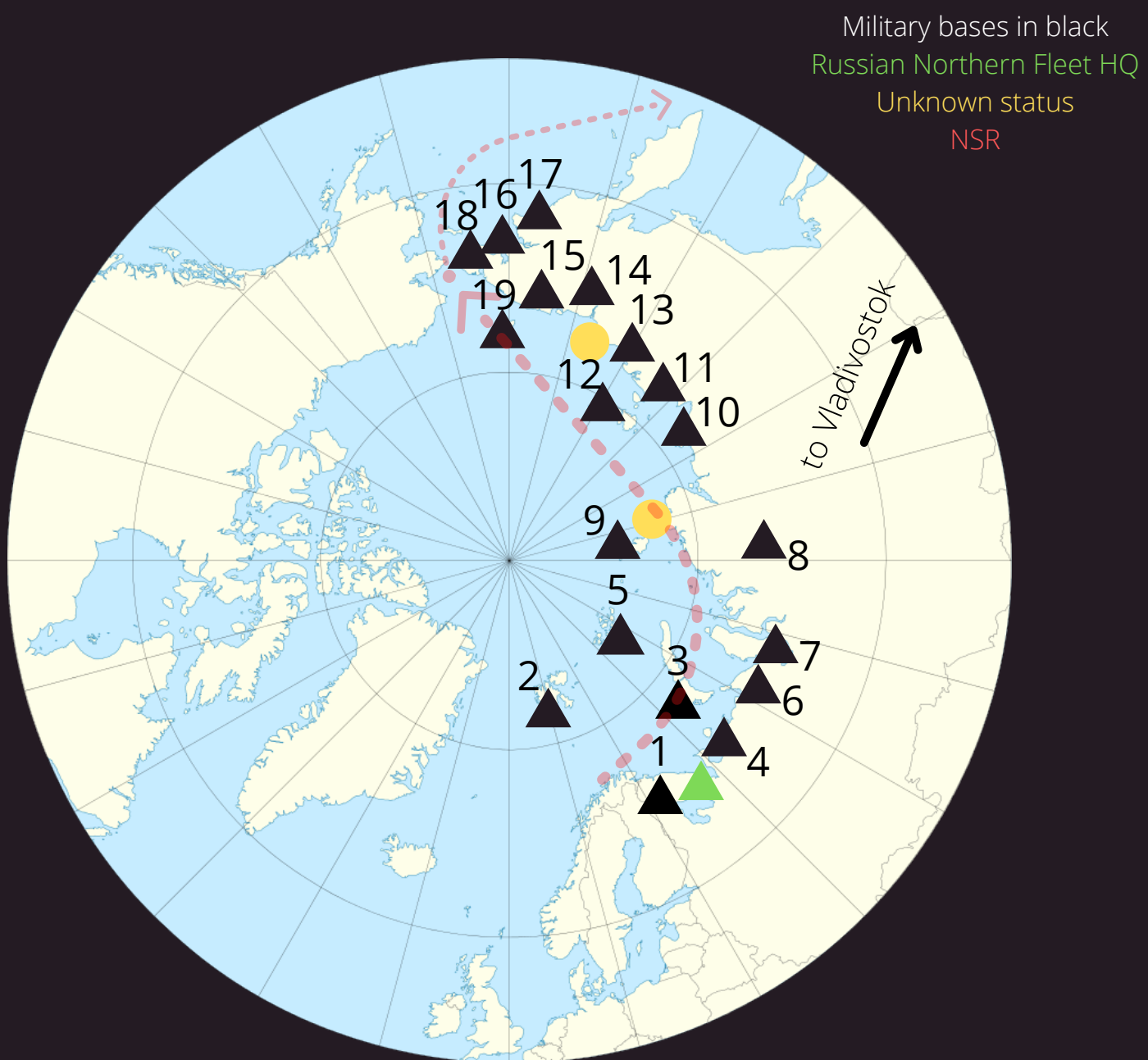


## Russia's Protective Dome along the Northern Sea Route

Russian military bases north of Arctic Circle and along a 20,000-kilometer coastline are of ever increasing importance, defending, controlling and denying the Northern Sea Route which is not just a "Polar Silk Road" but also a vital lane of communication to the Russian Pacific Fleet at Vladivostok. Significant investment in these strategic assets is exemplified by the bringing back into service and upgrading of facilities abandoned a quarter of a century ago on the collapse of the Soviet Union. They come within the Unified Strategic Command based in Arkhangelsk. The bases data below is derived from a number of public sources.

The Russian Northern Fleet is headquartered in Severomorsk (in green) near Murmansk 69°04'N 33°25'E (whose Order of Battle for 39 surface warships and 42 submarines can be found here [https://en.wikipedia.org/wiki/Northern\\_Fleet](https://en.wikipedia.org/wiki/Northern_Fleet)) However, other sources maintain the deployable fleet is less than 20 submarines, referencing those laid up at Gremikha (see below). The fleet is said to have control of 80% of Russia's maritime nuclear weapons. Nearby are Severomorsk -1 and Severomorsk -3, airfields which are the home of tactical aviation (Su-25 and Mig-29) and transport aircraft (Il-96). This base also hosts transport airplanes and helicopters can host Tu-95 and Tu-142 bombers.



There are five other Northern Fleet naval bases at Polyarnyy (docking, repair and decommissioning, Olenya Bay (Home port on Kola inlet) , Gadzhiyevo (Yagelnaya/Sayda submarine base, see below)

- Bolshaya Lopatka (Litsa Guba)( 69°26'12"N 32°25'30"E operational submarines)
- Vidyayevo (Ura Bay and Ara Bay 69°19'N 32°48'E Akula, Sierra, and Oscar-II class submarines.)
- Gadzhiyevo Naval Base (aka Yagelnaya Naval Base) 69°15'N 33°25'E Homeport to submarine fleet which includes 6 Delta-IV submarines and «Yury Dolgoruky» of the Borei-class SSBN submarines.
- Okolnaya Bay Kola Bay storage under construction for 200 Bulava missiles
- Gremikha (easternmost base on Kola Peninsula - 17 nuclear-powered submarines withdrawn from service with their 34 reactors are laid-up, as well as other nuclear waste).

## THE 3-OCEAN "PROTECTIVE DOME"

In 2015 it was reported that Russia had plans to build 13 aerodromes and six cantonments in the Arctic. The string of new and refurbished bases between the Atlantic and the Pacific via the Arctic Ocean was described by the Northern Fleet commander Admiral Nikolay Yevmenov as a "protective dome" – which we translate as Zashchitnyy Kupol, the title of this paper – and which sums up the Russian approach now being implemented.

In late 2019 Vice-Admiral Alexander Moiseyev, Commander of the Northern Fleet, confirmed that additional S-300 and S-400 systems will be deployed across the Russian Arctic to create a complete anti-aircraft dome over the region. "As a result of this, the Arctic will be covered from any means of an air attack by the enemy, including aviation, cruise or ballistic missiles".

Identified bases (as of January 2021) are listed from west to east:

- 1) Alakurtti Naval Air Base 66°58'24"N 030°20'42"E 2500 m long 4th Naval Bomber Regiment (Su-24) and 485 OVP (485th Independent Helicopter Regiment) Mi-24 and Mi-8. Substantial electronic monitoring. 80th Independent Motorised Rifle Brigade.
- (near point 1) Sputnik Base, Pechenga 69°30'30"N 31°18'2"E Base for 61st Naval Infantry Brigade considered one of the best trained and most combat-experienced units of the Russian military, deployed to Syria. 26 T-80BVM tanks. Elements of 200th Motorised Infantry Brigade.
- 2) Nagurskoye, Alexandra Land, westernmost island of the Franz Josef Archipelago, 80.6339°N 46.5839°E "Arctic shamrock" Air base (northernmost) was reopened in 2017. Radar detachment. Capable of handling Tu-160 Backfire strategic bombers.
- 3) Rogachyovo military air base on the Novaya Zemlya archipelago, 71°37'0"N 052°28'42"E There's also a commercial airfield. Mig-31s may be deployed. S-300 air defence systems 2014-15, Pantsir-S1 anti-aircraft systems and Rubezh anti-ship coastal systems. Resonance-N radar is included as well. In summer 2019 missiles were replaced with S-400 and the unit became combat-ready in September of last year. In March 2020 Russia's air defence forces engaged in a full-scale test of the new system, which has an effective range of 38-40 kilometers. Nearby is Belushya Bay, a military settlement which was associated with Soviet nuclear tests. It has a 200-bed military hospital. At least 6 redundant nuclear submarines are believed to have been scuttled off Novaya Zemlya. (Commercial?) port construction is underway.
- 4) Naryan-Mar 67°38'N 53°03'E Upstream from Barents Sea. Combined air base with the airstrip 2500 m long. Rear operations air base for Rogachevo air base on Novaya Zemlya. Coastguard outpost. "Emergency and preparedness facilities", sub unit at Amderma for search and rescue.
- 5) Greem Bell / Graham Bell Island (81°09'N 64°17'E) Restored 2100 m long airstrip for use as a military airfield. May only be usable when frozen.
- 6) Vorkuta Sovetsky Air Base, Pechora basin 67°27'56"N 064°18'28"E Former bomber staging post 3550 m long maintained by 364 OSAE OGA (Arctic Control Group) Search and Rescue (SAR) and long-range patrol (Tu-22M3) Early warning radar station.
- 7) Sabetta. 71.2733°N 72.0725°E Commercial port serving Yamal LNG project. Busy airport. FSB protection centre so presumably dual use of both civil and military.
- 8) Alykel outside Norilsk (a closed city with IBM facility) 69°18'36"N 087°20'0"E Joint use airport 1800 m long. Caretaker status provided by the Russian Air Force's OGA (Arctic Control Group). May also house 57th Interceptor Aircraft Regiment. Radar detachment. SAR.
- 9) Sredny Ostrov Sredny Island off the Severnaya Zemlya archipelago in the northern Kara Sea. Military ice airfield 79°31'42"N 091°4'30"E SAR, radar surveillance, tactical group.
- 10) Taymylyr 72°37'N 121°55'E Radar detachment.
- 11) Tiksi on Laptev Sea 71°39'N 128°52'E Airfield joint use including border guards. SAR, tactical aviation. Restored 2016. Former staging fields at Tiksi North and Tiksi West (3500 metres). New naval, radar and air defence facilities including S-300 SAMs, delivered 2019. Garrison is part of the Northern Fleet's 45th Army with around 100 personnel on site. The unit was first activated for training purposes in December 2019 and a collection of eleven military buildings, including dormitories, administrative buildings, power plants, fuel storage, and missile control rooms were completed in February 2020.

- 12) Kotelny Island, Novosibirsk (New Siberian Islands), Eastern Siberian Sea 75°20'N 141°00'E Naval base abandoned in 1993 restored 2014 when 99th Tactical Arctic Group permanently established the base by beginning construction of a military air base, pier, radar detachment and accommodation for troops and their families. Also known as "Northern Clover" or "Northern Shamrock".
- 13) Chokurdakh 70°38'N 147°54'E Airfield, radar detachment. Riverport. A winter road follows the Indigirka River upstream when it is frozen.
- 14) Chersky. 68°44'36"N 161°20'12"E Restricted town. Radar detachment. Airfield at least 1700 meters long, asphalt. Resupply point.
- 15) Pevek 69°47'0"N 170°35'48"E Primarily a civilian airfield 2500 meters long but capable of dual-use including interceptors (c.f. Mi-8 helicopter crash 2014) SAR, and resupply.
- 16) Providenya, Chutoka 64°22'42"N 173°14'36"W Closest airbase to USA. 2500 metres. 1960's fighter squadron base. Bear Tu-95 have deployed there. SAR, resupply. Restricted town.
- 17) Anadyr-Ugolny civilian/military airbase. 64°44'6"N 177°44'30"E Believed to be home to Mig 31 interceptors, reconnaissance and drones. Used for temporary deployments and long-range patrols eg Bear Tu-95 and Backfire Tu-22M3 bombers.
- 18) Mys Shmidta Cape Schmidt (headland into the Chukchi Sea 68°55'14"N 179°27'12"W Naval base and airfield.
- 19) Wrangel Island 71°14'N 179°25'W (In the Arctic Ocean, between the Chukchi Sea and East Siberian Sea. Kink in International Date Line). Naval base. Radar detachment at Kigelyakh.

Many of the installations with radar detachments and 2,500-metre runways can receive Russian fighter aircraft.

During the Cold War forward deployment and staging, even in winter, was often practiced. The radars improve domain awareness in Arctic airspace, and many bases are equipped with modern sophisticated weaponry including the Rubezh coastal missile systems and the Pantsir-S1 anti-aircraft weapon systems.

Other previously abandoned Arctic staging bases whose status has not currently been clarified are:

- Chekurovka near Tiksi 71°3'54"N 127°20'18"E (3500 m)
- Dresba (winter season 3500 m long 69°21'48"N 161°33'42"E )
- Ostrov Bolshevik, Bolshevik Island 78°35'6"N 100°59'42"E (winter season 3200 m airstrip)

Data curated by Robin Ashby. Illustration by Edoardo del Principe