

Navigating the Arctic 7Cs

Dr. Mike Sfraga, Director
Polar Institute &
Global Risk and Resilience Program
Woodrow Wilson International Center For Scholars
Established by the U.S. Congress in 1968

Woodrow Wilson International Center for Scholars





#6 Think Tank in the United States

















#1 Regional Studies Think Tank

#1 Best Institutional Collaboration Involving Two or More Think Tanks

2019 Global Think Tank Index Report University of Pennsylvania





A New Ocean



The Global Arctic is 5.4 M Sq. Mi

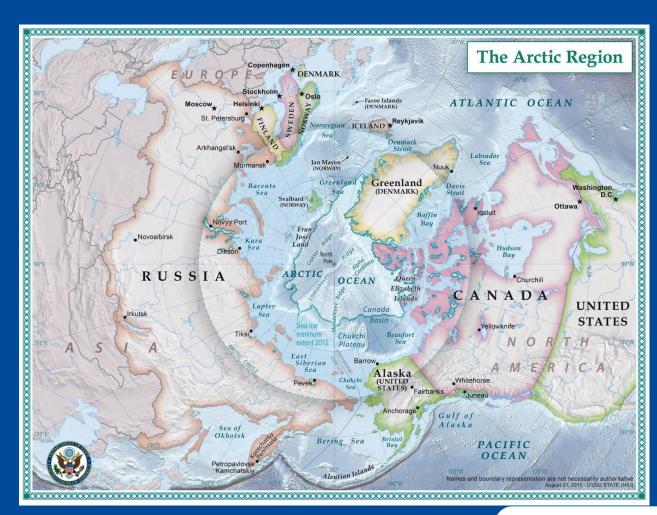
Roughly 1.5 times the size of the United States

Nearly half the size of the Continent of Africa.



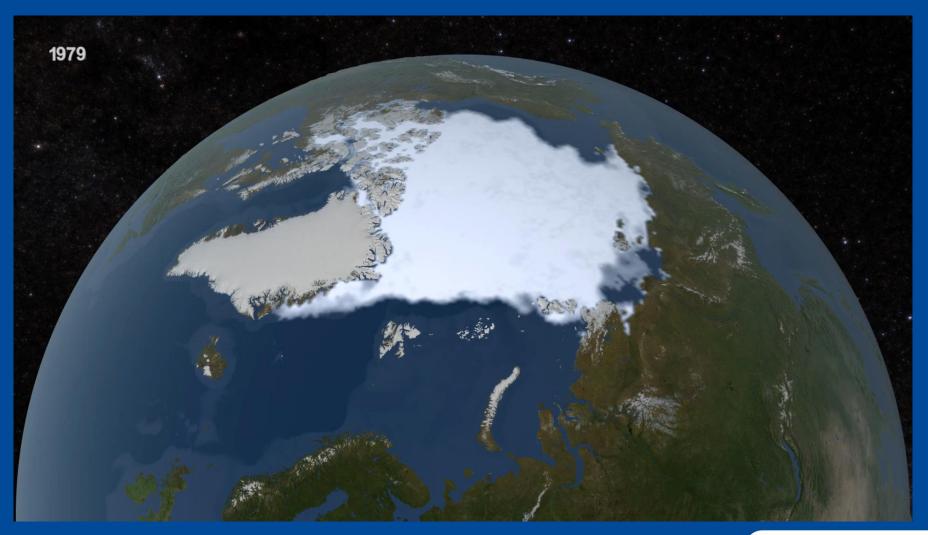
Navigating the Arctic's Seven Cs

- Climate
- Commodities
- Commerce
- Connectivity
- Communities
- Cooperation
- Competition





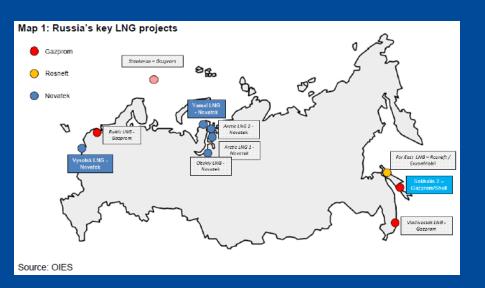
Climate



NASA/Goddard Space Flight Center Scientific Visualization Studio. The Blue Marble data is courtesy of Reto Stockli (NASA/GSFC).



Commodities



•Alaska's Arctic Seafood industry averaged \$3 billion annually over the past decade

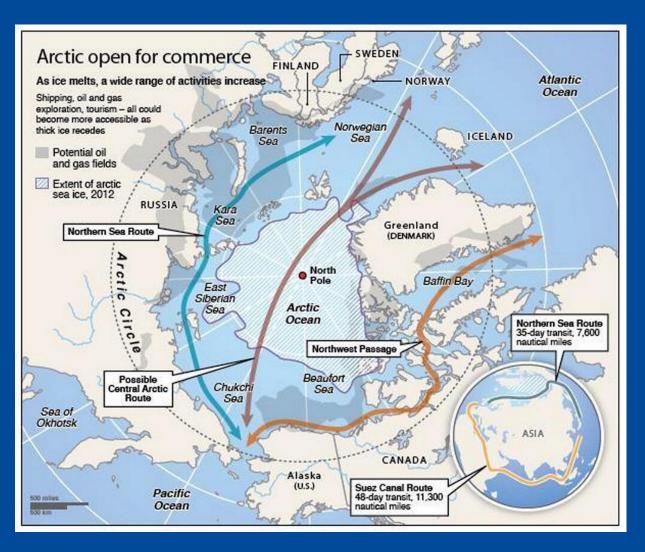
Alaska Resource Development Council



- •13% Undiscovered Oil
- 30% Undiscovered Natural Gas
- 20% Undiscovered Natural Gas Liquids



Commerce



Suez Canal 2018:

- 18,174 (vessels)
- 983.4 million tons of freight

Panama Canal 2018:

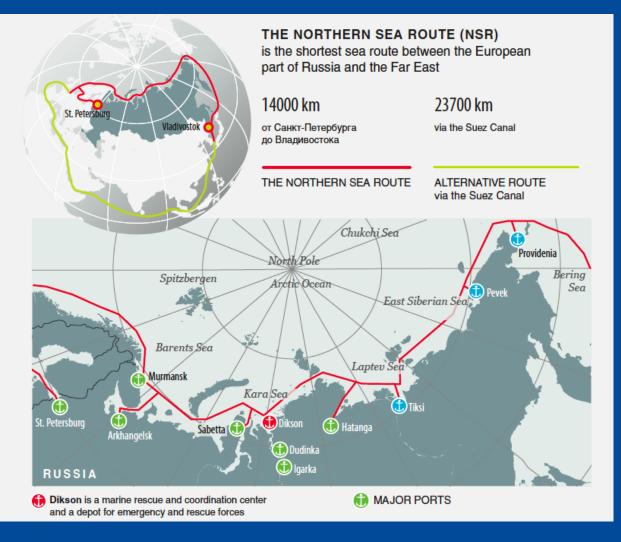
- 13,795 (vessels)
- 442.1 million tons

Northern Sea Route 2018:

- 22,022 voyages
- 20.1 million tons



<u>Commerce - Northern Sea Route</u>



NSR **2017**:

10.4 million tons of freight

NSR **2018**:

• 20.1 million tons of freight

NSR (Jan-Sept) **2019**:

• 23.37 million tons of freight

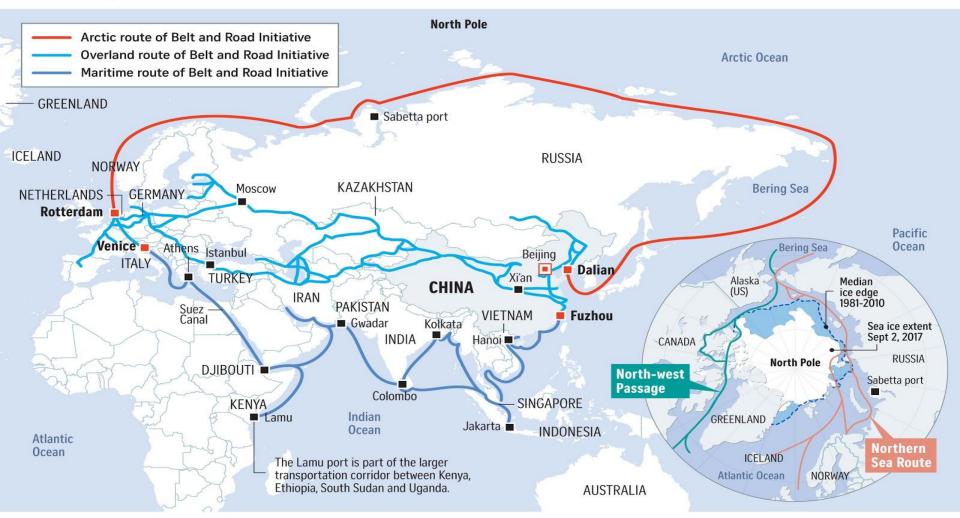
NSR **2024**:

 80 million tons of freight (estimated)



Commerce - Polar Silk Road

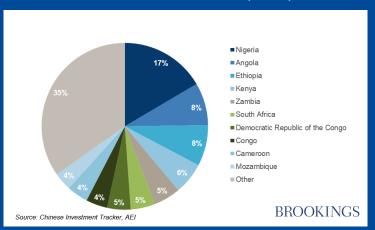
China's polar extension to Silk Road



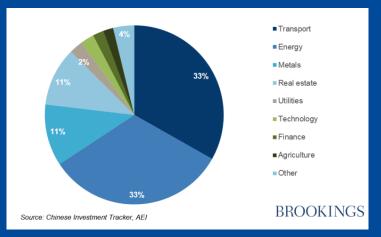


China in Africa

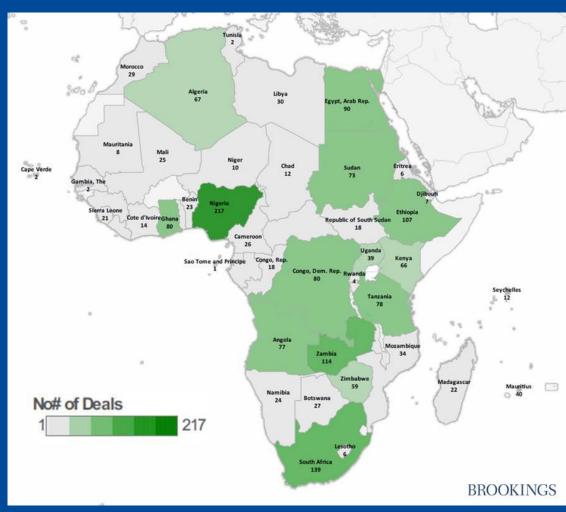
Locational distribution of Chinese investment in Africa (2018)



Sectoral distribution of Chinese investment in Africa



CHINESE INVESTMENT IN THE CONTINENT (2015)



Connectivity



USCG Air Station, Kodiak, AK



"Arctic peoples require access to affordable connectivity of sufficient quality in order to participate in today's digital economy." – Arctic Council Task Force on Improved Connectivity in the Arctic (TFICA)

Less than 5% of the US maritime Arctic is charted to modern international standards



Communities

31 communities identified for urgent relocation by Army Corps of Engineers in 2009



FLOODING AND EROSION IN ALASKA



"We have to serve *all* Americans.... You deserve every mission the Department owes you, period."

-Sean Moon, DHS



Cooperation: Arctic Council

Members



Permanent Participants

The Aleut International Association
The Arctic Athabaskan Council
Gwich'in Council International
The Inuit Circumpolar Council
Russian Association of Indigenous Peoples of the North
The Saami Council

Working Groups

Arctic Contaminants Action Program (ACAP)
Arctic Monitoring and Assessment Program (AMAP)
Conservation of Arctic Flora and Fauna (CAFF)
Emergency Prevention, Preparedness, and Response (EPPR)
Protection of the Arctic Marine Environment (PAME)
Sustainable Development Working Group (SDWG)

Observer Nations







(***

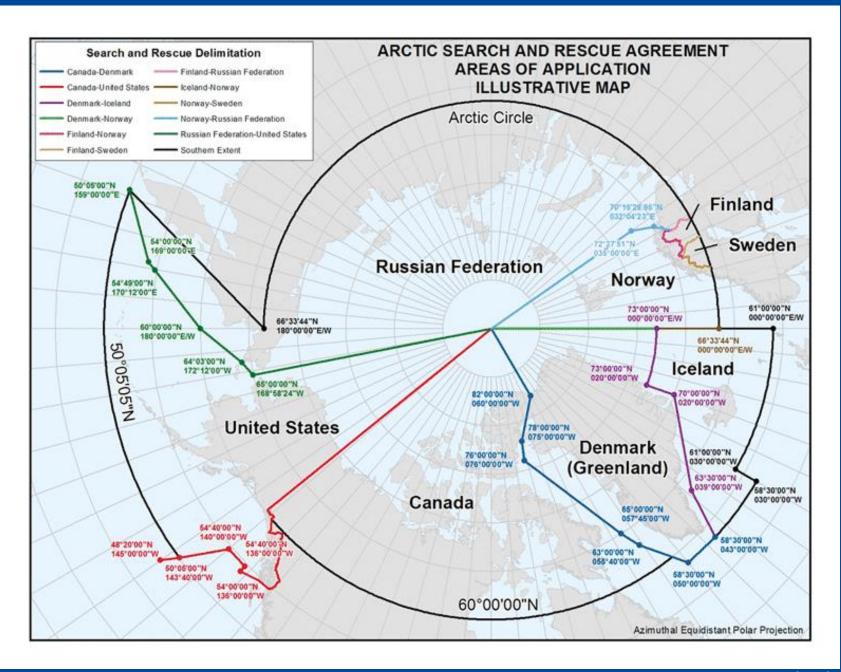


Spain









"New Era of Great Power Competition"



Source: Task & Purpose

- SECDEF Mattis: The US needs to "up its game" in the Arctic
- Exercise Trident Juncture, October
 2018 (NATO exercise)/ Vostok 2018
 (Russia/ China exercise)
- Revival of the 2nd Fleet
- Icebreaker funding for US (Russia has 53, China has 4 and is working on two more, including 1 nuclear-powered, US has 2)



Competition - Icebreakers



China
In service = 4
Developing = 2
Nuclear = 1



Russia
In service = 53
Developing= 6
Planned = 12



<u>United States</u> In service = 2 Planned = 6

<u>Canada</u>
In service = 10
Developing= 3
Planned - 6

Finland In service = 11

Sweden
In service = 4
Planned = 3

Norway
In service = 2

<u>Denmark</u> In service = 7

Germany
In service = 1
Planned = 1

South Korea
In service = 1
Planned = 1

<u>Japan</u> In service = 1



Russia in the Arctic

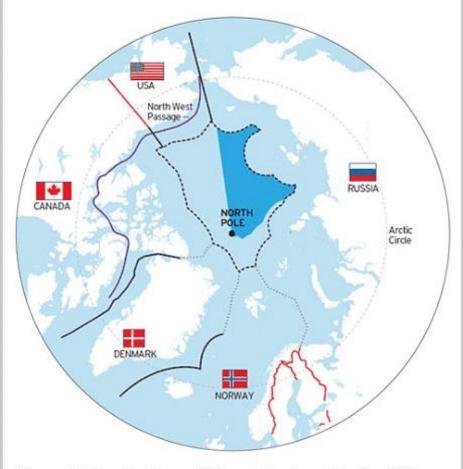


The Arctic is an important component of Russian identity, economic development, security buffer, and projection of force and influence



▼Map I WM 1582

Russian Continental Shelf Claims in the Arctic



Source: Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs, United Nations, "Outer limits of the continental shelf beyond 200 nautical miles from the baselines: Submissions to the Commission: Submission by the Russian Federation," at www.un.org/depts/los/clcs_new/submissions_files/rus01/RUS_CLCS_01_2001_LOS_2.jpg.

Russia's Arctic expansion

Six military bases which are either brand new/upgrades of existing or abandoned facilities are at the heart of Russia's Arctic expansion, with plans to set up a third Arctic Brigade as well as a coastal defence division.

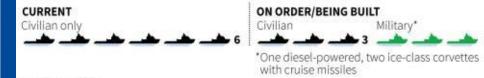
BASES

New Missiles Military Airfield to be modernised



Russian nuclear ice-breaker fleet base

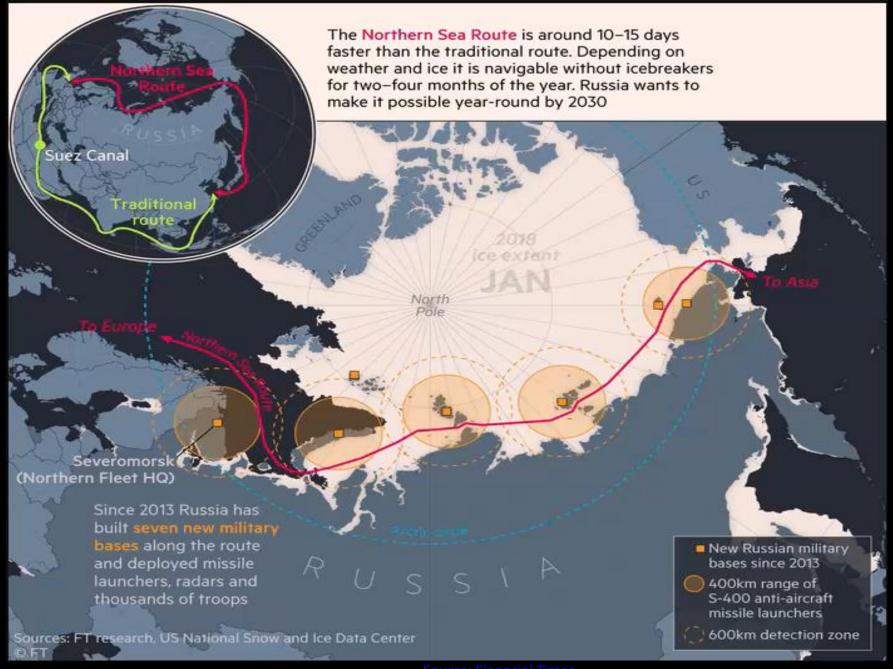
Based in Murmansk



Source: Reuters

Staff, 27/01/2017









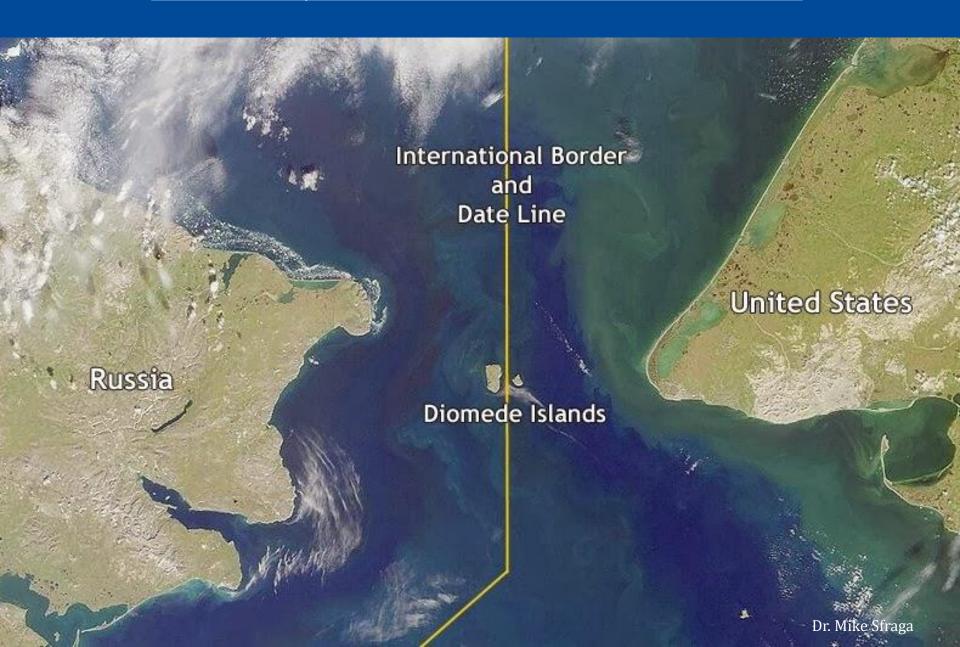


<u>fource: Financial Times</u>

Dr. Mike Sfraga



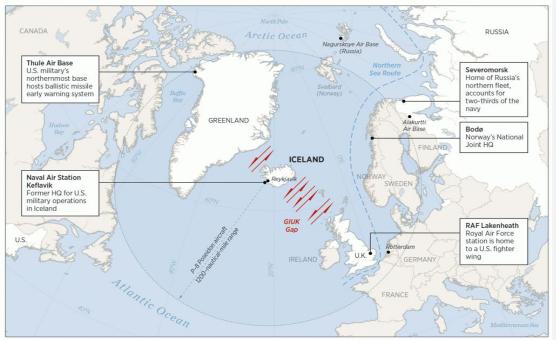
The US, RUSSIA and the Arctic





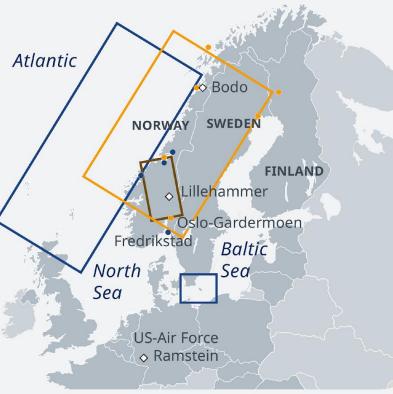


Iceland's Strategic Location in the North Atlantic



NATO's Trident Juncture

Biggest NATO war games since the Cold War



- Land and amphibian
 - Sea
 - Air

- Harbor
- Air Base

♦ Headquarters

Runs October 25 to November 7



Includes **50,000** participants from 31 countries

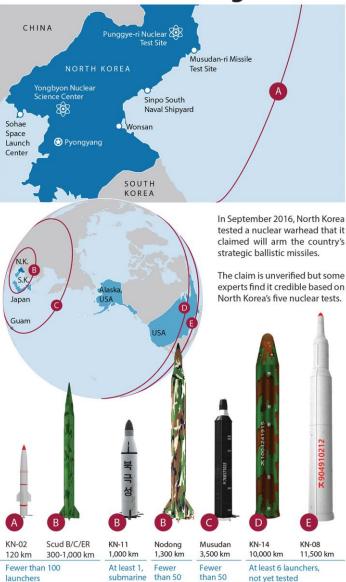






Source: NATO, Norwegian Armed Forces, dpa

North Korea's Strategic Threat



Note: North Korea may have additional missiles.

Estimates: Center for Nonproliferation Studies and
Department of Defense
Foreign Policy

launched

launchers

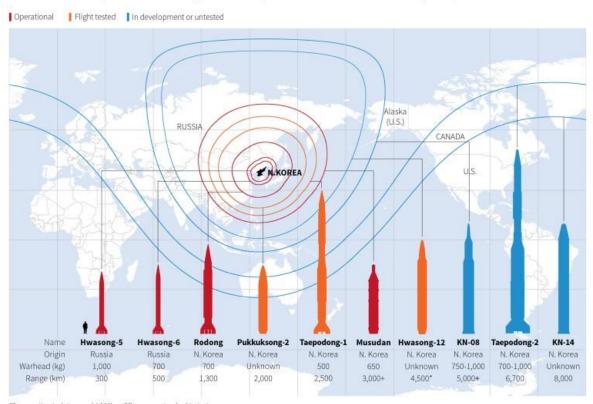
launchers

CNS

Funded by

North Korean missile range

Nuclear testing is part of a process that moves Pyongyang closer to miniaturising nuclear warheads to mount on intercontinental ballistic missiles. North Korea has well over 1,000 missiles of various ranges. Below is a comparison of North Korea's ballistic missiles' range and capabilities.



"Range estimated at around 4,500km, if flown on a standard trajectory.

Notes: Ranges of KN-08 and KN-14 show minimum estimates from CSIs; Taepodong-2 shows designed range but could travel further with lightened payload.

Sources: The Republic of Knera Ministry of National Defense; National Intelligence Service, South Korea; Center for Strategic and International Studies (CSIS); Reuters

Sources: The Republic of Korea Ministry of National Defense; National Intelligence Service, South Korea; Center for Strategic and International Studies (CSIS); Reuters
C. Inton, W. Cai, 24/03/2017

Brookings

REUTERS

The Hwasong-14 missile, which was tested on July 4, 2017, is not pictured here.
Its range would encompass Alaska.





The Arctic Has Emerged

- Politically
- Socially
- Economically
- Physically
- Strategic Bering Strait
- Great Power Competition
- NATO, 2nd Fleet, GI-UK Gap...
- Sustainable Arctic communities
- SAR

