

National Museum of Australia and Ryebuck Media

Investigating HISTORY MYSTERIES in Your Community

Youth Challenge

Pre-Challenge Reading

2007

What are the Mysteries of Maralinga?

What are Australia's Cold War secrets? Could Australia have been a nuclear power? Why did we build a nuclear reactor? Why were we testing atomic weapons in the 1950s? Why were the bones of dead Australians secretly tested for nearly thirty years after the explosions? What responsibilities does a government have to its citizens for the actions of previous governments? Is it acceptable to allow some citizens to be harmed for the benefit of the majority?

These are just some of the fascinating questions that are explored in this Youth Challenge program.

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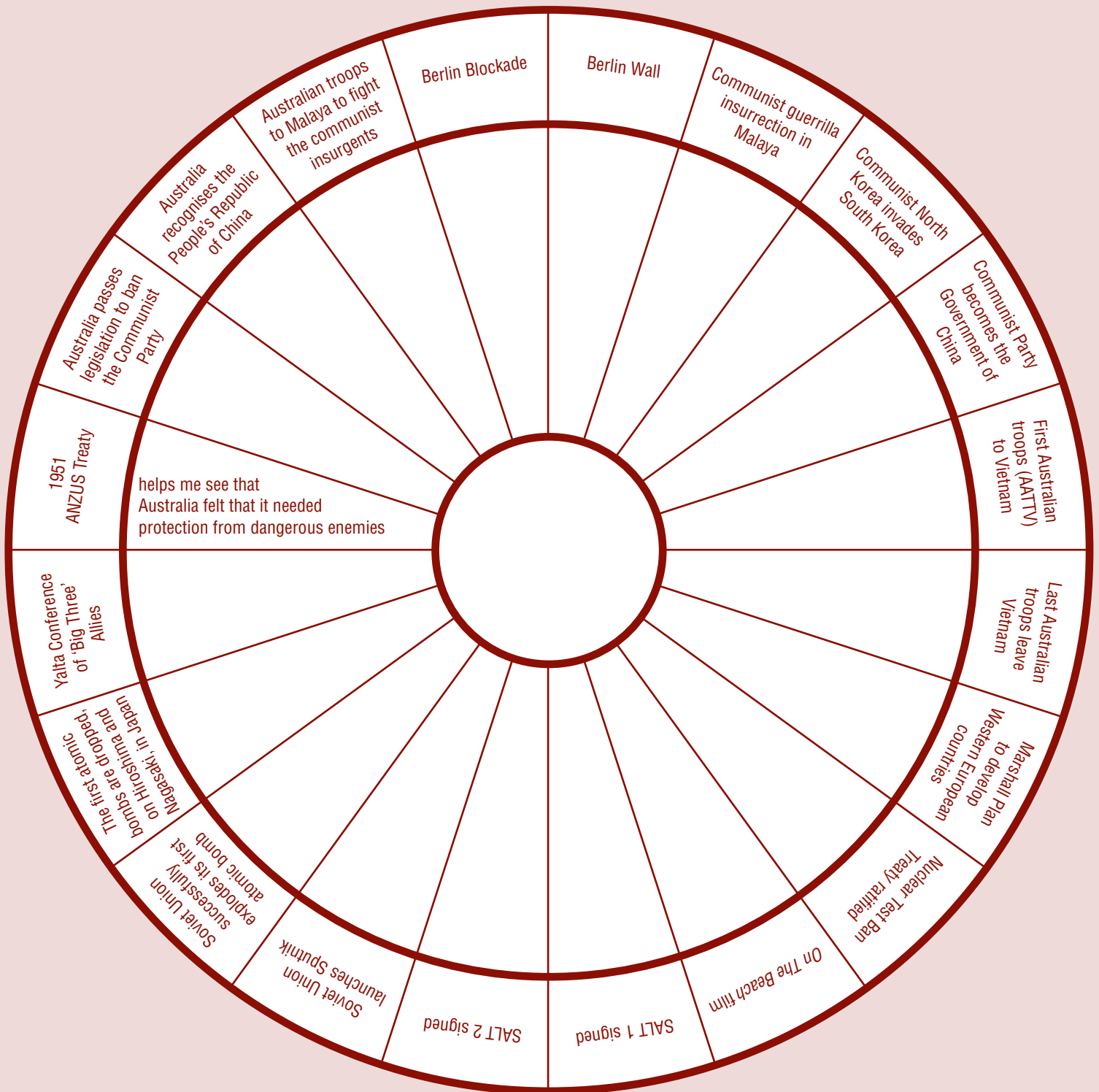


PRE-CHALLENGE TASK 1

Here are some world events that are part of the Cold War, and that help explain why Australia was involved in atomic weapons testing.

To get the most out of your participation in the *Australian History Mysteries Youth Challenge* you should complete the three tasks that follow, and bring this workbook with you on the day.

- 1 Go to <http://ryebuck.com.au/ahm> and add the date to each event.
- 2 When you have all the dates, number them in chronological order 1–20
- 3 Write in what each event helps you to understand about the Cold War period and Australian attitudes or reactions to it. One example has been done to help you.



PRE-CHALLENGE TASK 2

To understand the issues you will be exploring at the Youth Challenge you need to read the following information and use it to answer these questions. In some cases your answers will be speculative — you will have a chance to test some of them further during the Youth Challenge activities.

1 What was Britain's involvement with the first atomic bombs?

2 Why would Britain want its own atomic bomb?

3 Where would Britain have expected to work on its own atomic weapons?

4 Why did the McMahon Act make it look elsewhere?

5 Why would it have chosen Australia?

6 Why would Australia have agreed?

7 What are the directions of the Monte Bello Islands and Emu Field and Maralinga from your home?

8 Use an atlas to find the distance between Woomera and Maralinga and Emu Field.

9 What would have been the likely advantages of using these three places for testing atomic weapons?

10 What would have been the disadvantages?

11 Why would the tests have ended after 1957?

12 What was the role of Woomera in this period?

Background briefing

In August 1945 the American government authorised the dropping of two atomic bombs on Japan — at Hiroshima, and then Nagasaki — ending the war in the Pacific region.

America was the only nation at that time with an atomic bomb.

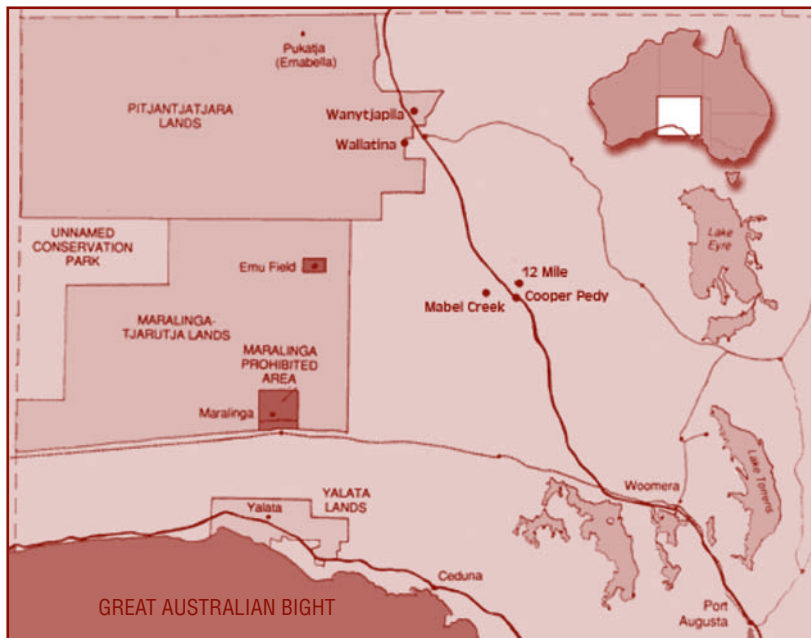
British scientists had worked as part of the team that developed the first atomic bomb, and the British Government looked forward to developing its own atomic weapons, and testing them with American co-operation. Although Britain's economic situation was weakened at the end of the war, it believed that it could still claim to be a world leader if it had the power and status that atomic weapons carried with them.

However, in 1946 the American Government, stung by the passing of secret information by non-American pro-Soviet spies about how to develop an atomic bomb, passed the McMahon Act, which said that it would no longer share any secret information about nuclear weapons with any other country.

Britain now needed a new place to test its weapons so it approached Australia for help.

Australia willingly co-operated, and between 1952 and 1957 eleven atomic bombs were tested on the Monte Bello Islands, off the coast of Western Australia, and at Emu Field and Maralinga, in South Australia.





There were also about 200 other tests in the Maralinga area between 1953 and 1963 involving elements of atomic weapons (but not atomic explosions), and many of these resulted in deadly plutonium contamination of a large area around the test sites.

In 1957 the United States decided to bring Britain back into its confidence as a nuclear partner, and British testing moved to Nevada. It no longer had any use for Australia's outback sites.

In 1958 Australia signed an atmospheric atomic test ban treaty, aware that nuclear fall-out was causing severe health problems in many people. Most testing now went underground. The last known atmospheric test was by China in 1980.

In 1946 a site at Woomera in South Australia was established for testing the delivery vehicle for atomic weapons — rockets. These tests did not involve any atomic explosions. It was from here that Australia's only satellite, WRESAT, was launched into orbit in 1967 — making Australia only the third nation (after the United States and the Soviet Union) to do so. In the 1950s the United States also began using Woomera, but more as a tracking station for its own tests.

Woomera still exists as a testing ground today, though it is not often used.

The tests were:

Year	Name	Site	Yield (kilotons)	Position
1952		Monte Bello		
1953	Totem	Emu: Totem 1 Totem 2	10 8	30 metre tower 30 metre tower
1956		Monte Bello		
1956	Buffalo	Maralinga: One Tree Marcoo Kite Breakaway	15 1.5 3 10	Ground level Ground level Air drop 30 metre tower
1957	Antler	Maralinga: Tadje Biak Taranaki	1 6 27	30 metre tower 30 metre tower Balloon drop

PRE-CHALLENGE TASK 3

Now state your hypothesis: Australia was involved in the testing of atomic weapons because:

You will be able to test this hypothesis at the Youth Challenge when you address the question:
Was the atomic testing program in the 1950s necessary and justified?