

Russia's Naval Renewal

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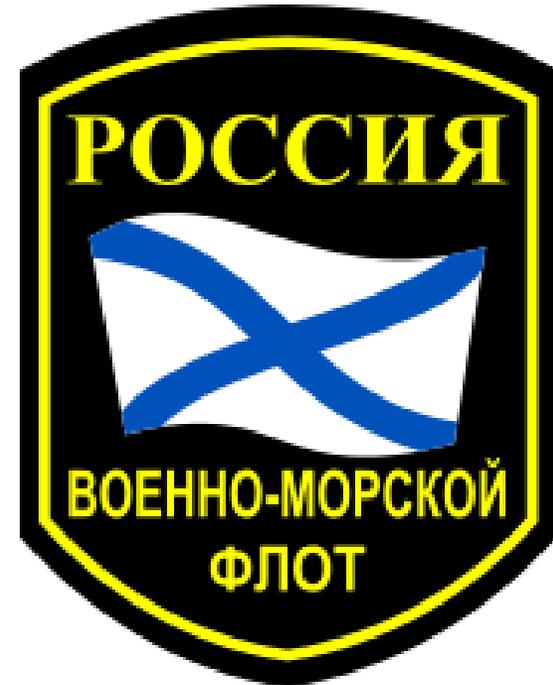
Russian Federation Navy Missions

Missions:

1. Ensure nuclear deterrence (provide survivable second strike capability)
 - SSBNs as an essential element of Russian security
2. Provide credible conventional deterrence, prior to and during war
 - *Sderzhivanie* (“restraining,” “keeping out,” “holding back,” “containment”)
 - Escalation management
3. Defense of SSBN bastions and maritime approaches to Russia
 - Primary mission of the non-SSBN fleet
4. Power projection around the globe

Russia does not have an A2/AD doctrine

- Sometimes uses the phrase “restriction and denial of access and maneuver” (*ogranicheniye i vospreshcheniye dostupa i manyuvra*)





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2017: Russian Naval Fundamentals

Strategic Deterrence

“IV. The Navy as an Effective Instrument of Strategic Deterrence

32. The Navy is one of the most effective instruments of strategic (nuclear and nonnuclear) deterrence, including preventing ‘global strike.’ This is due to the Navy possessing strategic nuclear and conventional naval forces and the ability to implement its combat potential in virtually any area of the World Ocean..”

Это бесстыдный
маркетинг



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Fundamentals of the State
Policy of the Russian
Federation in the Field of
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Period Until 2030

2017

Translated by Anna Davis

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2017: Russian Naval Fundamentals

Aspirations:

“V. Naval Strategic Requirements. Objectives and Priorities for its Modernization and Development

39. The Russian Federation will not allow significant superiority of naval forces of other states over its Navy and will strive to secure its position as the second most combat capable Navy in the world.”

Это более
бесстыдный
маркетинг



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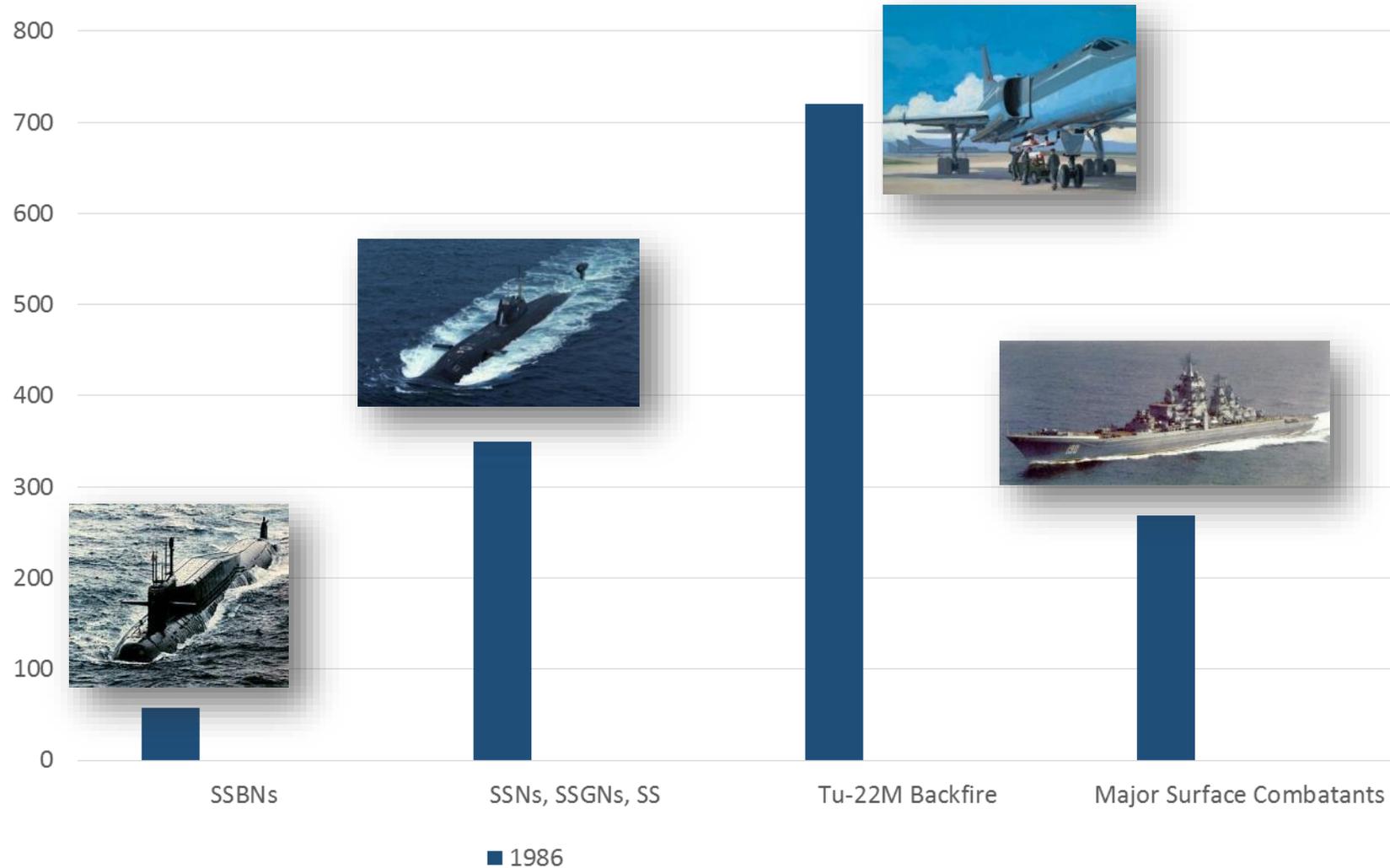
Say what?





The Soviet Military, 1986

Sample Maritime Combatant Numbers

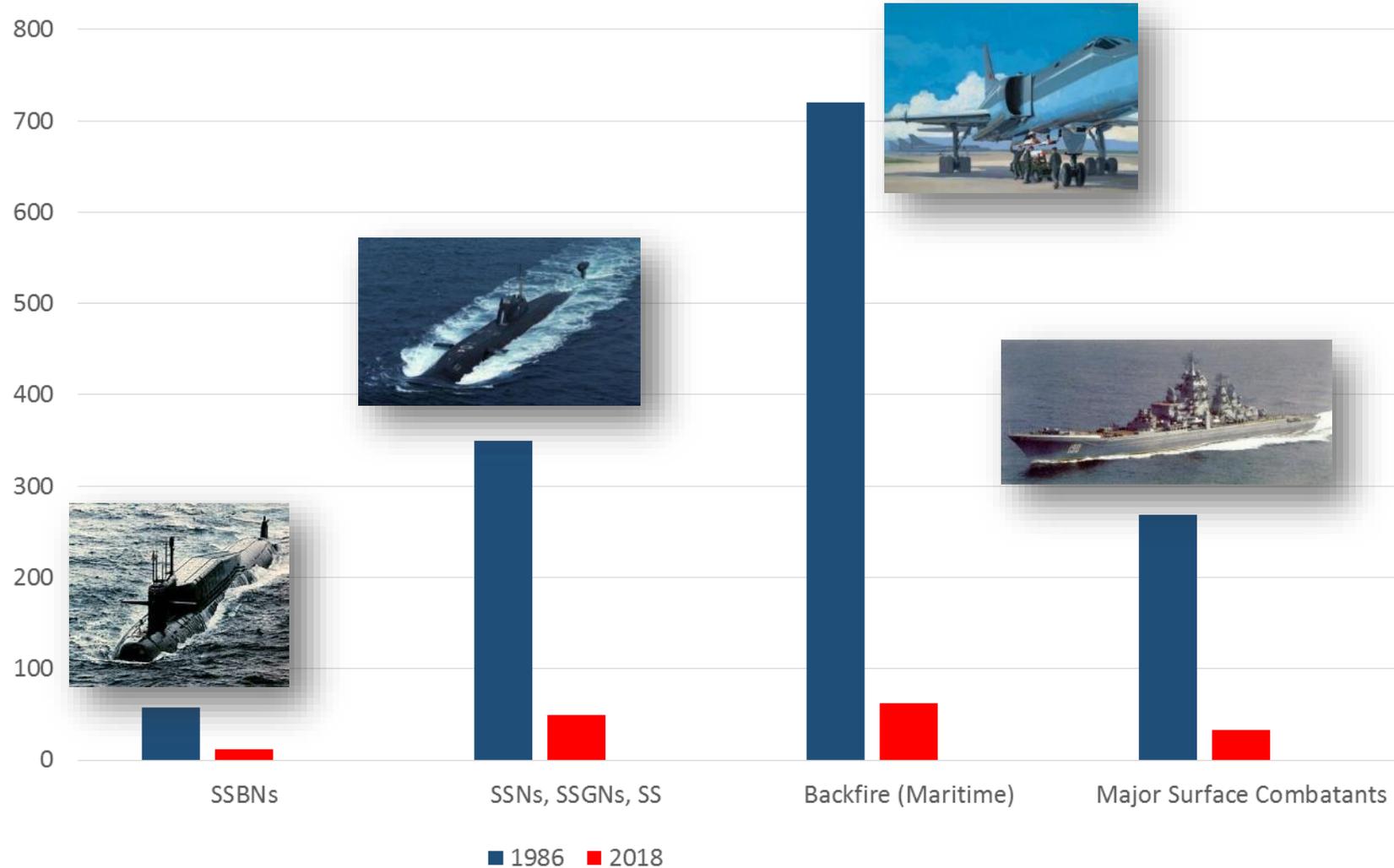




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Force Levels, 1986 vs. 2018

Sample Maritime Combatant Numbers





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What is Russia Building?





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ISR: Space and Air



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Space-based:

- 2 Lotos-S electronic intelligence (ELINT) satellites

Air-breathing maritime patrol (and ASW):

- Il-38 May (22), Tu-95 Bear-F
- High-demand, low-density assets
- No armaments

Bottom line:

Russia's space-based and air-breathing ISR assets are limited in number and/or vulnerable to attack

- High-demand, low density platforms





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Red Storm Rising?

Not so much:

“The Russian Federation Navy will... destroy enemy land-based facilities at long distances.” -- Russian Federation Ministry of Defense

Part of the role of RFN is to “... attack the critically important ground-based facilities of the adversary, without violating, until a certain moment, its national sovereignty.”

-- A.N. Popov, Ya. V. Yeshchenko, “The Sea Power of the State in the 21st Century,” *Voennaya Mysl*, 2014.

Standoff weapons will “destroy critically important ground-based facilities of the adversary and maritime carriers that are the global strike assets before these can move to the line of weapon employment.”

-- O.V. Alyoshin, A.N. Popov., V.V. Puchnin, “The Naval Might of Russia in Today’s Geopolitical Situation,” *Voennaya Mysl*, 2016.





ISR: Shore-Based

Konteyner “Skywave” Over-the-Horizon Radar (OTHR)

- Capable of detecting aircraft and missiles, both ballistic and cruise, at 3,000 km away at altitudes of up to 100 km
- Pointed west, coverage into the North Sea and beyond

Podsulnukh “Surface Wave” OTHR

- Capable of detecting sea, surface, and air objects at 450 km
- Can simultaneously detect, track and classify up to 300 sea and 100 aerial targets in an automatic mode

Monolit-B and others

- Passive/active detection for CDCM systems (SSC-5)
- Up to 450 km detection (passive)
- Up to 250 km detection (active, with surface ducting)
- Surface and air detection





Key Weapons Systems: ASCMs/LACMs/ALCMs

Focus of new programs is on long-range, high precision weapons

- Reflect Russian interest in standoff weapons since 1991
- ISR enables these systems

Key ASCMs/LACMs:

- SS-N-26 ASCM: 160 nm range (export variant), Mach 2.5, equipped with an advanced radar seeker, terminal maneuvers; available as CDCM (SSC-5)
- SS-N-27 ASCM: 119 nm range, subsonic cruise, supersonic terminal, and terminal maneuvers
- SS-N-30A LACM: 450 kg conventional warhead, waypoint navigation, roughly 1000nm range

Key ALCM:

Kh-101 LACM: maximum range 5500 km (3418 miles), terrain mapping, inertial guidance, and GPS, LO properties





Key Weapons Systems: SAMs

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ISR enables these systems

Key SAMs

- SA-20 (S-300): Medium/long-range, up to 150 km/80 nm; TEL carries 4 missiles (2 per target)
- SA-21 (S-400): Medium/long-range, up to 215nm
 - Update of S-300
- Other SAMs

Systems Feature:

- Multirole capabilities and the capacity for integration with legacy IADS technologies;
- Suitability for the defense of fixed infrastructure targets and maneuver forces;
- Ability to integrate with naval surface combatants;
- The ability to exploit legacy missile rounds already in operational use;
- High operational mobility and deploy-ability;
- High lethality and jam resistance;

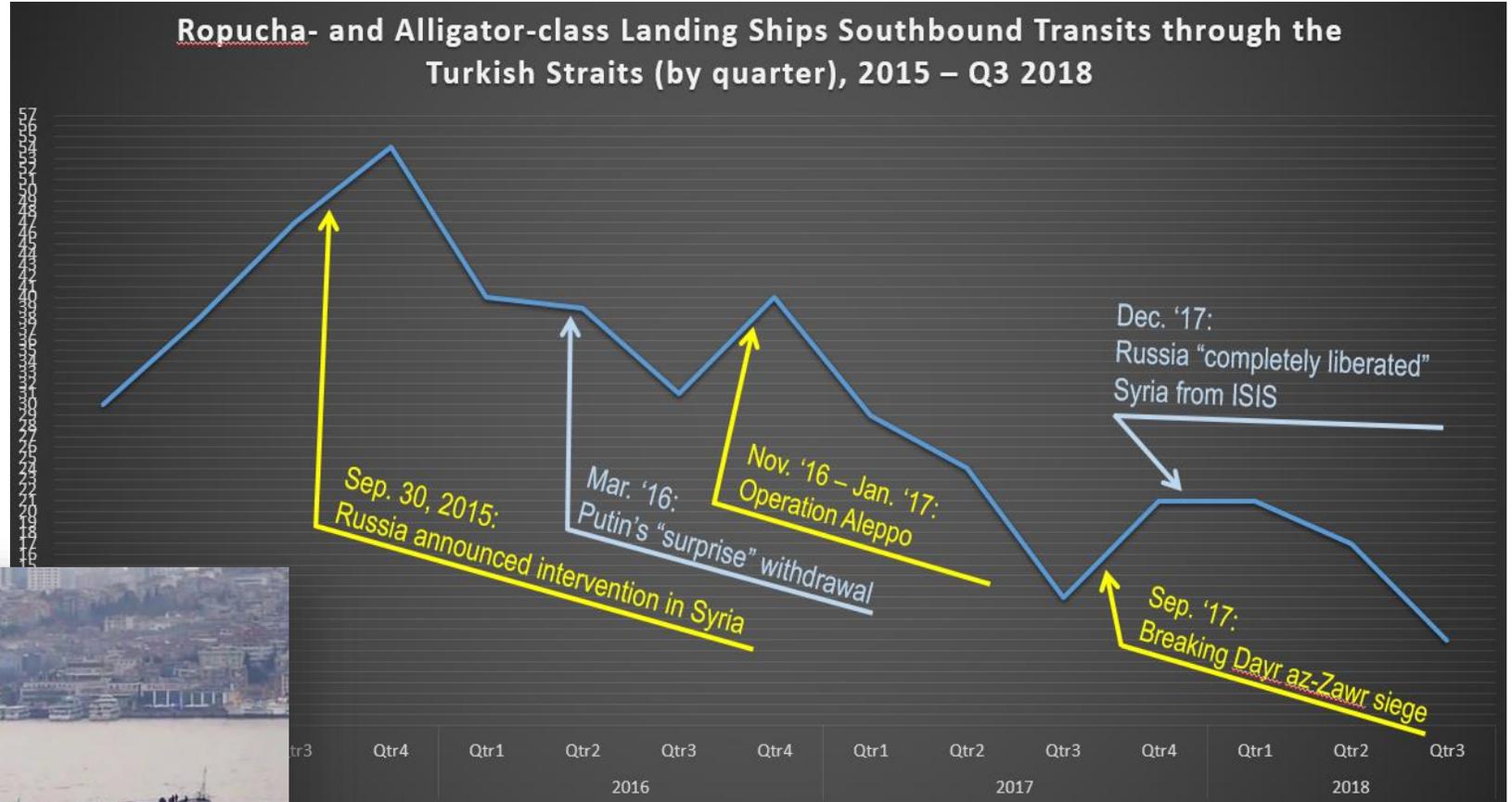




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Naval Operations: Syria and the E. Mediterranean

Transport and expeditionary operations: “The Syrian Express” resupply missions; Alligator and Ropucha Class landing ships also instrumental in Crimean occupation





Shipbuilding Challenges: 99 Problems



Yasen (Severodvinsk) Class SSGN:

- Most advanced SSGN ever constructed by Russia
- 1 boats currently delivered
- Laid down in 1993
- Cost: Just under \$2 billion
- Yasen-M (Kazan) in sea trials (24 September - 9 October)

Gorshkov Class Frigate:

- Multi-mission frigate
- Laid down in 2006 – launched 2010, approx. 40% finished; commissioned August 2018
- Multiple problems with gas turbines, integration of Poliment-Redut (first successful trial of entire system, Sept. 2018)





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Shipbuilding Challenges: 99 Problems



In 2010, SPTB Zvezdochka was given a contract for modernization of Kirov-class CGNs. Contract costs were severely inflated, and a third of the money allocated for modernization (100 million rubles) was embezzled by Konstantin Khryukin. In 2017, Khryukin was convicted of fraud and sentenced to 9 years in prison. Modernization of the first Kirov-class ship in dry dock, *Pyotr Velikiy*, scheduled for completion in 2018, will not be complete until at least 2021.



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NATO Responses





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Questions?



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