

Navigational, Legal and Insurance Aspects of Polar Shipping



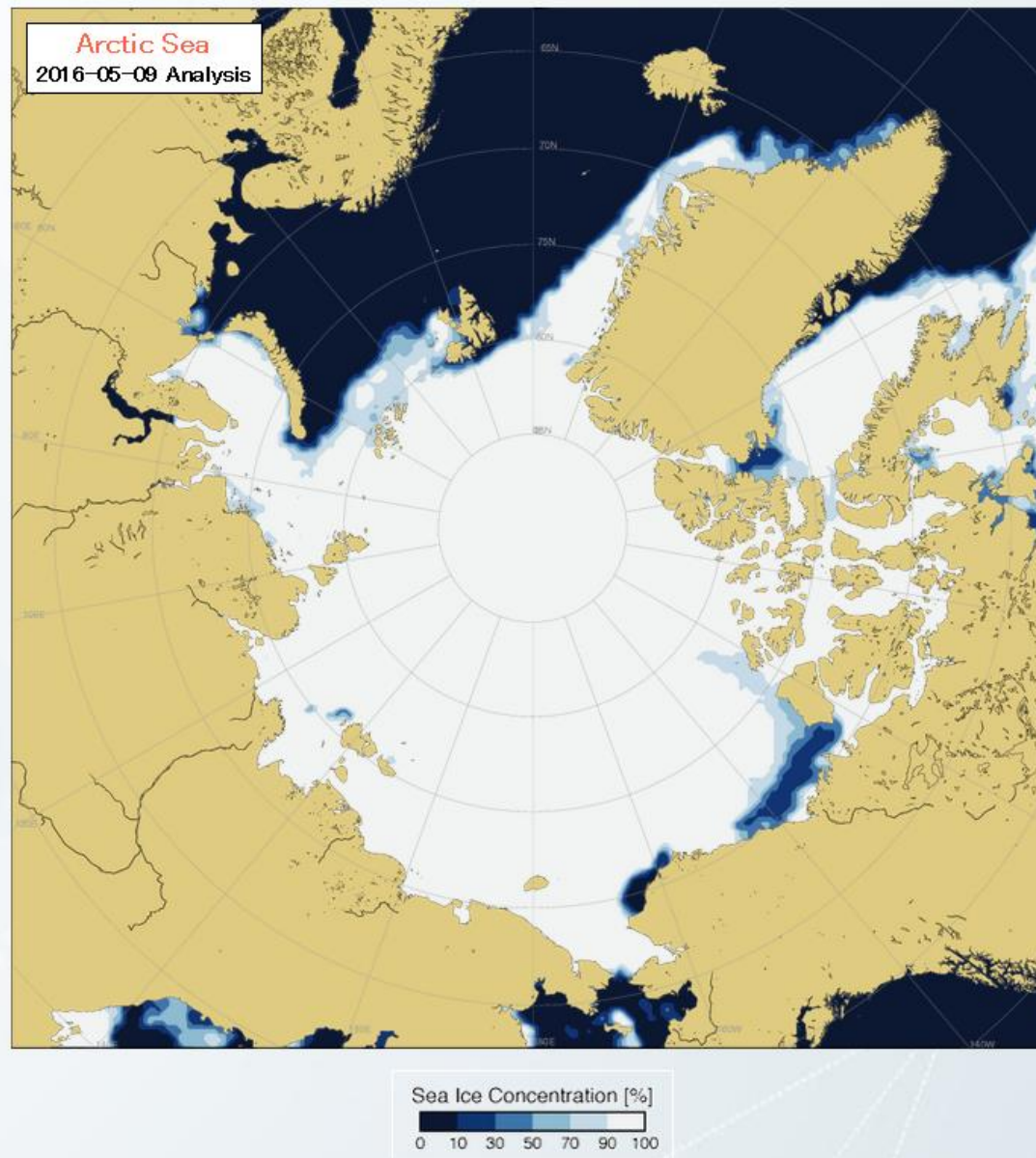
31st Marine Forum South Africa
May 14, 2016

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Aspects of Polar Shipping

Content

1. Areas & Routes
2. Stakeholders, Institutions & Forums
3. Navigation
4. Legal Issues
5. Insurance
6. Summary



Information Region

- ☒ Arctic Sea
- ☐ Northeast Passage
 - ☐ West
 - ☐ East
- ☐ Northwest Passage
 - ☐ West
 - ☐ East
- ☐ Baltic Sea
- ☐ Gulf of St. Lawrence
- ☐ Okhotsk Sea
- ☐ Bohai Sea
- ☐ Bering Sea

Parameters

- ☒ Sea Ice
- ☐ Air Pressure
- ☐ Wind
- ☐ Wave Height
- ☐ Ocean Current

Analysis

Forecast

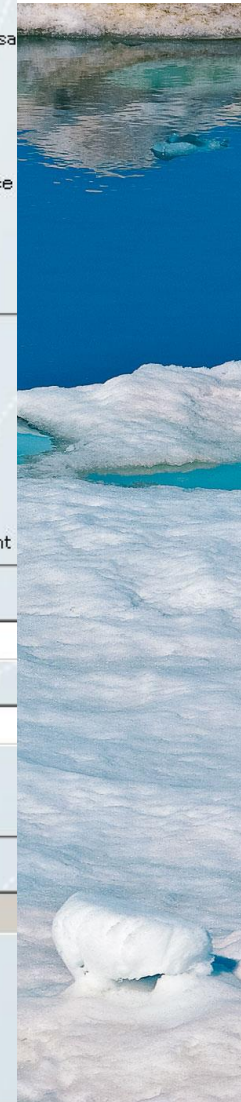
Outlook

☐ Sep. 2012

WNI Satellite

Ship Positions

- ☐ AIS
- ☐ PPS ?
- ☐ QRT ?



Areas and Routes of Polar Shipping

- **Antarctic & Arctic Shipping**

History ◦ Arctic Special Features ◦ Traffic Volumes ◦ Ice & Climate Change

- **North East Passage (NSR / Northern Sea Route)**

Most interesting ◦ Research ◦ Exploration ◦ Exploitation ◦ Cargo (Supply, Project & Transport Cargo)

- **North West Passage (NWP)**

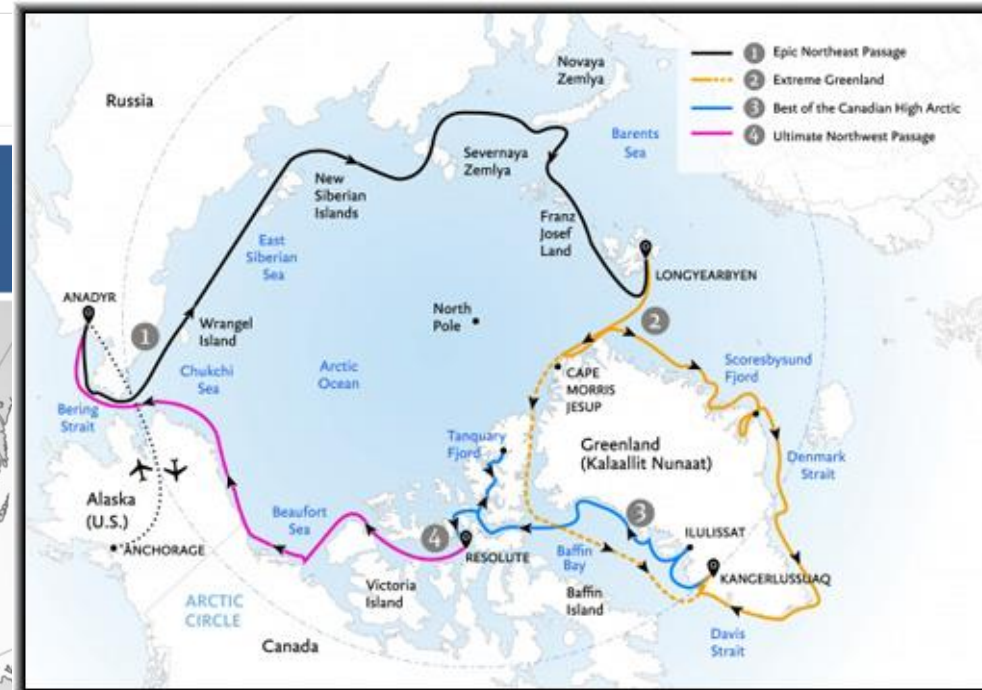
Research ◦ Exploration ◦ Cargo ◦ Cruises

- **Trans-Polar-Route (TPP)**

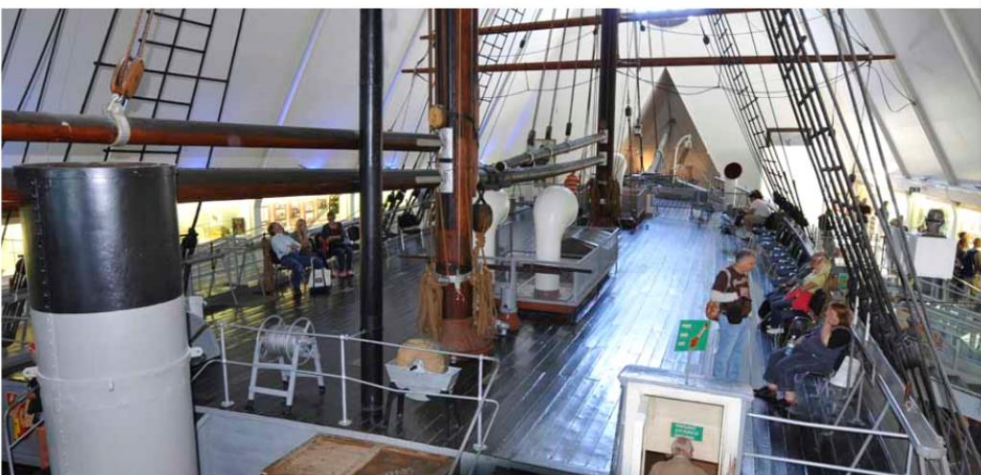
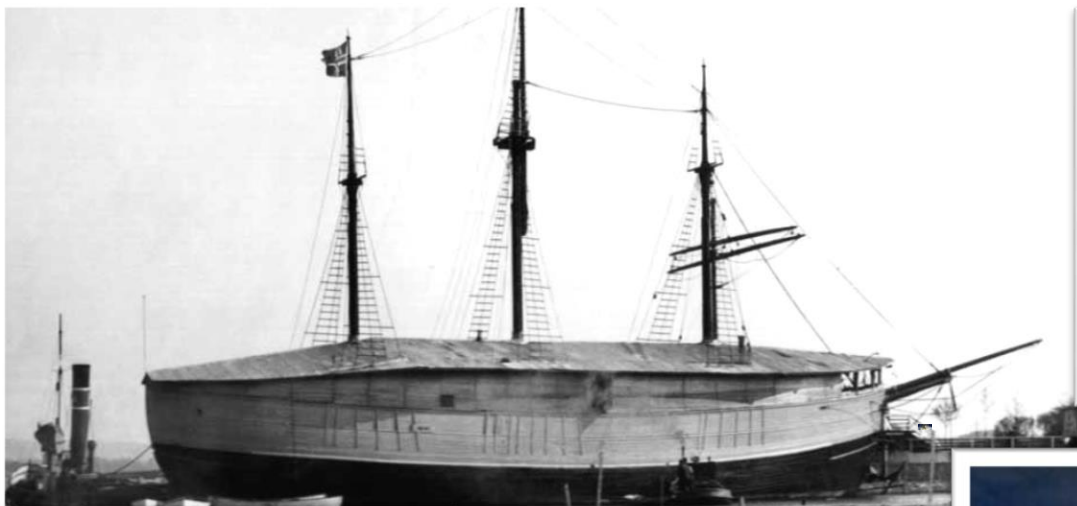
Submarines ◦ Cruises (so far only)

Areas and Routes of Polar Shipping


NORTHERN SEA ROUTE DEFINITION BY THE RUSSIAN FEDERATION



Fram



Stakeholders, Institution & Forums



















































The background of the slide is a photograph of an Arctic landscape. It shows jagged, snow-covered mountains or ice formations under a hazy, orange-tinted sky, suggesting a sunset or sunrise. The foreground is a dark, calm body of water.













































Governments & Authorities ◦ Military & Naval
Forces ◦ Research & Scientific Institutes ◦ Arctic
Council ◦ AMSA ◦ PAME ◦ Environmental
Organisations (e.g. WWF, Greenpeace) ◦
Shipowners ◦ Shipbuilders ◦ Classification Societies
◦ Insurers / Reinsurers ◦ CMI ◦ IUMI

Polar Navigation

- Statistics, Accidents & Data
- Strength & Design/Building Requirements for Vessels (Ice-Classes)
- Problems of (Ice) Navigation (Ice Jets & other factors)
- Navigation Assistance & Aids / Ice Pilots
- Surveillance & Charts
- Remote Bunkering, Repair & Salvage facilities / SAR limits
- Weather Routing and Passage Planning
- Best Practice / Insurer 's Recommendations



<div> <div>Search Results</div> <div>View As: Tabular Data Map</div> <div> <div>Save Search</div> <div>Sorting</div> <div>Layout</div> <div>Columns</div> </div> </div>							
Vessel	IMO	Flag	Vessel Type	Year of Build	GT	DWT	P&I Club
 0050 Let Pobedy	9152959	 Russia	Icebreaker	2007	23308	3505	
 Admiral Makarov	7347603	 Russia	Icebreaker	1975	14058	7560	U.K. Mutual Steam Ship Assurance Associat...
 Aleksey Chirikov	9613551	 Russia	Icebreaker	2013	7536	4191	Assuranceforeningen Skuld
 Arktika	7429061	 Russia	Icebreaker	1974	20665	4096	
 Baltika	9649237	 Russia	Icebreaker	2015	3800	1150	Assuranceforeningen Skuld
 Dikson	8009208	 Russia	Icebreaker	1983	5342	1909	
 Dudinka	6920094	 Russia	Icebreaker	1970	4121	1219	
 Ermak	7330038	 Russia	Icebreaker	1974	14058	7560	
 Evgeny Kocheshkov	9253686	 Russia	Icebreaker	2001	200	119	
 Fedor Litke	7020085	 Russia	Icebreaker	1970	2315	1141	
 Ivan Kruzenshtern	6501496	 Russia	Icebreaker	1964	2315	1092	
 Kapitan Babichev	8027236	 Russia	Icebreaker	1983			
 Kapitan Chadaev	8434257	 Russia	Icebreaker	1978	2335	257	
 Kapitan Chechkin	8878104	 Russia	Icebreaker	1977	2374	258	
 Kapitan Evdokimov	8027224	 Russia	Icebreaker	1983	2291	463	
 Kapitan Kharchikov		 Russia	Icebreaker	2012			
 Kapitan Kosolapov	7406320	 Russia	Icebreaker	1976	1960	365	
 Kapitan Metsayk	8027274	 Russia	Icebreaker	1984			
 Kapitan M.Izmaylov	7406318	 Russia	Icebreaker	1976	1669	354	
 Kapitan Nikolaev	7413490	 Russia	Icebreaker	1978	14264	4836	
 Kapitan Plakhin	8878099	 Russia	Icebreaker	1978	2427	258	
 Kapitan Sorokin	7413488	 Russia	Icebreaker	1977	15385	5138	
 Kapitan Zarubin	8434283	 Russia	Icebreaker	1978	2335		
 Karu	5182205	 Russia	Icebreaker	1958	2625	733	
 Krasin	5196402	 Russia	Icebreaker	1917	5484	2858	

Vessel	IMO	Flag	Vessel Type	Year of Build	GT	DWT	P&I Club
 Krasin	7359644	 Russia	Icebreaker	1976	14058	7554	U.K. Mutual Steam Ship Assurance Associat...
 Lenin	5206087	 Russia	Icebreaker	1959	13366	3201	
 Moskva	9326574	 Russia	Icebreaker	2008	9491	7243	
 Mudyug	8009181	 Russia	Icebreaker	1982	6954	2920	
 Murmansk	9658666	 Russia	Icebreaker	2015	11720	5048	
 Orlova		 Russia	Icebreaker	1976	4251		
 Pacific Enterprise	9335692	 Russia	Icebreaker	2006	4992	3700	Standard Steamship Owners Protection & In...
 Rossiya	8424240	 Russia	Icebreaker	1985	20646	2713	
 Sankt-Peterburg	9326586	 Russia	Icebreaker	2009	9491	7107	
 Semyon Dezhnev	7119446	 Russia	Icebreaker	1971	2315	1092	
 Sibir	7604491	 Russia	Icebreaker	1977	18171	3968	
 Sovetskiy Soyuz	8838582	 Russia	Icebreaker	1989	20646	2752	
 Taymyr	8417481	 Russia	Icebreaker	1989	20791	3550	
 Tor	5418197	 Russia	Icebreaker	1964	3947	1024	
 Varandey	9402392	 Russia	Icebreaker	2008	7338	4643	Assuranceforeningen Skuld
 Vaygach	8417493	 Russia	Icebreaker	1990	20791	3550	
 Vitus Bering	9613549	 Russia	Icebreaker	2012	7536	4158	Assuranceforeningen Skuld
 Vladimir Ignatyuk	8127804	 Russia	Icebreaker	1983	4391	2113	
 Vladislav Strizhov	9310018	 Russia	Icebreaker	2006	5871	3867	Assuranceforeningen Skuld
 Vladivostok	9658654	 Russia	Icebreaker	2015	11720	5610	
 Yamal	9077549	 Russia	Icebreaker	1992	20646	2750	
 Yuriy Lisyanskiy	6521850	 Russia	Icebreaker	1965	2255	1092	



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FleetMon.com



Iceclasses



Annex. Approximate correspondence between Ice Classes of the Finnish-Swedish Ice Class Rules (Baltic Ice Classes) and the Ice Classes of other Classification Societies

Classification Society	Ice Class				
Finnish-Swedish Ice Class Rules	IA Super	IA	IB	IC	Category II
Russian Maritime Register of Shipping(Rules 2007)	Arc 5	Arc 4	Ice 3	Ice 2	Ice 1
Russian Maritime Register of Shipping(Rules 1995)	UL	L1	L2	L3	L4
Russian Maritime Register of Shipping(Rules 1999)	LU5	LU4	LU3	LU2	LU1
American Bureau of Shipping	IAA A1	IA Ao	IB	IC	D0
Bureau Veritas	IA SUPER	IA	IB	IC	ID
CASPPR, 1972	A	B	C	D	E
China Classification Society	Ice Class B1*	Ice Class B1	Ice Class B2	Ice Class B3	Ice Class B
Det Norske Veritas	ICE-1A* ICE-10	ICE-1A ICE-05	ICE-1B	ICE-1C	ICE-C
Germanischer Lloyd	E4	E3	E2	E1	E
Korean Register of Shipping	ISS	IS1	IS2	IS3	IS4
Lloyd's Register of Shipping	1SS	1A	1B	1C	1D
Nippon Kaiji Kyokai	IA Super	IA	IB	IC	ID
Registro Italiano Navale	IAS	IA	IB	IC	ID



Legal Issues

- International Law / Territorial Issues and Exploitation
- Conventions
- „Polarworthiness“, Polar Loadlines, no ECAS
- The (IMO) Polar Code (Jan 1, 2017)
- Other (like NSR Requirements etc.)
- Recent China Arctic Navigation Guide (in Chinese, 365 pages with maps)

Insurance Aspects

- Cover & Markets (Generally available but Specialists recommended)
Underwriting & Pricing ◦ Risk Assessment ◦ Warranties
- H&M Insurance
Grounding ◦ Collision ◦ Rudder & Prop. Damage ◦ Equipment Failure
- Cargo Insurance
Foremost temperature damage
- P&I Insurance (following H&M)
RDC Part ◦ Pollution ◦ ROW ◦ Crew
- Cruise Conloss
Delay in Schedule ◦ TL Risk



Excluded Trading Areas







Late on 23 November 2007, after a festive meal in the dining room of the M/S *Explorer*, most of the ship's 91 passengers had retired to their cabins. A few lingered in the bar, lulled by the now familiar sound of the steel hull crunching through pack ice. The 38-year-old vessel was 12 days into a 19-day GAP Adventures tour that departed from the tip of Argentina and traced the voyages of early 20th-century explorer Ernest Shackleton to the Antarctic Peninsula. It was early in the tourist season, and a particularly cold austral winter had resulted in even more sea ice than usual. But conditions were mild, and the *Explorer's* captain and crew were veteran Antarctic sailors.



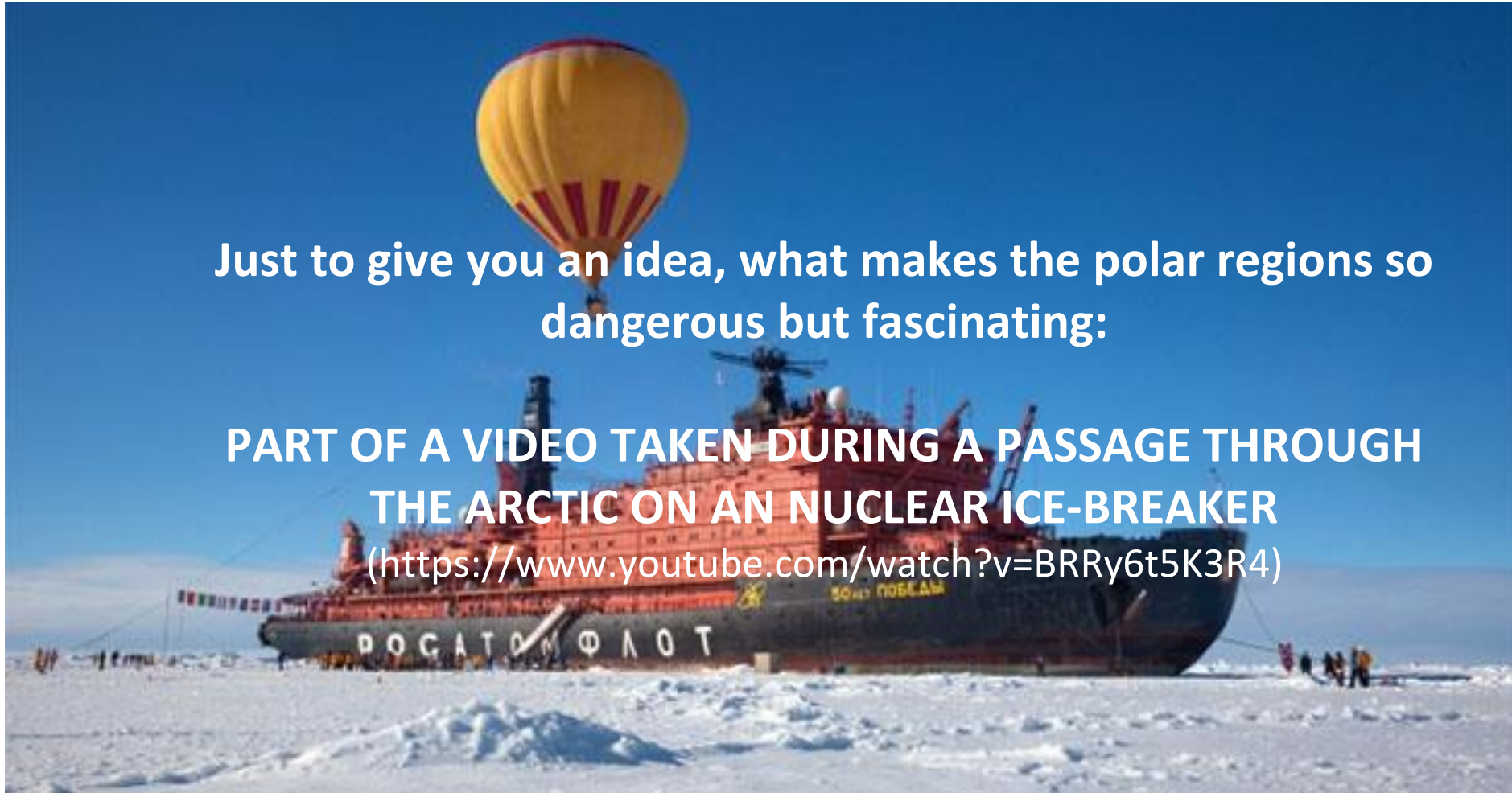
Le Boréal caught fire North of Falkland Islands in November 2015. The Transport was effected mid January. These days (late May) she will start operating again.



Just to give you an idea, what makes the polar regions so dangerous but fascinating:

**PART OF A VIDEO TAKEN DURING A PASSAGE THROUGH
THE ARCTIC ON AN NUCLEAR ICE-BREAKER**

(<https://www.youtube.com/watch?v=BRRy6t5K3R4>)



My Subcutaneous Messages

- Climate change or not – it can be damned cold out there (and dark, foggy and inaccessible)
- For the future development don't never underestimate the Russians



and

most importantly

don't eat the yellow snow, where the Polar bears go