

**It is 89 seconds to midnight**

# **Ending nuclear weapons before they end us: the role of nuclear-allied states**

**Tilman Ruff AO**

International Campaign to Abolish Nuclear Weapons (Nobel Peace Prize 2017)

International Physicians for the Prevention of Nuclear War (Nobel Peace Prize 1985)

School of Population and Global Health, University of Melbourne

With thanks to Vince Scappatura, Richard Tanter

**80 yrs since Hiroshima and Nagasaki – Towards the abolition of nuclear weapons  
Pugwash Hiroshima 1 Nov 2025**

“We the peoples of the United Nations determined to save succeeding generations from the scourge of war ... ”

## UN General Assembly Resolution 1.1, 1946



**Figure 3.1.** The first meeting of the United Nations General Assembly, London, January 1946. Passed on 24 January 1946, General Resolution 1.1 established a commission to draw up a plan “for the elimination from national armaments of atomic weapons.” *Source: United Nations Photo.*

# The obligation to disarm

## Nuclear non-proliferation Treaty(NPT)

- 191 states parties
- entered into force 1970

### Article VI

“Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament .... “

# International Court of Justice

Para 47: “The notions of “threat” and “use” of force under Article 2, paragraph 4, of the Charter stand together in the sense that if the use of force in a given case is illegal – for whatever reason – the threat to use such force will likewise be illegal.”

INTERNATIONAL COURT OF JUSTICE

REPORTS OF JUDGMENTS,  
ADVISORY OPINIONS AND ORDERS

LEGALITY OF THE THREAT OR USE  
OF NUCLEAR WEAPONS

ADVISORY OPINION OF 8 JULY 1996

# International Court of Justice

Re NPT Article 6 obligation:

264 THREAT OR USE OF NUCLEAR WEAPONS (ADVISORY OPINION)

The legal import of that obligation goes beyond that of a mere obligation of conduct; the obligation involved here is an obligation to achieve a precise result — nuclear disarmament in all its aspects — by adopting a particular course of conduct, namely, the pursuit of negotiations on the matter in good faith.

100. This twofold obligation to pursue and to conclude negotiations

No differentiation between states:

267 THREAT OR USE OF NUCLEAR WEAPONS (ADVISORY OPINION)

F. Unanimously,

There exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control.

# Indiscriminate inhumane weapons banned by international treaty



- [Expanding bullets 1899]
- Biological weapons 1972
- Chemical weapons 1993
- Landmines 1997
- Cluster munitions 2008

- The main basis for bans on all these has been humanitarian – unacceptable harm with any use
- Proven process: stigmatise - prohibit – eliminate
- No weapon has been controlled without being banned

# General Comment No. 36 (2018) on ICCPR Article 6: The right to life

“66. The threat or use of weapons of mass destruction, in particular **nuclear weapons**, which are indiscriminate in effect and are of a nature to cause destruction of human life on a catastrophic scale is **incompatible with respect for the right to life and may amount to a crime under international law**. ...

They must also respect their international obligations to **pursue in good faith negotiations in order to achieve the aim of nuclear disarmament** under strict and effective international control and to **afford adequate reparation to victims** whose right to life has been or is being adversely affected by the testing or use of weapons of mass destruction, in accordance with principles of international responsibility.

67. Article 6 is included in the list of non-derogable rights ...”



# Joint Humanitarian Statement

## NPT RevCon 22 – 147 yes

“It is in the interest of the very survival of humanity that nuclear weapons are never used again, under any circumstances.”

UNGA 2024: 142 Yes incl Japan, India, Greece, Philippines, Iran, Belarus



# NATO

## 27 Sep 2022

“any use of nuclear weapons is absolutely unacceptable”

Jens Stoltenberg, Secretary-General

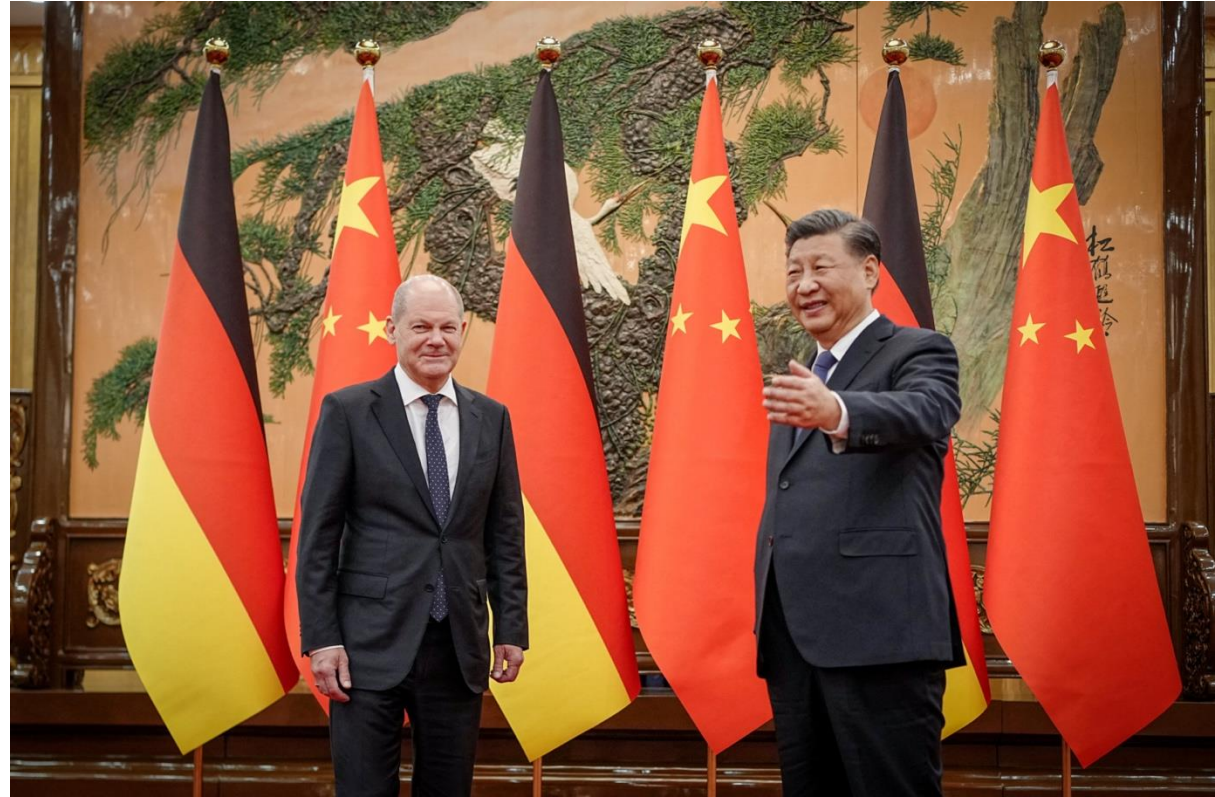




# Chancellor Scholz, President Xi

4 Nov 2022

- "President Xi and I agree: nuclear threats are irresponsible and incendiary," Scholz said after the meeting. "By using nuclear weapons, Russia would be crossing a line that the community of states has drawn together."



- Xi agreed that both leaders "jointly oppose the use or threat of use of nuclear weapons"

# G20 BALI LEADERS' DECLARATION

## Bali, Indonesia, 15-16 November 2022

“The use or threat of use of nuclear weapons is inadmissible.”

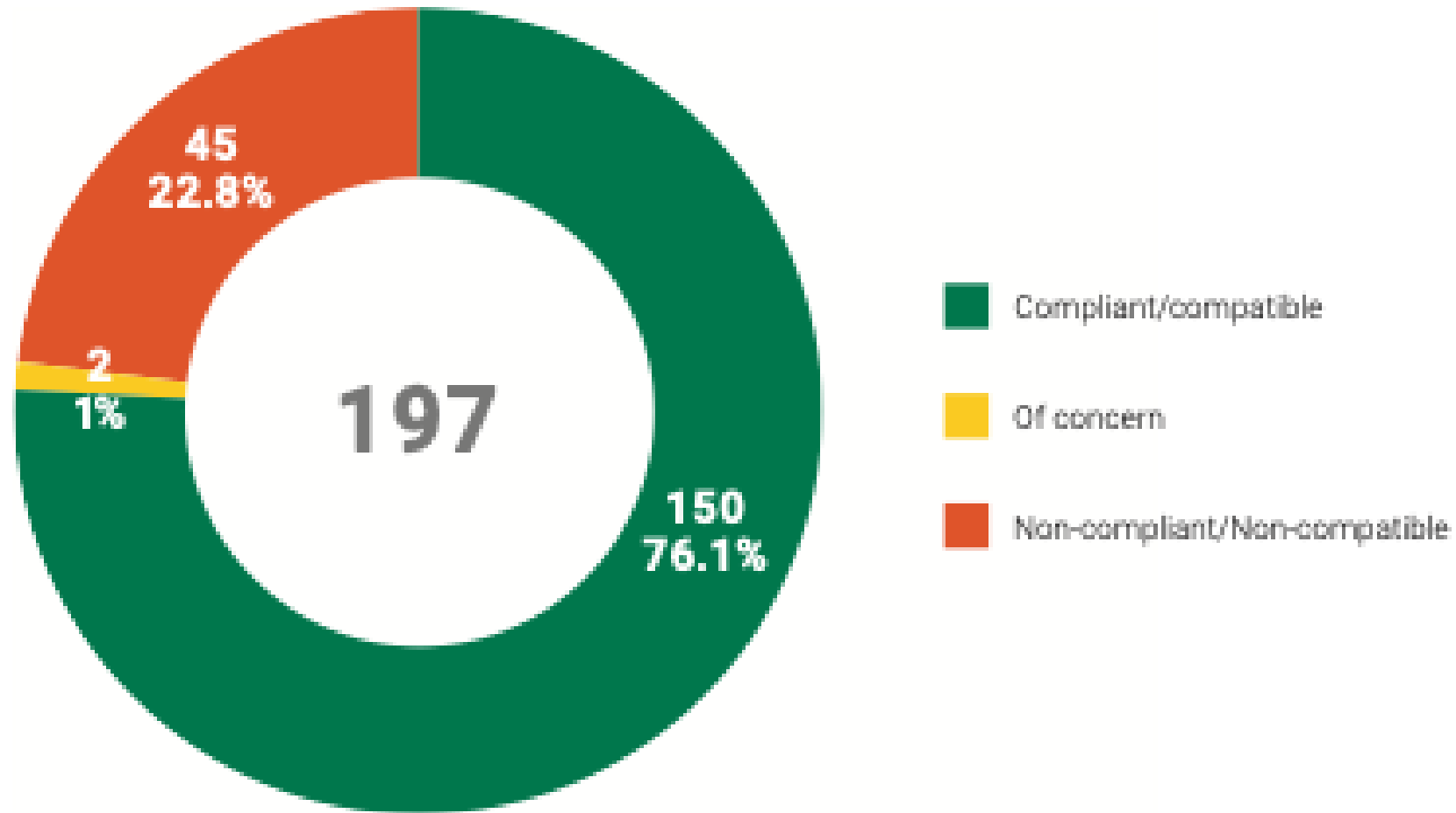


# States without nuclear weapons

- Most act responsibly:
  - Foreswear NW, support disarmament:
    - join applicable treaties including NPT, CTBT, nuclear free zones (104)
    - Provide no justification for NW or threat and no hosting or assistance for their possible use
    - De-legitimise, stigmatise and ban nuclear weapons: join the TPNW (99)
- Some contribute to NW dangers:
  - with US
    - NATO (29), Australia, South Korea, Japan
  - with Russia
    - Armenia, Belarus
  - Kazakhstan and Marshall Islands - hosting test sites used as target for nuclear-capable ICBM launches
    - » Sary-Shagan missile range; Ronald Reagan range, Kwajalein Atoll

# Compliance/compatibility with TPNW

Figure 9: Compliance and compatibility with the prohibitions of the TPNW in 2024: Summary of findings across all states.





# Nuclear “weasel” states

For undermining the NPT; obstructing efforts to ban nuclear weapons; general duplicity and insincere conduct; sundry offences against reason and logic.



# Open Letter in support of the Treaty on the Prohibition of Nuclear Weapons

“We must show courage and boldness - and join the treaty. As states parties, we could remain in alliances with nuclear-armed states, as nothing in the treaty itself nor in our respective defence pacts precludes that.”

- 56 former heads of government, foreign and defence ministers of nuclear-allied nations, including:
  - 20 NATO members
  - Ban Ki-moon
  - 2 former NATO secretary-generals (Willy Claes, Javier Solana)
  - Hatoyama Yukio, Tanaka Makiko & Naoki

21 September 2020





# Australia's nuclear posture: old and new

Tilman Ruff  
Pugwash Congress Hiroshima

thanks to Vince Scappatura, Richard Tanter

Three key ways Australia is implicated in nuclear war planning; two are old and one is new:



1. US 'Extended nuclear deterrence' - 'nuclear umbrella'
2. Pine Gap and North West Cape, nominally 'joint' surveillance, intelligence and communications facilities involved in US defensive and offensive nuclear operations
3. Hosting of US nuclear-capable forces, strategic aircraft and (possibly in future) nuclear-armed submarines
4. Integration of Australian personnel in US forces and vice versa

2, 3 and 4 make Australia potentially complicit in defensive and offensive nuclear operations  
AND make Australia a priority nuclear target

# US Extended Nuclear Deterrence

- Threat to inflict indiscriminate radioactive incineration on civilians to deter a nuclear attack on Australia
- No such commitment is in the ANZUS Treaty or official – an assumption by Australian officials based on ...?
- Would the US sacrifice Seattle for Sydney?
- Reckless, implausible and immoral





Northern Territory's 'Joint' Defence Facility **Pine Gap** (est. 1970), nuclear war roles:

1. **Nuclear attack planning support:** 'big ears' in space and on the ground provide the locations and characteristics of enemy operational units, radars and air defences; and collaboration in tracking mobile ICBMs and missile submarines at sea
2. **Early warning:** infrared satellites 'big eyes' detecting enemy nuclear missile launches, giving the US a few minutes of warning of nuclear attack
3. **Nuclear second strike targeting support:** detects which enemy missile silos (and submarines) have been fired and which have not, and are therefore to be targeted in a US second nuclear strike
4. **Missile defence:** Pine Gap can calculate in the first seconds of a missile launch the likely trajectory, and pass that data to US missile defence systems, cueing their fire radars for interception
5. **Verification of arms control agreements:** detecting infrared characteristics of adversary test missiles
6. **High priority nuclear target**



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



- Est. 1967, Western Australia, 15 km north of Exmouth on North West Cape
- 12 towers more than 300m high support a network of antenna wires for the transmission of powerful Very-Low Frequency (VLF) signals to submerged US nuclear-armed submarines
- Used in 1973 to communicate DEFCON 3 'nuclear readiness alert' without the prior knowledge of Prime Minister Gough Whitlam



Naval Communications Station  
Harold E. Holt – VLF submarine  
communications station

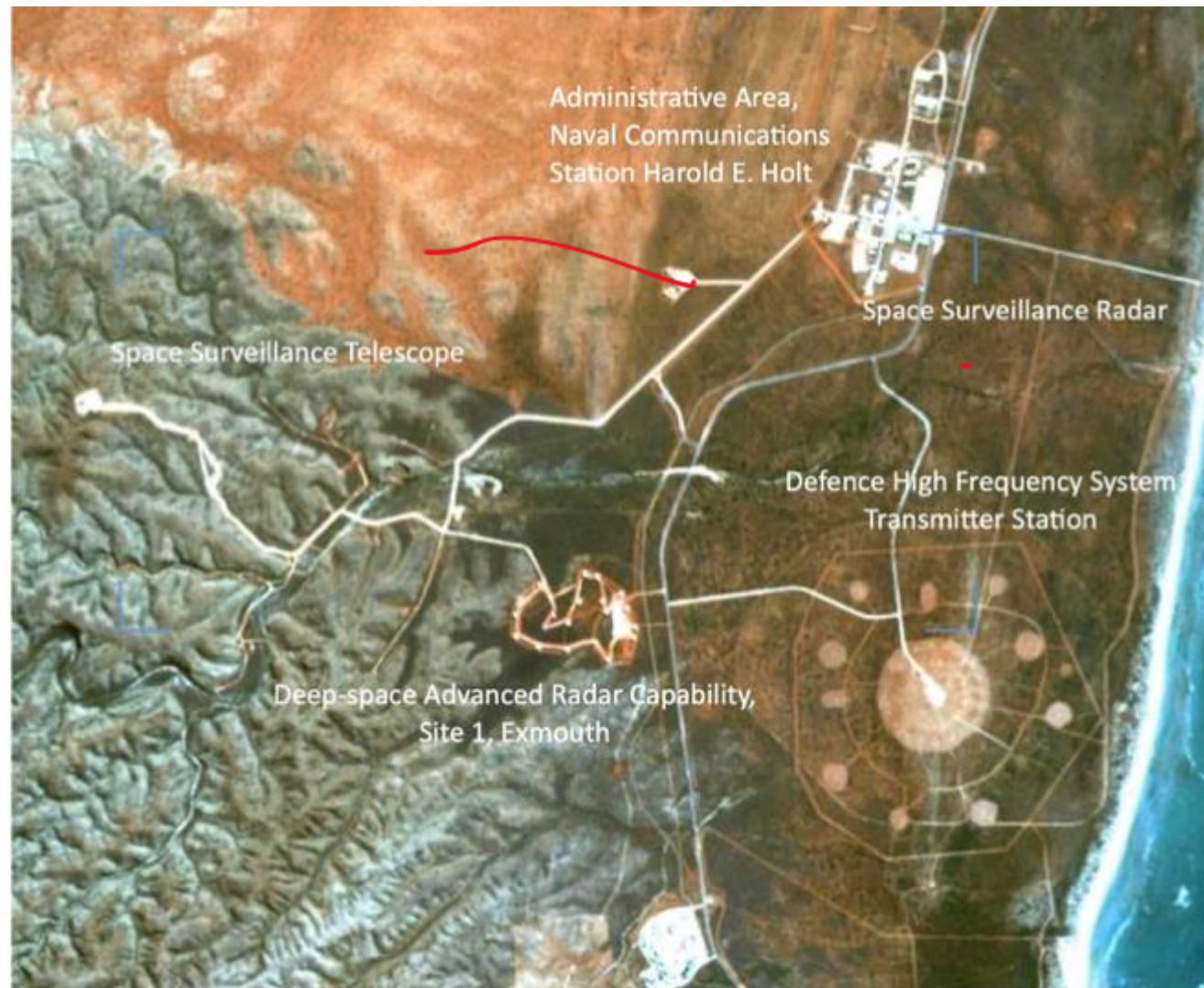
Defence High Frequency  
System Transmitter Station

Space Surveillance Radar – C-  
band

Space Surveillance Telescope

Deep-Space Advanced Radar  
Capability, Site 1

Defence High Frequency  
System Transmitter Station



DARC: 27 antenna construction 2025, Prof Richard Tanter: “ the most important new US surveillance development worldwide”, supporting US space warfare capability

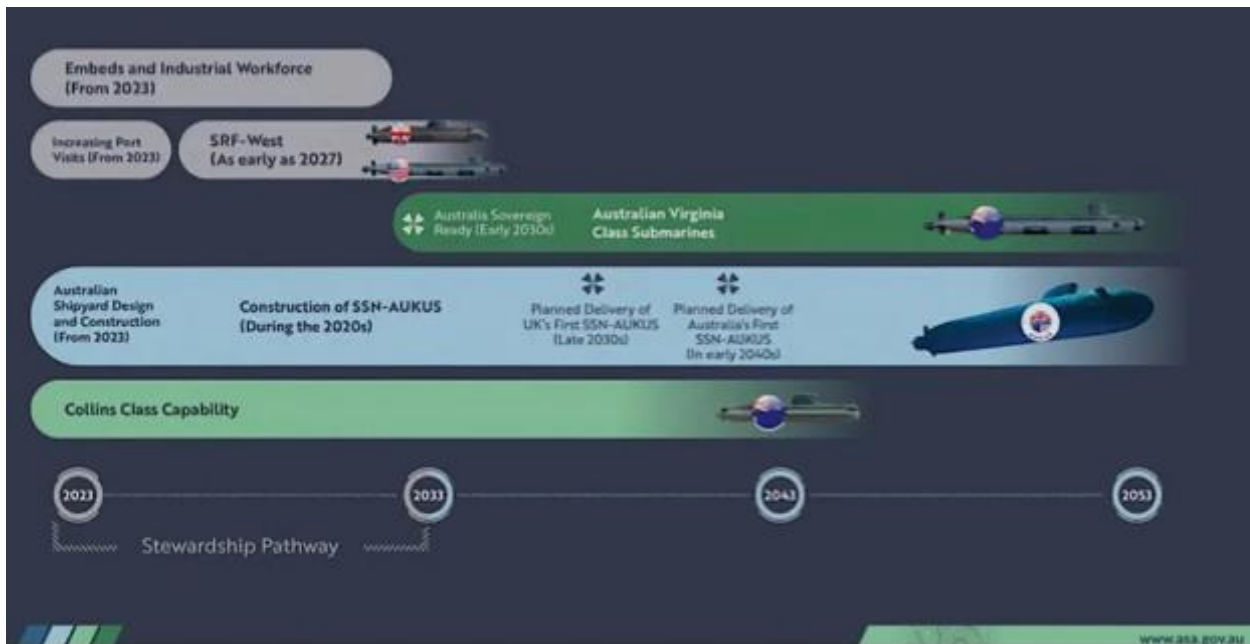




A reflector being assembled in the Antenna Integration Structure (AIS) at DARC Site 1 in Australia. Photo credit: Mike Kortum, Four Sea Group Inc. [United States Space Force photo by X0813, VIRIN: 250219-X-FC312-1002](#)

21/27 planned antennas completed Oct 2025

# AUKUS and nuclear submarines



## The Australian story: 'AUKUS Pillar 1 planned timeline', Australian Submarine Agency

Source: '[Optimal Pathway](#)', Australian Submarine Agency, updated: 20 June 2025

## The US story:

Ronald O'Rourke, [Navy Virginia-Class Submarine Program and AUKUS Submarine \(Pillar 1\) Project: Background and Issues for Congress](#), Congressional Research Service, RL32418, 28 March 2025.

- Embedding of Australian personnel
- Rotational deployments of U.S. and U.K. SSNs from Australia.
- Sale of three to five Virginia-class boats to Australia.
- Replacement SSNs to be built for U.S. Navy.
- UK and Australia construction of SSN AUKUS boats incorporating U.S. technology.
- Australian investments in U.S. and UK submarine industrial bases.

Extreme failure of good governance, compromised sovereignty, staggering cost est. A\$375 billion, Australia accepts risks and will manage waste





AUKUS and the acquisition of nuclear-powered submarines has potential implications for Australia's involvement in nuclear war, likely "locked in":

- Deployed against China's SSBNs (nuclear-armed submarines)
- Deployed to maintain control over critical maritime chokepoints and help free US submarines to target China's SSBNs
- New submarine base at HMAS Stirling to support and maintain forward-deployed US attack submarines, which could be re-armed with nuclear missiles

Submarines fuelled by weapons-grade HEU – bad for non-proliferation, fissile material control, safeguards, waste management

# United States-Australia Force Posture construction projects in the Northern Territory

## Northern Territory Training Areas and Ranges Upgrades Project

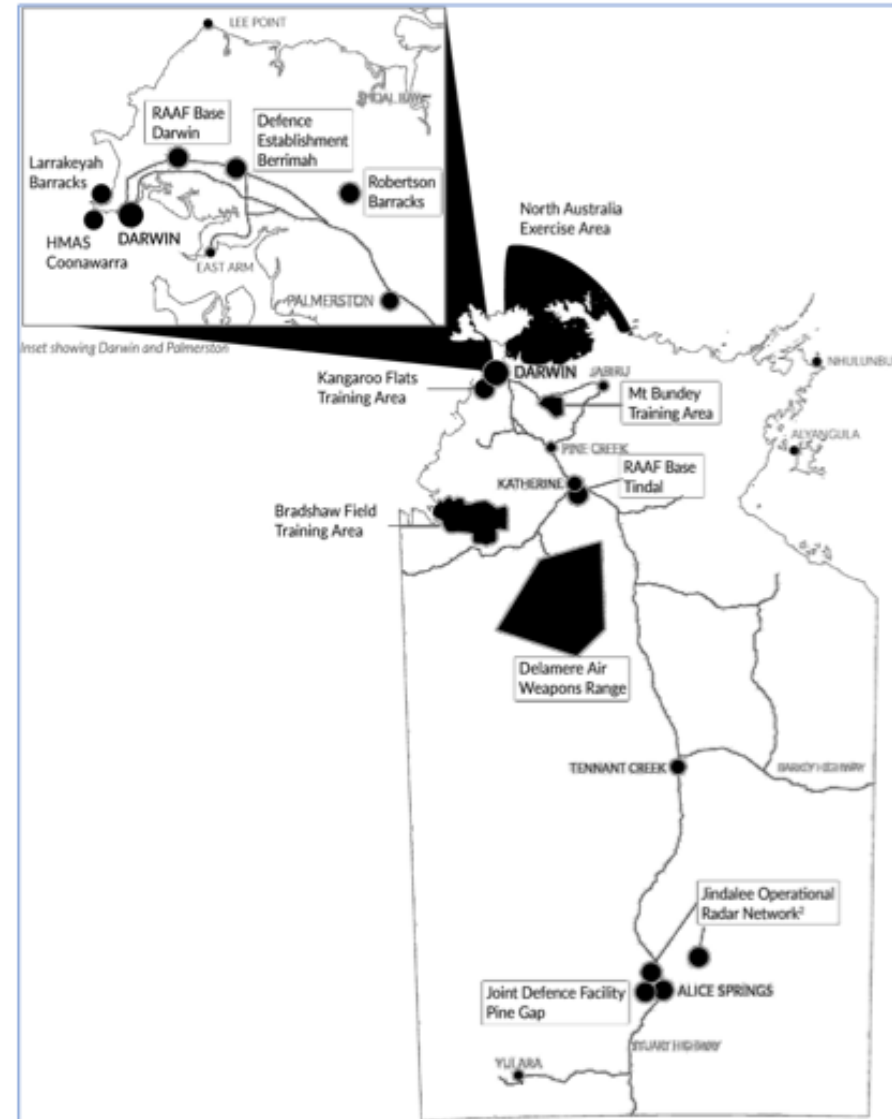
(Marine Air-Ground Task Force)

Robertson Barracks Close Training Area,  
Kangaroo Flats Training Area,  
Mount Bunday Training Area  
Bradshaw Field Training Area

## RAAF Base Tindal expansion

RAAF  
USAF

**U.S. Bulk Liquid Storage Facility, East Arm, Darwin**  
(Defense Logistics Agency / Crowley Solutions)



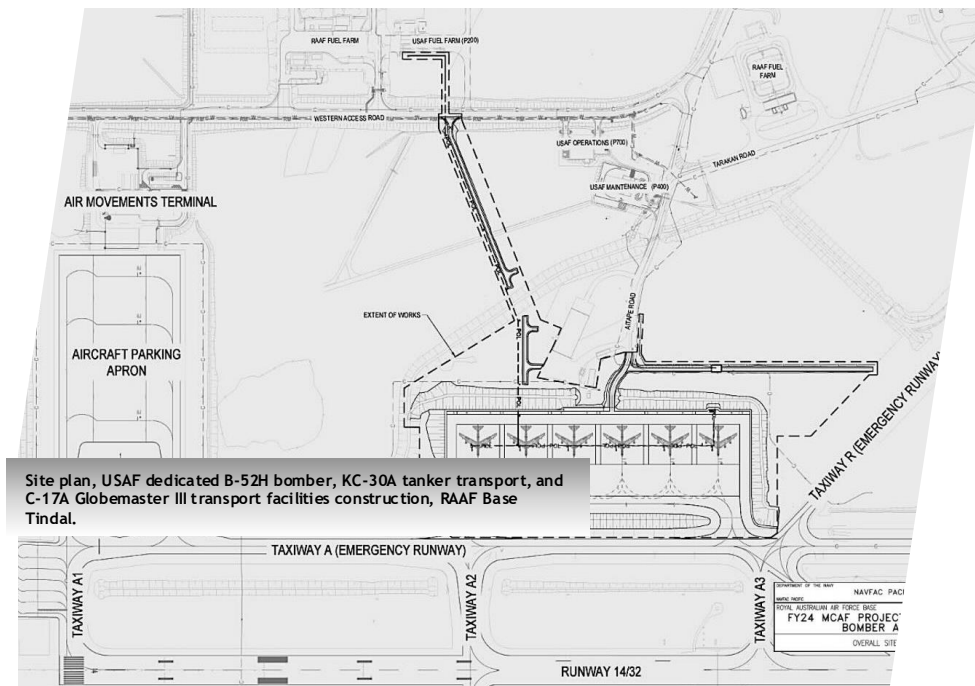
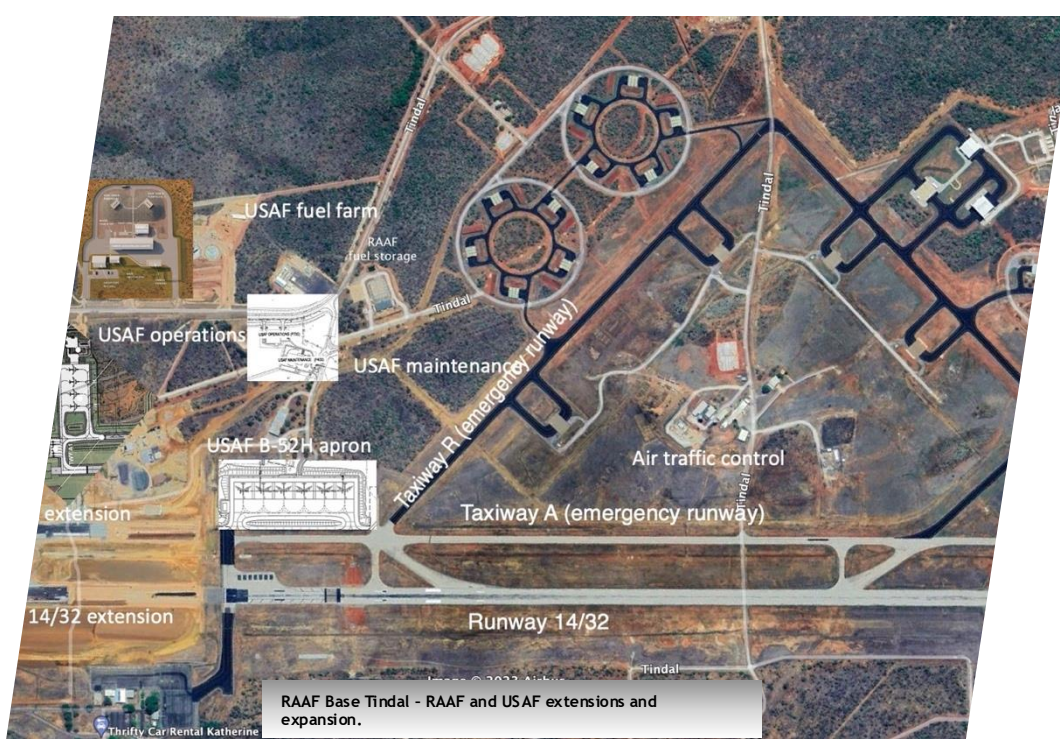
+ USAF Squadron Operations Facilities at Darwin and Tindal

# Australia's new nuclear posture: B-52s at RAAF Base Tindal

The US-funded expansion of RAAF Base Tindal in the Northern Territory includes the construction of dedicated USAF infrastructure, including:

- ▶ squadron operations facility
- ▶ fuel farm
- ▶ maintenance facility
- ▶ logistics and sustainment capacity
- ▶ 500 metre-long apron to support up to six B-52H aircraft, and/or C-17 transport aircraft

By hosting B-52 aircraft, and providing extensive operational mission support, the ADF will, for the first time in history, be in a position to support potential nuclear combat missions from Australian soil





Bulk Fuel Facility, East Arm, Darwin,  
(top centre right)  
(Google Earth, 8 August 2022)



U.S. Bulk Fuel Facility, East Arm,  
Darwin,  
U.S. Defense Logistics Agency /  
Crowley Solutions

Storage capacity =  
80 million gallons / 303 million litres



May 2023, courtesy of Justin Tuddy





B-2 possible overflight path en route to Yemen, 18 October 2024

- Two American B-2 strategic bombers en route to strikes in Yemen in Oct 2024 were granted rights to Australian airspace
- The B-2s were refuelled by US air tankers that took off from Cairns airport
- First time since World War 2 that Australian territory has been directly used to support US strategic bomber operations
- Prefigures similar and more prominent roles for Australia in American conventional and nuclear operations not only in the Middle East, but in East Asia and the Pacific, especially around China



Four KC-135 refueling aircraft at Cairns Airport, 18 October 2024



**The US will ‘neither confirm nor deny’ the presence of nuclear weapons on its aircraft, ships and submarines**

- Foreign Minister Wong said US had assured that submarines on permanent rotation in WA would not carry NW (haven't since 1991)
- No policy or legal impediments to the US bringing NW into or launching nuclear operations from Australia
- Treaty of Rarotonga (1986) prohibits ‘stationing’ of nuclear weapons, but permits nuclear weapons on aircraft or vessels on ‘visit’ or ‘transit’

- These developments are putting more obstacles in the way of the Albanese Labor government fulfilling its long-standing national policy platform commitment to sign and ratify the TPNW
- Australia should:
  - immediately act to keep nuclear weapons out of Australia
    - eg require only non nuclear-capable B52s in Aust
  - sign the TPNW in the first year of this term of government



# Unprecedented and never repeated

Australia - under PM Malcolm Fraser in the 1980s  
- uniquely implemented a national prohibition on nuclear-capable aircraft, while securing an explicit public exemption from the otherwise universally-applied US policy of neither confirm nor deny

Key principles :

- (1) B-52s operating in Australian territory would not carry nuclear or conventional weapons;
- (2) the Australian government would retain the right to approve any change in mission parameters;
- (3) Parliament would be informed of any such changes; and;
- (4) the United States would publicly consent to these arrangements.

This set of principles was unprecedented and never repeated by any host governments of nuclear-capable USAF aircraft



# Australia: disarmament is bipartisan business

- Australia has joined almost every applicable universal and regional disarmament, arms control and nuclear security agreement except TPNW
- 17 signatures + ratifications, 1 accession by Labor
- 23 sig + ratif by Coalition
  - in govt more since LP founded 1944
- Several signed by Coalition, ratified by ALP (eg NPT); vice versa for ATT
- Prohibition treaties (bio, chem, landmines, cluster munitions):
  - Sig + ratif – 4 ALP, 4 Coalition

Vienna Declaration  
of the 1st Meeting of States Parties of the Treaty on the Prohibition  
of Nuclear Weapons  
23 June 2022

“Our Commitment to a World Free of Nuclear Weapons”

“We regret and are deeply concerned that despite the terrible risks, and despite their legal obligations and political commitments to disarm, none of the nuclear- armed states and their allies under the nuclear umbrella are taking any serious steps to reduce their reliance on nuclear weapons.”



# Security concerns of states under the TPNW 3

7 Feb 2025 TPNW/MSP/2025/7

“Together with all other States parties to the NPT, States parties to the TPNW share the goal of a world without nuclear weapons and undiminished security for all. This can only be achieved by active steps towards disarmament.

Instead, the security of States parties to the TPNW is actively diminished by nuclear weapons and the perpetual reliance – in the face of extensive and growing evidence of the consequences and risks – on a dangerous and speculative system of nuclear deterrence, which illegitimately and unjustly transfers risk to all States and threatens the future of humanity.”



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For numbered affiliations see end of article.

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## Ending nuclear weapons, before they end us

WHO's mandate to provide evidence on health effects must be restored

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2025 joint editorial published in 134 medical journals

While only nuclear-armed states can disarm, nuclear-allied states need to stop contributing to nuclear dangers and consistently become part of the solution

Joining the TPNW is the most effective way to do this

Back-up

# Nuclear disarmament priorities for Australia

- No nuclear weapons in Australia
- End support for NW, any role for them for Australia
- Stop providing assistance for possible use of NW
  - Command and control links
  - Targeting
  - Base and support for nuclear operations
- Sign the TPNW soon
  - will provide basis for negotiations enabling ratification
  - work to support, promote, comply with and implement it
- Comply with SPNFZ - ensuring visiting or rotating=stationing craft are not NW-capable
  - eg B-52s, B2
  - nuclear-capable submarines, ships
- Practice non-proliferation and support NPT and safeguards by:
  - Avoiding fissile material naval fuel
  - Avoiding (first) exploitation of NPT Paragraph 14 loophole, rather work to close it
  - End Australian involvement in proliferation-sensitive uranium laser enrichment R&D
- End mining and export of uranium, particularly to nuclear-armed states

# TPNW prohibitions

- Assistance and encouragement by nuclear umbrella states
  - Endorsement of doctrines and policies supporting nuclear weapon possession
  - Participation in nuclear planning
  - Provision of capabilities in support of a nuclear posture
  - Participation in nuclear strike exercises and demonstrations of nuclear capability
  - Logistical and technical support to nuclear forces
  - Development, production, and maintenance of key components for nuclear weapons
  - Ownership in and other financial assistance to the nuclear-arms industry



# THE AUKUS SUBMARINES ARE A ROTTEN DEAL FOR AUSTRALIA

- 
- The illustration shows a dark blue submarine on the ocean surface. The words 'No AUKUS SUBS' are spray-painted in red and pink on its side. A yellow radiation symbol is also visible on the hull. The background is a bright red sun or sky, with several small, colorful fish swimming around the submarine. Lines connect the text points to various parts of the submarine and the background.
- At \$368 billion, it's our most expensive military purchase with no guarantee 8 subs (due 2035-40) will ever be delivered.
  - AUKUS is based on the groundless belief that our largest trading partner, China, is a threat to AUS.
  - Australia is now a nuclear target due to US bases and submarines operating from our territory.
  - The US Navy head has doubts they will build enough subs to provide any to AUS.
  - Too large and unsuitable to operate in the shallow seas off northern Australia.
  - Former PMs, MPs, military leaders and prominent Australians oppose AUKUS.
  - AUS will be required to store high level weapons grade nuclear waste from our submarines for tens of thousands of years.
  - The deal was made in secret without public or Parliamentary consultation, yet taxpayers will pay the bill.
  - Creates dependence on the US for decades to come, when international trust in the US is failing.
  - AUKUS undermines regional support for Nuclear Free South Pacific - a treaty we've signed and ratified.



Australian Peace and Security Forum For more: [austpeaceandsecurityforum.org.au](http://austpeaceandsecurityforum.org.au)

To date, A\$8 billion gift to US, UK submarine shipyards – no guarantees

# Australian Labor Party

## National Conference, Adelaide, 18 December 2018

### Resolution 397R

### Chapter 11

### Nuclear disarmament

Mover: Anthony Albanese (NSW)

Seconder: Richard Marles (VIC)

Labor in government will sign and ratify the Ban Treaty, after taking account of the need to:

- Ensure an effective verification and enforcement architecture;
- Ensure the interaction of the Ban Treaty with the longstanding Nuclear Non-Proliferation Treaty;
- Work to achieve universal support for the Ban Treaty.