



Joint Committee Annual Report 2011

Forward to the First Joint Committee Annual Report

Since its inception on October 4, 2004, the Joint Committee has played an important role in broadening and deepening the cooperation between Greenland and the United States. It is the primary forum for the tri-partite coordination that fulfills the vision of the Igaliku Agreement signed by Denmark, including the Greenland Home Rule Government, and the United States on August 6, 2004. Regular meetings of the Joint Committee in Copenhagen, Nuuk, and Washington, D.C. have led to greatly enhanced dialogue and important initiatives on a broad range of issues faced by Greenland and its people.

This first annual report is intended to be a baseline for future Joint Committee efforts following the restructuring of the Joint Committee working groups in 2010. Section 1 is an overview of Danish-Greenlandic-U.S. relations and interconnections. Section 2 is an inventory of projects either initiated under the auspices of the Joint Committee or incorporated into the Joint Committee structure. It will be updated annually to record the progress of previously initiated projects and to report newly initiated projects. It also highlights contributions made by the many different organizations working to enhance scientific, educational, cultural, and commercial connections between Greenland and the United States.

Most importantly, this report is an expression of the continued commitment of Denmark, Greenland, and the United States to use the Joint Committee to pursue the goals laid out in the Igaliku Agreement. It is in this spirit that we present it.

Signed,

Ambassador Michael Zilmer-Johns

Deputy Minister Inuuteq Holm Olsen

Ambassador Laurie S. Fulton

Introductory Remarks

Please find enclosed the Joint Committee Annual Report 2010. The report consists of two sections; Section 1 presents an overview of relations between US-Greenland-Denmark within the fields of Defense, Economy, Education and Politics. Section 2 is a project inventory, presenting the achieved results of ongoing projects and an accumulated statistics of all projects.

As this is the first Annual Report in this new set-up, I would like to sincerely thank all contributors for their efforts.

Especially I wish to thank the National Coordinators Melissa G. Ford (US), Casper Stenger Jensen (DK) and Pernille Møller (GL) for editing the chapters of Section 1. I also wish to thank the Status Group members for their work and always positive contributions to how the aims for the Report could be realized in the actual contents. The Status Group members are: Kirstine Borch (GL), Shawn Waddoups (US) and Casper Stenger Jensen (DK).

Anders U. la Cour Vahl
Chair
Joint Committee Status Group



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Overview of US-GL-DK relations



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Political co-operation

Overall framework

The Igaliku Agreement of 6 August 2004

In May 2004, and following a thorough process, the US on one side and Greenland and Denmark on the other side reached agreement on an agreement complex regarding modernization of the Defense Agreement of 1951. The agreement complex was signed on 6 August 2004 at a ceremony in Igaliku by Deputy Premier Josef Motzfeldt, Foreign Minister Per Stig Møller and U.S. Secretary of State Colin Powell.

The agreement complex includes:

- An agreement on the modernization of the Defence Agreement of 1951.
- A joint statement on cooperation on environmental issues at Pituffik.
- A joint declaration on technical and economic cooperation.

The Greenland Home Rule was a co-signatory to all three agreements.

The *agreement on the modernization of the defense agreement* includes:

- A preamble that recognizes constitutional change in status of Greenland since 1951, changes in base activities since 1951, Greenland's contribution to the common defense
- Provisions on bases and cooperation (there is only one base area, construction and major changes on the base area requires consultations)
- Provisions concerning the NATO Status of Forces Agreement
- Provisions for local cooperation

The *Joint Statement on Environmental Cooperation* states that:

- The parties commit to ongoing cooperation on the environmental conditions at the base.
- The US commits to apply the highest environmental standard at Thule Air Base, whether it is Greenlandic/(Danish) or American.
- An environmental sub-committee shall be established under the Permanent Committee on the US military presence in Greenland

The *joint declaration on technical and economic cooperation* provides a framework for cooperation between the three parties on non-military issues. The purpose of the declaration was to create real value for all parties concerned. To achieve this, a Joint Committee was set up to “work actively and collaboratively to identify and consider proposals and agree” (...) to “new or enhanced joint cooperation projects and programs” across a range of fields (i.e. research, technology and energy cooperation, environmental issues, education, development, tourism, air traffic planning and trade).

The Joint Committee held its first meeting on October 5 and 6 in Nuuk. One outcome of the meeting was a joint statement that concretized further work and ensured the foundation for continued broad and multifaceted cooperation between the three parties



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in areas of common interest. Reflecting the potential areas of cooperation, four working groups were established: 1) education and culture, 2) environment and 3) science, health and technology, and 4) trade, tourism and commerce. It was also established that the parties would host the annual meeting of the Joint Committee in turn.

High-level visits

Since 2004, Greenland has hosted a number of high-level visits from the US.

Senator John McCain (R-AZ) headed a delegation of senators on a trip to Greenland to observe the effects of climate change in August 2006.

In May 2007, Speaker Nancy Pelosi (D-CA) led a bipartisan delegation to Greenland and Europe to hold talks on the issue of global warming. During her visit, the Speaker flew to the Greenland Ice Cap to learn about scientific operations there. The Speaker's visit coincided with the 4th annual meeting of the Joint Committee, which was held in Ilulissat, Greenland.

Co-operation in regional fora

Both the US and Denmark, Greenland and the Faroe Islands have contributed actively to the work of the Arctic Council since its establishment. Denmark, Greenland and the Faroe Islands are currently chairing the Council and will hand over the chairmanship to Sweden at the ministerial meeting in Nuuk, 12 May 2011.

At the invitation of the Danish Minister for Foreign Affairs and the Premier of Greenland, representatives of the five coastal States bordering on the Arctic Ocean – Canada, Denmark, Norway, the Russian Federation and the United States of America – met at political level on 28 May 2008 in Ilulissat, Greenland, to hold discussions on the stewardship role of the so-called 'Arctic 5'. The Ilulissat declaration addresses issues concerning governance in the area and states that the five coastal states of the Arctic Ocean will continue to contribute actively to the work in the Arctic Council and in other relevant international fora.

Indigenous Peoples (ICC)

The majority of Greenland's population is Inuit and share parts of language, culture and history with the Inuit of Alaska. The Inuit Circumpolar Council (ICC) is an important forum for cooperation among Inuit in the circumpolar region, Greenland, Alaska, Canada, and Chukotka, Russia. The Inuit Circumpolar Council represents approximately 160,000 Inuit and participates in the work of the Arctic Council as Permanent Participant.

The principal goals of ICC are:

- To strengthen unity among Inuit of the Circumpolar region;
- To promote Inuit rights and interests on the international level;



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To ensure and further develop Inuit culture and society for both the present and future generations;

To seek full and active participation in the political, economic, and social development in our homelands;

To develop and encourage long-term policies which safeguard the Arctic environment;

To work for international recognition of the human rights of all Indigenous Peoples.



Economic Relations

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Greenland Economic Overview¹

Greenland's Self Rule Government

On June 21, 2009, Greenland assumed increased autonomy under a Self Rule Act, transitioning away from “home rule” which had been in effect since 1979. Under self rule, the Greenlandic government (Naalakkersuisut) and the Danish Government are recognized as equal partners and Kalaallisut, the Inuit dialect, is the official language of Greenland. Greenland will gradually take responsibility for additional government functions, such as prisons, criminal justice, courts of law, family law, passport processing, and mineral resources.

The Danish Government's annual block grant to Greenland is frozen at the 2007 level of 3.2 billion kroner (about USD \$570 million at the average 2010 exchange rate), adjusted for Danish inflation. Greenlandic inflation is often higher than Danish inflation, meaning the grant's value in real terms is expected to shrink in coming years. At the same time, Greenland gains rights to its mineral, oil, and natural gas resources, keeping the first 75 million kroner (about USD \$13.3 million) in annual revenues from exploiting these resources, with further revenues split equally between the two governments, with Denmark's share being subtracted from the annual block grant. Once the value of the block grant has been reached, any additional revenue would be subject to renegotiation between the Danish and Greenlandic governments.

Greenland's GDP

The public sector in Greenland, including publicly owned enterprises and the municipalities, plays the dominant role in the economy and employs roughly 50 % of the

¹ Based on figures reported by Statistics Greenland and Statistics Denmark unless otherwise stated



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workforce. A large part of government revenue (46 % in 2009) still comes from the Danish Government block grants. About a third of government revenue in 2009 came from taxes. The block grants remain an important supplement to GDP.

According to the World Bank, Greenland's GDP in 2008 was \$1.8 billion and GNI per capita was \$32,960. The global economic downturn affected Greenland, and a 2 % contraction of GDP was expected for 2009 (note: final statistics for that period have not yet been released). Historical surpluses in the public budget turned into a deficit of \$30 million in 2009, and unemployment is on the rise after an extended period of lower than average unemployment that started in 2003. The unemployment rate averaged 8.3 % for the first three quarters of 2010, up from a 2008 average of 5.5 %. Observers familiar with Greenland's economy, including Greenlandic Government officials, believe that structural reforms are still needed in order to create a broader business base and economic growth through more efficient use of existing resources in both the public and the private sector.

Greenland's Economy

The Greenlandic economy increased by an average of 3 % to 4 % annually between 1993 and 2001, the result of increasing catches and exports of shrimp, Greenland halibut, and, more recently, crabs. However, it was not until 1999 that the economy had fully recovered from an economic downturn in the early 1990s. GDP per capita growth averaged about 1 % between 1979 and 2008, though this does not take into account the effects of the Danish block grant or EU subsidies on the average disposable income in Greenland². During the last decade the Greenland Home Rule Government (GHRG) generally maintained small budget surpluses and kept inflation low, but a strain on the public budget has come from increased popular pressure for improved services in areas including education, health care, and retirement benefits. The government's efforts to increase the labor force and thus employment include increasing the retirement age from 60 to 63 years.

Trade³

Greenland's Export Sector

Greenland's economy remains very sensitive to foreign developments due to its continued dependence on exports of fish, mainly shrimp and the absence of a broader business base. According to the UN's Food and Agriculture Organization⁴, worldwide per capita fish consumption is at a record high and low global stocks are driving up prices, with current fish prices averaging above the previous record levels in 2008 prior to the economic downturn. The FAO warns that these high prices may negatively affect global sales of fish, which account for about 85 % of goods exports from Greenland. Greenland has registered a foreign trade deficit since the 1989 closure of its last

² Skatte- og Velfærdskommissionen: "Hvordan sikres vækst og velfærd i Grønland?" 2010

³ Based on figures reported by Statistics Greenland and Statistics Denmark unless otherwise stated

⁴ Source: <http://www.seafoodsource.com/newsarticledetail.aspx?id=9017>

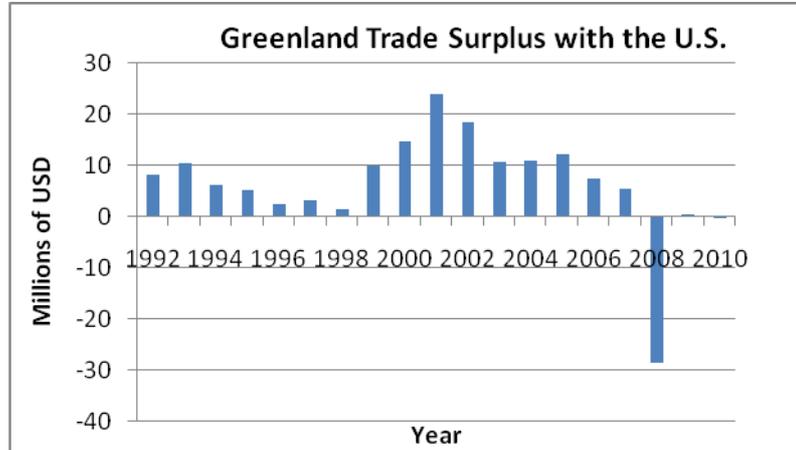


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remaining lead and zinc mine. In 2009, this trade deficit reached \$325 million or 18 % of GDP.

US-Greenland trade

Bilaterally, Greenland has had a trade surplus with the United States for over two decades, with the exceptions of 2008 (when an exceptionally large import of tele-communications equipment made for a large trade deficit) and 2010 (when there was a small



deficit of USD \$0.3 million). The bulk of trade consists of Greenland fish and seafood exports to the U.S. Greenland imports a wide variety of U.S. goods, especially finished goods and electronics. The tables below show the annual trade balance and the composition of trade between Greenland and the U.S.:

U.S. Trade with Greenland			
All figures are in millions of U.S. dollars on a nominal basis, not seasonally adjusted.			
Year	U.S. Exports to Greenland	Greenland Exports to U.S.	U.S. Trade Balance
2010	8.6	8.3	0.3
2009	7.1	7.6	-0.5
2008	34.9	6.1	28.8
2007	4.4	9.9	-5.5
2006	3.0	10.4	-7.4
2005	5.1	17.3	-12.2
2004	3.6	14.6	-11.0
2003	3.0	13.8	-10.8
2002	4.0	22.5	-18.5
2001	4.7	28.8	-24.1
2000	1.1	15.8	-14.7
1999	3.3	13.2	-9.9



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1998	6.1	7.4	-1.3
1997	4.9	8.0	-3.1
1996	4.1	6.5	-2.4
1995	2.4	7.6	-5.2
1994	3.2	9.4	-6.2
1993	2.7	13.1	-10.4
1992	3.4	11.6	-8.2

The above tables reflect only those months for which there was trade. Source: U.S. Census Bureau, Foreign Trade Division, Data Dissemination Branch, Washington, D.C. 20233.



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U.S International Trade Statistics
 Value of Exports General Imports and Imports by Country by 6-digit
 NAICS - Greenland(1010)
 [In Thousands of Dollars.(-) represents zero.]

Description	Exports	Imports
	F.A.S. Value Basic	C.I.F Value Basis
Finfish Fresh, Chilled Or Frozen and Other Finfish Products	-	1.573
Shellfish Fresh, Chilled Or Frozen and Other Shellfish Products	-	6.633
Men's and Boys' Other Outerwear	3	-
Other Apparel Accessories	6	-
Blankbook, Binders and Stationery Articles, Nesoi	3	-
Petroleum Refinery Products	13	-
All Other Basic Organic Chemicals	62	-
Pesticides and Other Agricultural Chemicals	10	-
All Other Plastics Products	199	-
Other Rubber Products	35	-
Drawn, Blown, Float and Flat Glass	19	-
Cutlery And Flatware (except Precious)	19	-
Hand and Edge Tools	34	-
Hardware	12	-
Other Fabricated Wire Products	4	-
Bolts, Nuts, Screws, Rivets, Washers and Other Turned Products	62	-
Plumbing Fixtures Fittings and Trim	4	-
Ball and Roller Bearings	6	-
Small Arms Ammunition	345	-
Small Arms	249	-
Other Miscellaneous Fabricated Metal Products	32	-
Farm Machinery and Equipment	98	-
Construction Machinery	14	-
Printing Machinery and Equipment	30	-
Food Product Machinery	5	-
Office Machinery	-	3
Optical Instruments and Lenses	257	-
Photographic and Photocopying Equipment	247	-
Machine Tools (metal Cutting Types)	7	-
Cutting Tools and Machine Tool Accessories	4	-
Turbines and Turbine Generator Sets	3	-
Mechanical Power Transmission Equipment	22	-
Other Engine Equipment	7	-
Pumps and Pumping Equipment	9	-
Air and Gas Compressors	24	-
Fluid Power Pumps and Motors	27	-
Other Miscellaneous General Purpose Machinery	77	-
Electronic Computers	23	-
Computer Storage Devices	15	-
Other Computer Equipment	44	-
Radio and TV Broadcasting And Wireless Communications Equipment	172	-
Audio and Video Equipment	39	-



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Picture, Microwave, Amplifier, Electron, Cathode Ray & Similar Tubes	558	-
Semiconductors and Related Devices	7	-
Electronic Connectors	35	-
Other Electronic Components	9	-
Search, Detection, Navigation, Guidance, Aeronautical, and Nautical Systems and Instruments	27	-
Instruments and Related Products for Measuring, Displaying, and Controlling Industrial Process Variables	98	-
Signals	31	-
Analytical Laboratory Instruments	66	18
Watches, Clocks, and Parts	101	-
Other Measuring and Controlling Devices	417	-
Unrecorded Magnetic and Optical Media	5	-
Lighting Equipment, Nesoi	17	-
Power, Distribution, And Specialty Transformers	15	-
Motors and Generators	28	-
Switchgear and Switchboard Apparatus	4	-
Relays and Industrial Controls	26	-
Storage Batteries	94	-
Primary Batteries	3	-
Communication and Energy Wire, Nesoi	3	-
Current-Carrying Wiring Devices	20	-
Miscellaneous Electrical Equipment and Components, Nesoi	84	-
Automobiles and Light Duty Motor Vehicles, Including Chassis	290	-
Heavy Duty Trucks and Chassis	3	-
Transportation Equipment, Nesoi Including Trailers and Campers	450	-
Motor Vehicle Gasoline Engines and Engine Parts	9	-
Motor Vehicle Electrical and Electronic Equipment, Nesoi	19	-
Motor Vehicle Parts, Nesoi	130	-
Aircraft Engines and Engine Parts	835	-
Aircraft Parts and Auxiliary Equipment, Nesoi	5	-
Aircraft, engines, equipment, and parts	2,030	-
Boats	122	-
Motorcycles, Bicycles, and Parts	83	-
Institutional Furniture	15	-
Surgical and Medical Instruments	158	-
Surgical Appliances and Supplies	6	-
Ophthalmic Goods	3	-
Jewelry (except Costume)	5	-
Sporting and Athletic Goods	3	-
Gaskets, Packing, and Sealing Devices	35	-
Software, other	12	-
Used or Second-Hand Merchandise	4	-
Goods Returned to Canada (Exports only); U.S. Goods Returned and Reimported	-	303
Special Classification Provisions, Nesoi	475	8
Total	8,578	8,538

Source: U.S. Census Bureau



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Greenland's Tourism Sector⁵

The tourism sector presents a potential for economic growth, with increasing numbers of cruise lines now operating in Greenland's western and southern waters during the peak summer tourism season. The Greenland Government's trade promotion agency, Greenland Expo, offers information for potential investors in Greenland online at www.greenlandexpo.com. The Danish government provides performance incentives to both foreign and domestic investors, including for investments in Greenland.

According to the Statistics Greenland publication "Tourism in Figures 2009," most visitors to Greenland arrive by plane. Figures for Greenlanders traveling to the U.S. are not available, as the U.S. immigration authorities do not track data separately for Greenlanders versus other Danish nationals. As Danish nationals, Greenlanders may visit the U.S. for tourism or business for up to 90 days without a visa.

There are no direct flights between Greenland and the United States. Greenland currently boasts 12 airports and 47 helipads. The two largest international airports are Kangerlussuaq/Søndre Strømfjord and Narsarsuaq. Flights between Greenland and Denmark are available year-round on national airline Air Greenland A/S. In the summer (June-August) there are connections 7 days a week with up to 12 flights a week. Air Iceland flies between Greenland and Iceland, also with more flights during the summer season. In 2008, over 400,000 passengers took off from or landed at Greenland's airports. There has been a significant growth in the number of passengers in recent years.

From May 2007 until March 2008, Air Greenland offered direct flights between Kangerlussuaq and Baltimore in an attempt to lure U.S. tourists to Greenland, with ten flights during the summer period. During the one summer season when the flights operated, the airline lost over USD \$3 million on the route and determined it was not worthwhile to continue operating it. There are currently no direct flights between the US and Greenland on any airline. Travelers in both directions are routed through either Copenhagen or Reykjavik.

Many tourists continue to travel to Greenland by airplane. In 2008, it was estimated that they numbered over 36,000. Most visitors to Greenland are Danes. A majority of them are over 50 years of age. Tourism has grown steadily since 2002, especially among non-Danes, so that even though Danish tourists remain the majority, the percentage of tourists from other countries is increasing.

There are approximately 50 establishments offering lodging for tourists spread among various towns and villages in Greenland. The total capacity is approximately 513 rooms or approximately 939 beds. Accommodations vary in size and standard from large luxury hotels to small budget hostels and individual cottages. Many hotels offer dining services. In 2007, hotel guests, including Greenlanders as well as tourists from Denmark and abroad, numbered approximately 83,000 individuals and stayed a total of

⁵ Based on Statistics Greenland publication: "Tourism in Figures 2009"



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approximately 235,000 nights. Both the number of nights and the number of guests has increased significantly in recent years. During the high season of July and August, the average occupancy rate was over 50 %. In larger towns, the rate has been as high as 90-100 % during certain weeks in summer.

Cruise tourism is a rapidly growing sector and is increasingly important to the economy. In 2008, 42 vessels made a total of 165 visits, bringing a total of almost 29,000 guests. The majority of tourists arriving on cruises are from Germany, the United Kingdom, and the United States and, as with tourists as a whole, most are over 50 years of age. Cruise vessels vary in size from small 50-passenger craft to luxury ships carrying up to 3,000 passengers. In the five-year period from 2003 to 2008, the number of very small vessels has increased significantly, typically “expedition ships” operating all around the coasts of Greenland.

At least four U.S. cruise lines offer regular cruises to Greenland, making more than 24 trips a year in total. The most active U.S. cruise line in Greenland, Polar Cruises, offers at least 18 trips to Greenland per year. Other U.S. companies include Travel Dynamics International, with at least one trip per year, Princess Cruises, at least three, and Holland America Line, with at least two.

Investment

Overall FDI⁶

The value of Greenlandic FDI into the U.S. is small but constant; for several years it has remained between USD \$0.5 and \$1.5 million.

Foreign Direct investment into America, [Millions of dollars]					
2005		2006	2007	2008	2009
All Countries	1,634,121	1,840,463	2,055,176	2,165,748	2,319,585
Europe.	1,154,048	1,326,738	1,478,383	1,555,208	1,685,279
Denmark.	6,117	6,726	4,796	4,883	5,246
Greenland.	1	1	1	1	1

Statistics on FDI from the U.S. into Greenland are not available. A 2006 survey estimated the figure at zero; however, at least some investment exists in the mineral/hydrocarbon sector and in connection with the American military base at Thule (see below).

Potential Mineral Resources⁷

International interest in Greenland’s mineral wealth is increasing. There is potential for hydrocarbons, minerals including zinc, lead, molybdenum, uranium, gold, and platinum, and rare earth minerals. International consortia are increasingly active in exploring for hydrocarbon resources off Greenland’s western coast. The U.S. Geological Survey

⁶ Source: U.S. Census Bureau, Foreign Trade Division, Data Dissemination Branch, Washington, D.C. 20233

⁷ Based on figures reported by Statistics Greenland and Statistics Denmark unless otherwise stated



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estimates that reserves of oil, natural gas, and natural gas liquids in the area between Canada and Greenland total up to the equivalent of 17 billion barrels of oil. Another 31.4 billion barrels equivalent are estimated in the northeast of Greenland. For comparison, the daily oil production of the Organization of Petroleum Exporting Countries (OPEC) in December 2010 was about 29.2 million barrels, or about 0.06 % of Greenland's total estimated reserves. Cairn Energy carried out three exploratory drillings in Greenland in 2010, the first such drilling in Greenland in ten years, and discovered gas and oil-bearing sands in one of the drillings.

U.S. companies ExxonMobil and Chevron own approximately 48 % of a partnership that was awarded licenses in October 2007 for the exploration and exploitation of hydrocarbons off the coast of western Greenland. In November 2010, the Greenlandic government awarded seven more licenses for exploration and exploitation of oil and gas in Baffin Bay. ConocoPhillips was among seven awardees. The blocks cover a total area of 70,768 km². Licenses are for ten years for exploration and may be extended to up to 30 years for exploitation of identified accessible reserves. Bidders were required to be pre-qualified as operators to enter competition. Selection criteria focused on safety record, experience operating in logistically difficult areas, and financial stability.

Alcoa Investment⁸

U.S. aluminum producer Alcoa concluded a memorandum of understanding with the Greenland Home Rule Government in May 2007 to study the feasibility of constructing an aluminum smelter and associated hydropower generation and transmission facilities in Greenland to take advantage of abundant hydropower potential. Progress on that project has been delayed but the company continues to pursue it. It is estimated that, upon completion, the Alcoa investment would be worth approximately \$2.5 billion, the largest ever greenfield U.S. direct investment in the Kingdom of Denmark.

The project has its origins in the Joint Committee, which facilitated initial contact between Alcoa and the Greenland Home Rule Government. Both Alcoa and the Greenlanders kept their discussions under the JC umbrella until an MOU was signed in May 2007 at the Joint Committee's annual meeting in Ilulissat, Greenland. Before the MOU, the Norwegian energy giant Norsk Hydro was also in discussions with the Greenlanders about a similar smelter project, but the MOU granted Alcoa exclusivity in pursuing a smelter project in Greenland. The project remains in the MOU phase, which involves expenditures by both Alcoa and the Greenlandic Government to carry out a series of studies over several years to assess the project's environmental impact and economic viability. The Greenlanders, because of the unprecedented scale of the project, created a state-owned enterprise, Greenland Development, to be the primary Greenlandic interface with Alcoa. The Greenlandic Parliament has also created a special parliamentary "Alcoa Committee" to track the project.

Based on the results of initial studies related to the provision of energy, construction, and infrastructure, in October 2010 it was decided that the proposed project required

⁸ Based on figures reported by Statistics Greenland and Statistics Denmark unless otherwise stated



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additional evaluation. This evaluation is currently underway, with the Greenland Self-Rule Government and Alcoa working together to assess all the available options. The Environmental, Social and Health Impact Assessment (EIA) process has been idled temporarily to allow for exact definition of the scope of the project. There is no definite timetable while the cooperative investigation proceeds, but both sides have discussed the possibility of a groundbreaking in 2012 or 2013.

Thule Investment⁹

The United States has maintained a military presence in Greenland since the World War II *Agreement Relating to the Defense of Greenland* between the U.S. and Danish Ambassador Henrik Kauffmann. A new agreement was signed in 1951, and the base at Thule was constructed that year. In 1961, a Ballistic Missile Early Warning System was constructed northeast of the main base. Thule became an Air Force Space Command base in 1982. Today it is home to the 821st Air Base Group and the 12th Space Warning Squadron (the BMEWS radar unit) and the first detachment of the 22nd Space Operations Squadron, part of the 50th Space Wing's global satellite control network.

Essential services at the base are provided by a contractor under a Base Maintenance Contract (BMC) and staffed from Denmark and Greenland. During Fiscal year 2010, Danish and Greenlandic labor increased to 495 full time and seasonal positions, which was an increase from fiscal year 2009 total of 440. The BMC is a Non-Personal Service/Performance Based Contract and the contractor is solely responsible for the number of personnel needed to perform the service.

Danish companies were awarded contracts in U.S. Defense Projects in Greenland worth about 700 million Danish kroner, or about USD \$120 million, in fiscal 2010 (October 2009-September 2010). This was a 14 % increase from the previous fiscal year, primarily due to the award of additional projects on the base services contract and of two major construction projects on the base.

U.S. company contracts for the same fiscal year was nearly \$26 million, a 4 % decrease from the previous year. Thus, the U.S. participation was about 18 % of the total. U.S. participation has been in the range of 18-25 % since 2000.

Overall Legal Framework¹⁰

The following treaties and conventions have been signed by the U.S. and Denmark and also apply to Greenland:

Agreement relating to relief from double income tax on shipping profits.

⁹ DET1, US Embassy Copenhagen, FY2010 Report.

¹⁰ <http://www.state.gov/documents/organization/143863.pdf>



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Exchanges of notes at Washington May 22, August 9 and 18, October 24, 25, and 28, and December 5 and 6, 1922.

Entered into force December 6, 1922; operative January 1, 1921.

47 Stat. 2612; EAS 14; 7 Bevans 65; 113 LNTS 381.

Amendment

July 6, 1987 (TIAS 11278).

Convention for the regulation of whaling

Concluded at Geneva September 24, 1931.

Entered into force January 16, 1935.

49 Stat. 3079; TS 880; 3 Bevans 26; 155 LNTS 349.

Agreement for collect-on-delivery service.*

Signed at Copenhagen October 13, and at Washington November 11, 1933.

Operative November 1, 1933.

48 Stat. 1671; Post Office Department print; 145 LNTS 113.

Note

* Applicable to Puerto Rico, the Virgin Islands, Guam, Samoa, Faroe Islands and Greenland.

Economic cooperation agreement.*

Signed at Copenhagen June 29, 1948.

Entered into force July 2, 1948.

62 Stat. 2199; TIAS 1782; 7 Bevans 141; 22 UNTS 217.

Amendments

November 4 and 18, 1948 (62 Stat. 3753; TIAS 1904; 7 Bevans 157; 55 UNTS 322).

February 7, 1950 (1 UST 148; TIAS 2022; 79 UNTS 294).

February 2 and 9, 1951 (2 UST 647; TIAS 2218; 132 UNTS 380).

November 24, 1952 (3 UST 5181; TIAS 2713; 184 UNTS 327).

Note

* Applicable to Greenland.

Agreement concerning the defense of Greenland.

Signed at Copenhagen April 27, 1951.

Entered into force June 8, 1951.

2 UST 1485; TIAS 2292; 94 UNTS 35.

Related agreements

December 2, 1960 (11 UST 2642; TIAS 4657; 402 UNTS 245).

September 30, 1986 (TIAS 12284).

August 6, 2004.

Agreement relating to relief from taxation of United States expenditures in Denmark for common defense.

Exchange of notes at Copenhagen April 7 and 9, 1952.

Entered into force April 9, 1952; operative April 7, 1952.

3 UST 4041; TIAS 2546; 177 UNTS 257.

Agreement relating to guaranties authorized under Section 111(b)(3) of the Economic Cooperation Act of 1948, as amended.

Exchange of notes at Washington July 30 and August 8, 1952.

Entered into force August 9, 1952.



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3 UST 5056; TIAS 2689; 181 UNTS 249.

Agreement on the joint financing of certain air navigation services in Greenland and the Faroe Islands.

Done at Geneva September 25, 1956.

Entered into force June 6, 1958.

9 UST 795; TIAS 4049; 334 UNTS 89.

Depository: *International Civil Aviation Organization Status:*

<http://www.icao.int/icao/en/leb/treaty.htm>

Convention on the recognition and enforcement of foreign arbitral awards.

Done at New York June 10, 1958.

Entered into force June 7, 1959; for the United States December 29, 1970.

21 UST 2517; TIAS 6997; 330 UNTS 3.

Depository: <http://treaties.un.org/Pages/Home.aspx?lang=en>

Agreement relating to communications facilities at Cape Dyer, Baffin Island to support the Greenland extension of the distant early warning system.*

Exchange of notes at Ottawa April 13, 1959.

Entered into force April 13, 1959; operative January 15, 1959.

10 UST 739; TIAS 4208; 342 UNTS 43.

Note

* See also agreements of May 5, 1955 (TIAS 3218), and July 13, 1959 (TIAS 4264).

Agreement concerning establishment and operation of certain aeronautical facilities and services in Greenland and Appendix.

Signed at Copenhagen July 7, 1960.

Entered into force July 7, 1960.

11 UST 1861; TIAS 4531; 380 UNTS 39.

Amendment

March 26 and September 6, 1976 (28 UST 3654; TIAS 8593).

Agreement providing compensatory concessions under the general agreement on tariffs and trade for certain tariff actions taken by the United States.

Exchange of notes at Geneva January 26 and February 12, 1962.

Entered into force February 12, 1962.

13 UST 936; TIAS 5032.

Convention for the suppression of unlawful seizure of aircraft. (Hijacking)

Done at The Hague December 16, 1970.

Entered into force October 14, 1971.

22 UST 1641; TIAS 7192.

Depository: *United States Status:* <http://www.state.gov/s/l/treaty/depositary/index.htm>

Depository: *United Kingdom Status:*

http://www.fco.gov.uk/resources/en/pdf/pdf9/fco_ref_sl_seizureaircraft

Depository: *Russia See* <http://www.mid.ru/>

Convention on international trade in endangered species of wild fauna and flora, with appendices.

Done at Washington March 3, 1973.



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Entered into force July 1, 1975.

27 UST 1087; TIAS 8249; 993 UNTS 243.

Depository: Switzerland Status: <http://www.cites.org/>

Agreement concerning a Danish-American Fund for the exchange of technology, with appendix.

Signed at Copenhagen March 25, 1985.

Entered into force March 25, 1985.

TIAS 11179.

Amendment

May 2, 1988 (TIAS 11580).

Memorandum of understanding concerning use of Sondrestrom Aviation Facility, Kulusuk Airfield and other matters related to U.S. military activities in Greenland.

Signed at Copenhagen March 13, 1991.

Entered into force March 13, 1991.

TIAS 12285; 1653 UNTS 389.

Agreement concerning the closure of the long-range radio aid to navigation transmitting station at Angissoq, Greenland, with annex.

Signed at Copenhagen December 12, 1994.

Entered into force December 12, 1994.

TIAS

Memorandum of understanding concerning scientific and technical cooperation in the earth sciences as related to Greenland, with annexes.

Signed at Copenhagen May 31, 2006.

Entered into force May 31, 2006.

TIAS

Greenland by the Numbers¹¹

Population

Population: 56,452 (Jan. 2010)

Density: 0.14 pr. km² ice free area (Jan. 2010)

Population in the capital: Nuuk 15,469 (Jan. 2010)

Population in towns: 47,461 (Jan. 2010)

Population in settlements: 8,991 (Jan. 2010)

Population growth rate: 0.46 percent (2009)

Death rate, total: 7.6 deaths / 1,000 population (2008)

Net migration -639 (2008)

Infant mortality rate, total: 9.6 deaths / 1,000 live births (2008)

Life expectancy: Female: 71.6 years, Male: 66.6 years (2008)

Total fertility rate: 2,217 live born per 1,000 women aged 15-49 years (2008)

People living with HIV /AIDS: 6 (2005)

Nationality: Noun: Greenlander(s), adjective: Greenlandic

¹¹ Statistics Greenland: Greenland in Figures 2010



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Ethnic groups: Inuit 88 percent, Danish and others 12 percent (Jan. 2010)

Religions: Evangelical Lutheran

Languages: Kalaallisut (Greenlandic)

Economy

GDP: DKK 10,924 million (2007) GDP - real growth rate: 3.6 percent in annual prices (2006)

Disposable GNI per capita: DKK 249,000 (2006) Gross income per household:

Highest 25 percent: DKK 720,000, Lowest 25 percent DKK 65,000.

Average: DKK 323,000 (2007)

Inflation rate (consumer prices): 1.4 percent (Jan 2009 - Jan 2010)

Labor force: 28,510 (15-62 years born in Greenland and living in towns Jan. 2010)

Unemployment rate: 7.1 percent affected by unemployment in towns (2009)

Budget: Income: DKK 8.8 billion. Expenditures: DKK 8.8 billion, including capital expenditures of DKK 0.6 billion (2008)

Industries: Fish processing (mainly shrimp and Greenland halibut), handicrafts, hides and skins, small shipyards, mining.

Electricity - production: 376 GWh (2009)

Electricity - consumption: 213 GWh (2009)

Agriculture - products: Forage crops, garden and greenhouse vegetables; sheep, reindeer; fish

Exports: DKK 1,923 million, f.o.b. (provisional figures 2009)

Exports - commodities: Fish and fish products including shellfish [?] 88 percent (shrimp 54 percent)

Exports - partners: EU (primarily Denmark) 93 percent, other European countries 4 percent, North America 4 percent (provisional figures 2009)

Imports: DKK 3,669 million, c.i.f. (provisional figures 2009)

Imports - commodities: Machinery and transport equipment, manufactured goods, food, petroleum products

Imports - partners: EU (primarily Denmark and Sweden) 90 percent, Canada and USA 2 percent (provisional figures 2009)

Balance of trade: DKK -1,745 million (provisional figures 2009)

Economic aid, recipient: DKK 3,495 million, subsidy (block grant) from Denmark (2010)

Currency: Danish Crown (DKK)

Exchange rates: 100 USD = 562.5670 DKK, 100 EUR = 744.7366 DKK (2010 average)

Fiscal year: Calendar year

Fishing is the primary industry of the country. Greenland has the legislative competence for the fisheries sector. Fisheries for shrimp and Greenland halibut are regulated by quota and license regulations decided on by the Cabinet. Decisions are based on biological advice to ensure a sustainable use of the natural resources.

Communications

Telephones - main lines in use: 22,818 (2008)

Telephones – mobile cellular: 55,816 (2008)

Country code[?]: 299



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Radio broadcast stations: AM 5, FM 12

Radios: 98 percent of all households have a radio (2002)

Television broadcast stations: Kalaallit Nunaata Radio-a national TV plus some local TV stations.

TV -products: 97 percent of all households have a TV (2002)

Newspapers: Atuagagdliutit/Grønlandsposten (AG) and Sermitsiaq

Internet country code: .gl

Internet suppliers: 1 (2010)

Internet connections: 11,695 (2008)

Transportation

Railways: 0 km

Ports and harbors: Ports in 16 towns plus harbors in 60 settlements

Airports: 13 airports, six heliports and 40 helistops



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Education and Culture

Here a short overview of the education initiatives and areas of concern regarding the education and cultural co-operation between USA and Greenland since Joint Committee was formed.

ENGLISH LANGUAGE

English Language Fellow (ELF) program: From 2006-2009, the US government supported an English Language fellow in Greenland in cooperation with Inerisaaik. A highlight was when high school students in Nuuk performed an updated version of Romeo and Juliet (Angutie and Juliette) in the three languages http://www.youtube.com/watch?v=e_D_zSYg-6M. **US contribution: US \$200,000.**

English Language Training: In 2010, Nuuk Business College ran a 6-month English language class for 10 person in-class, and 13 on-line, for two to three hours each week. **US Government contribution: US\$20,000.**

TOEFL: For students to have the opportunity to study in the U.S., they need to pass the so-called TOEFL test (Test of English as a Foreign Language). Today, due to our work in JC and ETS.org, the TOEFL test is available at Greenland Business School. Greenland's Business School is also, as part of the project "Having a good life", offering courses and E-learning activities focusing on straitening the English skills.

Greenlandic-English Dictionary Project: The project "The lexicon of a polysynthetic language" is a part of a collaborative effort for two US linguists, Lenore Grenoble and Jerrold Sadock, to partner with the staff of the Greenlandic Language Secretariat (Oqaasileriffik) (GLS), under the supervision of Carl Christian Olsen (Puju), director of the GLS, in a three-part project to focus on the lexicon of Kalaallisut (West-Greenlandic). The GLS has begun work on a monolingual, internet-based Kalaallisut lexicon; the present team, with Sadock as key researcher from the US side, will partner with the Greenlandic linguists to expand the lexicon to include English. This is the "Kalaallit-tuluit oqaasii ordbogi (Kalaallisut-English dictionary), or KTO. **US Government contribution: US\$10,000.**

American Corner: In September 2004, the American Corner in Nuuk opened at the Eskimo Slot or joint Gymnasium-Teacher's College library. After the initial set up of computers and a core book collection, the U.S. Embassy continues to provide the American Corner with issues of the *Forum* magazine for all English teachers in Greenland to use, DVDs and books. **US Government contribution: US\$15,000, plus yearly subscription and shipping of Forum magazine at US\$3,000.**

EXCHANGES

International Visitor Leadership Program (IVLP): Thirteen (13) Greenlanders have participated in the US government-sponsored International Visitor Leadership Programs,



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spending up to three weeks in the United States. Greenland government officials, academics and business persons have participated, learning about U.S. systems and networking. **Total US contribution: US\$75,000.**

EDUCATION

The co-operation between the University of Greenland and the USA.

- **DARTMOUTH COLLEGE:** The University of Greenland's closest co-operation is with the **Dartmouth College**. The Dartmouth IGERT in Polar Environmental Change supports the development of an interdisciplinary PhD program in polar sciences studying polar changes. The curriculum includes fieldwork in Greenland, which is followed up by lectures on The University of Greenland. In school year 2011 there is one Greenlandic student studying at Dartmouth College; the 2010 school year had two students at Dartmouth.
- **MONTANA STATE UNIVERSITY:** There are two Greenlandic students studying at **Montana State University** in Bozeman, and the University of Greenland is frequently having visitors from teachers and PhD students from Montana. The University of Greenland is also involved in **"Inuulluataarnek" (Having the Good Life)** which is a National Science Foundation (NSF) funded Community-Based Participatory Research project. The Greenlandic students are helping to collect data and make analysis of the project "Having the good life". The direct collaboration with professors and students from Montana University, is giving the students experience in using English as a communication tool, but also the use of international research language. "Having the good life" has also had a positive impact on the community true projects like for example the seminar held for teachers, on how to teach young people about safe sex.
- **Conferences:** In October 2010 a group of teachers and students from the University of Greenland participated in a Conference in USA titled *"The Inuit and the Aboriginal World"*. Both students and teachers gave presentations on the conference. During their stay in USA they visited the Université du Québec à Montréal (UQAM), McGill University and Dartmouth College. On Dartmouth College they discussed to broaden the existing contract for exchange of students to also include exchange of teachers. They also visited the, Department of Native Studies on the Columbia University in New York. At the moment Columbia University and the University of Greenland is working on establishing a contract for future co-operation.
- An **overview** of The University of Greenland's co-operation with foreign partners is available on this webpage:
<http://www.ilisimatusarfik.gl/Uddannelse/Internationaltsamarbejde/tabid/183/language/da-DK/Default.aspx>
- **Science education:** Two project aims on supporting natural science education and at the same time set focus on the collaboration and networks between the JC countries;



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The Summit camp “ Science in Education week and the summer camp in Kangerlussuaq. The goal of both projects is to educate and inspire young students to pursue a natural science education and to build strong networks between students and teachers from the three countries. Besides from that the summer camps give the student a possibility to practice their English skills. Both projects are approved by the Joint Committee, read more about them in section 2.

- **Student advising:** The Fulbright Commission and Denmark-America Foundation provide student advising and information for study abroad to Greenlandic students. The website is in Greenlandic at <http://www.wemakeithappen.dk/index.php/component/content/article/154>. Brochures are available at the American Corner about student advising. As requested by the Business School, advising sessions are also provided via Co.NX (web chat) on an as needed basis with the offices in Copenhagen. Total US Government contribution:



Science and Technology

There is a long history of cooperation in science involving Greenland, the U.S. and Denmark. Cooperation has taken place in many fields. In the last decades increasing interest has been in climate change. Climate changes are happening faster in the Arctic as compared to the rest of the world. Moreover, global climate models predict that the global warming will continue. In the Arctic this implies the melting of snow and ice at a faster rate and thawing of permafrost. Some of the most spectacular and well known research is going on at the Summit and North Greenland Eemian Ice Drilling (NEEM) scientific research stations, located on top of the Greenland ice cap. The stations monitor key climate variables as well as of a diversity of scientific research, including the famous drilling of deep ice cores.

In the history of the Joint Committee climate change has been a promising area of collaboration. There has been projects in permafrost, ice mass and atmospheric monitoring, and there is promising collaboration in the study of outlet glaciers.

A great success has been the Joint Permafrost Research Project (2006-10). The National Science Foundation (NSF) supported the University of Alaska Fairbanks (UAF) in a project which compared flat Alaskan tundra and mountainous Greenland coastal sites. The project explored the use of computer models to downscale weather predictions to dimensions that are appropriate to drive permafrost models. The joint permafrost research effort that involved Asiaq – Greenland Survey, Arctic Technology Centre (Artek), Technical University of Denmark (DTU) and Danish Meteorological Institute (DMI) was linked to climate model calculations with the goal of predicting how climate change would affect local regions. One of the project's important strengths was its cross-disciplinary approach, involving climate modeling, field measurements and engineering evaluations, and bringing together research groups from these different fields. The Joint Committee was a major contributor to the establishment of this important cross-disciplinary cooperation. The project obtained an end-to-end framework, combining global climate models at one end with measurements at the other, with everything tied together by regional and site-specific permafrost modelling and engineering related risk evaluation. Some of the project's main outcomes:

- 1) Establishment of systematic monitoring network of permafrost sites in Greenland.
- 2) New information on and a better understanding of the vulnerability of permafrost in Greenland and Alaska in respect to climate warming was produced on regional and site-specific scales.
- 3) Development and application of a permafrost risk assessment strategy, in relation to local population and infrastructure in Greenland.
- 4) Demonstration of the differences in how permafrost degradation affects the local communities in Greenland and Alaska.

The scientific cooperation has resulted in exchange of information and ideas, including:



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- Asiaq and Artek gained knowledge on measurement techniques and the appropriate equipment for ground temperatures and snow depth measurement.
- Artek and DTU were provided with the technology of "permafrost temperature reanalysis" developed at the Geophysical Institute UAF.
- UAF gained access to high-resolution climate simulations for both Greenland and Alaska from DMI.
- Development of a risk assessment strategy at Artek in cooperation with UAF.

Other important projects have been "Linking Atmospheric Monitoring Networks" (2009 -) and "Linking Ice Mass Monitoring Networks" (2009 -). The purpose of the first project is to link NASA's GC-NET, Geological Survey of Denmark and Greenland (GEUS)'s Programme for Monitoring of the Greenland Ice Sheet (PROMICE) stations and DMI's atmospheric monitoring stations and make their data available to the World Meteorological Organization (WMO) in real-time. This will improve the reliability of weather forecasting in Greenland while advancing the frontiers of atmospheric sciences. In the project "Linking Ice Mass Monitoring Networks" the goal is to link DTU-Space and GEUS's GNET ice mass monitoring network to NSF's POLENET network in Greenland. The U.S. (Ohio State University) and Denmark (DTU-Space) have linked together their installations to measure changes in ice sheet elevation and crustal rebound to complement satellite measurements of ice sheet change. The project will support the understanding of the Greenland ice sheet changes, and this is expected to provide supplementary data for the major NASA investment in Greenland climate change monitoring through the IceBridge airborne survey program. The mutual benefits of the project are enhanced knowledge and timely warnings for major glacier changes. In the longer term the impacts for Greenland are expected to be support of Greenland survey infrastructure. This project, as well as "Linking Atmospheric Monitoring Networks", are with no doubt of interest for Greenland. However, the challenge in both projects has been to find a Greenlandic counterpart.

In 2009 the Greenland Climate Research Center (GCRC) was established in Nuuk at the Greenland Institute of Natural Resources. The GCRC is becoming an increasingly important participant also in projects collaborating with U.S. research institutions. An example of a climate change project is the NSF funded project "Quantifying Glacier-Fjord-Ocean Interactions and their Impacts on changing Ice Discharge: Kangia Nunata Sermia and Other Outlets, West Greenland" (2009 – 2012). The project involves collaboration between GCRC and the UAF. It aims to improve understanding of ocean/glacier-ice interactions by linking oceanographic, glacier, and atmospheric measurements in a fjord/glacier system showing recent change to quantify processes occurring at this interface. The UAF will benefit from data in Greenland and from oceanographic expertise while GCRC will benefit from the glaciology experience in UAF.

Education is an increasing focus area within the Joint Committee context.. In the project "Joint Science in Education Week," NSF is hosting a tour for a group of U.S., Greenlandic and Danish teachers and high school students to the Summit (2007-2010) and NEEM camps (2010). The goals of the tour are to educate and inspire young students to pursue an Arctic science



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education, build strong networks between students and teachers and highlight the exemplary research work being undertaken. An added bonus is to improve English skills of Greenlandic and Danish students. In 2010 the Government of Greenland invited the Greenlandic students to visit high schools in Nuuk, Sisimiut and Aasiaat to give talks about their experiences. Both the teachers and the students have been encouraged to share data and take advantage of the resources made available via the NSF-sponsored online education program "Student Polar Research with IPY National (and International) Teacher Training" (SPRINTT). The Greenlandic teachers will also be signed up as pioneers for the SPRINTT program using IT to engage students in science on climate change and the Arctic. Preliminary actions are being made to organise a tour in 2011.

An attempt is made to combine this project with a new initiative, the project proposal "Scientific Field School in Kangerlussuaq". Under this proposal, NSF will pay their visiting scientists to stay extra days to teach and lecture. It will therefore be beneficial to make use of this commitment to create a scientific field school for high school students in Kangerlussuaq. The aim of the new project is to attract a group of up to 25 high school students from Greenland, the U.S. and Denmark. The students will stay at Kangerlussuaq Efterskole owned by the Government of Greenland. The field school will last for 2 weeks with combined field work and lectures. In addition the Kangerlussuaq International Science Support (KISS) has laboratories which can be used in connection with fieldwork. Another educational initiative, relaunching of the Global Learning and Observations to Benefit the Environment (GLOBE) will complement the teaching, networking and outreach efforts for Greenlandic high school students.

In the Graduate Research Training and Exchange (IGERT) program the goal is collaboration between Ilisimatusarfik (the University of Greenland) and U.S. research institutions on exchange of teachers and students. In 2009 and 2010 NSF was involved with ongoing cooperation among graduate research students at Dartmouth College's Dickey Center, the University of Kansas and Ilisimatusarfik..

Finally Arctic human health should be mentioned as an area of previous and potential future cooperation, most particularly involving telemedicine. This short review does not, however, include all science fields in which there has been cooperation between Greenland, the U.S. and Denmark



Defence

1. US Military History in Greenland
2. Thule Air Base
3. 109th Airlift Wing
4. Permanent Committee
5. Agreements related to US military activities in Greenland
6. Logistic coordination.

US Military History in Greenland

The first military installations in Greenland were constructed during World War II, after the US Secretary of State Cordell Hull and Danish Ambassador Henrik Kauffmann signed *The Agreement relating to the Defense of Greenland* in Washington on April 9, 1941. President Roosevelt approved it on June 7, 1941. In the agreement, the United States agreed to provide for the security of Greenland while Denmark was occupied by Germany. After the attack on Pearl Harbor, the allies established weather stations at Narsarsuaq Airport, Sondrestrom Air Base, Ikateq, and Gronnedal. **The US installations could be divided into bases and support installations named BLUIE, and are as follows:**

- Blui West One; Narsarsuaq airstrip.
- Blui West Eight; Sondrestrom (Kangerlussuaq) airstrip
- Blui East Two: Ikateq (Ved Ammasallik) airstrip.
- Blui East One: Prins Christianssund (Radio and weather station).
- Blui East Three: Cape Tobin, Walrus Bay (Radio and weather station).
- Blui East Four: Ella Ø Island (Radio, weather and patrol station).
- Blui East Five: Eskimonæs (Radio and weather station).
- Blui West Two: Kipisako (Alternate to Narsarsuaq).
- Blui West Four: Teague Field, Marraq Point (Radio and weather station).
- Blui West Five: Egedesminde (Radio and weather station).
- Blui West Six: Thule (Radio and weather station).
- Blui West Seven: Gronnedal Naval Base (Radio and weather station).
- Blui West Nine: Cruncher Island (Radio and weather station).

In 1943 the Army Air Forces set up weather stations, Scoresbysund on the east coast around the southern tip of Greenland, and Thule to be operated by Danish personnel. Following World War II, construction of a worldwide system of modern air bases became one of the Air Force's most important tasks. While the U.S. Air Force operated several air bases within Greenland at that time, it did not have a major presence in the extreme north of the island. Thus, in November of 1950, a board of Air Force officers



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made a recommendation to pursue a base at Thule. It was subsequently supported by the Joint Chiefs of Staff and approved by President Truman. Once the expansion from weather station to full-fledged airfield was completed, Thule became a critical part of the overall American military strategy. Defensively, Thule could serve as a base for detecting missile and bomber attacks along the northeastern approaches to Canada and the US and provided an operating location for fighter intercept of potential Russian aircraft. To replace the agreement entered into during WWII between the US and Denmark, a new agreement with respect to Greenland was ratified on April 27, 1951 (effective on June 8, 1951). At the request of NATO (North Atlantic Treaty Organization), the agreement became a part of the NATO defense program. The pact specified that the two nations would arrange for the use of facilities in Greenland by NATO forces in defense of the NATO area known as the Greenland Defense Agreement.

Thule Air Base

Following the closure of Sondrestrom Aviation facility and Kulusuk Airfield in 1992, Thule Air Base became the sole remaining joint Defense area. As such, Thule Air Base is the United States Air Force's northernmost base, located 1,118 km (695 mi) north of the Arctic Circle and 1,524 km (947 mi) from the North Pole on the northwest side of the island of Greenland.

Today, Thule Air Base is home to the 21st Space Wing's global network of sensors providing missile warning, space surveillance and space control to North American Aerospace Defense Command and Air Force Space Command. Thule Air Base is also home to the 821st Air Base Group and is responsible for air base support within the Thule Defense Area for the multinational population of "Team Thule." The base hosts the 12th Space Warning Squadron who operates a Ballistic Missile Early Warning System designed to detect and track ICBMs launched against North America.

Thule is also host to Detachment 1 of the 23rd Space Operations Squadron, part of the 50th Space Wing's global satellite control network. In addition, our modern airfield boasts a 10,000-foot runway and more than 3,000 U.S. and international flights per year. Finally, Thule is home to the northernmost deep water port in the world.

Detachment 1, 21 CONS

The Procurement Office in Copenhagen was established to implement the provisions of the Aide Memoir of June 1962 between the Governments of the United States of America and the Kingdom of Denmark. The prime function is to support Thule Air Base, Greenland by the procurement of services, equipment, supplies, and architect-engineering services from Danish origin. Construction contracts are open to Danish contractors. In 1992 Detachment 1 was reassigned to the 21st Space Wing at Peterson Air Force Base, Colorado. September 30, 1992 saw the closure of Sondrestrom Air Base, Greenland. DET 1, 21 CONS is now responsible for contracting for Thule Air Base only.



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The office functions further include: (a) contract administration of annual contracts executed by the Air Mobility Command (AMC) for air transportation of perishable subsistence/cargo and passengers from Denmark to Greenland, (b) contract award and administration of annual sealift requirements, (c) procurement support of miscellaneous activities involving procurement from Danish sources for services and construction.

Informal Thule Air Base Outreach Programs:

Thule Apprenticeship Program:

The United States Air Force, via its base support contract, fully funds the Greenlandic Apprenticeship Program is funded by the USAF for up to 25 positions. The USAF also funds for one full time "Youth Supervisor" whose sole purpose is to oversee the trainee's education. It is internal policy that after a trainee graduates from the apprenticeship program they must depart Thule for at least one year prior to applying for a full time position. The intent is for the trainee to bring back the skill to his/her home village. The "practical" educations (cooks and catering specialists, craftsmen of all trades, logistic and warehouse workers, IT technicians, vehicle mechanics, etc.) comprise of a 4 year education divided between studies at technical schools and practical training as an apprentice (intern) in a commercial company. It varies from education to education, but in general the 4 years of education are divided, so the apprentice spends 2 - 3 months at a school and then approximately 6 months as an apprentice/intern in a company. It does vary depending upon whether the apprentice is in his first year or last year of education. The education is completed with an exam, where the skills are tested both in writing, verbally and via a special project within his skills (as an example a carpenter has to draw and build something such as a miniature house, etc.)

The apprentice program has been very successful, with a "completion percentage" of 90 %.

Thule "Operation Julemand":

The annual Thule Air Base Operation Julemand is a fundraising effort, founded in 1959, to provide Christmas gifts and public playground equipment for Greenlandic children in villages near the Thule Defense Area. Recent Operation Julemand efforts include:

2009 - Thule AB raised \$8,000 for playground equipment installation in the village of Savissivik, Greenland.

2010 - Danish and Canadian donations purchased more than 500 Christmas gifts and playground equipment and more for 250 local Greenlandic children in seven villages. Additionally, more than 1,800 pounds of clothing and non-perishable food supplies were delivered to the surrounding communities.



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Many personal, official, and commercial entities support these operations via donated services. The Danish Liaison Officer at Thule Air Base serves a critical role in these operations as does Air Greenland, providing coordination and flights to the villages. Additionally, Detachment 1, located at the US Embassy in Copenhagen, coordinates sealift support to deliver the equipment to Thule Air Base via a shipping contractor who provides the transport for free.

Other Programs:

Several other informal programs provide services to surrounding Greenlandic communities. Examples include: doctors and nurses on the base provide medical services to Qaanaaq and surrounding communities; gym equipment has been donated by Thule Air Base to the Qaanaaq community; Thule Air Base frequently donates books and DVDs to local libraries.

109th Airlift Wing

The US Air National Guard's 109th Airlift Wing, based in New York, operate the only military ski-equipped transport aircraft in the Department of Defense. These aircraft, designated LC-130's, provide access to ice-bound facilities both in Greenland and the Antarctic.

Used to provided access to and resupply of US and international scientific facilities in Greenland and the Antarctic, the 109th serves a vital role in the pursuit of polar and climate research science efforts.

During the northern hemispheres summer months, the unit operates from the airfield in Kangerlussuaq Greenland (formerly the US Air Force's Sonderstromfjord Air Base).

From here, the 109th flies personnel and supplies to various science research camps located on the Greenlandic ice cap. Customers include the US National Science Foundation and the University of Copenhagen's Centre for Ice and Climate.

109th AW Informal Outreach Activity:

The 109th AW conducts informal community outreach activities in and around Kangerlussuaq Greenland.

Permanent Committee

In March of 1991, the US, Denmark, and Greenlandic Home Rule Government signed a Memorandum of Understanding (MOU) concerning matters related to US military activities in Greenland. Among other things, this MOU established the Permanent Committee (PC) as a tri-partite body consisting of representatives from the US, Denmark, and Greenlandic Home Rule Government. The purpose of the PC is to provide the parties a formalized venue in which they may consult with each other and exchange information on all matters pertaining to the US military presence in Greenland. The meetings take place annually with each party hosting and organizing the meeting on a rotating basis.



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Environmental sub-committee of the Permanent Committee:

In 2004, then US Secretary of State Colin L. Powell, Per Stig Møller (Kingdom of Denmark), and Josef Motzfeldt (Home Rule Government of Greenland) signed a Joint Declaration recognizing the importance of protecting and improving the environment in Greenland. Specific environmental issues addressed included:

1. Prevention and combating of pollution dangerous to human health
2. Pollution of air, water, ice, and earth,
3. Protection of nature, its wild animals, plants, and their habitats,
4. Protection of the landscape and areas of historical and scientific value.

With regard to Thule Air Base, the Joint Declaration established an Environmental Subcommittee of the Permanent Committee. This Subcommittee meets regularly to identify and address environmental issues and recommend relevant countermeasures to risks that may be posed by environmental contamination affecting the Thule Defense Area and the areas adjacent to the Defense Area. The common goals are to protect the environment and to prevent detrimental effects from any activities to the health and safety of residents of Greenland, as well as of the military and civilian personnel associated with the U.S. armed forces in Greenland.

The Joint Declaration recognized that U.S. armed forces in the Thule Defense Area respect Greenland Home Rule environmental standards developed an information exchange necessary to periodically update the Final Governing Standards applying at the Thule Defense Area.

The Joint Declaration also allows for access to the Thule Defense Area, granted through the Thule base commander, and consistent with the military mission, security and relevant safety considerations, to representatives of the Government of the Kingdom of Denmark, including the Home Rule Government of Greenland, to acquaint themselves with environmental conditions there.

Agreements related to US military activities in Greenland

27 April 1951

Agreement pursuant to the North Atlantic Treaty, concerning the defense of Greenland.

13 Mar 1991

Memorandum of understanding concerning use of Sondrestrom aviation facility, Kulusuk airfield and other matters related to United States military activities in Greenland.

20 Feb 2003

Memorandum of Understanding between The Government of the United States of America and The Government of the Kingdom of Denmark (including the Home Rule Government of Greenland) Concerning the Dundas Area.

6 Aug 2004



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Agreement to Amend and Supplement the 1951 Agreement on the Defense of Greenland (Igaliku Agreement).

Logistic coordination.

The US Embassy and the Danish Defence are agreed, that logistic support to environmental and science agencies, will be coordinated by Defence Command Denmark. Issues related to logistic support will normally be brought up on the annual Arctic Planning Conference held by US Air National Guard 109th.



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Appendix I

US Government contributions to the different initiatives (in 1,000 US \$):

Initiative:	Total
English Language Fellow (ELF) program	200
English Language Training	20
Greenlandic-English Dictionary Project	10
American Corner	15
Forum Magazine (subscription & shipping)	12
International Visitor Leadership Program	75
Student advising	
Total	332