

Forum: Advisory Panel on the Question of Antarctica (APQA)

Issue: Combatting the militarization of Antarctica

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Introduction

The Antarctic continent located in the Southernmost part of the world, is neighboring the Atlantic, Indian, and Pacific Ocean was discovered in January, 1820 by European explorers is a place over the time where several nations including Norway, Argentine, United Kingdom, Australia, and many other nations had claimed the ownership of and currently is acknowledged as the only continent that is free of weapons and soldiers in the world, except for scientific purposes. The continent is known for being isolated from the rest of the world, has no indigenous population, cold, desolate, and ice-covered which inhibits human population to locate permanently. There are temporary a few



Figure 1: Map of Antarctica (Britannica)

scientific hubs which locate scientists and experts for conducting experiments in the fields. Although the continent is not suitable for human habitation there are claims for the sovereignty of Antarctica due to its geopolitical importance as well as its being crucial for economic gains because of the growing tourism potential, biological and underground resources. The land being rich in valuable metals such as gold, silver, and minerals like copper, lead, zinc, and coal has led the militarization of the continent. The Arctic Treaty signed in 1959 by seven countries after the clashing interest of several nations including the United States of America, Soviet Union, and United Kingdom, regulates and reassures the peaceful usage of the continent in accordance with the United Nations and international collaboration. However in many cases the territorial claims overlap and the scientific purposes are being exploited for the nations' gains which put the wellbeing of the continent in danger and make the Artic Treaty ineffective.



Definition of Key Terms

Militarization: The process of introducing or extending military influence, presence, infrastructure, or operations within a certain area, community, or setting. This can involve the use of military forces in civilian areas, the construction of military structures or bases, the creation of military technology, or the deployment of military people. Increased security measures, alterations in public opinion, power dynamics, and possible effects on social, political, and economic institutions are just a few of the consequences that militarization may have. (Cambridge Dictionary)

Geopolitical stability: State of harmony and balance in international relations within a certain geographic region, marked by the lack of major disputes or tensions between countries. (Student room)

Peaceful Nuclear Explosions (PNEs): After the deployment of atomic bombs in August 1945 for military purposes USSR and USA the term refers to nuclear detonations carried out for non-military objectives. Proposed applications include utilizing explosions to excavate for the construction of canals and harbors, generate electricity, propel spacecraft, and serve as a method of wide-area hydraulic fracturing. (World Nuclear Association)

Antarctic Treaty System (ATS): Framework which was set in 1959 in order to supervise international interactions and activities that take place in Antarctica, with a scope on environmental conservation, scientific research, and the proscription of military operations.

Territorial claims: Disagreements about the parties who are in charge of a specific territory. It occurs when two or more political parties disagree on who is the rightful owner or the ruler of a certain area of a territory. These types of conflicts could rise between neighboring nations, territories, or even foreign parties. These regions under dispute could be vast tracts of land or small islets. Historical claims, cultural background, economic intentions, and geopolitical power are usually the underlying affairs. Legal frameworks, diplomatic debates, and international collaboration are essential for the resolution of these types of clash of interests. Geopolitical relations, security, and solidity in the region may be influenced by such conflicts.

Cold front: It is a metaphorically used phrase that illustrates the exigent equilibrium in Antarctica between feasible militarization and peaceful scientific studies.

Dual-use equipment: Technologies, equipment that have dual military and civilian utilizations. Although these products are aimed for non-military usage, there is a possibility of them being used if needed. Nuclear reactors, drones, satellites, and cutting-edge computer systems are examples for this type of equipment. It is challenging to differentiate and supervise the applications for military and non-military gains.



Dual-use personnel: Experts of their fields whose knowledge could be applied in both military and civilian purposes. This personnelles consists of scientists, engineers, pilots, and cybersecurity specialists. It is important to form a balance between security concerns and technical advancements for maximizing the benefits and minimizing the possible dangers.

Antarctic Treaty Consultative Parties (ATCPs): During the formation of the Antarctic Treaty there have been numerous nations who are able to participate in the decision-making of the Antarctic Treaty. Currently there are 29 nations who are actively named as consultative parties. These parties have the right to be involved in the meetings and make decisions. On the other hand there are 27 nations who are non-consultative parties and have the right to participate in the meetings but are not able to be involved in the decision-making process.

General Overview

Factors that lead to the militarization of Antarctica:

Although a huge portion of
Antarctica is not suitable for humans
to habitat permanently because of
the natural barriers there had been
territorial claims on the continent
ever after it was discovered. The
underground resources, such as
precious metals like gold, silver
minerals like copper, lead, zinc, and
coal and biological values of the
continent while also considering the
increasing tourism potential of the
region, the continent is becoming

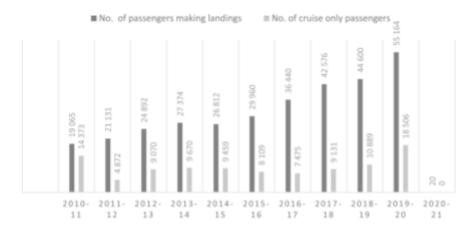


Figure 2: Overview of Antarctic tourism: A historical review of growth between 2010 and Present (IAATO 2021).

more prominent on an international level. Antarctica containing many potentials for development and gain raised many sovereignty claims on the continent and eventually led the militarization of the region. There had been many treaties and articles, which are mentioned in detail in the continuing sections, that intends to limit the operation activities that are about the mineral resources except for peaceful scientific research purposes but the lack of a definite and clear definition of the types of activities on the exploitation and investigation of underground resources, and dual-purpose activities create a loophole for parties to manipulate the enrichments of the region. Moreover, the lack of a definite allocation of restrictions about the exploration activities that may lead to exploitation of resources in the ocean up to 60 degrees south latitude causes a loophole to arise which the related parties could exploit for their benefits. A similar unclarity is present about the utilization of ice floes in the region as a spring of freshwater for ice mining. The concerns regarding Antarctica's militarization have grown during the recent years because of the assumption that the Madrid Protocol, the greatest



barrier for the operation of these sources, could be changed after 2048. The treaty can be changed not regarding the time as long as there is a consensus reached after the Antarctic Treaty consultative meeting, or it may be revisited after 2048 with the request of one of the consultative nations. The term "Antarctic nationalism" (Hemmings et al. 2015), that is developed after the closed policies and perspective raised the militarization. The sayings of sovereignty claims, utilizing from underground economic resources, owning superiority by having a strategic region, and using the resources for the personal gains of parties are the factors that increased the Antarctic nationalism. In summary, the need to exploit biological and subterranean resources, the ability to use dual-purpose (military and scientific) equipment made possible by technology, and the increased accessibility of the region due to technological advancements and global warming are some of the factors contributing to the militarization of the Continent. The potential for covert military actions on the Continent by certain parties to buttress their claims or assert their sovereignty in the event that the ATS is altered raises even more concerns about the risk of militarization. Furthermore, by endangering the security of the measures implemented to protect the continent from external threats, it is determined that Antarctic nationalism leads to militarism.

The quandary of security and militarization in Antarctica:

All of the aforementioned factors expand the militarization of Antarctica. However, as of right now, it is impossible to discuss the de facto and open military of the Continent, notwithstanding the hazards. Dual-use civil/military systems, however, can be used for military objectives at any moment. Satellite ground stations and communication systems are included in this scope, even if it is uncertain whether systems offer dual use because of their obscurity. Furthermore, when needed, transportation infrastructure like ice-breaking ships and airstrips/airports will be able to enable dual-use. Those actions that are ambiguous, hard to identify, and perhaps refute, but do not clearly violate the Treaty, are the ones that garner the greatest attention when it comes to the militarization of the Continent. One may characterize these actions as "non-uniformed military practices" in this way. These types of actions are typically favored to boost regional or worldwide effectiveness when the traditional use of force is not yet considered suitable because of political circumstances, expense, or a lack of prerequisites. It should not be considered just about attack systems when the topic is the militarization of Antarctica. This means that defensive systems that can help identify or neutralize a cruise missile should be included in this idea in addition to support systems that can be employed to guarantee that a cruise missile reaches its target. As a result, the inspections that are required under the Antarctic Treaty ought to be sufficiently effective in this regard. It is evident that there were generally few inspections conducted at the stations under the purview of the Antarctic Treaty when taking into account the overall number of inspections completed at those locations. For example, no inspections have been conducted at 22 stations, despite the fact that several of them are currently temporarily closed. The Great Wall of China, Bellingshausen, the Russian Federation, Henryk Arctowski, Poland, Comandante Ferraz, Brazil, and Artigas, Uruguay, were all inspected fifteen times, twelve times, eleven times, and ten times, respectively. On the Continent, these stations are the ones that are examined the most frequently. Since the Antarctic Treaty was signed, one to eight inspections of other



stations have taken place. Additionally, because of the pandemic's effects, no inspections had been conducted in the previous years which created a way of exploiting the resources and increasing military actions in Antarctica.

Major Parties Involved and Their Views

Argentina: The sovereignty claims of Argentina over some Western sections of Antarctica was stated in February 1943. Because of the clashing interest of Argentina and the UK, there have been instances in which both nations performed imbroglios during the 2nd World War's state of turmoil. After this incident the British government has referred the International Court, and Argentina was sure that the court will claim the British hegemony over the region. During the aggression with the UK Argentina was side by Chile against the UK's intentions. Some other South American nations such as Brazil challenged Argentina and Chile's intention to own Southern parts of Antarctica.

Chile: After the Second World War Chile became the first Southern American country who has territorial claims in Antarctica. On 6th of November 1940 Chile sought sovereignty over the Southern Territories of the continent named Chilean Antarctic Territory, and after that got involved in the scientific research in the continent. Chile recognizes the Artic Treaty and its conventions however the nation still has territorial claims on the continent. The intentions of the peaceful status of Antarctica are in danger behind the nation's scientific research purposes and multi-usable facilities and personnel.

China: Even though in history Chinese were skilled marines their involvement in Antarctica began in 1978 with them taking a side with Chile. Because of Mao Zeadong's closed-door policy Chinese were not interested in far lands and research. They firstly were interested in the Southern Ocean fishers, and took advice about it from New Zealand, however later on started constructing scientific hubs and stations over Antarctica as well as satellites that are destined to work over the continent. China believes that the resources of Antarctica should not be exploited for the benefits of mankind and the continent should be owned by all humankind. However, China defends the "first comed, first served" rule. Although China adapts the Antarctic Treaty they are using the scientific hubs for their commercial interests and had territorial sovereignty claims over the continent in history. The rising power of China and the innovative technologies are a potential danger for the exploitation of the allocated resources in the continent.

Russia: The interests of Russia have significantly impacted the development of the continent. The national interests of Russia cause the region to become more militarized. The military involvement of Russia is separated into two sections: ground-based research and Antarctic stations which possibly own military and intelligence intentions. Particularly for ISR and communications, space research and the stationing of satellite technology assets on the continent are frequently seen as covert military operations. Russia has been stepping up the deployment of ground-based Global Navigation Satellite



System (GLONASS) facilities in Antarctica, satellite relay 103, and remote sensing capabilities through the state firm Roscosmos.104 Due to its dual function, GLONASS is suspected of being used by Russia for military and intelligence operations, namely for missile tracking and enhancing its command and control (C2) capabilities. Within the framework of the Antarctic action plan for 2021, GLONASS installations will be based at the reopened Russkaya station in the upcoming years. The clandestine use of anti-satellite or electronic warfare tools on the continent would be concerning as they would both be blatant disregards for the ATS.

United States of America:

In the times of the Cold War the United States was playing a significant role in the geopolitical decisions of Antarctica about shaping the continent and deciding the territories of the relevant nations to operate. The USA's military activities in the region during the times of Cold War was mainly concerning the scientific research activities, specifically considering the International Geophysical Year (IGY) of 1957 until 1958. The presence of the USA serves military capabilities and infrastructure as well, such as but not limited to McMurdo Station, while also having strategic intentions, about supporting military operations' logistics and collecting intelligence activities. The USA's presence after 2015 has been shaped by proceeding military activities and scientific research activities. The USA owns various research stations and hubs in the continent, including the McMurdo Station which is one of the most facilitated and largest research hubs on Antarctica. Although these research stations' main focus is on scientific research in differentiating fields, including climate change and glaciology, they are also a way of working as logistical hubs and bases for military personnel and equipment that can be used for dual purposes. Also, the investments are continued by the USA in research and exploration of the continent, specifically in territories of strategic interest that underscores its effect on the region.

Australia: Since 1963, Australian inspection teams have carried out ten inspections, with Australia having the greatest claim to sovereignty on the Continent. Inspections were recently carried out in 2020, 2016, 2011, and 2010 by Australia. According to the inspection team's report, the station and the activities it saw aligned with the environmental protocol's provisions as well as the Treaty's core obligations regarding non-militarization and peaceful use (Australian Government 2020, p. 5). Naturally, this does not imply that the inspections are adequate; in fact, it is debatable whether or not an organization like Australia, which has legitimate worries about the militarization of the Continent, has conducted adequate inspections. Similarly, with the growing number of research bases, it is concerning that many of them have not been examined in a long time or that staff members lacking necessary experience have conducted the inspections. This is because research bases are becoming more and more numerous.



Timeline of Events

1 December 1959	The Antarctic Treaty was signed by 12 members. Banning the military actions in the continent and promising only scientific and peaceful actions.
September 1961	The Antarctic Treaty was put into action.
October 1971	Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR) was signed. It promotes peaceful and scientific usage of Antarctica.
November 1980	United Nations General Assembly adopts Resolution 34/22, reasserting the demilitarized status of Antarctica.
January 1989	Madrid Protocol that inhibits the mineral resourcing activities in Antarctica enters into force.
October 1991	In one of the Antarctic Treaty Consultative Meetings the members adopt the Guidelines for Environmental Impact Assessment in Antarctica that aims to supervise the scientific researches and their frameworks in the continent.
July 2004	The US establishes the United States Coast Guard Cutter plans to increase their presence in Antarctica.
June 2009	The tensions in the continent rose up after Norway's Dronning Maud Land Air Network Project (DROMLAN) project in Antarctica.
October 2016	Russia guides military exercises in Antarctica that results with international investigation over the aim of the military exercises conducted in the continent.
April 2018	China constructing the Kunlun Station which is located in the southern part of the continent and is the 5th research center constructed by China raises concerns about militarization.
August 2020	Australia promotes better infrastructure for Antarctic



	research stations, highlighting the need for scientific cooperation and the importance of security and peace in the region.
November 2020	The concerns about militarization in the region increase as satellite imagery indicates the rising military activities near Antarctic research stations, bringing questions about nations' compliance to the Antarctic Treaty's requirements about demilitarization of Antarctica.
August 2022	Concerns rise up after a territorial dispute between two Antarctic scientific research stations that are constructed by different nations, emphasizing the tensions are because of over or under resource allocation and sovereignty claims by different parties in the region.
December 2022	The United Nations Security Council (UNSC) gathers for a special meeting that aims to address the rising concerns about the militarization in Antarctica, highlighting the need for diplomatic cooperation and solutions for the benefit of the continent.

UN Involvement

The United Nations has played a crucial role while taking measures against the militarization of Antarctica and limiting the military activities in the region as well as the management of the territorial claims that have been made throughout the years, which are still continuing. The UN hosted several meetings and assisted the issue in regard as an international platform in which the related nations can gather and foster the international collaboration that is essential for addressing the issue. The UN has created a medium for many treaties that aim to demilitarize the continent, such as but not limited to the establishment of the Antarctic Treaty system, Madrid Protocol, the Comprehensive Nuclear-Test-Ban Treaty which helped for the maintenance of a initiative by opposing parties who clash thor interest about the region. The UN has passed resolutions, especially in its General Assembly meetings and Security Council. The presence of the UN is not limited with the resolutions and treaties, the UN also has served by allocating experts who participate in the scientific researches in the region for the benefit of the environment. In short, the UN is involved in the issue in many ways to foster global collaboration and ensure that Antarctica is being used only for peaceful purposes.



Relevant UN Documents

- Adopted by the United Nations General Assembly Resolution A/RES/50/245 on 10th of September 1996: "The Comprehensive Nuclear-Test-Ban Treaty"
- Adopted by the United Nations General Assembly Resolution A/RES/71/74: "Prevention of an arms race in the seabed and ocean floor and the subsoil thereof."
- Adopted by the United Nations General Assembly Resolution A/RES/71/90: "International cooperation in the peaceful uses of outer space."

Treaties and Events

Antarctic Treaty:

The Antarctic Treaty was signed in Washington on 1st of December 1959. There are seven countries who have firstly signed the treaty including Argentina, Australia, Chile, France, New Zealand, Norway and the United Kingdom whose territorial claims were intersecting. There have been countries who did not recognize any claims such as the US and the Soviet Union. However all positions of the countries who are a part of the Antarctic Treaty is protected in 4th article of the treaty that states: 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. The treaty states that Antarctica shall be used for peaceful purposes only and all activities conducted in the continent are open at all times to inspect. There are many sections that the treaty seeks to protect including peaceful use and inspections, science and operations, environmental protection, tourism and non governmental activities. The treaty is strictly against the militarization of Antarctica for non-scientific purposes. Currently there are 44 other countries that have signed the Treaty. There are 29 consultative parties and 27 other non-consultative parties who do not participate in the decision-making process. The Treaty conducts annual meetings for the aim of sharing information and consulting each other about Antarctica. The name of the meetings is the Antarctic Treaty Consultative Meeting (ATCM). These meetings consist of the consultative parties, non-consultative parties, observers, and invited experts.

Madrid Protocol:

Before known as the Protocol on Environmental Protection to the Antarctic Treaty, it was established in 1991 and put into force in 1998. It has 46 signatory nations and the protocol aims to limit practices about mineral resource exploration as well as exploitation in Antarctica including military actions in the region. The treaty has been banning mining in the continent for at least 50 years. These measures are intended to protect Antarctica's ecosystem, ensuring that international collaboration is sustained, and the continent is only used for scientific exploration purposes. It prohibits activities such that it degrades the environment including militarization activities. It safeguards Antarctica as a continent



that is only destined for peaceful purposes and activities. It helps to sustain that the continent is a demilitarized zone and away from military activities and installations.

The Comprehensive Nuclear-Test-Ban Treaty (CTBT):

The treaty intends to prohibit all types of nuclear explosions, such as underground tests, and helps to reduce the risk of nuclear conflict and the usage of nuclear weapons. This aspect of the treaty serves for the designation of Antarctica as a demilitarized zone that is correlated with the Antarctic Treaty System and promotes peace in the region. The treaty also encourages wider focuses of disarmament that correlates the goal of sustaining stability and security. Being bound to these rules promotes Antarctica's status as a peaceful and demilitarized territory, which is also stated in the Antarctic Treaty. At the same time CTBT includes a perspective that focuses on the environmental protection of Antarctica. In short the treaty correlates with the Antarctic Treaty and it aims to demilitarize and environmentally pristine the nature of the continent and promote the peaceful, scientific usage of the Antarctic region.

Evaluation of Previous Attempts to Resolve the Issue

The major attempt to resolve and regulate the issue is the Arctic Treaty. The treaty did not establish a great solution for the sustainability of peace in all parts of Antarctica. Currently the agreement does not inhibit the usage of nuclear power for peaceful utilization, and from 1962 till 1972 the US has been operating a non-functioning nuclear reactor at McMurdo Station which has contaminated more than 12 thousands tons of soil, which is a huge danger for the environmental well being of the continent. After operating the reactor, the US placed the contaminated soil in the north of Los Angeles. Moreover the treaty did not have a strong environmental commendation. In 1991, the members of the treaty established a protocol named Madrid Protocol that inhibits practices of mining and made all continental performations on an environmental basis. Currently the Antarctic Treaty has many challenges. Although the Antarctic Treaty is a great achievement for the regulation of the issue, the clash of interest of many nations and them manipulating the so-called peaceful intentions for their gains the treaty becomes ineffective day by day. The presence of nuclear powers and satellites for research purposes can be easily used for non-peaceful intentions by nations who have claimed their sovereignty in different parts of the continent. The dual use equipments and personnelles that are assigned by mission regarding the continent are a current threat for the peace in the continent and the historical agressions between nations being present in action in the region is rising the tensions even more, and the Antarctic Treaty should be renovated in accordance of the needs of the day on an international level for the sustainability of the peace in the region while also allowing the states to foster their scientific researches and innovations in the region.



Possible Solutions

For addressing the issue and finding long-term affecting solutions there has to be a comprehensive and collaborative approach that prioritizes the wellbeing of the world rather than personal gains of each nation. Enforcing the Antarctic Treaty System (ATS) by strengthening its fundamental principles and sustaining a vigorous supervision mechanism is essential. Increasing the level of transparency and dialogue among the concerned nations would help address the problems about militarization. While at the same time promoting stricter environmental protection can ensure Antarctica's undefiled ecosystem. Promoting global disarmament initiatives, such as but not limited to the execution of the Comprehensive Nuclear-Test-Ban Treaty (CTBT), would prevent the rising usage of weapons and maintain the demilitarized status of the continent. Highlighting the harmony in scientific explorations as the pivotal ideas of activities in Antarctica and enforcing the monitorization and surveillance abilities are important. The implementation of the civilian oversight procedures, taking an effective role in international diplomacy to solve conflicts, and increasing the public awareness about the cruciality of the demilitarization of the continent are also essential. The consideration of the establishment of further marine protected territories or wildlife reserves in the continent can additionally limit the possible militarization activities and safeten the biodiversity. By inducing these restrictions and implementing a collective commitment to cooperate peacefully as well as regarding the protection of the environment, these issues about the militarization of Antarctica can be addressed effectively.

Notes from the Chair

These links are helpful for the experts to gain further insights about the issue:

- The official website of the Secretariat of the Antarctic Treaty: https://www.ats.ag/e/antarctictreaty.html
- The Delineation of Militarisation in Antarctica: https://thestrategybridge.org/the-bridge/2017/1/31/the-delineation-of-militarisation-in-antarctic
- The Polar Trap China, Russia, and American Power in the Arctic and Antarctica: https://media.defense.gov/2021/Oct/24/2002879323/-1/-1/1/JIPA%20-%20BURKE%20&%20MATISEK.PDF
- Impact of security dilemma on Antarctic militarization:
 https://journals.pan.pl/Content/123017/PDF/2022-02-PPR-04-Kokyay.pdf?handler=pdf
- Demilitarization and Arms Control: Antarctica:
 https://scholarlycommons.law.case.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=17

 55&context=jil



Bibliography

ASCOBANS. "ASCOBANS Advisory Committee Meeting Discusses Impacts of Military Activities on Marine Mammals." ASCOBANS, 28 Jan. 2022,

www.ascobans.org/en/news/ascobans-advisory-committee-meeting-discusses-impacts-military-activities-marine-mammals. Accessed 15 Feb. 2024.

Australian Antarctic Division. "Antarctica Treaty System." Australian Government, Department of Agriculture, Water and the Environment, 2023,

https://www.antarctica.gov.au/about-us/antarctic-treaty/. Accessed 25 Feb. 2024.

Barr, Robert Graham. "Military Forces and Military Conflicts in Antarctica: Deterrence Theory and Disarmament Possibilities." GeoJournal, vol. 33, no. 4, 1994, pp. 489-497. JSTOR, www.istor.org/stable/41146449. Accessed 25 Feb. 2024.

Bergin, Anthony. "Antarctic Nationalism | The Strategist." The Strategist, March 4, 2013. https://www.aspistrategist.org.au/antarctic-nationalism/. Accessed 11 March 2024.

Brady, Anne-Marie. "Environmental Conservation in Antarctica: Assessing the Effectiveness of the Antarctic Treaty System." Review of European, Comparative & International Environmental Law, vol. 24, no. 2, 2015, pp. 209-219. Wiley Online Library, doi:10.1111/reel.12117. Accessed 25 Feb. 2024.

Cook, Megan. "The Antarctic Environmental Protocol: Towards a New Era in Antarctic Governance?" The International Journal of Marine and Coastal Law, vol. 19, no. 3, 2004, pp. 301-326. Brill, doi:10.1163/1571808042852759. Accessed 25 Feb. 2024.

Cold Front: Antarctica and Its Military Future.

www.lowyinstitute.org/the-interpreter/cold-front-antarctica-its-military-future. Accessed 16 March 2024.

Environmental Investigation Agency. "Out of the Cold: A Spotlight on Military Activities in the Antarctic." Environmental Investigation Agency, 2022,

https://eia-global.org/sites/default/files/2022-01/Out%20of%20the%20Cold%20Military%20Activities% 20in%20Antarctic.pdf. Accessed 20 Feb. 2024.

Kriwoken, Lorne K. "The Antarctic: A Unique and Complex Environmental Management Challenge." Journal of Environmental Management, vol. 56, no. 2, 1999, pp. 77-94. ScienceDirect, doi:10.1006/jema.1999.0281. Accessed 20 Feb. 2024.

Musto, Ryan Alexander. "Antarctic Arms Control at 60: A Precedent or a Pole Apart?" *Wilson Center*, 2 Nov. 2019, www.wilsoncenter.org/blog-post/antarctic-arms-control-60-precedent-or-pole-apart.

Oosthuizen, Wilma C., et al. "The Potential Impact of Military Activities on Antarctic Blue Whales: A Feasibility Study." Antarctic Science, vol. 30, no. 2, 2018, pp. 131-138. Cambridge Core,



doi:10.1017/S0954102018000045. Accessed 21 Feb. 2024.

United Nations General Assembly. "Resolution adopted by the General Assembly on 5 December 2023: Prevention of an arms race in outer space." A/RES/78/45, 5 Dec. 2023. United Nations, www.un.org/en/ga/75/resolutions.shtml. Accessed 18 Feb. 2024.

United Nations General Assembly. "Resolution adopted by the General Assembly on 5 December 2023: Prevention of an arms race in the seabed and ocean floor and the subsoil thereof." A/RES/78/46, 5 Dec. 2023. United Nations, www.un.org/en/ga/75/resolutions.shtml. Accessed 18 Feb. 2024.

United Nations General Assembly. "Resolution adopted by the General Assembly on 5 December 2023: International cooperation in the peaceful uses of outer space." A/RES/78/47, 5 Dec. 2023. United Nations, www.un.org/en/ga/75/resolutions.shtml. Accessed 18 Feb. 2024.