported in the scientific journal *Nature* that, for the personal radiation badges he developed to measure exposure, ‘An accuracy to within 5% can be achieved in dose determinations without undue elaboration of measurement and calibration.’<sup>18</sup>

In the same year he confirmed in an AERE report that ‘one observer working full-time can determine fortnightly slow neutron doses for between 100–150 individuals’.<sup>19</sup> He repeated these findings in the *British Journal of Radiology* in 1950, stating: ‘The photographic plate technique, using boron and lithium loaded emulsions, has been applied to provide a slow neutron personnel monitoring service. The method is simple and economical in operation, and is sufficiently sensitive to reduce the necessary microscope work to insignificant proportions.’<sup>20</sup>

The oral and written statements of participants to the Royal Commission are particularly important in light of a document I found in the UK National Archives (Fig. 1). A fax message dated 25 June 1985 from the British Defence Research and Supply Staff in Canberra to the Atomic Weapons Research Establishment in the UK enquired about ‘the final volume of the sanitised version of the “Blue Book”’. We have so far received the full sanitised version except for that part dealing with Australian participants.

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**'It was agreed that should there be any reactions arising from reports of the cloud having been seen, the Meteorological Service should announce that normal clouds were within the quoted region and the observed cloud was probably a rain cloud.'**

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Has this been sent to us and perhaps lost in transit or is it still in preparation?'

The Blue Book records have been the basis of studies by the UK's National Radiological Protection Board monitoring the long-term health status of nuclear test participants since 1983.<sup>21</sup> Veterans' applications for pensions relating to the health effects from their participation in the nuclear tests reference data from the Blue Book. If those records have been 'sanitised' then it is possible that many pensions have been unfairly denied.

More than 16,000 Australians and 22,000 Britons were present at the tests. Over the past 25 years I have participated in successful appeals against denials of service pensions in Australia, the UK, Fiji and New Zealand.<sup>22</sup> Oral evidence from the appellant serviceman, and often his family and friends, has played a critical role in convincing appeals boards of the possibility that they were exposed to ionising radiation during their work at the tests. There will be further evidence to be found in the Royal Commission transcripts if researchers can ever afford to study the thousands of pages.

As it is, we have already established that the NRPB's epidemiological studies 'under ascertained' multiple myeloma, a marker condition for possible radiation exposure, in at least thirty per cent of test veterans.<sup>23</sup>

Several radio and television interviews with the scientists responsible for the Australian tests, such as Sir Mark Oliphant and Sir Ernest Titterton, are still available online.<sup>24</sup>

The Los Alamos National Laboratory Library has tapes of several interviews with scientists from the Manhattan Project.<sup>25</sup> In October 2022 about 12 hours of memoirs recorded by Titterton were identified by myself and Clare McLellan, Archivist of the Fenner Archives Collection of the Australian Academy of Science in Canberra (Fig. 2).

Online technology permits a whole new level of research. For instance, we can recover the meteorological data that refutes the claims of spokesmen that no potentially radiation-bearing rain fell on the major cities after the detonations.<sup>26</sup>

A new generation of university researchers is emerging in both Australia and the UK. Here's hoping that teaching about the tests in high schools will rapidly multiply their number. As Frances Bacon said 500 years ago, 'Truth is the daughter of Time, not of Authority.'



**Figure 2. Tape recordings made by Sir Ernest Titterton found in the Fenner Archives Collection of the Australian Academy of Science in Canberra in late 2022.** Clare McLellan, Australian Academy of Science

20 E. Titterton and M. E. Hall, 'Neutron Dose Determination by the Photographic Plate Method,' *British Journal of Radiology*, 23: 465–471.

21 UK Health Security Agency, 'Nuclear Weapons Test Participants: Epidemiological Study,' 1 July 2013, <https://www.gov.uk/government/publications/nuclear-weapons-test-participants-study/>

22 Sue Rabbitt Roff. "'Knocked over by a Pile of Bombs. Hasn't Felt Well Since": Nuclear Test Veterans and the UK Ministry of Defence Pensions System,' in *Festschrift for Roger Clark*, ed. Suzannah Linton (Leiden: Brill/Nijhoff, 2015).

23 S. R. Roff, 'Under-ascertainment of Multiple Myeloma among Participants in UK Atmospheric Atomic and Nuclear Weapons Tests,' *BMJ Occupational & Environmental Medicine*, 60:12 (2003): e18, <https://oem.bmj.com/content/60/12/e18/>

24 'Mark Oliphant,' Australian Institute of Physics, <https://www.aip.org/history-programs/niels-bohr-library/oral-histories/4805>; 'Sir Ernest Titterton Interviewed by David Ellyard [Sound Recording],' National Library of Australia, <https://catalogue.nla.gov.au/Record/493517>

25 'Val Fitch's Interview,' Voices of the Manhattan Project, <https://ahf.nuclearmuseum.org/voices/oral-histories/val-fitchs-interview/>

26 Roff, 'Making the British H Bomb in Australia'.