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” (*ogranichenyi i vospreshchenyi dostupa i manyuvra*)
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.”
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.”
Say what?
The Soviet Military, 1986

Sample Maritime Combatant Numbers

- SSBNs
- SSNs, SSGNs, SS
- Tu-22M Backfire
- Major Surface Combatants

1986
Force Levels, 1986 vs. 2018

Sample Maritime Combatant Numbers

SSBNs  SSNs, SSGNs, SS  Backfire (Maritime)  Major Surface Combatants

1986  2018
What is Russia Building?
ISR: Space and Air

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
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.”

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.”
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
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

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 215 nm
  - 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;
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)
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.
NATO Responses
Questions?