Beyond the Status Quo

Australia's strategic policy options in Antarctica

An Australian National Internships Program report drafted for

The Office of Mr. Ben Morton MP Federal Member for Tangney

&

The Joint Standing Committee on the National Capital and External Territories inquiry into Australia's Antarctic Territory

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Executive Summary

In today's rapidly changing strategic environment, Australia's sovereignty and broader national interests in Antarctica and the Southern Ocean can no longer be taken for granted. Antarctica is seeing unprecedented levels of activity from states new to the icy continent and increasing pressure on the Antarctic Treaty System (ATS), which protects against resource extraction and militarisation. Antarctica's strategic importance and resource riches demand Australia's reassessment of its strategic policy settings to the South to ensure Federal decision-makers are appraised of developments.

China's activities on the continent will be used as a case study to test the assumption made by Australia's key policy documents, which see no credible risk of being challenged in such a way that requires a substantial military response for at least the next few decades. Parts of China's opaque policy toward Antarctica are directly at odds with Australia's strategic interests, with alleged dual-use (military and civilian) facilities within Australian Antarctic Territory, as well as dangerous domestic rhetoric around resource extraction.

Research undertaken for this report includes Australia's key policy document concerning Antarctica the 2016 *Australian Antarctic Strategy and 20 Year Action Plan*, academic journals, think tank reports, as well as primary sources from submissions and transcripts of hearings of the Joint Standing Committee on the National Capital and External Territories inquiry into Australia's Antarctic Territory.

This report finds that Australia's policy is adequate for the status quo, but it does not account for potentially heightened competition in Antarctica and the Southern Ocean, particularly beyond 2048. Unless steps are taken to reduce emerging and latent competitive tensions, Australia risks being left out of the continent's future. Of course, Antarctica's strategic imperatives cannot be examined in isolation. Budget constraints and Australia's strategic priorities in Asia mean that substantial investment in the sorts of capabilities needed may not be feasible.

This report and its recommendations focus on addressing the most pressing long-term challenges for Australia in Antarctica: militarisation, resource exploitation, capabilities, and maintaining Australia's leadership in the continent's affairs.

Recommendations

Militarisation:

- Prioritise the strengthening of inspection regimes through the Antarctic Treaty System;
- Standardise inspection procedures for all stations on Antartica and exercise the right to inspect more frequently;
- \circ Improve the expertise of observers carrying out and training for inspections.

Resource exploitation:

- Transparent discussions with all consultative parties to the Antarctic Treaty in anticipation of sovereignty and resource issues being revisited in 2048;
- Enforce guidelines and principles for scientific work, especially around mineral resources;
- Establish tourism guidelines.

Capabilities:

- Give careful consideration of ice-strengthened patrol boats in upcoming Australian defence planning and acquisition;
- Initiate or enhance formalized engagement between the Australian Defence Force, the US and New Zealand in Southern Ocean Patrols;
- Establish a year-round runway to ensure heavy-lift capabilities are maintained.

Maintaining Australian leadership:

- Appoint an "Antarctic Ambassador" a designated senior diplomat to play a coordination role and lead discussions on areas of tension;
- Promote the Australian Antarctic Territory in the Australian conscious;
- Continue deep policy research on the changing Antarctic political environment;
- Continue cooperation with like-minded states, as well as those that are not like-minded, with an emphasis on fostering greater transparency and on ATS issues of militarisation and resource exploitation.

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List of Abbreviations

AAD	Australian Antarctic Division
AAP	Australian Antarctic Program
AAT	Australian Antarctic Territory
ADF	Australian Defence Force
ANZUS	The Australia, New Zealand, United States Security Treaty
ASPI	Australian Strategic Policy Institute
ATCM	Antarctic Treaty Consultative Meetings
ATS	Antarctic Treaty System
CCAMLR	Convention on the Conservation of Antarctic Marine Living Resources
CRAMRA	Convention on the Regulation of Antarctic Mineral Resource
DFAT	Department of Foreign Affairs and Trade
PLA	People's Liberation Army
RAAF	Royal Australian Air Force
RAN	Royal Australian Navy
UNCLOS	The United Nations Convention on the Law of the Sea
US	United States of America

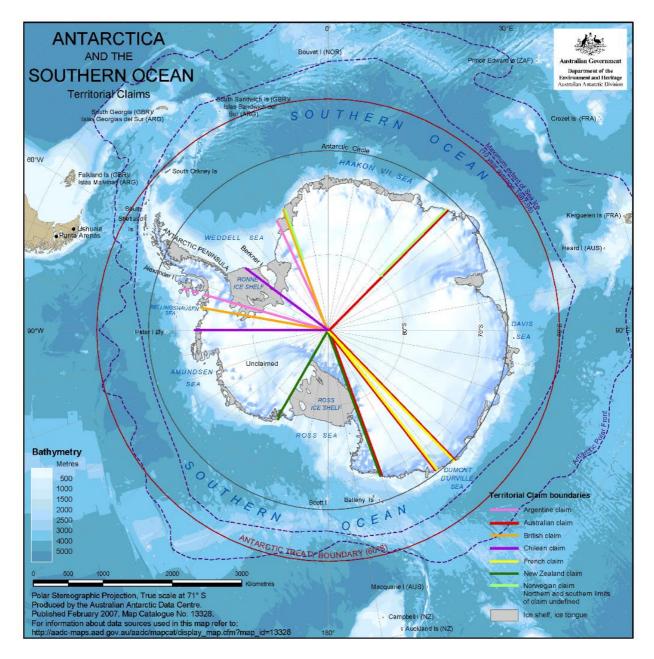


Figure 1: Map of Antarctica and the Southern Ocean Territorial Claims. Australia claims sovereignty over 42% of Antarctic and sovereign rights over adjacent offshore areas.¹

Introduction:

Before Australia released its action plan, AJ (Tony) Press headed an inquiry on Antarctica's future, coming up with recommendations in the form of a 20 Year Australian Antarctic Strategic Plan, which Mr. Press confirmed were largely adopted by the Commonwealth

¹ Australian Antarctic Data Centre, *Antarctica and the Southern Ocean Territorial Claims*, Australian Antarctic Division, Canberra, 2017. Accessed October 1, 2017.

https://data.aad.gov.au/aadc/mapcat/display_map.cfm?map_id=14610.

Government.²³ This plan addressed the dominant policy discourse, which has been focused on the protection of Australia's national interests, protecting and/or using resources of the Southern Ocean, as well as leading international cooperation and scientific research.⁴

This plan was released in conjunction with the Foreign Affairs, Defence and Trade References Committee's inquiry into *Australia's future activities and responsibilities in the Southern Ocean and Antarctic waters*.⁵ These two enquiries and their subsequent recommendations resulted in the 2016 *Australian Antarctic Strategy and 20 Year Action Plan*, which defined Australia's national interests in Antarctica as follows:⁶

- maintain Antarctica's freedom from strategic and/or political confrontation;
- preserve our sovereignty over the Australian Antarctic Territory, including our sovereign rights over adjacent offshore areas;
- support a strong and effective Antarctic Treaty System;
- conduct world-class scientific research consistent with national priorities;
- protect the Antarctic environment, having regard to its special qualities and effects on our region;
- be informed about and able to influence developments in a region geographically proximate to Australia;
- foster economic opportunities arising from Antarctica and the Southern Ocean, consistent with our Antarctic Treaty System obligations, including the ban on mining and oil drilling.

These highly interconnected interests are fundamentally underwritten by the Antarctic Treaty System (ATS), with Australia's attention and resources focused on its sustainment.

Antarctic Treaty System:

As spelled out clearly in Australia's above strategic interests, the ATS is fundamental to the maintenance of security and order in Antarctica. The ATS is comprised of the Antarctic Treaty (1959), the Conservation of Antarctic Seals (1972) The Conservation of Antarctic Marine Living Resources (CCAMLR, 1980) and the Environment Protocol (1991).⁷

However, the ATS has elements of institutional weakness; it is reliant on decision making by consensus, and only established a secretariat in 2004, with the Antarctic Treaty Consultative Meeting (ATCM) the only decision making forum.⁸ In practice, the ATCM maintains control over the system and its processes, which allows it to address broader challenges, such as

⁶ Australian Antarctic Strategy and 20 Year Action Plan, Commonwealth of Australia 2016, 17.

² Anthony Press, *20 Year Australian Antarctic Strategic Plan*, (Canberra: Department of Environment and Energy, Australian Antarctic Division, 2014) 6-15.

³ Anthony Press, Joint Standing Committee on the National Capital and External Territories Inquiry into Australia's Antarctic Territory, Submission 5 (Hobart, August 2017) 1.

⁴ Jeffrey McGee, and Danielle Smith, "Framing Australian Antarctic policy: the 20-year Antarctic plan and beyond," *Australian Journal of Maritime And Ocean Affairs* 9 (2017): 25.

⁵ Foreign Affairs, Defence and Trade References Committee, *Australia's future activities and responsibilities in the Southern Ocean and Antarctic waters* (Senate Printing Unit, Parliament House: Canberra, 2014) ix.

⁷ Doaa Abdel-Motaal, *Antarctica: The Battle for the Seventh Continent* (Praega: Santa Barbara, 2016) 67. ⁸ Ibid., 3.

Malaysia's critique of the Antarctic Treaty and the ATS – referred to as the 'Question of Antarctica' in the $\rm UN.^{910}$

Enduring Security Concerns:

At the start of the cold war there were global concerns that Antarctica would become a new front for strategic competition. The 1959 Antarctic Treaty ended uncertainty by forbidding the militarisation of the continent (Article I), as well as establishing the world's first nuclear-free zone (Article V).¹¹

The Antarctic Treaty's first words are "Antarctica shall be used for peaceful purposes only."¹² Such words make it clear that security was a concern from the beginning, and remains so sixty years later. Territorial issues persist with conflicting claims a serious ongoing challenge. Article IV of the Antarctic Treaty, which deals with territorial issues is known as "a purgatory of ambiguity."¹³ Beyond this, future mining prospects, bioprospecting activities, protection of marine life in Antarctic Waters and jurisdictional issues over criminal activity in Antarctica (particularly with tourism growth), remain unresolved tensions.¹⁴ The combined weight of these issues may weaken the ATS governance system in the future, especially as Antarctica has historically been a region where issues were addressed proactively with broad international cooperation.¹⁵ The ATS now appears more reactive than proactive.

Australia's Sovereignty:

The Department of Foreign Affairs and Trade (DFAT) states that the Antarctic Treaty provides a "carefully crafted compromise on differences over territorial sovereignty in Antarctica that protects Australia's sovereign interests and limits the potential for strategic tension in the region to our south."¹⁶ Argentina, Chile, France, New Zealand, Norway and the United Kingdom also claim territory, with Argentina, Chile and the United Kingdom having overlapping claims. DFAT also sees the Environmental Protocol dispelling issues around resource exploitation.

In reality, all territorial claims in Antarctica are underpinned by a "combination of the following principles: discovery, geographical proximity, territorial contiguity, geological affinity, inherited rights occupation, formal acts of possession, performance of administrative

⁹ Marcus Haward, "Reader response: Looking south…" *ASPI Strategist*, October 15, 2014, accessed August 8, 2017. https://www.aspistrategist.org.au/reader-response-looking-south/.

¹⁰ Secretariat of the Antarctic Treaty, "ATCM Measures," accessed October 1, 2017.

http://www.ats.aq/devAS/ats_meetings_meeting.aspx?lang=e.

¹¹ Secretariat of the Antarctic Treaty, *The Antarctic Treaty*, accessed August 8, 2017. http://www.ats.aq/index e.htm.

¹² Ibid.,

 ¹³ Elizabeth Nyman, "Australia's current security concerns," in *Handbook on the Politics of Anarctica* ed. Klaus Dodds, Alan Hemmings, and Peder Roberts (Edward Elgar Publishing: Cheltenham, 2017) 572, 580.
¹⁴ Ibid., 572.

¹⁵ Ibid., 581.

¹⁶ Department of Foreign Affairs and Trade, *Joint Standing Committee on the National Capital and External Territories Inquiry into Australia's Antarctic Territory, Submission 17* (Canberra, September 2017) 1.

acts, and the 'sector principle' of using the meridians to demarcate boundaries."¹⁷ However, no claim is supported by the US or the Soviet Union (now Russia), as they reserve the right to make a future claim. These states level the argument that "traditional and orthodox view that discovery and exploration of new territories, which are not followed by effective control or occupation, do not give valid title."¹⁸ This sort of language is very similar to that which is used by China in the South China Sea.¹⁹ The fact that the US does not recognise Australia's claims means that its primary ally through ANZUS Treaty, would not necessarily be expected to assist Australia in the unlikely event real conflict arises.

Consultative Parties to the Antarctic Treaty (29)					
Origonal Signatories (12)	Others (17)				
Claimants (7)	Brazil				
Argentina	Bulgaria				
Australia	China*				
Chile	Czech Republic				
France	Ecuador				
New Zealand	Finland				
Norway	Germany				
United Kingdom	India				
Non-claimants (5)	Italy				
Belgium	Republic of Korea				
Japan	Netherlands				
Russia*	Peru				
South Africa	Poland				
United States*	Spain				
*States that have reserved the right to make a claim to the Antarctic at	Sweden				
any time.	Ukraine				
	Uruguay				

Figure 2: Consultative Parties to the Antarctic Treaty.²⁰

¹⁷ Abdel-Motaal, *Antarctica: The Battle for the Seventh Continent*, 56.

¹⁸ Abdel-Motaal, *Antarctica: The Battle for the Seventh Continent*, 60, 61.

¹⁹ Ministry of Foreign Affairs of the People's Republic of China, "The Historical Basis Of China's Sovereignty To Spratly Islands," (中国对南沙群岛拥有主权的历史依据). November 22, 2000, accessed May 1, 2017, http://www.fmprc.gov.cn/web//ziliao_674904/zt_674979/ywzt_675099/wzzt_675579/2305_675827/t10648.sht ml.

²⁰ Secretariat of the Antarctic Treaty, *The Antarctic Treaty*, accessed August 8, 2017. http://www.ats.aq/index_e.htm.

There is also frequent misrepresentation around Article VI, that the claims are frozen, or suspended, whereas in reality what is suspended is not the claims, but the arguments about them.²¹ That being said, it is not necessarily clear that Australia's claims persist without the treaty. As early as 1986 issues around sovereignty and international law in Antarctica were recognised.²² Gillian Triggs, a distinguished law professor stated, "there is little evidence to support Australian sovereignty over the vast hinterland of its claimed sector beyond exploratory expeditions and the extension of legislation. It is thus doubtful whether Australia can support its claim to sovereignty over such territory." She went on to flag future exploitation of resources presenting sovereignty issues, "it is unlikely that other States will tolerate the continued management of the region pursuant to a Treaty regime controlled by the present Consultative Parties." The very same fears persist today.

The question of resources is seen as central to the question of sovereignty, as well as the survival of the Antarctic Treaty. Australia was in favour of limited and regulated resource exploitation right up until it pulled out of the Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA), in 1989.²³ This reportedly frustrated the United States and New Zealand, among others, who believed exploration and development was inevitable and regulation was the best way forward.²⁴

²¹ Marcus Haward and Andrew Jackson, "Australia's Antarctic future," in *Australia and the Antarctic Treaty System: 50 Years of Influence* ed.Tom Griffiths, and Marcus Haward, (University of New South Wales Press: Sydney, 2011) 340.

²² Gillian Triggs, International Law and Australian Sovereignty in Antarctica (Legal Books: Sydney, 1986) 323.

 ²³ Malcolm Browne, "France and Australia kill pact on limited Antarctic mining and oil drilling," *New York Times*, September 25, 1989, accessed October 12, 2017. http://www.nytimes.com/1989/09/25/world/france-and-australia-kill-pact-on-limited-antarctic-mining-and-oil-drilling.html?pagewanted=all.
²⁴ Ibid.,

Broader Scholarship on Antarctica:

Antarctica's sovereignty is a particularly divisive issue in modern scholarship, perhaps because there is a feeling that issues of resource exploitation and strategic imperatives were not resolved through the ATS. Doaa Abdel-Motaal argues that the ATS has only kicked the issue of sovereignty down the road and that, like The United Nations Convention on the Law of the Sea (UNCLOS) and conflict in the South China Sea, states will flout international rules and norms if it suits them.²⁵ Abdel-Motaal argues that commercial exploitation lay at the heart of Antarctica's discovery and it the best way to "embrace colonisation and exploitation of the continent."²⁶ While recognising how controversial this is, he points out that "science has gradually become a code word for uncovering the mineral potential of the continent and laying claim to it. The conquest of Antarctica is well underway…"²⁷

While the proposition that we might exploit resources in Antarctica may seem alien now, it was an important consideration in Australia's initial Antarctic programs. In 1964, the first director of what would become the Australian Antarctic Division (AAD) looked 20 years ahead to 1984. What he saw was an economically developed mining settlement with nuclear power and mineworkers loading "loading mineral concentrates from Antarctic mines."²⁸

One of the most prominent authors on Antarctica today is Anne-Marie Brady, who writes most frequently on the implications of China's rise in Antarctica.²⁹ The vision she paints of China's intentions in Antarctica are not dissimilar from those expressed by the director of the AAD in the 1960s. She also recognises that there is rising dissatisfaction being expressed with the Antarctica's current order, which is perceived as a zone for 'collective hegemony' where China has been a second-class citizen in the past.³⁰

In Australia, academic and policy debate has focused on Australia's need to free itself from reliance on the status quo. Before the 2016 plan was released, multiple articles and policy reports from Australia's foremost defence/strategic think tanks, the Lowy Institute and the Australian Strategic Policy Institute (ASPI) advocated for a rethink of Australia's Antarctic strategy.^{31 32 33 34} Both Lowy's Ellie Fogarty and ASPI's Peter Jennings noted that the 2009 Defence White Paper even overlooked the Australian Antarctic Territory (AAT) as part of Australia's sovereign territory.

²⁵ Abdel-Motaal, Antarctica: The Battle for the Seventh Continent, 2.

²⁶ Ibid., 3, 4.

²⁷ Ibid., 2-4.

²⁸ Phillip Law quoted in Tony Press, "Antarctica and the Future" in *The Antarctic: Past, Present and Future* ed. Julia Jabour-Green and Marcus Haward (Antarctic CRC Research Report: Hobart, 2001) 153,154.

²⁹ Anne-Marie Brady, "China's Rise in Antarctica?" Asian Survey 50 (2010): 759-785.

³⁰ Ibid., 772, 228.

 ³¹ Ellie Fogarty, "Preserving Australia's claim to Antarctica," *Lowy Interpreter*, August 8, 2011, accessed August 7, 2017. https://www.lowyinstitute.org/the-interpreter/preserving-australias-claim-antarctica.
³² Peter Jennings, "Antarctica and the Defence White Paper: snow job?" *ASPI Strategist*, April 24, 2013,

²² Peter Jennings, "Antarctica and the Defence White Paper: snow job?" ASPI Strategist, April 24, 2013, accessed August 8, 2017. https://www.aspistrategist.org.au/antarctica-and-the-defence-white-paper-snow-job/.

 ³³ Anthony Bergin, "Antarctic nationalism," *ASPI Strategist*, March 1, 2013, accessed August 8, 2017. https://www.aspistrategist.org.au/antarctic-nationalism/.

³⁴ Neil Hamilton, "Australia's Antarctic nightmare," *Lowy Interpreter*, May 10, 2016, accessed August 7, 2017. https://www.lowyinstitute.org/the-interpreter/australias-antarctic-nightmare.

It has received at least a little more attention from defence planers with the 2016 Defence *White Paper* declaring that:

The Australian Antarctic Territory faces no credible risk of being challenged in such a way that requires a substantial military response for at least the next few decades. It is in our interest to work with like-minded countries to prevent any militarisation of Antarctica, which could threaten Australia's sovereignty over the Australian Antarctic Territory and its sovereign rights over its offshore waters. Australia is a strong supporter of the Antarctic Treaty System, which expressly prohibits any mining in Antarctica.³⁵

Defence, it should be noted, did not single out the 'like-minded' states referred to, although it is undoubtedly shorthand for the US, Norway, New Zealand and the United Kingdom (UK).³⁶ It is interesting that the Department of Defence recognises the need "to reassure domestic audiences that claims to territory and access are safe, sovereign and secure without alienating others with whom one wishes to do business within a particular area of Antarctica."³⁷

Whilst the Department of Defence is right in its assessment of its role under the treaty, it neglects to account for possible escalated competition in the medium to long term. Indeed if the mainstream media was to be believed, Australia might already be under attack.^{38 39 40 41} While these reports are largely overblown, there are valid concerns raised, particularly around China's increasing presence in the AAT, which will be examined in section two.

³⁵ Department of Defence, 2016 Defence White Paper (Canberra, 2016) 54.

³⁶ Klaus Dodds, "'Awkward Antarctic nationalism': bodies, ice cores and gateways in and beyond Australian Antarctic Territory/East Antarctica," *Polar Record* 53 (2017): 22.

³⁷ Ibid., 16.

³⁸ Nicola Davison, "China eyes Antarctica's resource bounty," *The Guardian*, November 9, 2013, accessed August 8, 2017. https://www.theguardian.com/environment/2013/nov/08/china-antarctica-trip-icebreaker-snow-dragon.

³⁹ Jane Perlezmay, "China, Pursuing Strategic Interests, Builds Presence in Antarctica," *New York Times*, May 3, 2015 accessed August 8, 2017. https://www.nytimes.com/2015/05/04/world/asia/china-pursuing-strategic-interests-builds-presence-in-antarctica.html.

⁴⁰ Matthew Teller, "Why do so many nations want a piece of Antarctica?" *British Broadcasting Corporation Magazine*, June 20, 2014, accessed August 8, 2017. http://www.bbc.com/news/magazine-27910375.

⁴¹ Nick Whigham, "Should we be concerned about a challenge to Australia's territorial claim in Antarctica?" *News.com.au*, October 15, 2017, accessed October 16, 2017.

http://www.news.com.au/technology/environment/conservation/should-we-be-concerned-about-a-challenge-to-australias-territorial-claim-in-antarctica/news-story/ad27325554ff70b7b0a0e7c5e1312c3a.

Australia in Antarctica:

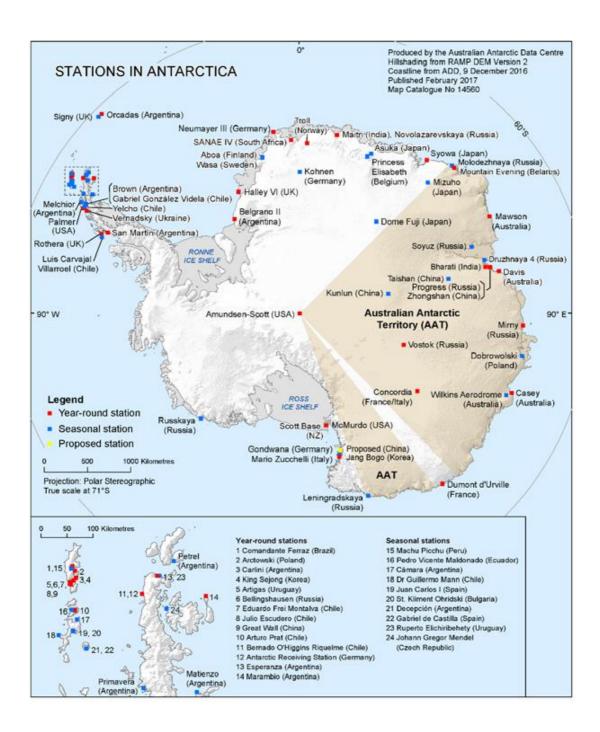


Figure 3: Stations in Antarctica.⁴²

Australia's Antarctic Territory is primarily the responsibility of the AAD under the Department of the Environment and Energy. AAD manages 3,300 Antarctic infrastructure

⁴² Australian Antarctic Data Centre, *Stations in Antarctica*, Australian Antarctic Division, Canberra, 2017. Accessed October 1, 2017. https://data.aad.gov.au/aadc/mapcat/display_map.cfm?map_id=14610.

assets with an \$880 million replacement value.43 There are three permanent Antarctic research stations: Casey (1969), Mawson (1954) and Davis (1957), as well as Wilkins Aerodrome (2004), operating as a summer-only station, and its associated airfield infrastructure. Wilkins is Australia's only intercontinental aviation access point into East Antarctica. Intra-continental flights operate on skiways, which are established seasonally at all three research stations. Intracontinental flights are made by small aircraft including helicopters, and ski-equipped BT-67 Basler and DHC-6 Twin Otter aircraft for intracontinental travel.⁴⁴ There is also a research station on the sub-Antarctic Macquarie Island (1948).45

Australia takes a whole-of-government approach to Antarctic affairs. Whilst this has strengths in terms of resource and expertise sharing, it lacks a centralised leadership position. An appointed ambassador on Antarctic affairs, either in DFAT or in the Department of Prime Minister and Cabinet, would elevate the importance of the continent's strategic challenges, as well as being accountable for affecting Australia's policy outcomes. Australia has appointed ambassadors or special envoys on a variety of specific and timely issues, including terrorism and human rights. An appointment on Antarctica would strongly signal Australia's proactive approach to issues arising on the continent.

Future Plans:

Australia has made significant funding commitments for key deliveries against the government's 20 year plan. The centrepiece is \$1.9 billion to deliver and run a new icebreaker, RSV Nuvina, meaning "Southern Lights," in palawa kani, the language of Tasmanian Aborigines.⁴⁶ Significantly, the icebreaker is funded for its 30 year whole-of-life operations. There is also a \$200 million boost over ten years in additional funding for the AAD's operations. In terms of strategic infrastructure the Commonwealth Government has allocated \$45 million to re-establish an overland science traverse capability, which is critical in inspection duties, as well as \$10 million for a business case on establishing year-round aviation access between Hobart and Antarctica.⁴⁷ The research stations themselves are also under review for upgrade.

⁴³ Department of the Environment and Energy, *Joint Standing Committee on the National Capital and External* Territories Inquiry into Australia's Antarctic Territory, Submission 13 (Canberra, August 2017) 1,2.

⁴⁴ Department of the Environment and Energy, *Joint Standing Committee Submission 13*, 1, 2.

⁴⁵ Ibid., 2.

⁴⁶ Australian Antarctic Division, "Australia's new icebreaker name providing students with the trip of a lifetime," September 29, 2017, accessed October 5, 2017. http://www.antarctica.gov.au/news/2017/australiasnew-icebreaker-name-providing-students-with-the-trip-of-a-lifetime. ⁴⁷ Ibid., 2.

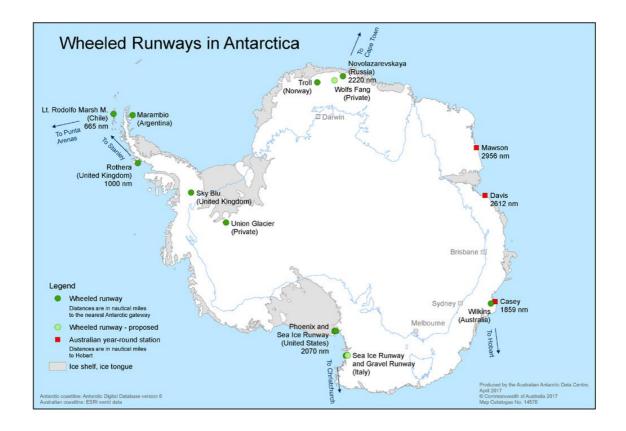


Figure 4: Existing and proposed runways in Antarctica.⁴⁸

Defence Support:

The Department of Defence has significant limitations in operating in Antarctica, which are primarily due to the ATS, as well as unique requirements of the Southern Ocean's operating environment and competing priorities for the development of defence capabilities.⁴⁹ Maintaining national interests Department of Defence suggests protecting Australia's interests in the region is best done through a "permanent broad based presence in Antarctica." In practice, that has led Defence to sign a Memorandum of Understanding (MOU) between Defence and Environment in support of the Australian Antarctic Program (AAP), finalised in June 2017.

The MOU was primarily to provide logistics support (airlift capabilities), search and rescue support, maritime resource protection tasks, as well as share expertise in climate.⁵⁰ Ongoing support is primarily provided through Operation Southern Discovery - deploying a C-17A Globemaster on a regular flights between Hobart and Wilkins Aerodrome. One of the recommendations of their submission was a year-round runway, and if not, then an improvement of existing capabilities for mission assuredness. This included greater access to aviation fuel, ground handling equipment, de-ice capability, airfield lighting.

⁴⁸ Australian Antarctic Data Centre, *Wheeled Runways in Antarctica*, Australian Antarctic Division, Canberra, 2017. Accessed October 1, 2017. https://data.aad.gov.au/aadc/mapcat/display_map.cfm?map_id=14610.

⁴⁹ Department of Defence, Joint Standing Committee on the National Capital and External Territories Inquiry into Australia's Antarctic Territory, Submission 14 (Canberra, August 2017) 1-6.

⁵⁰ Ibid.,

The ADF, through RAN and RAAF, also provides assets to prevent illegal fishing, led by Border Force-led Maritime Border Command – Operation Resolute. There is also an Inter-Agency Working Group to review Commonwealth policy on Southern Ocean patrol, surveillance and research requirements, led by the Department of Immigration and Border Protection that is exploring available assets, capacity gaps and best-practice models for managing Australia's future needs in Antarctic and Southern Ocean waters. This includes consideration of a national fleet approach to the acquisition and management of Australian vessels.⁵¹

Australia's Scientific Coverage:

Although infrastructure is critical to maintaining Australia's interests, according to the Australian Academy of Science, "Australia's ability to influence affairs in the region is dependent on its scientific credibility."⁵² In this area, it is clear that Australia is in relative decline.⁵³ The number of projects supported by the Australian Antarctic Science Program has declined from 138 in 1997/8 to 84 in 2016/17, with new project approvals amounted to just 25 in 2016/7. It is noted that "While scientific output, counted as numbers of publications (2011- 2015) has remained relatively high (3rd among Antarctic Nations), the influence of these works, counted, for example, as citations per publication, is comparatively low – 10th among the Antarctic Treaty Consultative Parties."⁵⁴ Without a long term, sustainable funding model, Australia's science capabilities will be limited, with infrastructure improvements for nought.⁵⁵

 ⁵¹ Department of Immigration and Border Protection, Joint Standing Committee on the National Capital and External Territories Inquiry into Australia's Antarctic Territory, Submission 15 (Canberra, August 2017) 1,2.
⁵² Australian Academy of Science, Joint Standing Committee on the National Capital and External Territories Inquiry into Australia's Antarctic Territory, Submission 4 (Canberra, August 2017) 1-10.

⁵³ Ibid., 4.

⁵⁴₅₅ Ibid.,

⁵⁵ Antarctic Climate & Ecosystems Cooperative Research Centre, *Joint Standing Committee on the National Capital and External Territories Inquiry into Australia's Antarctic Territory, Submission 11* (Hobart, August 2017), 1-5.

Case Study: China

This case study will focus on two key elements of China's operations in Antarctica, resource exploitation and military involvement. Perhaps more importantly, the intentions behind these developments will be assessed. Figure 5 illustrates China's significant standing in Antarctic and its upward trajectory, particularly in terms of spending.

Area of Interest	Ranking				
Polar-related military capabilities					
Polar-capable submarines and surface vessels	1.US	2.Russia	3. China		
Satellites	1.US (549)	2.China (142)	3.Russia (131)		
Nuclear missiles	1.Russia (1,648)	2.US (1,538)	3.China (250)		
Number of Antarctic research stations	1. Argentina	2. Chile	3. Russia		5. China and Germany
Antarctic science budget (operation costs/research funds/capital investment)	1. China	2. US	3. Russia		
Citizens in Antarctica (scientists, tourists, fishers, workers)	1. US	2. China	3. Australia		
Level and spread of engagement in Antarctic affairs	1. US	2. Russia	3. China		

Figure 5: China's Ranking in Antarctic Affairs.⁵⁶

⁵⁶ Table adapted from Table 1 in Anne-Marie Brady, *China's expanding Antarctic interests*, ASPI Special Report, 20.

Defining militarisation:

When looking at competition in Antarctica, it is difficult to imagine, let alone prove, that states are in breach of Article 1 of the Antarctic Treaty. Part of the problem is that although the Antarctic treaty prohibits "any measures of a military nature, such as the establishment of military bases and fortifications, the carrying out of military manoeuvres, as well as the testing of any type of weapons," it allows the use of military personnel or equipment for scientific research or for any other peaceful purpose.⁵⁷ Things have changed with military technology since the treaty was drawn up in the 1950s.

Jenna Higgins defines militarisation as an end state, a "commitment of force resulting in violence and destruction."⁵⁸ Higgins argues that the much-referenced 'dual-use' technology in Antarctic bases does not warrant a designation of militarisation as it has not yet seen use in direct military action. This is not a view shared by everyone. Sam Bateman, writing for ASPI, argues that 'measures of a military nature' do not necessarily have to be carried out by military personnel.⁵⁹ In his view, "scientific research and development for military purposes may be carried out by civilian scientists and private sector contractors. Antarctic bases are increasingly used for 'dual use' scientific research that has utility for military purposes, including possibly for controlling offensive weapon systems."⁶⁰

Strategic interests:

On the question of China's strategic interests Anne-Marie Brady has completed the most comprehensive independent and publicly available reports on *China's expanding Antarctic interests*.⁶¹ China's strategic interests in Antarctica can be divided into three core categories, as follows:⁶²

- Security: China has economic, political, military and strategic interests in Antarctica.
- Resources: China wants access to Antarctic minerals, hydrocarbons, fishing, tourism, transport routes, water and bioprospecting.
- Science and technology: Access to Antarctica is essential for the rollout of the BeiDou navigational system, China's space science program, and weather forecasting in China.

When examining China's intentions, Brady points to China's contradictory domestic and international messages on Antarctica, as evidenced by Chinese President Xi Jinping's visit to Australia in 2014, where he gave a speech saying, "The Chinese side stands ready to continuously work with Australia and the international community to better understand, protect and exploit the Antarctic." This was reported in Chinese by the Xinhua news service, but the Chinese Communist Party's official English-language newspaper, China Daily,

⁵⁷ Secretariat of the Antarctic Treaty, *The Antarctic Treaty*, accessed August 8, 2017. http://www.ats.aq/index_e.htm.

⁵⁸ Jenna Higgins, "The Delineation of Militarisation in Antarctica," *ASPI Strategist*, January 31, 2017, accessed August 8, 2017. https://thestrategybridge.org/the-bridge/2017/1/31/the-delineation-of-militarisation-in-antarctica.

⁵⁹ Sam Bateman, "Is Antarctica demilitarised?" *ASPI Strategist*, April 23, 2013, accessed August 8, 2017. https://www.aspistrategist.org.au/is-antarctica-demilitarised/.

⁶⁰ İbid.,

⁶¹ Anne-Marie Brady, *China's expanding Antarctic interests*, ASPI Special Report (Canberra, 2017) 4.

⁶² Ibid., 12.

replaced 'exploit' with 'explore.'⁶³ This is no slip of the tongue. It reflects on China's true intentions. The Antarctic Treaty protects Australia's claim for now, but China's official definition of Antarctic sovereignty is that the Antarctic is 'a continent with no attribution of sovereignty' and the issue of sovereignty in Antarctica is 'frozen' under the terms of the Antarctic Treaty."⁶⁴

Resource Exploitation:

China's perspective on the controversial issue of resource exploitation played out at the 40th Antarctic Treaty Consultative Meeting (ATCM), in May. This was hosted by China in Beijing. During that conference and in conjunction with its most recent policy paper on Antarctica, Lin Shanqing, Deputy Director of China's State Oceanic Administration, told reporters China had "no immediate plans to exploit Antarctic resources."⁶⁵ The evidence to the contrary, however, is compelling. Resource exploitation, from a Chinese perspective is, merely a question of timing.

The Polar Research Institute of China indicates that Antarctic has abundant natural resources with 500 billion tons of oil and 300–500 billion tons of natural gas on the Antarctic continent, plus a potential 135 billion tons of oil in the Southern Ocean.⁶⁶ The most recent large study, as reported by Brady was conducted from 2012 to 2016, saw more than 50 classified reports produced that included a preliminary exploration of mineral resources in Antarctic waters.⁶⁷ Beyond mineral resources, tourism, fishing and bioprospecting remain a focus, with China advocating a quota. The reason, as Brady puts it, is to get in "before other states or international bodies attempt to take them away."⁶⁸ As most of China's infrastructure and operations are within the AAT, this issue is particularly important for Australia, as any move by China within the AAT would be dealt with primarily by Australia.

⁶³ Brady, *China's expanding Antarctic interests*, 7.

⁶⁴ Ibid.,

 ⁶⁵ Anne-Marie Brady, "China's undeclared foreign policy at the poles," *Lowy Interpreter*, May 30, 2017, accessed August 8, 2017. https://www.lowyinstitute.org/the-interpreter/china-undeclared-foreign-policy-poles.
⁶⁶ Brady, *China's expanding Antarctic interests*, 17.

⁶⁷ Ibid., 19.

⁶⁸ Ibid.,

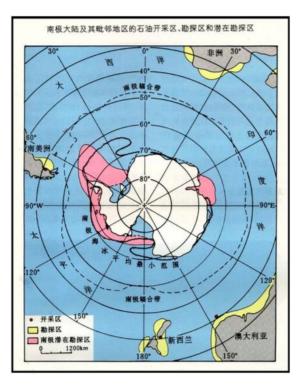


Figure 6: Chinese Government Map "Antarctic mineral exploration zones."69

The 2048 Review:

The risk of instability in Antarctica as a result of competition over resources cannot be discounted. As Anthony Bergin posits, "resources of sufficient strategic or economic value will be exploited for a resource hungry world. International agreements can always be renegotiated."⁷⁰ Chinese government claims its Antarctic program is directed primarily toward capacity building for exploration and study of the continent.⁷¹ Increasing the urgency is the fact that there are options for review of the Environmental Protocol and its moratorium on natural resource exploitation in 2048, the primary safeguard of the ATS. It would not be easy, with any modification to the terms of the protocol needing to be passed by a three-quarter majority of the parties.⁷² But it would be possible, especially in a resource scarce future.

While not commenting directly on the ASPI report, a senior DFAT diplomat acknowledged there is differing views on Antarctica's resources, but that "there are very strict bars which would be required to be satisfied before resource exploitation could be undertaken."⁷³ And

⁶⁹ Figure 5 in Anne-Marie Brady, *China's expanding Antarctic interests*, ASPI Special Report, 17.

⁷⁰ Anthony Bergin, "Cold calculations: our Antarctic choices," *ASPI Strategist*, May 28, 2013, accessed August 8, 2017. https://www.aspistrategist.org.au/cold-calculations-our-antarctic-choices/.

⁷¹ Chinese Arctic and Antarctic Administration, "Antarctic capacity will be boosted," May 25, 2017, accessed October 15, 2017. http://www.chinare.gov.cn/english/gb_news.php?id=1992&modid=13001.

⁷² Anis Bajrektarevic, "Arctic and Antarctic: Two Poles – Different Scores," *Geopolitics, History, and International Relations* 2 (2010): 165-232.

⁷³ Hansard, Joint Standing Committee on the National Capital and External Territories Inquiry into Australia's Antarctic Territory, *Public hearing with Department of Foreign Affairs and Trade*, September 14, 2017, accessed September 30, 2017.

reiterated that, to his knowledge, there were no parties agitating for a review or any change of the status quo.

China's Capabilities:

Regardless of China's willingness to act on its research on Antarctic resources, China's use of the continent militarily has significant impact on the broader geopolitical jostling in Asia between the US and China. The military-strategic importance of Antarctica is, in the view of Chinese polar analysts a key strategic transport route, a strategically vital territory rich in resources, and an ideal site for military-related research and satellite installations.⁷⁴

In light of these interests, an examination of China's Antarctic capabilities reveals significant military-civilian dual use capabilities. China currently has three stations, three airfields and two field camps in the AAT, plus a fourth station on King George Island and plans for a fifth station for the Ross Sea region. As of 2016, China is also investing in a new polar icebreaker, on top of the two military icebreakers serving in the Northern Fleet.⁷⁵

The capabilities include:

- China's Zhongshan Station's high-frequency radar station capable of blocking the US's polar satellites (this was set up by People's Liberation Army (PLA)).⁷⁶
- Helicopter support is contracted to Ha Air, a subsidiary of one of China's top 10 military companies.⁷⁷
- The fleet of amphibian and all-terrain vehicles used in Antarctica was specially designed by PLA engineers, which makes them useful for both peaceful and military applications.⁷⁸
- China's astronomical program at Dome A (Dome Argus) as infrared telescopes can be used to search for enemy satellites, drones and launched missiles. This would greatly enhance its defensive capabilities in an air-sea battle in its near seas.⁷⁹
- Each polar research station is important in PLA communications, computers, intelligence, surveillance and reconnaissance via the BeiDou satellite system. BeiDou is intended to give China independence from other satellite navigation systems, such as the United States' GPS, by 2020.⁸⁰

These greatly enhanced logistics, combined with the above military capabilities could make the station a target in the event of China's conflict with someone else.

Some of Brady's claims are less compelling in context. China is not modernizing in isolation, as the Department of Energy observes, France the UK, New Zealand and United States are all

 $http://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p; orderBy=customrank; page=0; query=antarctica\% 20 SearchCategory_Phrase\% 3A\% 22 committees\% 22; rec=4; resCount=Default.$

⁷⁴ Brady, China's expanding Antarctic interests, 13.

⁷⁵ Franz-Stefan Gady, "China Begins Construction of Polar Icebreaker," *The Diplomat*, December 22, 2016, accessed August 8, 2017. http://thediplomat.com/2016/12/china-begins-construction-of-polar-icebreaker/.

⁷⁶ Brady, *China's expanding Antarctic interests*, 14.

⁷⁷ Ibid., 14.

⁷⁸ Ibid., 14.

⁷⁹ Ibid., 16

⁸⁰ Andrew Darby, "China's Antarctica satellite base plans spark concerns," *Sydney Morning Herald*, November 12, 2014, accessed August 8, 2017. http://www.smh.com.au/world/chinas-antarctica-satellite-base-plans-spark-concerns-20141112-1113wx.html.

undertaking significant works of upgrade.⁸¹ Russia has also been singled out in its use of military equipment and perspectives on mineral exploration.⁸².

The academic community certainly isn't united around Brady's central thesis on China's domination of the AAT, with Anthony Bergin and Tony Press declaring that Australia's presence in AAT remains greater than China's: "Our program is larger than China's, whether we look at people on the ground, logistics, scientific infrastructure, programmed scientific research, or seasonal and year-round presence."⁸³ In reference to Brady's allegations of breaches of Article VII of the Protocol on Environmental Protection to the Antarctic Treaty, as well as dual-purpose satellite receiving stations, Press and Bergin propose that full reporting under Article VII (requirement to disclose use of military personnel and equipment) and the right of inspection should be used.⁸⁴ Inspection remains a critical issue discussed in the next section.

The Case For Cooperation:

In 2014 Australia signed an MOU with China that affirms commitment to the Antarctic Treaty system, including non-militarisation, environmental protection and science in the region, as well as establishing a joint committee for discussions on cooperative actions and exchanges.⁸⁵ This committee meets every two years and cooperation is largely focused around policy, scientific and operational collaboration.⁸⁶ The first China-Australia Joint Committee Meeting on Antarctic and Southern Ocean Collaboration was held in Hobart in March 2016. At the first meeting of the Joint Committee China and Australia agreed priorities for a joint program of work including:⁸⁷

- Ensuring the Joint Committee serves as an effective overarching framework for China-Australia Antarctic cooperation and the platform to complement our strong operations and science cooperation;
- Agreeing on a focus for future scientific cooperation;
- Holding a joint East Antarctic/Ross Sea Workshop on Collaborative Science in 2017;
- Increasing the use of Hobart as an Antarctic gateway;
- Advancing policy discussions on enhanced environmental protection and other key areas;
- Committing to support each other's national Antarctic programs through an annual logistics support agreement ahead of each season;
- Establishing professional exchanges of scientists, officials and scholars on policy, science and operations.

⁸¹ Department of the Environment and Energy, *Joint Standing Committee Submission 13*, 14, 15.

⁸² Ian Armstrong, "Russia's long-game in Antarctica runs political risk," *Global Risks Insights*, January 28, 2016, accessed August 8, 2017. http://globalriskinsights.com/2016/01/russias-long-game-in-antarctica-runs-political-risk/.

political-risk/. ⁸³ Anthony Bergin, and Tony Press, "Readers' response: China on ice," *ASPI Strategist*, August 25, 2017, accessed September 20, 2017. https://www.aspistrategist.org.au/readers-response-china-ice/. ⁸⁴ Ibid..

⁸⁵ Greg Hunt, "Australian And China Strengthen Antarctic Ties," *Office of the Minister of Environment*, November 18, 2014, accessed September 27, 2017.

http://www.greghunt.com.au/Home/LatestNews/tabid/133/ID/3090/Australian-and-China-strengthen-Antarctic-ties.aspx.

⁸⁶ Ibid.,

⁸⁷ Australian Antarctic Division, "Australia hosts Antarctic talks with China," March 1, 2016, accessed October 1, 2017. http://www.antarctica.gov.au/news/2016/australia-hosts-antarctic-talks-with-china.

This is a positive step for Australia, particularly as it allows for a softer approach to addressing allegations of resource exploration and militarisation. Cooperation and collaboration is not restricted to the government, the University of Tasmania and the Institute for Marine and Antarctic Studies offer an innovative "2+2" undergraduate degree partnership with the Ocean University of China.⁸⁸ Indeed, while it is in the minority of opinions, there are some who see cooperation with China has essential to the sustainability of Australia's ongoing operations in Antarctica.⁸⁹

As a senior DFAT diplomat stated in response to assertions on China's intentions in Antarctica, "the most effective international mechanism of ensuring that those ambitions are either constrained or operate in ways we see in our mutual interest is to make sure that the current treaty structure works effectively and its objectives are upheld."⁹⁰

⁸⁸ Institute for Marine and Antarctic Studies, University of Tasmania, *Joint Standing Committee on the National Capital and External Territories Inquiry into Australia's Antarctic Territory, Submission 8* (Hobart, August 2017) 3.

⁸⁹ Nengye Liu, "Why Antarctica depends on Australia and China's alliance," *The Conversation*. July 8, 2016, accessed August 8, 2017. https://theconversation.com/why-antarctica-depends-on-australia-and-chinas-alliance-59522.

⁹⁰ Hansard, Joint Standing Committee on the National Capital and External Territories Inquiry into Australia's Antarctic Territory, *Public hearing with Department of Foreign Affairs and Trade*, September 14, 2017, accessed September 30, 2017.

http://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;orderBy=customrank;page=0;query=antarctica% 20SearchCategory_Phrase%3A%22committees%22;rec=4;resCount=Default.

Implications and Recommendations:

Inspections:

Given the importance of maintaining the treaty, inspection and compliance will be central to its future efficacy. According to DFAT, "the Treaty's inspections regime provides an important means of monitoring compliance with these critical non-militarisation and environmental protection principles."⁹¹ The reality, however, is very different.

Current rules under Article VII mean that all areas of Antarctica are open to inspection by qualified observers.⁹² In practicality a random sample of stations are checked against a set of non-mandatory Inspection Checklists.⁹³ There have been 50 inspections between 1961 and 2015 (ATS Website). There is no administrative body to ensure that recommendations of the reports are taken up and disputes are set out through the Antarctic Treaty as negotiation or arbitration through the International Court of Justice, which may not ultimately be binding.⁹⁴

The only time that the military status of equipment was queried was at the O'Higgins German Antarctic Receiving Station (2014-2015), with the report requesting clarification on the nature of the data collected by the German Remote Sensing Data Centre. While it was ultimately decided that it was purely civilian, the query suggests observers were not qualified to make assessments. As Jenna Higgins suggests, "While it is important to have multiple countries conducting inspections, the ATS should consider a permanent standardisation position in order to ensure continuity." For Australia, traverse capability will need to be restored to inspect other stations independently, not relying on US logistics.

Capabilities & Collaboration:

Beyond inspection, in terms of capability, Australia should look to its neighbour, New Zealand, an existing ally through ANZUS. New Zealand Defence Force's leads in the Southern Ocean with its ice-strengthened Protector-class offshore patrol vessels, a capability Australia does not possess (HMAS Choules and Ocean Shield are only safe in light ice).⁹⁵ As the ADF is currently investigating a replacement vessel for its patrol boats, mine hunters and survey vessels through procurement project SEA 1180, future commitments to the Southern Ocean (and Antarctica) should be considered.⁹⁶ However, given financial constraints and priorities as outlined by the white paper, a 'cold fleet' may not be viable, even in the longer term. In this case, collaboration with New Zealand would offer something of a solution, given our strength and continued investment in heavy-lift support capability and surveillance.

⁹¹ Department of Foreign Affairs and Trade, *Joint Standing Committee Submission 17*, 15.

⁹² Secretariat of the Antarctic Treaty, *The Antarctic Treaty*, accessed August 8, 2017.

http://www.ats.aq/index_e.htm.

⁹³ Higgins, "The Delineation of Militarisation in Antarctica," ASPI Strategist.

⁹⁴ Ibid.,

⁹⁵ Izaak Gurney, *Cold fleet: The Southern Ocean, Antarctica and the ADF* (Australian Defence College: Centre for Defence and Strategic Studies, 2016) 8.

⁹⁶ Ibid.,

Recommendations:

Militarisation:

- Prioritise the strengthening of inspection regimes through the Antarctic Treaty System;
- Standardise inspection procedures for all stations on Antarctica and exercise the right to inspect more frequently;
- Improve the expertise of observers carrying out and training for inspections.

Resource exploitation:

- Transparent discussions with all consultative parties to the Antarctic Treaty in anticipation of sovereignty and resource issues being revisited in 2048;
- Enforce guidelines and principles for scientific work, especially around mineral resources;
- Establish tourism guidelines.

Capabilities:

- Give careful consideration of ice-strengthened patrol boats in upcoming Australian defence planning and acquisition;
- Initiate or enhance formalized engagement between the Australian Defence Force, the US and New Zealand in Southern Ocean Patrols;
- Establish a year round runway to ensure heavy-lift capabilities are maintained.

Maintaining Australian leadership:

- Appoint an "Antarctic Ambassador" a designated senior diplomat to play a coordination role and lead discussions on areas of tension;
- Promote the Australian Antarctic Territory in the Australian conscious;
- Continue deep policy research on the changing Antarctic political environment;
- Continue cooperation with like-minded states, as well as those that are not like-minded, with an emphasis on fostering greater transparency and on ATS issues of militarisation and resource exploitation.

Conclusion:

A neutral stance of 'wait and see' will no longer be a sufficient policy setting. Australia needs to be proactive in understanding other states intentions and activities in Antarctica, opening up the discussion on the balance between protection and utilization of the continent. The Antarctic Treaty System remains the best framework for opening these discussions and protecting Australian interests. Transparency and cooperation will remain powerful agents in ensuring a sustainable and stable order in Antarctica. The Chinese Government remains willing to work within these international organizations and work within the order to bring about change. Australia should encourage this, as well as boost its own strategic capabilities in Antarctica. The time is right to take advantage of a relatively benign security environment, rather than wait until a crisis response is required.

Annex 1: Antarctic Treaty Text

The Antarctic Treaty

Signed at Washington December 1, 1959 Ratification advised by U.S. Senate August 10, 1960 Ratified by U.S. President August 18, 1960 U.S. ratification deposited at Washington August 18, 1960 Proclaimed by U.S. President June 23, 1961 Entered into force June 23, 1961

The Governments of Argentina, Australia, Belgium, Chile, the French Republic, Japan, New Zealand, Norway, the Union of South Africa, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America,

Recognizing that it is in the interest of all mankind that Antarctica shall continue forever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord;

Acknowledging the substantial contributions to scientific knowledge resulting from international cooperation in scientific investigation in Antarctica;

Convinced that the establishment of a firm foundation for the continuation and development of such cooperation on the basis of freedom of scientific investigation in Antarctica as applied during the International Geophysical Year accords with the interests of science and the progress of all mankind;

Convinced also that a treaty ensuring the use of Antarctica for peaceful purposes only and the continuance of international harmony in Antarctica will further the purposes and principles embodied in the Charter of the United Nations;

Have agreed as follows:

Article I

1. Antarctica shall be used for peaceful purposes only. There shall be prohibited, inter alia, any measures of a military nature, such as the establishment of military bases and fortifications, the carrying out of military maneuvers, as well as the testing of any type of weapons.

2. The present treaty shall not prevent the use of military personnel or equipment for scientific research or for any other peaceful purposes.

Article II

Freedom of scientific investigation in Antarctica and cooperation toward that end, as applied during the International Geophysical Year, shall continue, subject to the provisions of the present treaty.

Article III

1. In order to promote international cooperation in scientific investigation in Antarctica, as provided for in Article II of the present treaty, the Contracting Parties agree that, to the greatest extent feasible and practicable:

(a) information regarding plans for scientific programs in Antarctica shall be exchanged to permit maximum economy and efficiency of operations;

(b) scientific personnel shall be exchanged in Antarctica between expeditions and stations;

(c) scientific observations and results from Antarctica shall be exchanged and made freely available.

2. In implementing this Article, every encouragement shall be given to the establishment of cooperative working relations with those Specialized Agencies of the United Nations and other international organizations having a scientific or technical interest in Antarctica.

Article IV

1. Nothing contained in the present treaty shall be interpreted as:

(a) a renunciation by any Contracting Party of previously asserted rights of or claims to territorial sovereignty in Antarctica;

(b) a renunciation or diminution by any Contracting Party of any basis of claim to territorial sovereignty in Antarctica which it may have whether as a result of its activities or those of its nationals in Antarctica, or otherwise;

(c) prejudicing the position of any Contracting Party as regards its recognition or nonrecognition of any other States right of or claim or basis of claim to territorial sovereignty in Antarctica.

2. No acts or activities taking place while the present treaty is in force shall constitute a basis for asserting, supporting or denying a claim to territorial sovereignty in Antarctica or create any rights of sovereignty in Antarctica. No new claim, or enlargement of an existing claim, to territorial sovereignty in Antarctica shall be asserted while the present treaty is in force.

Article V

1. Any nuclear explosions in Antarctica and the disposal there of radioactive waste material shall be prohibited.

2. In the event of the conclusion of international agreements concerning the use of nuclear energy, including nuclear explosions and the disposal of radioactive waste material, to which all of the Contracting Parties whose representatives are entitled to participate in the meetings provided for under Article IX are parties, the rules established under such agreements shall apply in Antarctica.

Article VI

The provisions of the present treaty shall apply to the area south of 60o South Latitude, including all ice shelves, but nothing in the present treaty shall prejudice or in any way affect the rights, or the exercise of the rights, of any State under international law with regard to the high seas within that area.

Article VII

1. In order to promote the objectives and ensure the observance of the provisions of the present treaty, each Contracting Party whose representatives are entitled to participate in the meetings referred to in Article IX of the treaty shall have the right to designate observers to carry out any inspection provided for by the present Article. Observers shall be nationals of the Contracting Parties which designate them. The names of observers shall be communicated to every other Contracting Party having the right to designate observers, and like notice shall be given of the termination of their appointment.

2. Each observer designated in accordance with the provisions of paragraph 1 of this Article shall have complete freedom of access at any time to any or all areas of Antarctica.

3. All areas of Antarctica, including all stations, installations and equipment within those areas, and all ships and aircraft at points of discharging or embarking cargoes or personnel in Antarctica, shall be open at all times to inspection by any observers designated in accordance with paragraph 1 of this Article.

4. Aerial observation may be carried out at any time over any or all areas of Antarctica by any of the Contracting Parties having the right to designate observers.

5. Each Contracting Party shall, at the time when the present treaty enters into force for it, inform the other Contracting Parties, and thereafter shall give them notice in advance, of

(a) all expeditions to and within Antarctica, on the part of its ships or nationals, and all expeditions to Antarctica organized in or proceeding from its territory;

(b) all stations in Antarctica occupied by its nationals; and

(c) any military personnel or equipment intended to be introduced by it into Antarctica subject to the conditions prescribed in paragraph 2 of Article I of the present treaty.

Article VIII

1. In order to facilitate the exercise of their functions under the present treaty, and without prejudice to the respective positions of the Contracting Parties relating to jurisdiction over all other persons in Antarctica, observers designated under paragraph 1 of Article VII and scientific personnel exchanged under subparagraph 1(b) of Article III of the treaty, and members of the staffs accompanying any such persons, shall be subject only to the jurisdiction of the Contracting Party of which they are nationals in respect of all acts or omissions occurring while they are in Antarctica for the purpose of exercising their functions.

Without prejudice to the provisions of paragraph 1 of this Article, and pending the adoption of measures in pursuance of subparagraph 1(e) of Article IX, the Contracting Parties

concerned in any case of dispute with regard to the exercise of jurisdiction in Antarctica shall immediately consult together with a view to reaching a mutually acceptable solution.

Article IX

1. Representatives of the Contracting Parties named in the preamble to the present treaty shall meet at the City of Canberra within two months after the date of entry into force of the treaty, and thereafter at suitable intervals and places, for the purpose of exchanging information, consulting together on matters of common interest pertaining to Antarctica, and formulating and considering, and recommending to their Governments, measures in furtherance of the principles and objectives of the treaty, including measures regarding:

(a) use of Antarctica for peaceful purposes only;

(b) facilitation of scientific research in Antarctica;

(c) facilitation of international scientific cooperation in Antarctica;

(d) facilitation of the exercise of the rights of inspection provided for in Article VII of the treaty;

(e) questions relating to the exercise of jurisdiction in Antarctica;

(f) preservation and conservation of living resources in Antarctica.

2. Each Contracting Party which has become a party to the present treaty by accession under Article XIII shall be entitled to appoint representatives to participate in the meetings referred to in paragraph 1 of the present Article, during such time as that Contracting Party demonstrates its interest in Antarctica by conducting substantial scientific research activity there, such as the establishment of a scientific station or the despatch of a scientific expedition.

3. Reports from the observers referred to in Article VII of the present treaty shall be transmitted to the representatives of the Contracting Parties participating in the meetings referred to in paragraph 1 of the present Article.

4. The measures referred to in paragraph 1 of this Article shall become effective when approved by all the Contracting Parties whose representatives were entitled to participate in the meetings held to consider those measures.

5. Any or all of the rights established in the present treaty may be exercised from the date of entry into force of the treaty whether or not any measures facilitating the exercise of such rights have been proposed, considered or approved as provided in this Article.

Article X

Each of the Contracting Parties undertakes to exert appropriate efforts, consistent with the Charter of the United Nations, to the end that no one engages in any activity in Antarctica contrary to the principles or purposes of the present treaty.

Article XI

1. If any dispute arises between two or more of the Contracting Parties concerning the interpretation or application of the present treaty, those Contracting Parties shall consult among themselves with a view to having the dispute resolved by negotiation, inquiry, mediation, conciliation, arbitration, judicial settlement or other peaceful means of their own choice.

2. Any dispute of this character not so resolved shall, with the consent, in each case, of all parties to the dispute, be referred to the International Court of Justice for settlement; but failure to reach agreement on reference to the International Court shall not absolve parties to the dispute from the responsibility of continuing to seek to resolve it by any of the various peaceful means referred to in paragraph 1 of this Article.

Article XII

1.

(a) The present treaty may be modified or amended at any time by unanimous agreement of the Contracting Parties whose representatives are entitled to participate in the meetings provided for under Article IX. Any such modification or amendment shall enter into force when the depositary Government has received notice from all such Contracting Parties that they have ratified it.

(b) Such modification or amendment shall thereafter enter into force as to any other Contracting Party when notice of ratification by it has been received by the depositary Government. Any such Contracting Party from which no notice of ratification is received within a period of two years from the date of entry into force of the modification or amendment in accordance with the provisions of subparagraph 1(a) of this Article shall be deemed to have withdrawn from the present treaty on the date of the expiration of such period.

2.

(a) If after the expiration of thirty years from the date of entry into force of the present treaty, any of the Contracting Parties whose representatives are entitled to participate in the meetings provided for under Article IX so requests by a communication addressed to the depositary Government, a Conference of all the Contracting Parties shall be held as soon as practicable to review the operation of the treaty.

(b) Any modification or amendment to the present treaty which is approved at such a Conference by a majority of the Contracting Parties there represented, including a majority of those whose representatives are entitled to participate in the meetings provided for under Article IX, shall be communicated by the depositary Government to all the Contracting Parties immediately after the termination of the Conference and shall enter into force in accordance with the provisions of paragraph 1 of the present Article.

(c) If any such modification or amendment has not entered into force in accordance with the provisions of subparagraph 1(a) of this Article within a period of two years after the date of its communication to all the Contracting Parties, any Contracting Party may at any time after

the expiration of that period give notice to the depositary Government of its withdrawal from the present treaty; and such withdrawal shall take effect two years after the receipt of the notice of the depositary Government.

Article XIII

1. The present treaty shall be subject to ratification by the signatory States. It shall be open for accession by any State which is a Member of the United Nations, or by any other State which may be invited to accede to the treaty with the consent of all the Contracting Parties whose representatives are entitled to participate in the meetings provided for under Article IX of the treaty.

2. Ratification of or accession to the present treaty shall be effected by each State in accordance with its constitutional processes.

3. Instruments of ratification and instruments of accession shall be deposited with the Government of the United States of America, hereby designated as the depositary Government.

4. The depositary Government shall inform all signatory and acceding States of the date of each deposit of an instrument of ratification or accession, and the date of entry into force of the treaty and of any modification or amendment thereto.

5. Upon the deposit of instruments of ratification by all the signatory States, the present treaty shall enter into force for those States and for States which have deposited instruments of accession. Thereafter the treaty shall enter into force for any acceding State upon the deposit of its instrument of accession.

6. The present treaty shall be registered by the depositary Government pursuant to Article 102 of the Charter of the United Nations.

Article XIV

The present treaty, done in the English, French, Russian and Spanish languages, each version being equally authentic, shall be deposited in the archives of the Government of the United States of America, which shall transmit duly certified copies thereof to the Governments of the signatory and acceding States.

IN WITNESS WHEREOF the undersigned Plenipotentiaries, duly authorized, have signed the present treaty.

DONE at Washington this first day of December, one thousand nine hundred and fifty-nine.

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