

Australia and nuclear weapons

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Outline

- Australian treaty links to nuclear weapons
- British nuclear tests
- Australian nuclear energy development history
- Australian nuclear weapons acquisition and development history
- Revisiting the Australian nuclear weapons option
- Extended nuclear deterrence in Australian defence policy
- Australia, nuclear strategy, and the militarisation of space

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Australian treaty linkages to nuclear weapons

- Security Treaty between Australia, New Zealand and the United States of America [ANZUS]
- Australia-Indonesia Agreement on the Framework for Security Cooperation (2006)
- Japan-Australia Joint Declaration on Security Cooperation (2007)
- Agreement between the Australian Government and the United States Government relating to the Establishment of a Joint Defence Space Research Facility (1966)
- United Nations Security Council Resolution 1540 (2004) and national ratification acts
- Agreement between the Government of Australia and the Government of the United States of America Relating to the Operation of and Access to an Australian Naval Communications Station at North West Cape in Western Australia (2008)

2

British nuclear testing in Australia - 1952 - 1959

3

British major nuclear tests in Australia

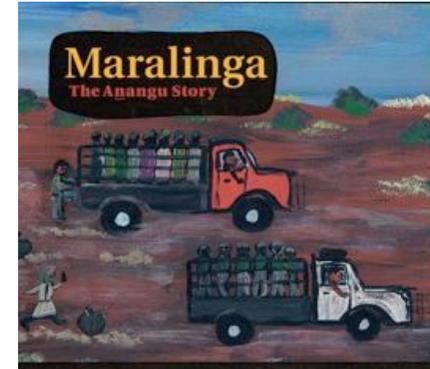
Codename	Location	Date	Yield
Hurricane	Monte Bello (off Trimouille Is)	3 October 1952	25 kt
Totem 1	Emu Field	15 October 1953	15 kt
Totem 2	Emu Field	27 October 1953	7 kt
Mosaic G1	Monte Bello (off Trimouille Is)	16 May 1956	15 kt
Mosaic G2	Monte Bello (off Alpha Is)	19 June 1956	60 kt (actual yield 98 kt)
One Tree	Maralinga	27 Sept 1956	12.9 kt
Marcoo	Maralinga	4 October 1956	1 kt
Kite	Maralinga	11 October 1956	2.9 kt
Breakaway	Maralinga	22 October 1956	10.8 kt
Tadje	Maralinga	14 Sept 1957	0.93 kt
Biak	Maralinga	25 Sept 1957	5.67 kt
Taranaki	Maralinga	9 October 1957	26.6 kt

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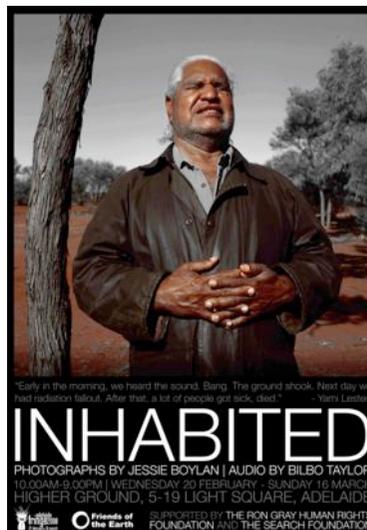
Yalata and Oak
Communities with
Christobel
Mattingley,
*Maralinga: The
Anangu Story*,
2009.

Verbatim - Yami
Lester, Radio
National 10
January 2011
<http://www.abc.net.au/rn/verbatim/stories/2011/3086502.htm>

Yami: *The
Autobiography of
Yami Lester*,
(Alice Springs,
Jukurrpa Books,
2009)



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It was early in the morning, might be around about seven. Explosion, big one. We feel the ground shook and we heard the bang and another smaller bang. A lot of little ones between the big ones," says Yami Lester.

Yami Lester was only 12 years old when the first atomic tests to happen on the Australian mainland occurred at Emu Field in northern South Australia on the 15th of October, 1953.

Verbatim - Yami Lester, Radio National 10 January 2011
<http://www.abc.net.au/rn/verbatim/stories/2011/3086502.htm>

Yami: *The Autobiography of Yami Lester*, (Alice Springs, Jukurrpa Books), 2009

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Paul Kelly: Maralinga (Rainy Land)

This is a rainy land
this is a rainy land
no thunder in our sky
no trees stretching high
but this is a rainy land

My name is Yami Lester
I hear I talk I touch but I am blind
my story comes from darkness
listen to my story now unwind
this is a rainy land

First we heard two big bangs
we thought it was the great snake digging holes
Then we saw the big cloud
then the big black mist began to roll
this is a rainy land

A strangeness on our skin
a soreness in our eyes like weeping fire
a pox upon our skin
a boulder on our backs all our lives
this is a rainy land



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Nuclear weapons development history

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“The Need for Nuclear Capability” : Strategic Basis of Australian Defence Policy - 1959, Department of Defence

54. If only because of the high costs involved, Australia is most unlikely to undertake the manufacture of nuclear weapons. The acquisition of a tactical nuclear capability by Australian forces would, however, vastly increase our defensive and offensive strength and would also enhance the value of our contribution in operations under collective arrangements. Moreover, in the future some weapon systems will be dependent on nuclear war-heads for their effectiveness. The availability of low-yield nuclear weapons would be of considerable importance to the Australian Services should a situation develop which posed a direct threat to Australia, requiring defensive operations in the northwest approaches. In the worst circumstances, viz. the inability of the United States and the United Kingdom to come to our assistance, the possession of such weapons might well be essential to our national survival.

55. Whether or not the Australian forces acquire a nuclear capability in the immediate future, they should have, as far as possible, a potential capability to operate with nuclear weapons and in the face of nuclear opposition.

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Strategic Basis of Australian Defence Policy - 1971, Department of Defence

192. Finally there is, in our opinion, no present strategic need for Australia to develop or acquire nuclear weapons; but the implications of China's growing nuclear military capacity, and of the growth of military technology in Japan and India, need continuous review.

We consider that the opportunities for decision open to the Australian Government in future would be enlarged if the lead time for the acquisition of a nuclear weapons capability could be shortened.

We recommend regard to this, without undue claims upon resources, in the future development of Australia's nuclear capacity for peaceful purposes, in the Defence research and development programme, and in other relevant ways.

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The nuclear energy component of Australian nuclear weapons planning

- See Reynolds (2001) and Cawte (1992) on industrial planning and nuclear research

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Fact or Fission, the Truth about Australia's Nuclear Ambitions, Richard Broinowski, Scribe Books, 2003.

Fortress Australia, ABC television documentary, Peter Butt – Director/Co-producer/writer/editor; broadcast: 22 August 2002.

Australia's Bid for the Atomic Bomb, Wayne Reynolds, Melbourne University Press, 2001.

"Isotopes and Identity: Australia and the Nuclear Weapons Option, 1949-1999", Jacques E. C. Hymans, Nonproliferation Review, Vol.7, No.1, Spring, pp.1-23, 2000.

Surprise Down Under: The Secret History of Australia's Nuclear Ambitions, Jim Walsh, Nonproliferation Review 5 (Fall 1997), pp 1-20.

Atomic Australia 1944-1990, Alice Cawte, University of New South Wales Press, Sydney, 1992.

Policy, Desmond Ball, "Australia and Nuclear Policy", in Strategy and Defence: Australian Essays, Desmond Ball (ed.), George Allen and Unwin, 1982, pp. 320-343.

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Hymans on Australian nuclear proliferation and identity

Theory: *degree of threat and capacity for self-help* explains proliferation decisions, but only through variable of *perception*: i.e. shifting national identities

History:

- Menzies: "oppositional but not nationalist"
- Gorton: "oppositional nationalist"
- Whitlam: non-oppositional nationalist

Source: "Isotopes and Identity: Australia and the Nuclear Weapons Option, 1949-1999", Jacques E. C. Hymans, Nonproliferation Review, Vol.7, No.1, Spring, pp.1-23, 2000.

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Walsh on Australian proliferation explanations: bureaucratic politics

- Problem: neither *motivation* nor *capacity* explain the key period: 1956 -1961
- Better candidates: perceptions of nuclear weapons, leadership shifts, and most importantly bureaucratic politics.
- "a contest between two powerful coalitions":
- Pro: the military (RAAF) and the civilian nuclear establishment
- Con: Dept of External Affairs and Treasury

Source: Jim Walsh, "Surprise Down Under: The Secret History of Australia's Nuclear Ambitions," Nonproliferation Review 5 (Fall 1997), pp 1-20.

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The American veto - Dean Rusk: "I opened up all stops."

In my talk with Prime Minister Gorton I ran into a full battery of reservations about the Non-Proliferation Treaty. You could almost repeat everything the Germans have said and put them in Australian mouths.

Gorton is deeply concerned about giving up the nuclear option for a period as long as twenty-five years when he cannot know how the situation will develop in the area. He sounded almost like De Gaulle in saying that Australia could not rely upon the United States for nuclear weapons under ANZUS in the event of nuclear blackmail or attack on Australia.

I will not recount here what I said to him but I opened up all stops. One of the things which is getting in the way is objections coming out of the Australian Atomic Energy Commission and Defense on all sorts of picayune problems on which we have been able to satisfy the Germans and others.

Secretary of State, U.S. Embassy Canberra cable 4842 to Department of State, 6 April 1968

Source: "Australia's Prime Minister Wanted 'Nuclear Option'", 40th Anniversary of the Nuclear Nonproliferation Treaty, National Security Archive, 1 July 2008. Document 16A.

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Arms Control and Disarmament Agency Memorandum of Conversation, "Consultations with Australians on NPT and Status of Interpretations on Articles I and II," 24 April 1968, Secret

Mr Bunn [ACDA] said that they [ACDA and AEC officials] were particularly impressed by the independence of the officials representing the Australian AEC, the confidence of their ability to manufacture a nuclear weapon and desire to be in a position to do so on short notice. ...The political rationalization of these officials was that Australia needed to be in a position to manufacture nuclear weapons rapidly if India and Japa were to go nuclear. ...

Indeed the Australian officials indicated they would not even contemplate signing the NPT if it were not for an interpretation which would enable the deployment of nuclear weapons belonging to an ally on Australian soil.

Source: "Australia's Prime Minister Wanted 'Nuclear Option'", 40th Anniversary of the Nuclear Nonproliferation Treaty, National Security Archive, 1 July 2008. Document 16D.

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Contemporary Australian nuclear proliferation discussions

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Lowy Institute Poll May 2010 attitudes to Australian nuclear weapons development

- A) Now a question about nuclear weapons. Are you personally in favour or against Australia developing nuclear weapons?
- B) If some of Australia's near neighbours were to begin to develop nuclear weapons, would you then be personally in favour or against Australia also developing nuclear weapons?



Source: Lowy Institute Poll May 2010, Figure 19: Nuclear weapons in Australia, p. 13

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"In a darker Asian future of rising nuclear disorder ..." (Lyon)

"A thorough nuclear policy review should also consider which strategic circumstances might lead to Australia's revisiting the nuclear weapons option. As extreme as this may sound, failure to sustain and strengthen our current non-proliferation regime may force us to consider such an option. In the current strategic circumstances, no government could leave such an eventuality entirely out of mind."

- **A delicate issue: Asia's nuclear future, Rod Lyon, ASPI, 14 December 2009**

"Australia might decide that it can take its time hedging. But there's a problem: long lead-times. To retain the option of nuclear hedging in the future, we'd need to grow the prerequisites—nuclear expertise, a nuclear industry, proficiency in the sensitive technologies of enrichment and reprocessing, and the delivery vehicles that might offer assured penetration to target (which is important for an arsenal with relatively few warheads)."

- **Australian Voters' Guide to International Policy: Non-proliferation and Arms Control, Martine Letts, Lowy Institute, 15 Oct 2007**

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The uranium enrichment option

"Australia, including for reasons of distance, can afford to rely more than Japan does on extended deterrence in relation to both China and North Korea. But it may not elect to do so if in future Indonesia were to decide it needed its own deterrent...."

So for security as well as economic reasons, Australia is successfully resisting aspects of President Bush's Global Nuclear Energy Partnership (GNEP) that would have seen Australia required permanently to give up the option to enrich uranium."

Robyn Lim, Australia and the Future of Nuclear Deterrence, Issue Analysis No 82, Centre for Independent Studies, 1 March 2007

See also:

Wayne Reynolds, Australia's Quest to Enrich Uranium and the Whitlam Government's Loans Affair, Australian Journal of Politics and History, Vol. 54, Issue 4.

Jessica Burke, Enriching the uranium debate, Australian Mining, 9 May 2011

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Stephan Fruhling, Never Say Never, 2011

- "Three conditions for the acquisition of nuclear weapons by Australia to be a credible option:
 - the existence of a major threat to Australia;
 - a loss of confidence in US guarantees;
 - allied acquiescence to an Australian nuclear program."
- "These conditions interact with Australia's relationship with Indonesia, and the technological and industrial feasibility of 'tactical' and 'strategic' nuclear weapons postures, respectively.
- "The only Australian nuclear posture that does not lack credibility in light of all of these factors is the use of 'tactical' weapons to deter major landings on the Australian mainland.

Stephan Fruhling, "Never Say Never: Considerations about the Possibility of Australia Acquiring Nuclear Weapons", Asian Security, Volume 6, Issue 2, 2010.

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Australia and extended nuclear deterrence

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Extended nuclear deterrence; *defenders*, *antagonists* and *protégés*

- US-Russia
 - protégés: NATO countries (historically China re SU?)
- US-China
 - protégés: Japan, Korea, Taiwan, **Australia**
- US-North Korea
 - protégés: Japan, Korea, Taiwan, **Australia**
- US-Iran
 - Middle Eastern allies - Israel; selected others?

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Dimensions of the organization of the US contemporary nuclear umbrella

- the range of threats against which nuclear protection is offered
- the location and type of forces involved in substantiating the threat
- the physical location of the nominal antagonist nuclear weapons state in relation to the allied recipient country
- the level and type of engagement of the allied recipient country in the provision of the deterrent
- the involvement of the allied recipient country with other allied nuclear weapons states besides the nuclear guarantor

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Models of US extended nuclear deterrence

- How many countries under the US “nuclear umbrella”?
 - 30?, 31? , “30 plus”?
- Four regional models
 - NATO - nuclear sharing
 - East Asia - Japan, South Korea, (Taiwan)
 - Australia
 - Emerging Middle East

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Defence White Paper 1994: first public official reference to the place of extended nuclear deterrence in Australian defence policy?

The government does not accept nuclear deterrence as a permanent condition. It is an interim measure until a total ban on nuclear weapons, accompanied by substantial verification provisions, can be achieved.

In this interim period, although it is hard to envisage the circumstances in which Australia could be threatened by nuclear weapons, we cannot rule out that possibility.

We will continue to rely on the extended deterrence of the US nuclear capability to deter any nuclear threat or attack on Australia. Consequently, we will continue to support the maintenance by the United States of a nuclear capability adequate to ensure it can deter nuclear threats against allies like Australia.

- Defending Australia: Defence White Paper 1994, Department of Defence, 1994.

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Four elements in that first statement are of ongoing importance:

- reliance on deterrence is necessary for the foreseeable future
- necessary for circumstances which cannot be named or specified;
- necessary only for a threatened or actual nuclear attack on Australia;
- leads to support the wider American global nuclear deterrence

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2009 Defence White Paper - greatly expanded justification of END for Australia

- The United States will continue to rely on its "nuclear deterrence capability to underpin US strategic power, deter attack or coercion by other nuclear powers, and sustain allied confidence."
- For the first time, specific nuclear/ballistic missile threats to Australia – "direct, though remote" – are named: Iran and North Korea
- The alliance "means that, for so long as nuclear weapons exist, we are able to rely on the nuclear forces of the United States to deter nuclear attack on Australia."
- Joint defence facilities, especially at the Pine Gap signals intelligence intelligence facility, "contribute to the intelligence collection capabilities of both countries, support monitoring of compliance with arms control and disarmament agreements, and underpin global strategic stability by providing ballistic missile early warning information to the United States."
- Alliance "protection provides a stable and reliable sense of assurance and has over the years removed the need for Australia to consider more significant and expensive defence options."

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The Australian model of extended nuclear deterrence

- lack of public presence and awareness
- a lack of certainty about its standing and character in American eyes
- offshore location of potential deterrent force
- lack of an identifiable direct nuclear threat
- hosting of United States targeting-related intelligence facilities justified as Australian contribution to maintenance of global nuclear stability
- concomitant government secret acceptance of certain targeting of those facilities in the event of nuclear war

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The bargain

- Part 1: Australian security depends on US maintenance of a stable world nuclear order.
- Part 2: "We accepted that the joint facilities were probably targets, but we accepted the risk of that for what we saw as the benefits of global stability."
 - Kim Beazley, presentation to Seminar on the ANZUS alliance, Joint Standing Committee on Foreign Affairs, Defence and Trade, Parliament of Australia, 11 August 1997.
- We judged, for example, that the SS-11 ICBM site at Svobodny in Siberia was capable of inflicting one million instant deaths and 750,000 radiation deaths on Sydney. And you would not have wanted to live in Alice Springs, Woomera or Exmouth -- or even Adelaide.
 - Paul Dibb, "America has always kept us in the loop", The Australian, 10 September 2005.

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Four examinations of Australia and nuclear weapons development/deterrence:

A.L. Burns, "Australia and the Nuclear Balance", in H.G. Gelber (ed.) Problems of Australian Defence, (Oxford University Press, 1970)

Desmond Ball, "Australia and Nuclear Policy", in Desmond Ball (ed.), Strategy and Defence: Australian Essays, George Allen and Unwin, 1982

Stephan Fruhling, "Never Say Never: Considerations about the Possibility of Australia Acquiring Nuclear Weapons", Asian Security, Volume 6, Issue 2, 2010.

Rod Lyon, "Australia", in Muthiah Alagappa (ed.), The Long Shadow: Nuclear Weapons and Security in 21st Century Asia, (Stanford U.P., 2008)

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Evaluating claims for the need for nuclear defence or nuclear deterrence for Australia

- what are the actual threats to Australia against which extended nuclear deterrence is invoked?
- what are the probabilities attached to such threats?
- where threats are deemed to be actionable with nuclear response, what alternative responses or means of addressing the issue exist or could be generated?

No government has addressed these questions in a systematic and open manner.

Question: why are Australians so accepting of their government's 50-year history of commitment to defence by nuclear weapons?

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The joint facilities and nuclear weapons

- Pine Gap
- Nurrungar (until 2000)
- North West Cape (Harold E. Holt Naval Communications Base)
- Geraldton/Kojarena: Australian Defence Satellite Communications Station

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Pine Gap, August 2005

Annotation Desmond Ball and Bill Robinson



Pine Gap functions today

- Two functions, primary and secondary
 - two separate space-based intelligence systems downlinked through Pine Gap
- Primary role: signals intelligence (SIGINT)
 - Advanced Orion satellites detecting radio transmissions
- Secondary role: Missile launch detection by infra-red imagery
 - Defence Support Program (DSP) satellites
 - successor SBIRS [Space-Based Infra-Red Satellite] systems
- SIGINT role: an integral, inseparable and substantial part of the total US signals intelligence interception capability

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Secondary function: DSP satellite Remote Ground Station

- transferred from Nurrungar in 2000
- US DSP Dishes 25 and 26 (western edge)
- Australian DSP dishes 23 and 24 (northern edge)
- "Simple" downlink and re-transmission to U.S; part of system with planned redundant elements
- Role in Gulf War and Iraq invasion acknowledged by US and Australian governments
- Upgrade to Space Based Infra Red Satellite System (SBIRS) RGS in process
- DSP/SBIRS has a key role in the suite of US missile defence systems - providing initial launch location and probable general trajectory data for ground- and sea-based MD radars and missile systems

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Primary function: signals intelligence collection and processing

- 1. A category of intelligence comprising either individually or in combination all communications intelligence, electronic intelligence, and foreign instrumentation signals intelligence, however transmitted.
- 2. Intelligence derived from communications, electronic, and foreign instrumentation signals. Also called SIGINT.

Doctrine for Intelligence Support to Joint Operations, Joint Chiefs of Staff,
Joint Publication 2-0, 9 March 2000.

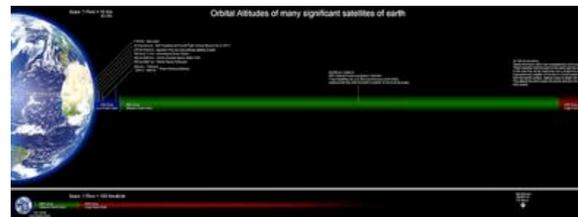
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Key operational sections of Pine Gap

- Satellite Station Keeping Area
- Signals Processing Station
- Signals Analysis Section
 - National Cryptographic Room (US)
 - Australian Cryptographic Room

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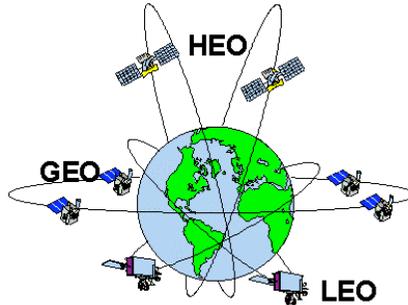
Satellite orbits: Low Earth Orbit and Geo-Stationary Orbit



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Types of satellite orbits

- HEO: High Earth Orbit
- LEO: Low Earth orbit
- GEO: Geo-stationary earth orbit



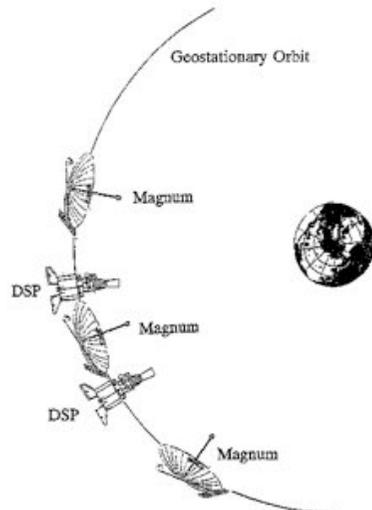
40

Important categories of Pine Gap SIGINT capabilities

- Pine Gap's SIGINT satellites can intercept the following types of radio transmissions in the atmosphere as they pass into space:
 - Missile telemetry
 - Radar
 - Satellite communications
 - Terrestrial microwave transmission
- These signals are in the following frequencies:
 - VHF: very high frequency
 - UHF: ultra high frequency
 - EHF: extremely high frequency

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Geo-stationary orbit, 33,000 kms above the earth's surface - schematic



Defense Program Support- I [improved] satellite

- detects missile launches by infrared emissions
- probably three functioning, with two in reserve orbits



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SIGINT geo-stationary satellites

- Probable current constellation:
 - = three Advanced Orion satellites, launched 1993, 1995, 2003
 - Question of lifetimes of remaining older satellites
- Previous satellites series and code-words:
 - Rhyolite/Aquacade
 - Argus (Advanced Rhyolite)
 - Chalet/Vortex
 - Magnum
 - Mentor/Mercury/Advanced Orion

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Joint intelligence facilities as “the strategic essence”

- Pine Gap (and previously, Nurrungar and Northwest Cape) = core utility of Australia for United States
- Despite the risks, hosting the intelligence facilities is usually justified by three rationales for the Australia-US alliance for Australian governments:
 - Australia derives crucial intelligence from joint facilities
 - Australia gets access to higher levels of US military equipment (unlike non-UKUSA partners)
 - Australia gets a seat at the highest strategic discussions in Washington

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Intelligence and the human interest

- “intelligence” and human rationality
- The human interest in reliable, democratically accessible intelligence
- Beyond national controls
- In the present scheme of things: why current restrictiveness is counter-productive and anti-democratic
- The right to intelligence
- The French proposal for United Nations access to surveillance satellite data

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Expanding links: Australia, nuclear strategy, and the militarisation of space

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Australian link to Japan's missile defence: military satellite downlink at Perth International Telecommunications Centre

One of the satellite two dishes operated by Japan Aerospace Exploration Agency (JAXA) provides a downlink for Japan's suite of military surveillance satellites, known as Information Gathering Satellites.

Data processed by this network is directed to the Cabinet Satellite Intelligence Centre (内閣衛星情報センター) within the Cabinet Intelligence and Research Office (内閣情報調査室).



See: Perth International Telecommunications Centre - Lansdale, Australian defence Facilities, Nautilus Institute
<http://www.nautilus.org/publications/books/australian-force48abroad/defence-facilities/lansdale>

Geraldton/Kojarena: Australian Defence Satellite Communications Station expansion for joint facility

2007 MOU: a new joint US-Australian ground station with three 19-meter antennas for the US Department of Defense Mobile User Objective System, a narrow-band networked satellite constellation for Ultra-High-Frequency satellite communications enabling secure all-weather and all-terrain 3-G mobile telecommunications.



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Naval Communication Station Harold E. Holt (North West Cape)



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Naval Communication Station Harold E. Holt (North West Cape) - Area A

Expansion under US-Australia Space Situational Awareness Partnership



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North West Cape and the militarisation of space

- *Agreement between the Government of Australia and the Government of the United States of America Relating to the Operation of and Access to an Australian Naval Communications Station at North West Cape in Western Australia (2008)*
- *Space Situational Awareness Partnership Statement of Principles (2010)*
- Sensors (unspecified) including radars to be emplaced as part of US Space Surveillance Network at North West Cape and elsewhere (unspecified)
- US Joint Space Operations Centre under the US Air Force Space Command
 - Australian personnel on its staff

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What is driving these shifts?

- US push / Australian pull
- Australian desire for global niche role)
- US global re-alignment
- pressure for alliance broadening and integration
- Interoperability
- Five-Eyes Fora
- electronic and imagery intelligence global integration: organisational and technical

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Further reading

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Joint facilities resources

- Australia - nuclear proliferation, Nautilus Institute [resource list]
 - <http://www.nautilus.org/projects/holding/reframing/aust-ind-nuclear/aust-prolif>
- Joint Australian-US intelligence facility - Pine Gap, Australian Defence Facilities, Nautilus Institute
 - <http://www.nautilus.org/publications/books/australian-forces-abroad/defence-facilities/pine-gap/pine-gap-intro>
- Naval Communication Station Harold E. Holt (North West Cape), Australian Defence Facilities, Nautilus Institute
 - <http://www.nautilus.org/publications/books/australian-forces-abroad/defence-facilities/naval-communication-station-harold-e.-holt-north-west-cape>
- Australian Defence Satellite Communications Station, Geraldton, Australian Defence Facilities, Nautilus Institute
 - <http://www.nautilus.org/publications/books/australian-forces-abroad/defence-facilities/australian-defence-satellite-communications-station-geraldton/australian-defence-satellite-communications-station>

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Richard Broinowski, *Fact or Fission, the Truth about Australia's Nuclear Ambitions*, Scribe Books, 2003.

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- George Perkovich, Extended deterrence on the way to a nuclear-free world, Research Paper, International Commission on Nuclear, Non-proliferation and Disarmament, May 2009; and his comments in the Panel on Are the Requirements for Extended Deterrence Changing? Panel discussion at the 2009 Carnegie International Nonproliferation Conference: The Nuclear Order—Build or Break, 6 April 2009
- Defending Australia in the Asia-Pacific Century: Force 2020. Defence White Paper 2009, Department of Defence, 2009.
- Desmond Ball, "The Strategic Essence", *Australian Journal of International Affairs*, 55.2, 2001.
- Richard Tanter, Australia's treaty links to nuclear weapons and nuclear disarmament, Austral Policy Forum 09-8A, Nautilus Institute, 26 March 2009
- _____, "Just in Case": Extended Nuclear Deterrence in the Defense of Australia, *Pacific Focus*, Vol. 26, No. 1 (April 2011)
- _____, North by North West Cape: Eyes on China, Austral Policy Forum 10-02A, Nautilus Institute, 14 December 2010
- _____, The Re-emergence of an Australian nuclear weapons option? Austral Policy Forum 07-20A, Nautilus Institute, 29 October 2007

British nuclear test resources

- Fact sheet 129 – British nuclear tests at Maralinga, National Archives of Australia
– <http://www.naa.gov.au/about-us/publications/fact-sheets/fs129.aspx>
- The Royal Commission into British Nuclear Tests in Australia, 1985
- Lorna Arnold and Mark Smith, *Britain, Australia and the Bomb: The Nuclear Tests and their Aftermath*. (2006).
- Robert Milliken, *No Conceivable Injury* (1986)