



B-2 BOMBER STRIKES IN YEMEN AND THEIR SIGNIFICANCE FOR AUSTRALIA



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I. INTRODUCTION

Vince Scappatura documents the novel use of Australian territory in supporting US B-2 bombers en route and in return from strikes against Houthi targets in Yemen on October 17, and highlights the profound strategic significance of this event for the future role Australia may play in US strategic bomber operations in the Asia Pacific and beyond.

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The views expressed in this report do not necessarily reflect the official policy or position of the Nautilus Institute. Readers should note that Nautilus seeks a diversity of views and opinions on significant topics in order to identify common ground.

Banner image: Possible path of the B-2 bombers flying over Australia enroute to striking Yemen, travelling west from the Coral Sea, across northern Australia and out to the US base on Diego Garcia. Source: Google Earth, author generated.

II. NAPSNET SPECIAL REPORT BY VINCE SCAPPATURA

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The global significance of B-2 strikes in Yemen

In a statement published late on the evening of Wednesday 16 October 2024 (EDT), Secretary of Defense Lloyd Austin revealed US forces had conducted strikes against five hardened underground weapons storage locations in Houthi-controlled areas of Yemen.^[1] Although the US Navy also played a role in the operations, US Central Command announced the use of US Air Force B-2 Spirit long-range stealth bombers.^[2]

The decision to launch strikes using the distinctive bat-wing bomber, which has been employed relatively infrequently in combat operations, contains a significance beyond the immediate conflict with the Houthis and carries implications that have assumed greater importance in light of the results of the recent US presidential election.

In the first instance the strikes signal the possibility of a larger conflagration in the Middle East, with the B-2's unique combination of stealth and 'bunker buster' capabilities sending a clear message to Iran about America's commitment to the defence of Israel; a commitment Washington has made even as Israel has taken a series of escalatory steps against Iran that have placed the region on the brink of all-out war.

However, they also carry a broader significance in demonstrating the ability of the US Air Force to deliver devastating strikes worldwide, including nuclear strikes due to the dual-capable role of the B-2, which is particularly salient for any future operations against both China and Russia.

Moreover, the B-2 strikes have momentous strategic implications for Australia, although this fact was left unexamined in media coverage of the event.

The Australian Department of Defence (hereafter Defence) confirmed to the Australian Broadcasting Commission (ABC) that Australian airspace and airbases were accessed in support of the strikes.[\[3\]](#) This participation marks the first time since World War II that Australian territory has been directly used to support US strategic bomber operations.

This novel use of Australian territory follows significant infrastructure developments at airbases across the north of the country, still ongoing, that are ultimately being developed to enable full-spectrum support for US 'deterrence' operations against China.[\[4\]](#)

The B-2 strikes in Yemen are the first active demonstration of these developing capabilities and a harbinger of more comprehensive Australian support for any future US strategic air operations, including potential nuclear missions, perhaps in the Middle East, but also ultimately against China and even Russia.

The Australian government is yet to acknowledge the profound strategic implications foregrounded by the strikes in Yemen, while Defence has been unnecessarily opaque about the details of the operation. A full account and wide understanding of Australia's role in the strikes and what it portends are crucially important for democratic transparency and accountability, while the spectre of the forthcoming Trump administration contributes to the urgency.

Trump's erratic and unpredictable decision-making, combined with the president's sole authority over the use of nuclear weapons, highlights the risks of the United States, and by implication, Australia, becoming engulfed in a fateful conflict that is neither anticipated nor desired by their respective peoples. If there was a time for Australian political leaders to be forthright about the dangers of positioning Australia in the frontline of US strategic bomber operations it is now more than ever.

A rare bomber strike; and a message to Iran

As the only US bomber capable of long-range stealth strike operations, the US Air Force is highly selective in the employment of its relatively small and expensive fleet of 19 B-2 strategic aircraft. The last time the B-2 was used in combat was January 2017, when two bombers were deployed from Whiteman Air Force Base, Missouri, to conduct strikes against Islamic State targets in north Libya.[\[5\]](#)

The reason for employing the B-2 in strikes in Yemen, according to a Pentagon spokesperson, was because of its 'unique capability and ability to carry a large payload to deliver munitions that could penetrate and strike these deep underground facilities that were storing components that the Houthis have been using.'[\[6\]](#)

Justified as degrading the Houthis' ability to attack vessels transiting the Red Sea, US Defense Secretary Lloyd J. Austin declared:

This was a unique demonstration of the United States' ability to target facilities that our adversaries seek to keep out of reach, no matter how deeply buried underground, hardened, or fortified. The employment of U.S. Air Force B-2 Spirit long-range stealth bombers demonstrate U.S. global strike capabilities to take action against these targets when necessary, anytime, anywhere.[\[7\]](#)

The Pentagon refused to divulge the specific type of ordinance that was employed in the strikes, although an anonymous source revealed to a specialist military journal that the B-2s dropped 2,000-pound BLU-109 JDAM 'bunker buster' bombs.[\[8\]](#)

Of particular significance for Iran is the fact that the B-2 is uniquely capable of employing the 30,000-pound GBU-57 Massive Ordnance Penetrator (MOP) in combat operations, reportedly reaching targets of up to 200 feet underground.^[9] Iran's nuclear facilities are known to be deeply embedded underground at Fordow and Natanz and could only plausibly be destroyed by the employment of the MOP.^[10]

Although Iran wasn't mentioned by name, the Pentagon made it clear that the employment of the B-2 was not only a message to the Houthis but any 'potential adversaries that hide things deep underground. It's a message to them as well.'^[11]

An historic first for Australia

Although aspects of the Australian role in supporting the B-2 strike mission remain unclear, the fact that it prefigures future support for a range of US missions involving conventional and nuclear forces in contingencies anywhere in the world demands a full account and understanding.

Australia is the only foreign country publicly known to have provided direct military support for the B-2 strikes in Yemen. Moreover, achieving this level of logistical cooperation represents a significant milestone in Australia-US military cooperation.

In its statement to the ABC, Defence declared that support for US strikes in Yemen was provided 'through access and overflight for US aircraft in northern Australia'. The ABC also reported that air-to-air refuelling aircraft were part of the mission, although Defence declined to confirm this claim.^[12]

The precise extent and nature of Australia's support is still unknown, including whether any Australian Defence Force (ADF) capabilities were employed in support of the B-2 bombers. Defence has so far declined to comment further about Australia's involvement, citing operational security. However, a Defence department spokesperson did issue a clarification to the ABC that American B-2s were not operating out of RAAF Base Tindal in the Northern Territory at the time of the strikes.

RAAF Base Tindal is currently undergoing a major infrastructure expansion project to support the future forward-deployment of up to six B-52 (and eventually, possibly B-2 and B-1) strategic bombers, along with refuelling and transport aircraft. The upgrades include a squadron operation facility for mission planning, crew briefings and intelligence, along with maintenance facilities, strategic fuel reserves, and earth covered magazines for stockpiling munitions. The massive fuel storage facilities at Tindal have already been completed.^[13]

B-2 bombers are known to have been operating out of RAAF Base Amberly in Queensland across the months of August and September in a Bomber Task Force mission that saw the aircraft covering vast distances throughout Australia and the Indo-Pacific, including 'hot pit' refuelling at the US base in Diego Garcia. However, the BTF mission had concluded by September 18.^[14]

The clarification about Tindal issued by Defence, along with the nondescript use of the term 'US aircraft', leaves open the possibility that B-2 bombers operated from other RAAF bases in northern Australia, either enroute or in return from Yemen, although there is no operational reason for the B-2s to have landed in Australia as against overflying and refuelling from aircraft operating from Australian airfields.

Rather, the allusion by Defence to providing 'access' for 'US aircraft' likely refers to US air refuelling tanker support as was reported by the ABC, drawing on either dedicated US or Australian strategic fuel reserves. According to an analysis undertaken by the defence news website *The War*

Zone, 'photos - backed up by some satellite imagery - show KC-135 Stratotankers and KC-46 Pegasus tankers at Cairns Airport in Queensland and more KC-135s at RAAF Amberley, soon after the strikes.'[\[15\]](#)

In fact, photos taken by local Australian aviation enthusiasts provide evidence for a plausible scenario whereby US tankers operating out of Australia were used to refuel US B-2 bombers both enroute and in return from strikes in Yemen.

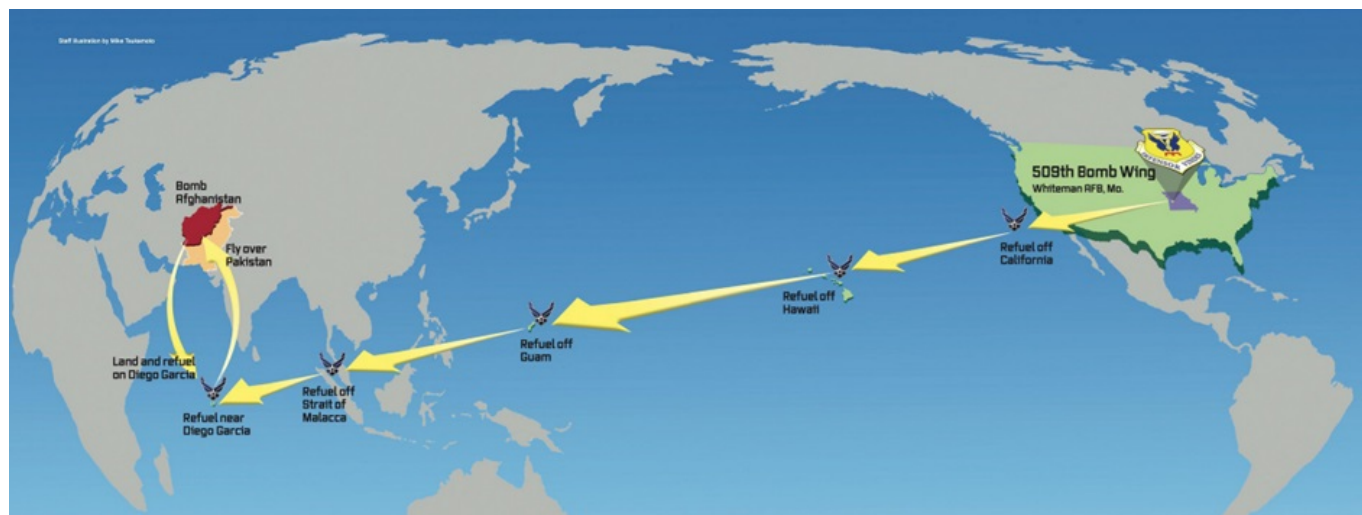
Western route to the Middle East

To fly over Australian airspace enroute to Yemen, US B-2 bombers are likely to have flown west over the United States and out across the Pacific Ocean before continuing over northern Australia and across the Indian Ocean to their eventual target.

A similar route, although traversing further to the north of Australia into Southeast Asia, was used when B-2 bombers launched strikes against the Taliban in Afghanistan in the aftermath of the terrorist attacks on 11 September 2001. To reach their targets without landing, the bombers were required to carry out ariel refuelling five times off the coasts of California, Hawaii, Guam, the Strait of Malacca and finally Diego Garcia (see figure 1).[\[16\]](#)

Although there is a shorter and more direct route to Yemen flying east from the United States, this path has the advantage of avoiding the need to inform and seek permission from several countries in Europe and the Middle East whose airspace would otherwise be traversed. Flying a carefully plotted western path over northern Australia would avoid the airspace of several Southeast Asian states with large Islamic populations and potential political sensitivities to the strikes. Whether intended or not, it also signals to China and Russia that US strategic airpower can attack them via their 'soft' southern underbelly as was planned and exercised during the Cold War.

Figure 1: Western route to the Middle East



This map shows the route B-2s took at the commencement of operation Enduring Freedom which opened the bombing campaign by the United States in Afghanistan in October 2001. Source: Mike Tsukamoto/Air & Space Forces Magazine, January 2017.

Overflying northern Australia

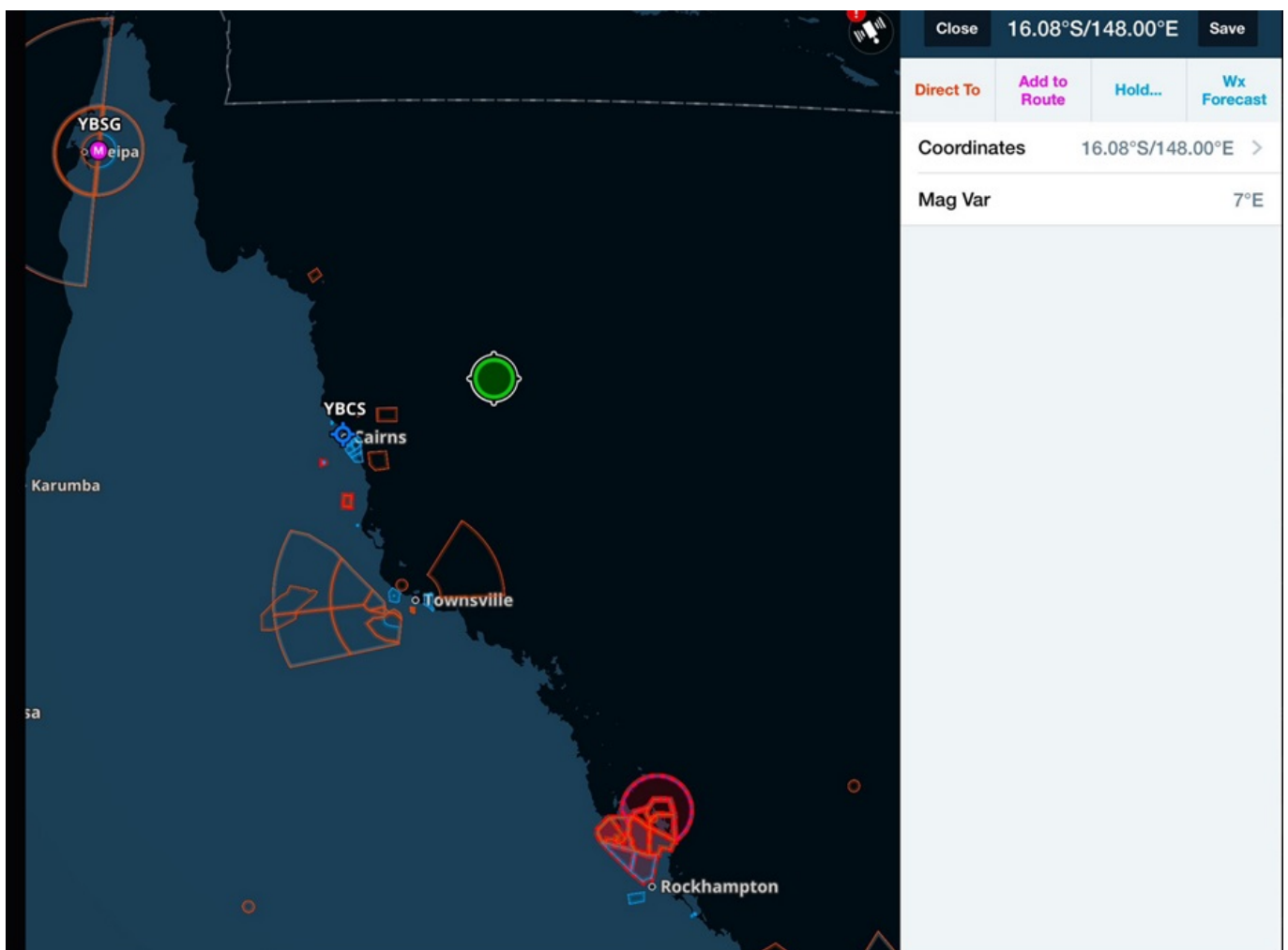
The presence of B-2s over Australian airspace at the time of the strikes in Yemen can be confirmed by aircraft communications with civilian air traffic control towers responsible for managing

Australia's airspace.[17] This type of communications is publicly available via online sources such as LiveATC.net.[18]

Australia's airspace is managed by Airservices Australia which operates two major air traffic service centres. The Brisbane Centre, located at Brisbane airport, manages the airspace over the northern half of Australia up to the airspace boundaries with Indonesia and Papua New Guinea in the north, and east to the airspace boundaries with New Zealand and Fiji. The airspace in the southern half of Australia and the Southern and Indian Oceans is managed by the Melbourne Centre.[19]

Air traffic communications obtained via LiveATC confirms that five B-2 bombers, in two formations of three and two aircraft, checked in with Airservices Australia's Brisbane Centre at around 5:00am UTC (3pm AEST) on Wednesday October 16. In a recording of the communications posted online, the bomber pilots confirm their position at 16.08 degrees south and 148.00 degrees east, which places their location at approximately 250km east of Cairns in the Coral Sea (see figure 2).[20] Presumably the bombers then flew westward across northern Australia enroute to Yemen, although it is unknown precisely how many of the bombers went on to carry out the strikes.[21]

Figure 2: B-2 check-in location, Coral Sea



The location of the five B-2 bombers (green target symbol) when checking in to Brisbane Centre.

Source: Thenewarea51 @Thenewarea51, X, 19 October 2024, at

<https://x.com/thenewarea51/status/1847401648475213982>

The Houthi-run al-Masirah TV reported that 15 strikes took place on October 17, with six airstrikes targeting three sites in the Yemeni capital Sanaa and nine strikes targeting two sites in Sadaa.[22]

The strikes are reported to have taken place early on Thursday morning local time, with amateur videos posted on social media showing the flash of explosions, rising flames and billowing smoke from where the strikes took place in the darkness before dawn.[23]

Having left their location in the Coral Sea after checking in with the Brisbane Centre on October 16 at 3pm AEST, the B-2 bombers arrived at their target destinations in Yemen approximately 19 hours later at around 3am in local time on October 17.[24]

As reported by ABC News, air-to-air refuelling aircraft were a part of the B-2 mission that logistically required 'access and overflight' in northern Australia. This claim was neither confirmed nor denied by Defence. However, a Queensland-based group of aviation enthusiasts spotted four US KC-135 Stratotankers on the ground at Cairns Airport on the morning of October 15.[25] All four aircraft were subsequently captured on video departing Cairns Airport at 3pm AEST on October 16, not to return until just after 8pm, presumably on their way to rendezvous with the B-2 bombers that were then approximately 250kms east off the coast of Cairns.[26] The four KC-135s were again observed taking off and later returning to Cairns Airport on the morning of Friday October 18, with local aviation enthusiasts continuing to track them to their final departure on October 20 (see figure 3).[27]

Figure 3: Four KC-135 aircraft at Cairns Airport



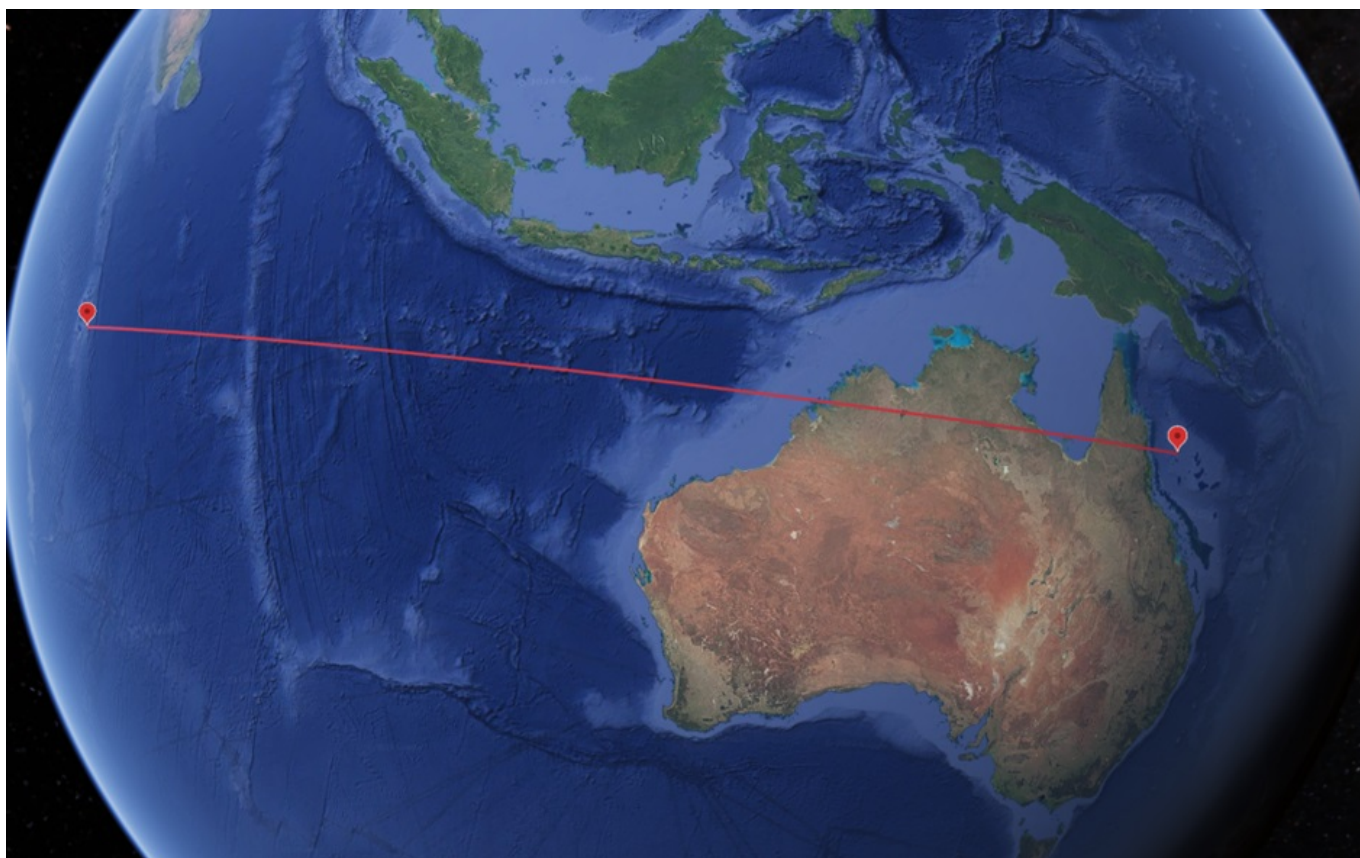
Source: 'fnqskies', *Far North Queensland Skies*, 18 October 2024, at <https://fnqskies.blogspot.com/>.

Piecing these elements together, a plausible, though incomplete, picture of the operational and logistical aspects of the B-2 strikes emerges. The bombers flew a great circle route travelling west from Whiteman Air Force Base, Missouri, across the Pacific Ocean to the Coral Sea, continuing over northern Australia and out across the Indian Ocean to the US base in Diego Garcia before proceeding to their targets in Yemen – and a similar inverse route on their return mission (see figure 4).

Given the logistics and fuel requirements involved, the B-2s are likely to have been refuelled by air

tankers from the continental United States, Hawaii and Cairns on October 15 and 16 (UTC); with a final layover and refuelling pit stop on the ground in Diego Garcia; and then the same sequence in reverse, including the refuelling over Australia on the morning of October 18 (AEST).[28]

Figure 4: B-2 possible overflight of Australia



Possible path of the B-2 bombers flying over Australia enroute to striking Yemen, travelling west from the Coral Sea, across northern Australia and out to the US base on Diego Garcia. Source: Google Earth, author generated.

Unanswered questions

There was no immediate post-strike assessment provided by the Pentagon when the strikes in Yemen were first announced on October 16, bar a brief statement that there were no indications of civilian casualties.[29] Two days later, in an apparent reference to the strike, a regular update on combat operations undertaken by US Central Command (CENTCOM) reported the successful destruction of 20 one-way attack drones and land-attack cruise missiles over the previous week in the CENTCOM area of responsibility, but with no specific dates or locations provided.[30]

A press statement issued by the Houthis declared the US attack to be ‘a blatant violation of Yemeni sovereignty’ and ‘a flagrant violation of all international laws, norms, and covenants.’[31] No assessment about the outcome of the strikes, including any civilian casualties, was provided in the statement given by the militia group. The Houthis also vowed not to be deterred from continuing their support for Gaza and Lebanon. True to their word, a ship in the Arabian sea was targeted the very next day, and a little over a week later another drone attack was launched towards the Israeli city of Ashkelon.[32]

Although the Pentagon provided only scant details of the strikes, there has not to date even been an official statement about Australia’s participation in the operation made by the Minister for Defence

or released on the website of the Australian Department of Defence. Nor has there been a post-operation account about the success or otherwise of the strikes.

This lack of transparency by Defence is typical but especially unwelcome given the operation marks an escalation in Australia's participation in the conflict in the Middle East and especially its contested role in providing direct and indirect support to Israel in its wars in Gaza and Lebanon where there are reasonable grounds for believing war crimes and even genocide have been committed.[\[33\]](#)

Defence frequently promotes capability demonstrations of increased interoperability between the ADF and US military forces in official media releases, and Australia's participation in the US strikes in Yemen represents the first combat demonstration of how Enhanced Air Cooperation under the framework of the US Force Posture Initiatives can be successively used for strategic bomber operations.[\[34\]](#) But if the joint operation was intended to contribute to 'deterrence' then the logical approach would have been to draw attention to it.

The obvious question that comes to mind therefore is why the Australian government acquiesced to involving Australia in the B-2 strikes? Australia's long history of reflexive support for US military operations probably goes a long way in explaining the decision. But incremental decisions announced in a series of recent AUSMIN consultations has led to an unprecedented degree of Australia-US defence integration with implications for Australian participation in US global military operations that political leaders in Australia may not have fully appreciated.[\[35\]](#)

Whatever the rationale, Australians have a right to know about the nature and extent of Australia's support for the strikes in Yemen, including what US aircraft were involved and what Australian bases they may have operated from. Specifically, Defence should be transparent with the Australian people about the following questions:

- Although it seems unlikely, did the B-2s in fact land at any Australian bases?
- US aerial refuelling aircraft were undoubtedly part of the mission. But did they draw from Australian or US dedicated fuel reserves?
- Were any ADF capabilities employed to support the B-2 strikes during their overflight of Australia or in the region more broadly?
- What assessment was made to ensure Australia's participation in the strikes was compliant with International Humanitarian Law?

Finally, participation in the B-2 strikes in Yemen have taken Australia a step closer to becoming further entangled in the conflict in the Middle East. This leads to the obvious question of what, if any, are the limits to Australia's support for US strategic bomber operations should the region become engulfed in all-out war?

Merely citing 'operational security' in refusing to answer such questions is wholly inadequate. Democratic transparency and accountability require any potential operational security concerns to be fully explained and justified.

The future of US strategic bomber operations in Australia

Although the strikes in Yemen point to the risks Australia faces in reflexively supporting its ally in yet another conflict in the Middle East, ultimately this unique demonstration of Australia's growing capabilities to contribute to US strategic air operations is a harbinger of more comprehensive

support for any future US conflict with China and/or Russia.

The Australian government has displayed no willingness to publicly acknowledge, let alone debate, the implications of America's steady military buildup in the north of the country and the deepening integration of the ADF with US armed forces. Washington now views Australia as 'the central base' of its Indo-Pacific operations squarely targeted at China; and the strikes in Yemen make clear that the United States is willing and able to utilise its new base capabilities in Australia to devastating effect.[36]

It is critical therefore that the Australian public and its political leaders at all levels comprehend the profound implications of participating in the B-2 strikes in Yemen. It 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, and especially around China and even Russia.

Although tactical surprise may require opacity before and during such a joint operation, there is no excuse for the failure to share with the Australian people what Australia has done, not least so that they are prepared to make informed judgements that will restrain or enable future expanded joint operations now envisioned by the two governments under the 2014 Force Posture Agreement and more recent AUKUS rubric, but not shared with their respective peoples.[37]

Until a full official account is provided, observers could be forgiven for assuming that supine acquiescence on the part of the Australian government in supporting American strikes combined with Defence's utter lack of accountability explains how Australian airbases and airspace were utilised to support the B-2 strikes in Yemen.

III. ENDNOTES

[1] 'Statement by Secretary of Defence Lloyd J. Austin III on U.S. Airstrikes in Houthi-Controlled Areas of Yemen', *US Department of Defence*, 16 October 2024, at <https://www.defense.gov/News/Releases/Release/Article/3937640/statement-by-secretary-of-defense-lloyd-j-austin-iii-on-us-airstrikes-in-houthi/>.

[2] 'U.S. Central Command Conducts Multiple Strikes on Underground Iran-Backed Houthi Weapons Facilities', *US Central Command*, 16 October 2024, <https://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/3937643/us-central-command-conducts-multiple-strikes-on-underground-iran-backed-houthi/>.

[3] Andrew Green and Jacob Greber, 'Australian air bases assisted with US strike on Houthi weapon stores', *ABC News*, 18 October 2024, at <https://www.abc.net.au/news/2024-10-18/australian-airbase-used-in-us-strike-on-houthi-stores-yemen/104490578>. Although ABC News cited Australian 'air bases' as having assisted with the strikes, Defence did not clarify the precise form of 'access' that was provided. However, as noted below, at least one Australian airport was in fact utilised to support US refuelling aircraft.

[4] Vince Scappatura, 'Australia's evolving nuclear posture: avoiding a fait accompli (part 1 of 2)', 12 October 2024, at <https://johnmenadue.com/australias-evolving-nuclear-posture-avoiding--fait-accompl-i-part-1-of-2/>; 'Australia's evolving nuclear posture: avoiding a fait accompli (part 2 of 2)', 14 October 2024, at <https://johnmenadue.com/australias-evolving-nuclear-posture-avoiding-a-fait-accompl-i-part-2-of-2/>.

[5] Megan Friedl, 'Long range strike operations in Libya', *United States Air Force*, 20 September 2017, at <https://www.af.mil/News/Article-Display/Article/1318139/long-range-strike-operatio->

[s-in-libya/](#).

[6] 'Pentagon Press Secretary Maj. Gen. Pat Ryder Holds a Press Briefing', *US Department of Defence*, 17 October 2024, at <https://www.defense.gov/News/Transcripts/Transcript/Article/3939030/pentagon-press-secretary-maj-gen-pat-ryder-holds-a-press-briefing/>.

[7] 'Statement by Secretary of Defense Lloyd J. Austin III on U.S. Airstrikes in Houthi-Controlled Areas of Yemen', *US Department of Defense*, 16 October 2024, at <https://www.defense.gov/News/Releases/Release/Article/3937640/statement-by-secretary-of-defense-loyd-j-austin-iii-on-us-airstrikes-in-houthi/>

[8] Chris Gordon, 'B-2 Bombers Strike Houthi Targets in Yemen', *Air & Space Forces Magazine*, 17 October 2024, at <https://www.airandspaceforces.com/b-2-stealth-bombers-strike-houthi-targets-yemen/>.

[9] The B-52 bomber has also carried the MOP during testing, but the B-2 is the only aircraft able to employ the MOP operationally. Oliver Parken, 'Our Best Look Yet At The Massive Ordnance Penetrator Bunker Buster Bomb', *The War Zone*, 3 May 2023, at <https://www.twz.com/our-best-look-yet-at-the-massive-ordnance-penetrator-bunker-buster-bomb>.

[10] Darya Dolzikova and Matthew Savill, 'Why Iran may accelerate its nuclear program, and Israel may be tempted to attack it', *Bulletin of the Atomic Scientists*, 26 April 2024, at <https://thebulletin.org/2024/04/why-iran-may-accelerate-its-nuclear-program-and-israel-may-be-tempted-to-attack-it/>.

[11] 'Pentagon Press Secretary Maj. Gen. Pat Ryder Holds a Press Briefing'.

[12] Andrew Green and Jacob Greber.

[13] Kirsty Needham, 'US military, seeking strategic advantages, builds up Australia's northern bases amid China tensions', *Reuters*, 26 July 2024, at <https://www.reuters.com/world/us-military-seeking-strategic-advantages-builds-up-australias-northern-bases-2024-07-26/>.

[14] 'Spirit of cooperation', *Department of Defence*, 18 September 2024, at <https://www.defence.gov.au/news-events/news/2024-09-18/spirit-cooperation>.

[15] Thomas Newdick, 'Questions Linger Over Australia's Role In B-2 Spirit Strikes On Yemen', *The War Zone*, 18 October 2024, at <https://www.twz.com/air/questions-linger-over-australias-role-in-b-2-spirit-strikes-on-yemen>. Note that photos and satellite imagery are cited but not provided in the article. However, Newdick confirmed with the author that privately sourced satellite imagery shows the KC-135s on the ground in the timeframe that would suggest participation in the Yemen strikes.

[16] Daniel L. Haulman, '44 hours', *Air & Space Forces Magazine*, January 2017, at <https://www.airandspaceforces.com/PDF/MagazineArchive/Documents/2016/December%202016/1216hours.pdf>.

[17] B-2 bombers checked in regularly with civilian air traffic controllers on their last combat operation in Libya in 2017. Scott Canon, 'Inside a B-2 mission: How to bomb just about anywhere from Missouri,' *The Kansas City Star*, 7 April 2017, at <https://www.kansascity.com/news/state/missouri/article143191469.html>.

[18] LiveATC.net, a listener- and advertising-supported website, is one popular source of such data. See LiveATC.net, 'Live Air Traffic - From Their Headsets to You', at <https://www.liveatc.net/>.

[19] 'Air Traffic Services Centres', *Airservices Australia*, accessed 21 October 2024, at <https://www.airservicesaustralia.com/about-us/about-our-operations/facilities/air-traffic-management-services/>.

[20] Thenewarea51 @Thenewarea51, X, 19 October 2024, at <https://x.com/thenewarea51/status/1847401648475213982>; Coronet East, 'Sarge 11 Flight - 16 Oktober 2024', *Soundcloud*, 21 October 2024, at <https://soundcloud.com/user-378472020/sarge--1-flight-16-oktober-2024>. A copy of the full audio file obtained from LiveATC.net is in possession of the author.

[21] B-2 bomber operations in the past have included 'spares' for contingency purposes. Canon, Inside a B-2 mission: How to bomb just about anywhere from Missouri.

[22] 'Houthis vow retaliation as U.S. strikes Yemeni targets', *Xinhua*, 18 October 2024, at <https://english.news.cn/20241018/8f7f9fda4d6745c293d61ef9164d7474/c.html>; 'U.S.-British coalition makes air raids on Houthi sites in Yemen', *Xinhua*, 17 October 2024, at <https://english.news.cn/20241017/a82816be305d4be3b85cc765bcf772b8/c.html>.

[23] Savunma İşleri @savunmaisleri, X, 17 October 2024, at <https://x.com/savunmaisleri/status/1846789949485375803>.

[24] According to one Yemeni news website, the strikes took place at around 3:00am in local time. 'A qualitative shift.. "American Ghost" penetrates Houthi fortifications in Sana'a and Sa'dah with unprecedented strikes', *Barran.press*, 17 October 2024, at <https://barran.press/news/topic/5894>.

[25] Jonathan Williams, Far North Queensland Plane Spotters, Facebook, 15 October 2024, at <https://www.facebook.com/share/p/1CgzUyUkUz/>. A single KC-46 aircraft was also spotted at Cairns airport, although its participation in the B-2 strike is less clear.

[26] Caitlin Emma Lewis-Jones, Far North Queensland Plane Spotters, Facebook, 16 October 2024, at <https://www.facebook.com/share/p/19Yqo1ZzUD/>; Jonathan Williams, Far North Queensland Plane Spotters, Facebook, 17 October 2024, at <https://www.facebook.com/share/p/1QmztTCQUr/>.

[27] Admin, Far North Queensland Plane Spotters, Facebook, 18 October 2024, at <https://www.facebook.com/share/p/1Bt6bVn3At/>; Andrew Bel, Far North Queensland Plane Spotters, Facebook, 18 October 2024, at <https://www.facebook.com/share/p/15bPGT5jem/>; Jensen Jackson, Far North Queensland Plane Spotters, Facebook, 18 October 2024, at <https://www.facebook.com/share/p/17ozTtSdeM/>; Jensen Jackson, Far North Queensland Plane Spotters, Facebook, 20 October 2024, at <https://www.facebook.com/share/p/1EcK6GvA7q/>.

[28] A layover and refuelling pit stop on the ground in Diego Garcia, as against an ariel refuelling, is the most plausible scenario given it took the bombers approximately 19 hours to reach their targets from their check in location over the Coral Sea. Assuming an average cruising speed of 487 knots, it would have otherwise taken the bombers approximately 14 hours to reach Yemen flying non-stop from the Coral Sea, over northern Australia and across the Indian Ocean.

[29] U.S. Central Command Conducts Multiple Strikes on Underground Iran-Backed Houthi Weapons Facilities.

[30] 'U.S. Central Command Weekly Update', *US Central Command*, 18 October 2024, at

<https://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/3940149/us-central-command-weekly-update/>.

[31] Houthis vow retaliation as U.S. strikes Yemeni targets.

[32] 'Yemen's Houthis say they targeted ship in Arabian sea with drones', *Reuters*, 19 October 2024, at <https://www.reuters.com/world/middle-east/yemens-houthis-say-they-targeted-ship-arabian-sea-with-drones-2024-10-18/>; 'Yemen's Houthis launched drones towards Israel's Ashkelon, spokesperson says', *Reuters*, 29 October 2024, at <https://www.reuters.com/world/middle-east/yemens-houthis-launched-drones-towards-israels-ashkelon-spokesperson-says-2024-10-29/>.

[33] On Australia's contested role in providing support to Israel see, Richard Tanter, 'Does Pine Gap place Australia at risk of complicity in genocide in Gaza? A complaint concerning the Australian Signals Directorate to the Inspector General of Security and Intelligence', 27 March 2024, at: <https://nautilus.org/wp-content/uploads/2024/03/Complaint-mss-27-March-final-v4.pdf>

On evidence of war crimes and genocide see, Francesca Albanese, 'Anatomy of a Genocide: Report of the Special Rapporteur on the situation of human rights in the Palestinian territories occupied since 1967 to Human Rights Council - Advance unedited version (A/HRC/55/73), United Nations, 25 March 2024, at <https://www.un.org/unispal/document/anatomy-of-a-genocide-report-of-the-special-rapporteur-on-the-situation-of-human-rights-in-the-palestinian-territory-occupied-since-1967-to-human-rights-council-advance-unedited-version-a-hrc-55/>.

[34] 'Enhanced Air Cooperation', *Department of Defence*, accessed 31 October 2024, at <https://www.defence.gov.au/defence-activities/programs-initiatives/united-states-force-posture-initiatives/enhanced-air-cooperation-initiative>.

[35] Ashley Townshend, 'How to Manage the Risks and Requirements of U.S.-Australia Force Posture Cooperation', Carnegie Endowment for International Peace, 20 October 2023, at <https://carnegieendowment.org/research/2023/10/how-to-manage-the-risks-and-requirements-of-us-australia-force-posture-cooperation?lang=en>.

[36] James Curran, 'The map that Canberra doesn't want you to see', *Australian Financial Review*, 27 October 2024, at <https://www.afr.com/policy/foreign-affairs/three-key-zones-how-the-pentagon-sees-australia-20241022-p5kk5w>.

[37] Richard Tanter, 'Cover up: The Australian Government's secret list of US bases', *Pearls and Irritations*, 25 July 2023, at <https://johnmenadue.com/cover-up-the-australian-governments-secret-list-of-us-bases/>.

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