

Nuclear-capable B-52H Stratofortress bombers: a visual guide to identification

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Media Information Kit



“Wow, a model of transparency.”

*Hans Kristensen,
Federation of American Scientists*

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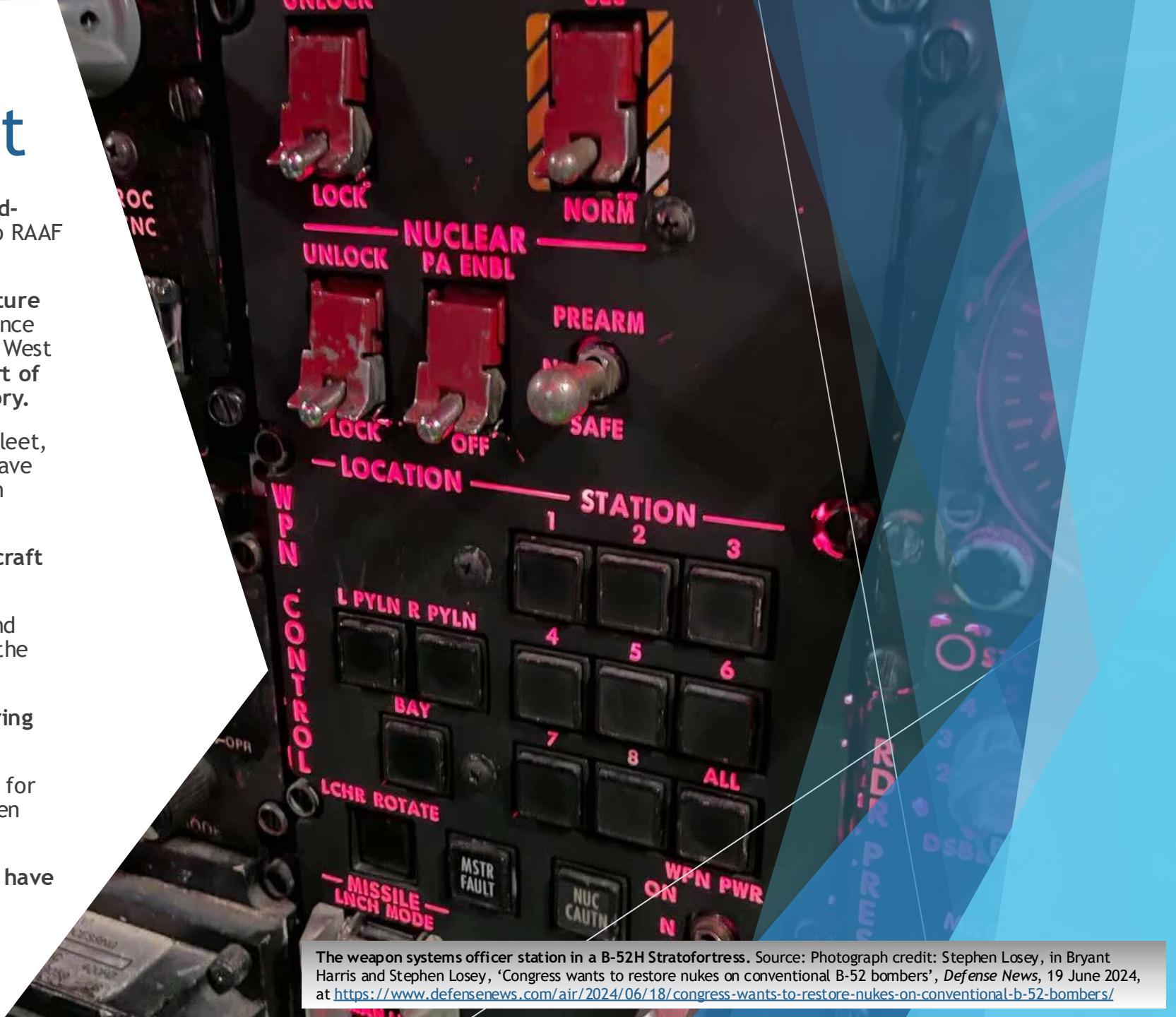
Hans M. Kristensen

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Authors' statement

- ▶ The Australian government has agreed to the forward-basing of US Air Force B-52 Stratofortress bombers to RAAF Base Tindal.
- ▶ This signals the development of a new nuclear posture for Australia, expanding from existing nuclear intelligence and communications assistance via Pine Gap and North West Cape to potentially direct ADF participation in support of US nuclear combat operations from Australian territory.
- ▶ Of the 76 B-52H bombers currently in the US active fleet, 46 can deliver strategic nuclear weapons. Another 30 have been converted, under the 2011 New START Treaty with Russia, to conventional-only capability.
- ▶ How will Australians know if US nuclear-armed aircraft are deployed to Australia?
 - ▶ The Albanese government has said it “understands and respects” the US doctrine to neither confirm nor deny the presence of nuclear weapons on US aircraft.
 - ▶ The first step is to identify which US aircraft entering Australia are capable of delivering nuclear weapons.
 - ▶ This study provides a reliable and transparent source for Australia and other host countries to distinguish between nuclear-capable and conventional-only B-52s bombers.
 - ▶ This research study, based on open sources, could have been - and should have been - carried out by the Australian government and provided to the public.




The weapon systems officer station in a B-52H Stratofortress. Source: Photograph credit: Stephen Losey, in Bryant Harris and Stephen Losey, 'Congress wants to restore nukes on conventional B-52 bombers', *Defense News*, 19 June 2024, at <https://www.defensenews.com/air/2024/06/18/congress-wants-to-restore-nukes-on-conventional-b-52-bombers/>

Who the *Visual Guide* is for



Implausible deniability - hiding behind the policy of “We don’t ask”

- ▶ US nuclear-capable aircraft do not typically fly armed with nuclear weapons. But this can change quickly in a crisis.
- ▶ In Australia, for example, there are **no domestic or international legal or policy barriers to US aircraft carrying nuclear weapons** when entering the country.
- ▶ The ability to identify *nuclear-capable aircraft* is a critical pre-requisite to ascertaining the presence or absence of *nuclear-armed aircraft*.
- ▶ The **first barrier** to reliable information on nuclear-armed and nuclear-capable aircraft is the **US doctrine of neither confirming nor denying the presence of nuclear weapons** on board US military aircraft.
- ▶ The **second barrier** is the “We don’t ask” policy of host governments, including Australia, that “understand and respect” the **US neither confirm nor deny policy**.
- ▶ In this **self-imposed ignorance**, governments intentionally deny citizens the knowledge they need to contribute to critical policy debates on matters of profound strategic significance.
- ▶ There is **no compelling national security reason for adherence to the neither confirm nor deny policy**.
- ▶ In the case of identifying nuclear-capable B-52s, the US has long provided Russia with all the data used in this study as part of its obligations under the New START arms limitation agreement.
- ▶ Governments of B-52 host governments, including Australia, **hide behind the “We don’t ask” policy to protect themselves from demands for accountability**.



5th Aircraft Maintenance Squadron load crews load a AGM-86B air-launch cruise missile trainer onto a B-52H Stratofortress. Source: Aaron Allmon, ‘Bomb load [image 17 of 19]’, DVIDS, photo ID: 1178845, VIRIN: 130516-F-PM487-025, photo date 26 Feb 2014, at <https://www.dvidshub.net/image/1178845/bomb-load>

What the *Visual Guide* provides

For each aircraft, the Visual Guide provides a page-long dataset and visual evidence for identifying the nuclear weapons capability of each USAF B-52 bomber, which

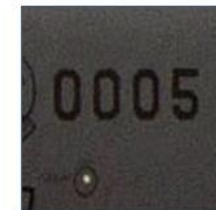
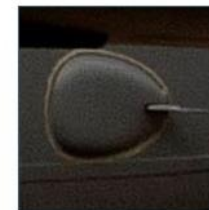
- ▶ is authoritative and accessible
- ▶ is reliable to a verifiable high degree of confidence for armament classification
- ▶ is based on transparent and publicly verifiable sources of information, mostly from US government sources
- ▶ provides Air Force unit and main operating base data
- ▶ includes 92 pages-long data entries for:
 - ▶ 76 aircraft in the USAF active B-52H fleet, of which
 - ▶ 46 are nuclear-capable
 - ▶ 30 are conventional-only
 - ▶ 5 inactive aircraft used for ground instruction
 - ▶ 11 aircraft in long-term storage converted to conventional only capability
 - ▶ of which 10 remain capable of restoration to the active fleet

60-0005

Status	Active
Armament classification	Nuclear-capable
Confidence level	High

Air Force serial number	60-0005
Tail number	AF 60 005
Fuselage nose number	0005
Construction number	464370

Main operating base	Minot AFB, North Dakota
Unit	5 th Bomb Wing (5 BW flagship)



Primary source:

Zade Vadnais, '23rd EBS brings bomber support to Diamond Shield 2019', *U.S. Strategic Command*, 1 April 2019, VIRIN: 190326-F-WV456-0290, photo date 26 March 2019, uploaded 1 April 2019, [accessed 29 February 2024], at <https://www.stratcom.mil/Media/News/News-Article-View/Article/1802985/23rd-eps-brings-bomber-support-to-diamond-shield-2019/>. High resolution at <https://media.defense.gov/2019/Mar/28/2002107119/-1/-1/0/190326-F-WV456-0290.JPG>.

Secondary source:

Marie Chealthia Ortiz, Matthew Plew (photographer) 'Bombers, Marine F-35s join Point Blank 20-4 exercise', *Air Force*, VIRIN: 200910-F-QP712-0085, photo date 10 September 2020, uploaded 11 September 2020, [accessed 18 February 2024], at <https://www.af.mil/News/Article-Display/Article/2345203/bombers-marine-f-35s-join-point-blank-20-4-exercise/>. High resolution at <https://media.defense.gov/2020/Sep/11/2002495900/-1/-1/0/200910-F-QP712-0085.JPG>.

Aircraft List - first five entries

	<i>Air Force Serial Number</i>	<i>Status</i>	<i>Armament Classification</i>	<i>Confidence Level</i>	<i>Main Operating Base</i>	<i>Unit</i>
1.	60-0001	Active	Nuclear-capable	High	Barksdale AFB, Louisiana	96th Bomb Squadron, 2nd Bomb Wing
2.	60-0002	Active	Nuclear-capable	High	Barksdale AFB, Louisiana	2nd Bomb Wing (2 BW flagship)
3.	60-0003	Active	Conventional-only	High	Barksdale AFB, Louisiana	93rd Bomb Squadron, 307th Bomb Wing
4.	60-0004	Active	Nuclear-capable	High	Minot AFB, North Dakota	23rd Bomb Squadron, 5th Bomb Wing
5.	60-0005	Active	Nuclear-capable	High	Minot AFB, North Dakota	5th Bomb Wing (5 BW flagship)

Summary Results of Confidence Levels

	<i>High</i>	<i>Moderate</i>	<i>Low</i>	<i>Very Low</i>	<i>None</i>	<i>Total</i>
<i>Number</i>	75	-	1	-	-	76
<i>% of total</i>	99%	-	1%	-	-	100%

Visual Guide: Aircraft List Results

The Visual Guide applies strict classification and confidence criteria to open source photography to identify each B-52H bomber in the U.S. Air Force active fleet as nuclear-capable or conventional-only.

For all but one of the 76 aircraft in the active fleet, the confidence criteria assigned is 'High'.

How to identify a nuclear-capable B-52 bomber

- ▶ One of the New START Treaty-mandated ‘externally observable’ and ‘distinguishing features’ of B-52 nuclear-capable bombers are what the US analyst Hans Kristensen has dubbed informally as ‘New START fins’.
- ▶ The ‘New START fins’ are attached to blisters mounted on the middle of the rear section of the port and starboard sides of the fuselage of the B-52 bomber.



Starboard side ‘New START fin’ in place on B-52H 60-0059. Source: Lauren Clevenger, ‘Guam Mayors visit Andersen AFB [Image 10 of 11]’, DVIDS, photo ID: 8114536, VIRIN: 231103-F-NI202-1227, photo date 11 November 2023, at <https://www.dvidshub.net/image/8114536/guam-mayors-visit-andersen-afb>



Nuclear capable



Conventional-only

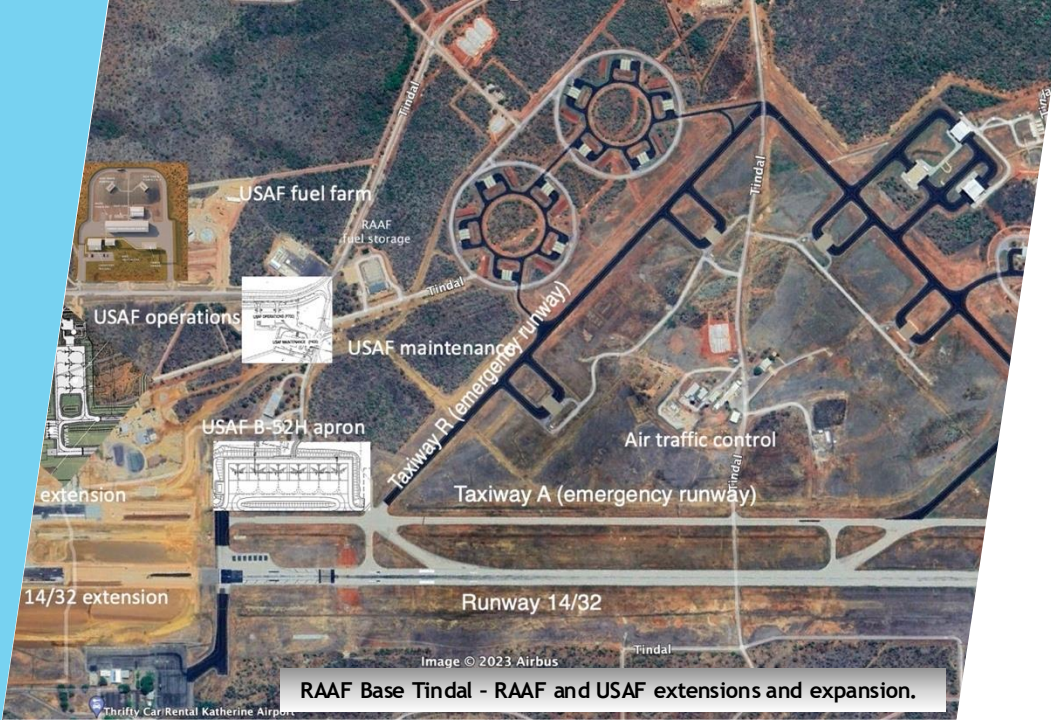
Absence of ‘New START fin’ on B-52H 61-0021 indicating conversion to conventional-only armament. Hans Kristensen@nukestrat, X, photo date 19 September 2022, uploaded 19 September 2022, at <https://twitter.com/nukestrat/status/1571518011143602176>

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

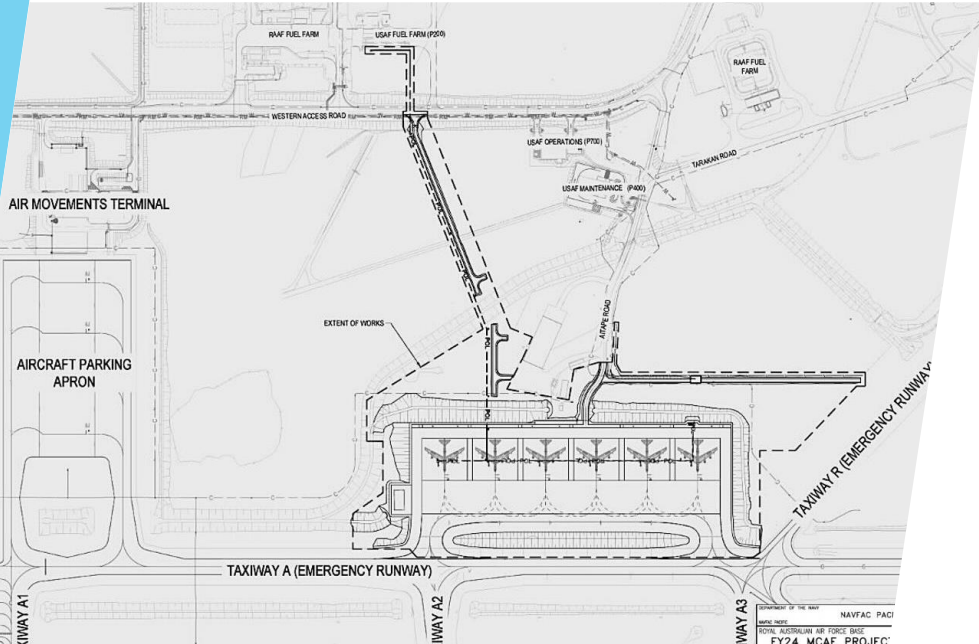
The US-funded expansion of RAAF Base Tindal in the Northern Territory includes the construction of dedicated USAF infrastructure, including:

- ▶ 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.



RAAF Base Tindal - RAAF and USAF extensions and expansion.



Site plan, USAF dedicated B-52H bomber, KC-30A tanker transport, and C-17A Globemaster III transport facilities construction, RAAF Base Tindal.

▶ Australia's **wilful ignorance** about B-52 nuclear operations today stands in stark contrast to the approach taken by the conservative government of Malcolm Fraser in the early 1980s.

▶ Fraser, **uniquely**, obviated the worldwide US doctrine of neither confirm nor deny.

▶ Under Fraser, B-52 operations in Australia, including landings in Darwin, were approved on the express condition that they be **'unarmed and carried no bombs'**.

The Fraser model

- ✓ The US informs the host government of the armament status of deployed bombers;
- ✓ the host government informs the host country public; and
- ✓ the US confirms the host's stated understanding in public.

When questioned about whether the US would withhold information about nuclear-armed B-52 operations from Australia, Fraser, characteristically, replied:

'They will tell me!'

What the Australian government could do and should do

The *Visual Guide* provides critical information on the nuclear-capability of US Air Force B-52 strategic bombers.

- ▶ This critical information could have been, and should have been, produced by the Australian government.
- ▶ The Australian government should have provided this critical information to the Australian people.
- ▶ The Australian government should have provided this critical information to other signatories to the Treaty of Rarotonga.
- ▶ The Australian government should have informed and engaged with the Australian public about the strategic implications of forward-basing B-52 bombers in Australia.
- ▶ The Australian government should adopt the Fraser model and insist on informing the Australian public about the armament status of any and all B-52 operations in Australia.

Nuclear-capable B-52H Stratofortress Bombers Project

Nautilus Institute

- ▶ Nuclear-capable B-52H Stratofortress bombers project, Australian Defence Facilities, Nautilus Institute, updated 25 August 2024, <https://nautilus.org/?p=99781>
- ▶ Vince Scappatura and Richard Tanter, 'Nuclear-capable B-52H Stratofortress strategic bombers: a visual guide to identification', Nautilus Institute Special Report, 26 August 2024, at <https://nautilus.org/napsnet/napsnet-special-reports/nuclear-capable-b-52h-stratofortress-bombers-a-visual-guide-to-identification/> (HTML intro); <https://nautilus.org/wp-content/uploads/2024/08/Nuclear-capable-B-52H-Stratofortress-final-23-08-2024.pdf> (PDF full)
 - ▶ *Authoritative and transparent B-52H Stratofortress nuclear-capable identification and policy guide for government and civil society.*
- ▶ Vince Scappatura and Richard Tanter, 'B-52s in Australia in the 1980s - US strategic drivers CINCPAC histories, and the nuclear heterodoxy of Malcom Fraser' (forthcoming).
 - ▶ *Historical study of the first phase of B-52s in Australia, and Fraser's unique contravention of the US doctrine of neither confirming nor denying the presence of nuclear weapons on USAF aircraft.*
- ▶ Vince Scappatura and Richard Tanter, 'Undermining Rarotonga: Australia's new nuclear posture' (forthcoming).
 - ▶ *Forward-basing of B-52s in Australia and the implications for Australian compliance with the Treaty of Rarotonga establishing the South Pacific Nuclear Weapon Free Zone.*