

# The Antarctic Treaty and International Agreements



# Genesis of the Antarctic Treaty

**Territorial disputes in Antarctica can be traced to the first formal claim made by Great Britain in 1908, called the Falkland Islands Dependencies**

**It began when W. S. Bruce led a Scottish National Antarctic Expedition to Laurie Island in the South Orkneys in 1902-1904**

**He had offered his stone hut and meteorological station to the British, but they turned it down**



**Snubbed, Bruce gave it to the Argentinians who had helped him so much, and they established what is now the longest continuous occupation in the Antarctic since 1904**

**The 1908 claim by Britain included the Falkland and South Orkney Islands, South Sandwich Islands, and the Antarctica Peninsula**

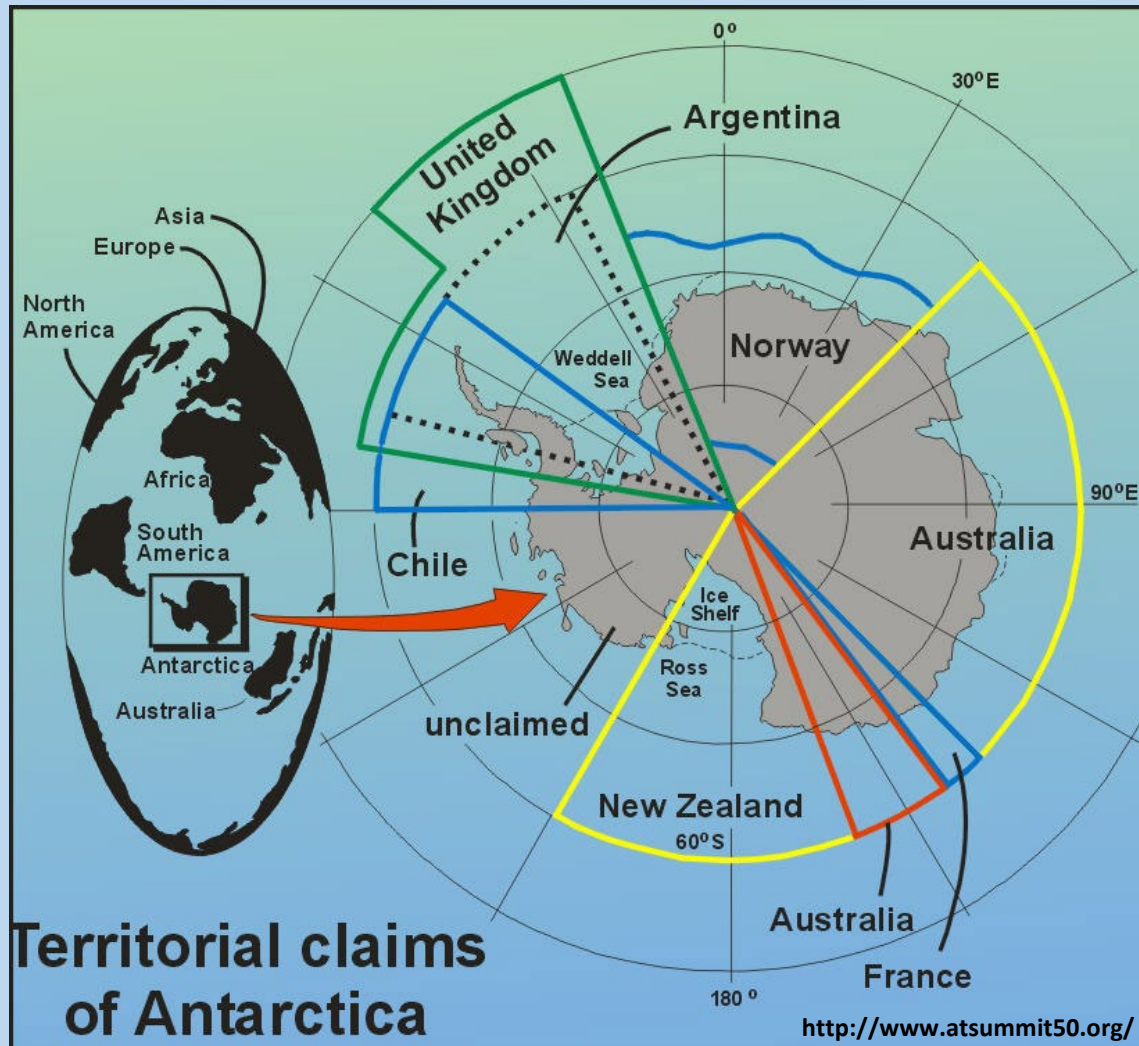
**Ultimately these disputes with Argentina led to the Falklands war in 1982**

**Orcadas Base**



By the 1940s, a number of wedge-shaped claims had been made, though some were restricted to just some islands (South Africa) or part of the coastline (Norway)

Only Britain, Argentina, and Chile had overlapping claims





# Sledging journey October 1902



British Base "D" 1945



Esperanza 1952



**In the 1940s, Chile and Argentina each tried to make separate claims of priority for their territories based on decrees dating from the 1400s**

**In 1947, though, the two countries agreed to a**

**“harmonious plan of action for the better scientific knowledge of the Antarctic zone by means of exploration and technical investigations”**

**Berkman (2002)**

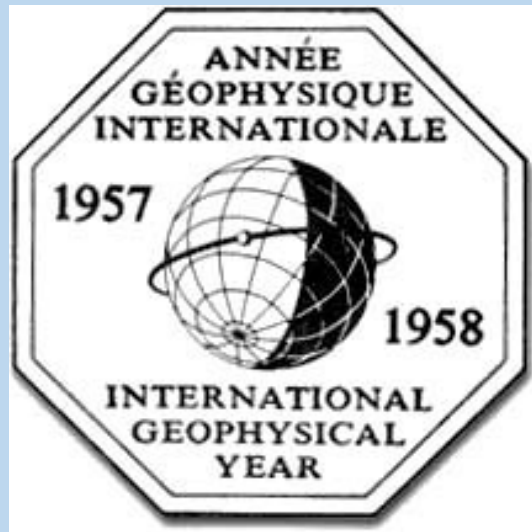
**Most of the other countries recognized each other's claims**

**U.S. tried to stay neutral, despite previous claims though these were never asserted**

**In 1948, the U.S. proposed that the Antarctic become an international trust territory and place it under a United Nations Trusteeship**

**Only New Zealand, though, said it would relinquish its claims for this trust**

**Then, in 1950, Lloyd Berkner proposed the IGY for 1957-1958 and scientific research began to shape Antarctica's future**





**The first Antarctic conference to emphasize science convened in Paris in 1955**

**Most of the countries that attended this conference were to become the first signatories of the future Antarctic Treaty**

**It was felt that science, not politics, might finally bring accord to Antarctica and all the territorial disputes**





**By 1959, there were seven claimant and five non-claimant nations involved in Antarctic research:**

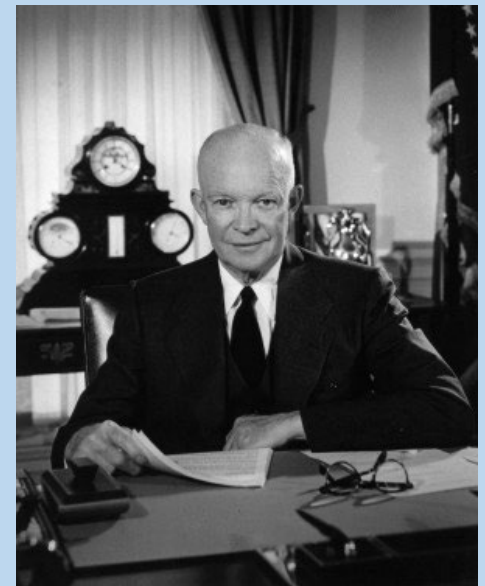
**Claimants: Argentina, Australia, Chile, France, New Zealand, Norway, and the U.K. (including Great Britain and Northern Ireland)**

**Non-claimants: Belgium, Japan, South Africa, U.S.S.R., and the U.S.**

**The IGY and focus on research, creation of SCAR in 1958, and increasing discovery of mineral, oil and gas deposits on land and on the continental shelf led these 12 nations to hold a series of meetings and hammer out the guidelines that became the Antarctic Treaty**

**The meetings were held in Washington D.C. at the invitation of President Eisenhower**

**The meetings were secret to other countries and known only to the 12 participants (Hanesian 1960)**



The treaty was formalized during these meetings and signed on 1 December 1959  
(every Dec. 1 is now known as 'Antarctica Day')

U.S. Ambassador Herman Phleger signed the treaty for the U.S.

He signed this photo for Laurence Gould, a scientist who had been south with Byrd in 1928 and did much to promote Antarctic research and international cooperation



**Antarctic Treaty signatories included those recognized in having consultative status, versus non-consultative**

**Consultative: recognized in conducting substantial research activities, including having a scientific station or expeditions; also known as Contracting Parties**

**Non-consultative: do not conduct substantial research, but accede to the terms of the treaty and can attend meetings**

**Only consultative nations can vote on Treaty amendments and any new articles**

**In general, acceding nations have initiated research in Antarctica and eventually become consultative parties**



**Break into groups and make an outline of a treaty for Antarctica that would:**

- 1. help resolve issues between claimant nations**
- 2. provide guidelines that everyone could accept for the future of Antarctica and its living and non-living resources**

**The Treaty has 14 articles and it relatively short and succinct:**

[http://www.atsummit50.org/session/the\\_antarctic\\_treaty-5.html](http://www.atsummit50.org/session/the_antarctic_treaty-5.html)

**Read links on background, history, and significance to humanity of the treaty on the upper right of this website**

**The Treaty went into force in 1961 and resolved that “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”**

**Enforcement of treaty is left to the nation’s involved, a sort of ‘gentleman’s agreement’**

**The Treaty allows for the presence of military from each country, but only for peaceful purposes and scientific cooperation**

**The Treaty does not expire, but can be reviewed and modified with a majority vote of consultative parties**

**The Treaty sets aside, but does not dissolve, existing territorial claims**

**There are currently 29 CP and 27 NCP countries in the Treaty, with Iceland, Mongolia, and Kazakhstan the most recent additions in 2023 with San Marino**



# **Antarctic Treaty Articles**

**Preamble Interest of all Mankind**

**Article I Peaceful Purposes Only**

**Article II Freedom of Scientific Investigation**

**Article III International Cooperation in Scientific Investigation**

**Article IV No Basis for Asserting, Supporting or Denying Claims**

**Article V No Nuclear Explosions or Radioactive Waste Disposal**

**Article VI Area of Application South of 60° South Latitude**

**Article VII Complete Freedom of Access and Inspection by Designated Observers**

**Article VIII Jurisdiction by the Contracting Parties over their own Nationals**

**Article IX Consulting and Recommending Measures of Common Interest**

**Article X Consistent with Charter of the United Nations**

**Article XI Resolve Disputes by Peaceful Means**

**Article XII Antarctic Treaty Modifications and Amendment**

**Article XIII Accession and Ratification**

**Article XIV Official Languages and Depository Government**



**General Dwight D. Eisenhower, 34<sup>th</sup> U.S. President  
Two terms, 1953-1961**

**How did Eisenhower bring together all nations, including the Soviet Union, to agree on this treaty at the height of the Cold War?**

**--Eisenhower was Supreme Commander of Operation Overlord in WWII to invade Europe at Normandy (D-Day, 1944) and defeat Nazi Germany**



**--he promoted peace and peaceful resolution of conflicts after the war**

**--he was brought in to resolve the Korean War, which ended in 1953**

**--as President he refused to escalate conflicts with other countries, or start any new wars**

**More than anything, Eisenhower had worldwide respect and he had a gift to work with people, very likable**





**Eisenhower Presidential Library  
Abilene, Kansas**



**The Antarctic Treaty was perhaps Eisenhower's greatest achievement, but is not recognized or even mentioned in many of his biographies**

- records at library reveal that he was pressured to not sign this treaty**
- his own National Security Council pushed him to stake a claim for territory in Antarctica based on earlier U.S. expeditions there**
- he refused to do that and documents indicate that he believed it would escalate conflicts among nations with overlapping claims**
- also concerned about keeping defense budget down, and maintaining a balanced national budget**



ANNEX D  
(Prepared by State)DRAFT

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

## A PROCLAMATION

WHEREAS, over a period of many years, commencing in the early eighteen-hundreds, certain areas of the Antarctic region have been discovered, sighted, explored and claimed on behalf of the United States of America by nationals of the United States of America and by expeditions carrying the flag of the United States of America; and

WHEREAS, during such period, the Government of the United States of America and its nationals have engaged in well known and extensive activities in the Antarctic region;

NOW THEREFORE, I, DWIGHT D. EISENHOWER, President of the United States of America, do hereby proclaim and make known that:

I. The area between  $90^{\circ}$  W. longitude westwardly to  $150^{\circ}$  W. longitude, and between  $70^{\circ}$  S. latitude and the South Pole, excepting areas of the high seas, is within the sovereignty of the United States of America.

II. With respect to other areas of the Antarctic region, the United States of America reserves its rights, pending the conclusion of satisfactory arrangements with other states which have asserted claims of sovereignty in the Antarctic region.

## Draft Proclamation for U.S. claims in Antarctica, 1958

Eisenhower never gave this statement, but the fact that it was drafted for him indicates the pressure he was under to do this

**--also believed that it would extend the Cold War to a new region of the world and he wanted to avoid that**

**--Antarctica for 'peaceful purposes only' fits perfectly with his beliefs at the time and probably no other person could have succeeded at uniting nations for this treaty**





**Numerous agreements were added to the Treaty since it was signed:**

**Agreed Measures 1964**

**Seals Convention 1972**

**CCAMLR 1980**

**CRAMRA 1988**

**Environmental Protocol 1991**



**Antarctic Treaty System (ATS)**

# **Agreed Measures for the Conservation of Antarctic Fauna and Flora**

**Signed at ATS meeting June 1964, went into force in 1982**

**Arose from concerns regarding ecosystem conservation and to prevent a repeat of the earlier sealing era**

## **Article VI**

**1. Each Participating Government shall prohibit within the Treaty Area the killing, wounding, capturing or molesting of any native mammal or native bird or any attempt at any such act, except in accordance with a permit.**

**2. Such permits shall be drawn in terms as specific as possible and issued only for the following purposes;**

**a) to provide indispensable food for men or dogs in the Treaty Area in limited quantities, and in conformity with the purposes and principles of these Agreed Measures;**

**b) to provide specimens for scientific study or scientific information;**

**c) to provide specimens for museums, zoological gardens, or other educational or cultural institutions or uses.**

## **Article VII**

- 1. Each Participating Government shall take appropriate measures to minimize harmful interference within the Treaty Area with the normal living conditions of any native mammal or bird, or any attempt at such harmful interference, except as permitted under Article VI.**
  
- 2. The following acts and activities shall be considered as harmful interference:**
  - a) allowing dogs to run free;**
  
  - b) flying helicopters or other aircraft in a manner which would unnecessarily disturb bird and seal concentrations, or landing close to such concentrations (e.g. within 200 meters);**

**The Agreed Measures also established a system to designate Antarctic Specially Protected Areas (ASPAs) where activities would be limited without a permit**

**Rules against introducing non-indigenous species to Antarctica**

**The Agreed Measures also led to the Antarctic Conservation Act of 1978 passed by Congress that applied to U.S. citizens only**

**This Act established rules and procedures for Antarctic research or visitation by U.S. citizens, needs for permits to work in ASPAs, etc.**

**Established enforcement against U.S. citizens if the Act was violated**

**The Act makes it unlawful, unless authorized by permit, to:**

- 1. take native mammals or birds**
- 2. enter specially designated areas**
- 3. introduce nonindigenous species to Antarctica**
- 4. use or discharge designated pollutants**
- 5. discharge wastes**
- 6. import certain Antarctic items into the United States**

## **Convention for the Conservation of Antarctic Seals signed in 1972**

**Arose from need to further protect seals with additional conservation measures since the Agreed Measures did not protect seals on the 'high seas'**

**A sealing expedition in 1964 was able to take crabeater seals from ice floes and not violate the Agreed Measures**

**Although the rights of parties on the 'high seas' could still not be legislated, there were no more sealing expeditions to Antarctica after 1964**

**Permissible takes for each species far exceed those actually taken for scientific research or other uses**

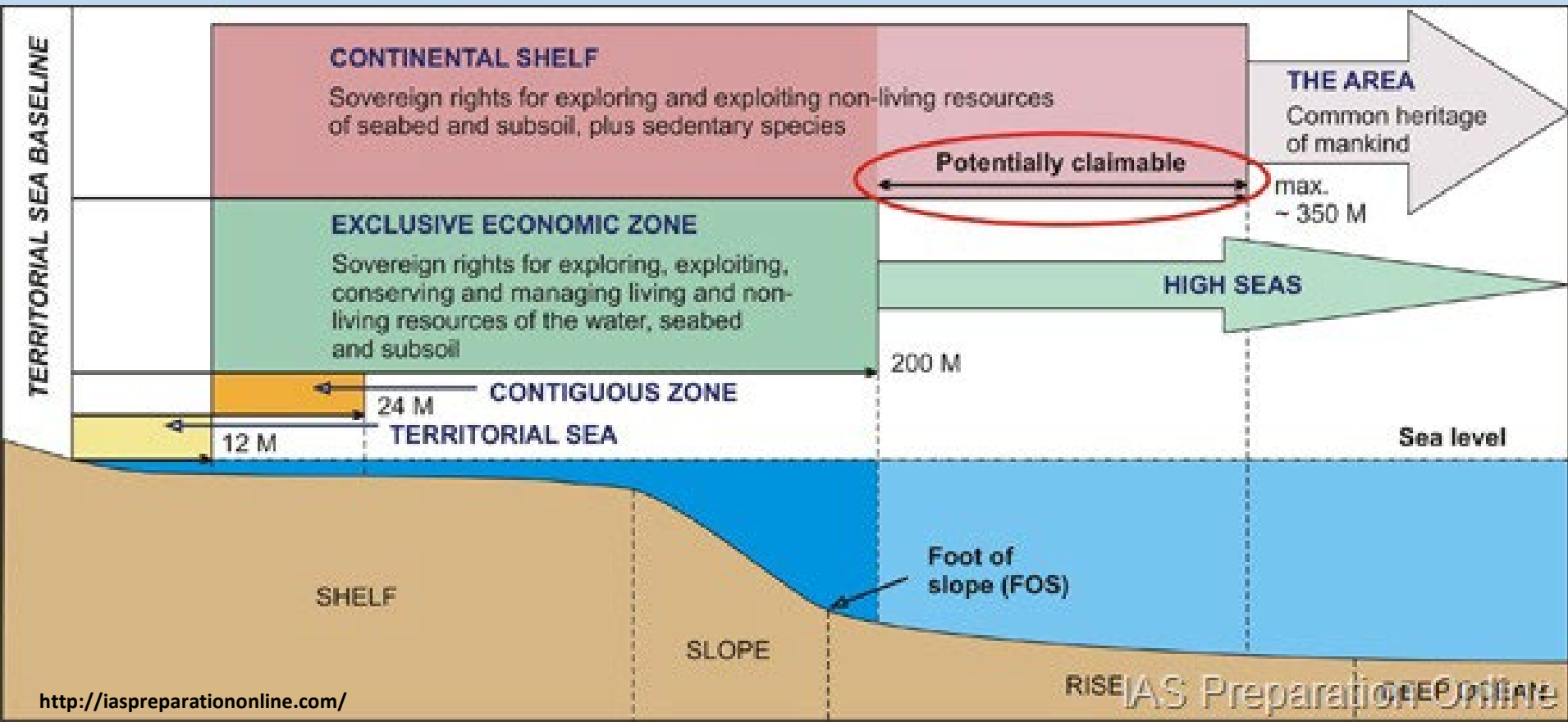


# United Nations Convention on the Law of the Sea (UNCLOS)

Ocean zones as recognized by international agreement signed in 1982 but not effective until 1994

High seas covers two thirds of all oceans, 45% of earth's surface

Does not protect biodiversity, mineral resources and no restraints on fisheries



**A new High Seas Treaty was signed by 82 countries at the United Nations in June 2023**

[https://oceans-and-fisheries.ec.europa.eu/news/win-ocean-high-seas-treaty-signed-united-nations-2023-09-20\\_en](https://oceans-and-fisheries.ec.europa.eu/news/win-ocean-high-seas-treaty-signed-united-nations-2023-09-20_en)

**Numerous agreements were added to the Treaty since it was signed:**

**Agreed Measures 1964**

**Seals Convention 1972**

**CCAMLR 1980**

**CRAMRA 1988**

**Environmental Protocol 1991**



# **Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR)**

**Signed at ATS meeting 1980**

**Arose because the Treaty did not include marine resources, such as fin fish, molluscs, crustaceans, etc., and because krill fisheries were increasing and krill was becoming depleted**

**Area defined was narrower: only south of the Antarctic convergence**

**The goal of CCAMLR was primarily management—prevent depletion of species beyond their ability to maintain stable recruitment**

**Also to restore depleted populations from before the agreement**

**Unlike other management agreements that usually target individual species, CCAMLR was undertaking management of an entire ecosystem**

## **Article II**

- 1. The objective of this Convention is the conservation of Antarctic marine living resources.**
  
- 2. For the purposes of this Convention, the term "conservation" includes rational use.**
  
- 3. Any harvesting and associated activities in the area to which this Convention applies shall be conducted in accordance with the provisions of this Convention and with the following principles of conservation:**
  - (a) prevention of decrease in the size of any harvested population to levels below those which ensure its stable recruitment. For this purpose its size should not be allowed to fall below a level close to that which ensures the greatest net annual increment;**



## **Article VII**

**1. The Contracting Parties hereby establish and agree to maintain the Commission for the Conservation of Antarctic Marine Living Resources (hereinafter referred to as "the Commission").**

**2. Membership in the Commission shall be as follows:**

**(a) each Contracting Party which participated in the meeting at which this Convention was adopted shall be a Member of the Commission;**

To help monitor entire ecosystem, CCAMLR established the Ecosystem Monitoring Program (CEMP) in 1985, plus works closely with SCAR

The goals of CEMP were to detect changes in the ecosystem that would be important towards conservation goals, and to distinguish between changes due to environmental variability versus harvesting

Identified some key indicator species to act as proxies for changes in fish stocks, krill



**Fisheries are of primary concern for CCAMLR, but reaching consensus for catch limits has been difficult**

**In 2012, CCAMLR agreed to establish Marine Protected Areas in Antarctica**

**By 2015, consensus still not reached on one for East Antarctica and another for the Ross Sea**

**Blocked by members from Russia and China**

**Recently, Ross Sea was approved as a reserve, but for only 35 yrs and certain areas can still be fished:**

**<http://thediplomat.com/2016/11/a-pyrrhic-victory-in-antarctica/>**

**See also review article on website on CCAMLR**

**Numerous agreements were added to the Treaty since it was signed:**

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**CRAMRA 1988**

**Environmental Protocol 1991**



# Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA)

Signed at ATS meeting June 1988

Arose to protect non-living resources in Antarctica and prevent international discord over mineral rights after oil crisis of 1973

Also maintains the use of Antarctica for 'peaceful purposes' as set forth in the Treaty

However, again all nations could not reach consensus on this agreement and this time it was France and Australia who refused to ratify it in 1989



<https://www.hemmings.com>



<https://www.fredericksburg.com>



**PROTOCOL ON ENVIRONMENTAL PROTECTION TO THE ANTARCTIC TREATY  
Signed at Madrid ATS meeting in 1991 and ratified unanimously in 1998**

**Supersedes the Agreed Measures, which were no longer current by 2011**

**Probably one of the most important agreements in the ATS with strict environmental protocols established for all research stations, tourism**

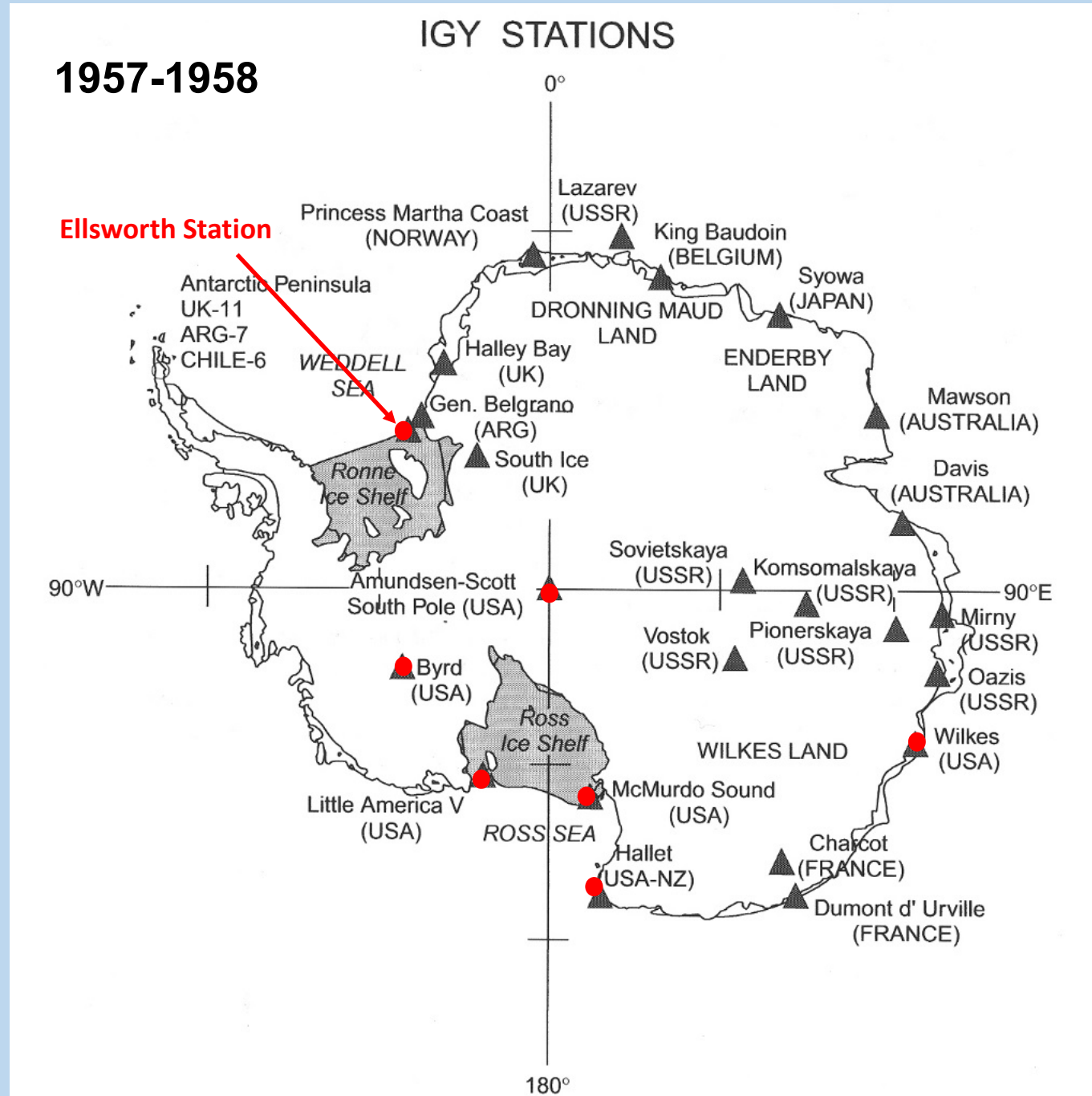
**Followed quickly after the failure of CRAMRA**

**Arose because impacts of stations varied—discarded materials, displacement of native fauna and flora, pollution from spills or dumping of wastes**

**Also there were still dumps left over from pre-IGY and IGY stations that needed to be cleaned up**

In the IGY, 12 countries established 40 stations in Antarctica with an additional 20 on islands

Seven established by the U.S., but Byrd and Little America were eventually abandoned, Wilkes was turned over to Australia in 1959, and Ellsworth to Argentina in 1959



**GREENPEACE**  
**DECLARES**  
**WORLD PARK ANTARCTICA**  
**AND DEMANDS**  
**SANCTUARY *FROM* EXPLOITATION**  
**FOR THE**  
**.LAST WILDERNESS!**  
**FEBRUARY 1987**

© Greenpeace / Andy Loor

Efforts by Greenpeace to draw attention to pollution and impacts in Antarctica helped in developing the Environmental Protocol



**Greenpeace base at Cape Evans, 1987, with first winter-over team  
Of four including a mechanic, doctor, radio operator, and scientist.**

**Official policy of ATS countries was to ignore them, though New Zealand  
would help them in an emergency**



GREENPEACE

GREENPEACE



McMurdo trash dump, 1990-1991





Blocking airstrip construction at Dumont D'Urville Station



**BOX 11.3 1991 PROTOCOL ON  
ENVIRONMENTAL PROTECTION TO THE  
ANTARCTIC TREATY (PROTOCOL)<sup>a</sup>**

**ARTICLE 3. ENVIRONMENTAL PRINCIPLES**

1. The protection of the Antarctic environment and dependent and associated ecosystems and the intrinsic value of Antarctica, including its wilderness and aesthetic values and its value as an area for the conduct of scientific research, in particular research essential to understanding the global environment, shall be fundamental considerations in the planning and conduct of all activities in the Antarctic Treaty area.
2. To this end:
  - a. activities in the Antarctic Treaty area shall be planned and conducted so as to limit adverse impacts on the Antarctic environment and dependent and associated ecosystems;
  - b. activities in the Antarctic Treaty area shall be planned and conducted so as to avoid:
    - i. adverse effects on climate or weather patterns;
    - ii. significant adverse effects on air or water quality;
    - iii. significant changes in the atmospheric, terrestrial (including aquatic), glacial or marine environments;
    - iv. detrimental changes in the distribution, abundance or productivity of species or populations of species of fauna and flora;
    - v. further jeopardy to endangered or threatened species or populations of such species; or
    - vi. degradation of, or substantial risk to, areas of biological, scientific, historic, aesthetic or wilderness significance;

<sup>a</sup>From the Antarctic Treaty Searchable Database: 1959–1999 CD-ROM.

**The Protocol prohibited mineral resource activities except for research**

**Also, all wastes must be removed from the continent**

**Oil and fuel spills, even tiny ones, must be mitigated and reported immediately**

**Required burning by incinerators only, no open burning**

**Sewage could be dumped in the sea only if it had no adverse effects on the local environment. For stations of 30 or more, sewage treatment is required first**

**After 50 yrs from ratification (2048) “any of the Antarctic Treaty Consultative Parties so requests, a conference shall be held as soon as practicable to review the operation of this Protocol”**

**Wilkes Station, East Antarctica, established by U.S. Navy in 1957 during IGY**

**Also built to counter potential military threats from the Soviet Union**





## Old radar dome at Wilkes





## Discarded and leaking fuel drums





**Wilkes was turned over to Australia in 1959 and they have since cleaned up much of the old station debris**





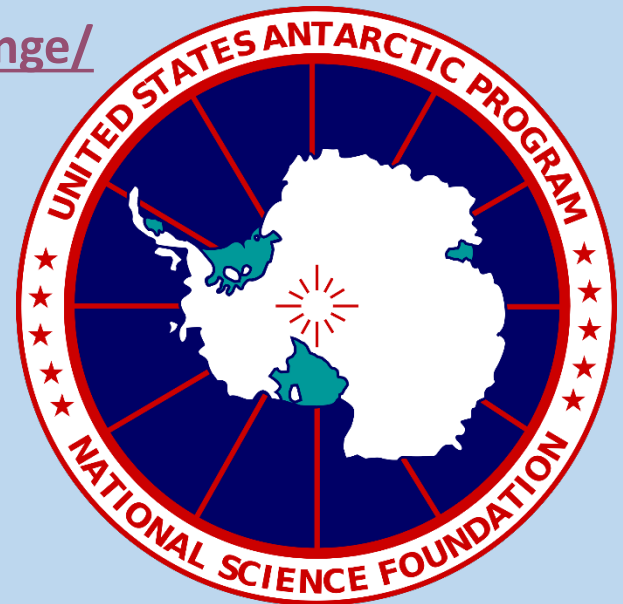
**The U.S. Antarctic Service began in the IGY with continuous presence of the U.S. in Antarctica since that time**

**The U.S. Antarctic Program (USAP) is the main agency today, funded by Congress as part of the National Science Foundation (NSF)**

**NSF is the main granting agency for scientists at universities and research institutions today**

**All exchange of information (Treaty Article VII) now posted on the Antarctic Treaty Secretariat website:**

**<https://www.ats.aq/devAS/InformationExchange/LatestReports?lang=e>**



## Polar Programs budget indicates the bulk of the costs are for logistical support:

OFFICE OF POLAR PROGRAMS (OPP)

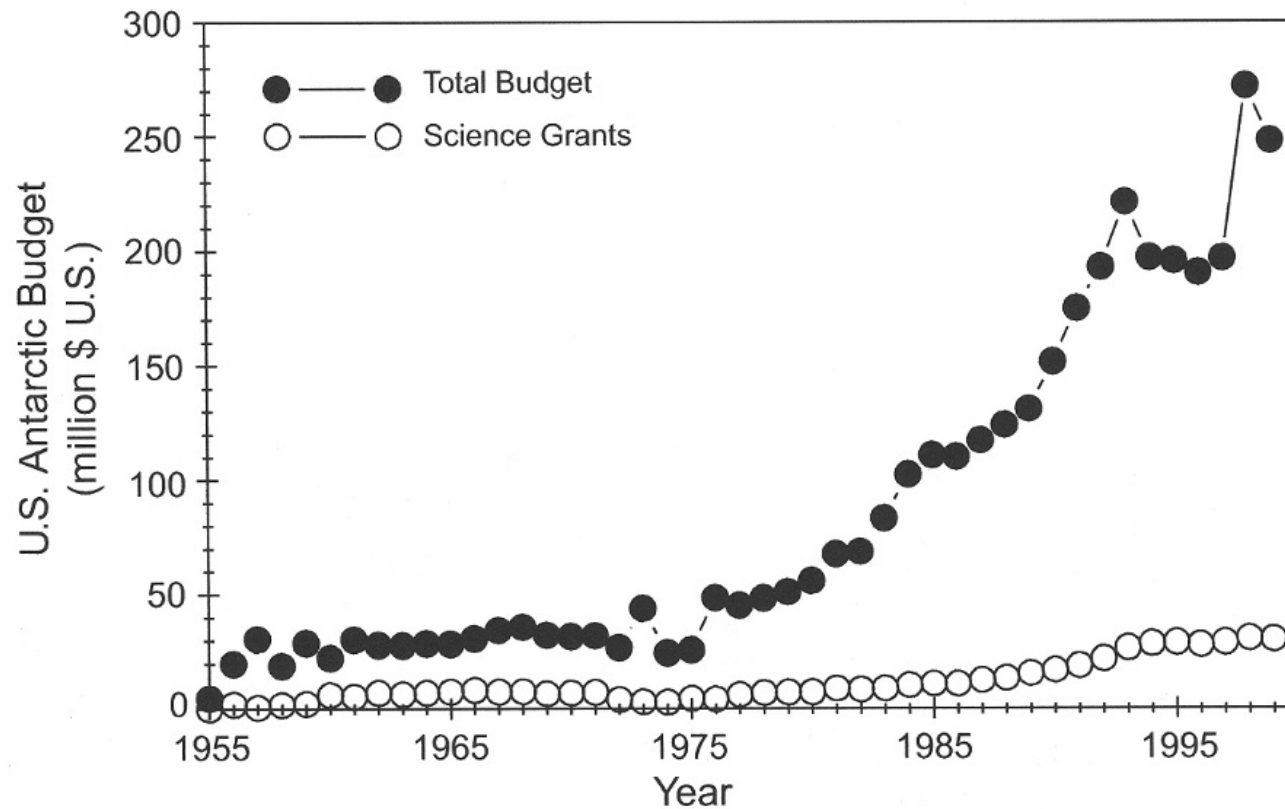
**\$547,100,000**  
**+\$63,060,000 / 13.0%**

OPP Funding  
(Dollars in Millions)

	FY 2021		FY 2022 (TBD)	FY 2023 Request	Change over	
	FY 2021	ARP			FY 2021 Actual	Percent
	Actual	Actual				
<b>Research</b>	<b>\$115.84</b>	<b>\$14.47</b>	-	<b>\$130.14</b>	<b>\$14.30</b>	<b>12.3%</b>
Long Term Ecological Research (LTER)	2.77	-	-	3.38	0.61	21.8%
STC: Center for OLDest Ice EXploration (COLDEX)	-	-	-	5.00	5.00	N/A
<b>Education</b>	<b>4.97</b>	<b>0.05</b>	-	<b>5.00</b>	<b>0.03</b>	<b>0.6%</b>
<b>Infrastructure</b>	<b>363.23</b>	-	-	<b>411.96</b>	<b>48.73</b>	<b>13.4%</b>
Antarctic Infrastructure Modernization for Science (AIMS)	0.22	-	-	-	-0.22	-100.0%
Arctic Research Support and Logistics	48.22	-	-	58.00	9.78	20.3%
Geodetic Facility for the Advancement of GEoscience (GAGE)	1.43	-	-	1.30	-0.13	-9.1%
IceCube Neutrino Observatory (ICNO)	3.56	-	-	3.83	0.27	7.7%
Polar Environment, Safety, and Health (PESH)	7.59	-	-	9.00	1.41	18.5%
Research Resources	8.00	-	-	5.29	-2.71	-33.9%
Seismological Facility for the Advancement of GEoscience (SAGE)	0.94	-	-	0.87	-0.07	-7.1%
U.S. Antarctic Facilities and Operations (AFO)	216.27	-	-	243.67	27.40	12.7%
U.S. Antarctic Logistical Support	77.00	-	-	90.00	13.00	16.9%
<b>Total</b>	<b>\$484.04</b>	<b>\$14.52</b>	-	<b>\$547.10</b>	<b>\$63.06</b>	<b>13.0%</b>

**For Antarctic research, over half the funding goes to McMurdo Station operations**

**About 25-30% goes to scientific research**



**FIGURE 11.2** National commitment of the United States to maintain an “active and influential presence in Antarctica” (as stated in Presidential Memorandum 6646 signed by Ronald Reagan on 5 February 1982) with the National Science Foundation (NSF) as the lead coordinating agency—affirming the central role of “scientific activities” as the basis for international cooperation in the south polar region. The total NSF Antarctic budget and allocation for scientific grants increased along with international interest in Antarctica since before the International Geophysical Year in 1957–58 (Fig. 5.3). Data courtesy of the National Science Foundation, Office of Polar Programs.

**The IPY in 2007-2008 was focused on global climate change and the role of polar regions in global processes**



**In 2009, celebrating the 50<sup>th</sup> anniversary of the signing of the treaty, a summit meeting was held in Washington D.C.**

<http://www.atsummit50.org/session/history-1.html>



## Quiz

1. What are two major events that led to the development of the Antarctic Treaty?
2. What is meant by claimant vs non-claimant nations in the treaty system?
3. What are some major points in the Antarctic Treaty and the later Agreed Measures? What are ASPAs?
4. What is CCAMLR, CEMP, and SCAR?
5. What changes in Antarctic operations were required by the 1998 Environmental Protocol?