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The Russian Navy in 2009:

A Review of Major Developments

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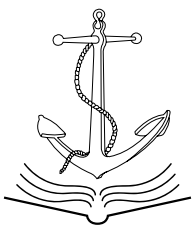

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Key Points

- Russia is looking to substantially enhance and expand its naval forces, with a particular focus on large aircraft carriers, amphibious assault ships and land-attack capable surface combatants. It also continues to invest in the development of a new generation of naval strategic nuclear forces and potentially, new sub-strategic weapons.

- The renewed interest and investment in seapower is a component of an increasing assertiveness and desire for global influence in Russian national policy. This is reflected in the plans for assets capable of power projection and sustaining a forward presence in regions of interest (for example, nuclear-powered aircraft carriers and surface combatants).

- The Russian Navy still has major problems with readiness and the quality of both personnel and equipment. The industrial base is also a source of substantial weakness. Attempts are being made to remedy both these areas but will require sustained attention and investment.

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Introduction

The past year has been particularly noteworthy for the Russian Navy both in a positive and negative sense. On a positive note, major investment plans for the development of a new aircraft carrier capability, new amphibious shipping and the reactivation of at least two of the currently laid-up *Ushakov* (ex-*Kirov*)-class cruisers have been announced. A renewed interest in developing overseas bases is also being quietly pursued (particularly in the eastern Mediterranean and Indian Ocean region). However, 2009 has seen continuing significant problems for the Russian Navy. Of particular concern are the continuing problems with the development of the SS-NX-30 *Bulava* submarine-launched ballistic missile and its implications for the sustainability of Russia's naval strategic nuclear forces. There are also continuing problems with both equipment and personnel readiness, and the capacity of the Russian military-industrial base and on-shore infrastructure to support the current naval force-structure and deliver the planned revitalisation of Russian seapower.

This article will review the major developments of 2009 concerning the Russian Navy. This will focus on the plans for the development of a new aircraft carrier capability; the interest in acquiring new amphibious shipping; the reactivation of the *Ushakov*-class cruisers; progress toward building new destroyers; the *Bulava* saga; and the general prospects for the Russian Navy in the mid-term.

The New Aircraft Carrier Programme

The most significant development for the Russian Navy in 2009 was the articulation of plans concerning the development and procurement of a new class of aircraft carrier. It is intended that the new aircraft carriers will be nuclear-powered, displace 75,000 tonnes fully loaded and be configured for operating conventional take-off and landing aircraft.[1] The embarked air-group is to include a naval variant of the in-development Sukhoi T-50 fifth-generation fighter, helicopters and unmanned air vehicles (UAVs).[2] Development of the latter has begun with the involvement of the Vega Corporation.[3] This company is a specialist in the development of UAVs and intelligence, surveillance and reconnaissance systems; its involvement in the development of a carrier-based UAV may indicate that the organic airborne surveillance and early warning capability for the carriers will be UAV-based.

Between three and six ships are planned and they will be deployed with the Northern and Pacific Fleets. It is intended that construction of the first-of-class should begin in 2012-13.[4] The shipyard to undertake construction has not yet been selected[5] but will most likely be either the Baltic Shipyard in St. Petersburg or the Sevmash yard in Severodvinsk. Both yards are capable of constructing vessels displacing up to 100,000 tons and with nuclear propulsion.

As part of the process of developing supporting on-shore infrastructure, a new naval pilot training facility is to be built on the site of an existing airfield (Eisk) on the Sea of Azov; it is planned that this facility will become operational in 2012.[6] Each ship will cost approximately $4 billion;[7] the Russian Navy has an investment budget for the period up to 2015-16 of approximately $39.5 billion.[8]

New Amphibious Ships

The second major development for the Russian Navy in 2009 was the announcement of plans to invest in the acquisition of new amphibious warfare ships with the option of procuring vessels from European producers. Interest has been expressed in the acquisition of four landing platform docks (LPDs) similar to the *Johan de Witt*-class produced by the Dutch company Damen Schelde Naval Shipbuilding[9] and four to five *Mistral*-class landing helicopter docks (LHDs) from France.[10] The proposed acquisition would see the first-of-class ships built in the Netherlands and France respectively with production of subsequent units taking place under licence in Russian shipyards. This is intended to both facilitate defence cooperation between Russia and leading European defence companies and as a means to develop Russian naval manufacturing capacities through importing Western technologies and practice.

The announcement of plans to acquire new ships was preceded in October 2008 by an announcement from the chief designer of the Kamov Ka-52 'Hokum-B' attack helicopter of plans to develop a ship-borne variant;[11] the *Mistral* made a port call in St. Petersburg during November and as part of its visit, hosted Russian helicopters including a Ka-52. At present, the only dedicated maritime attack helicopter is the US Marine Corps' AH-1W Super Cobra; the development of a maritime variant of the 'Hokum' would be indicative of a serious desire on Russia's part to enhance the effectiveness of its Naval Infantry. The acquisition of either an LPD or LHD capability would be a substantial improvement over the Russian Navy's current amphibious lift capability, of which its current major asset is a single *Ivan Rogov*-class landing ship.

Boosting Cruiser Numbers

As part of Russia's increasing efforts to strengthen its presence in the international system, and following on from the extended deployment of the

Pyotr Velikiy in the latter part of 2008, the reactivation and modernisation of at least a further two of the three laid-up *Ushakov* (ex-*Kirov*)-class nuclear-powered guided-missile cruisers is to be enacted in the short-term. It was first confirmed in early 2009 that the *Admiral Nakhimov* would be modernised and returned to service;[12] it was subsequently announced in September that the *Admiral Lazarev* would also be modernised and returned to service.[13] This will provide the Russian Navy with three active nuclear-powered guided-missile cruisers. The specifics of the modernisation of the ships have not been announced, but would either entail bringing the *Admiral Nakhimov* and *Admiral Lazarev* up to the standard of the *Pyotr Velikiy*; or, the former two ships could be more extensively modernised and the *Pyotr Velikiy* subsequently updated.

The replacement of the systems currently equipping the *Ushakov*-class with contemporary Russian systems would significantly increase the defensive and offensive capabilities of the ships and could potentially enable them to undertake additional roles including theatre ballistic missile defence and long-range land attack. It is intended that an active *Ushakov*-class ship will be deployed with both the Northern and Pacific Fleets;[14] the *Pyotr Velikiy* is currently assigned to the Northern Fleet. A timeline for the reactivation of the *Admiral Nakhimov* and *Admiral Lazarev* has not been disclosed but funding is provided within the 2007-2015 State Armament Programme.[15]

Destroyer Developments

The Russian Navy also took steps in 2009 toward the modernisation of its surface combatant force, including the laying down of the second *Admiral Gorshkov*-class frigate and announcing plans to begin construction of a new class of destroyer by 2012.[16] It is planned that the new class of destroyer will initially replace the current *Sovremenny*-class; however, it is the intention of the Russian Navy to consolidate its force structure around single classes of ship - thus the new destroyer will most likely also replace the *Udaloy* and *Udaloy-II*-class destroyers. The design of the new destroyer has not been

officially revealed but it is possible to garner substantial insight into the likely general characteristics of the ship. This is because the Severnoe Design Bureau (responsible for numerous Russian warship designs including the aforementioned *Ushakov*-class and *Sovremenny*-class) has released a concept for a new destroyer (including offering it for export); the Project 21956.[17]

The design is of a surface combatant displacing around 9,000 tons and incorporating signature-reduction measures. Its proposed armament would include the 'Rif-M' surface-to-air missile (SAM) system, and using the 48N6 missile, would be capable of engaging targets up to a distance of 150 kilometres.[18] It would also include variants of the *Klub* (SS-N-27 'Sizzler') missile system for anti-submarine (91RE2), anti-ship (3M54) and land attack (3M14) missions. The *Klub* family are derived from the 3M10 long-range (2,600 km) cruise missile (SS-N-21 'Sampson'). The range of the *Klub* anti-ship and land attack missiles is stated as not exceeding 300 km – this is to fulfil the requirements of the Missile Technology Control Regime regarding exports of missile technology. As Mikhail Barabanov discusses regarding the ground-launched R-500 *Iskander-K*, its range is stated to be 500 km so to stay within the bounds of the INF Treaty but its actual range may be as high as 2,000 km.[19] The 'R-500' is a ground-launched variant of the 3M14.[20] It is also likely that the range of the two-stage anti-ship 3M54 variant of the *Klub* exceeds 300 km and perhaps exceeds 500 km (similar to the SS-N-19 'Shipwreck').

The new destroyer will also be capable of deploying the SS-N-26 *Yakhont* anti-ship cruise missile. This is because a common vertical launch system or 'multipurpose shipboard firing system' has been developed for ships to be equipped with the *Klub* and *Yakhont* missile systems.[21] The Project 21956 (or a similar vessel) would thus provide the Russian Navy with a substantially improved surface combatant and one that is multi-purpose; it could also provide Russia with a significantly enhanced long-range land attack and anti-ship capability.

The Bulava *Saga*

The developments concerning new aircraft carriers, amphibious shipping, reactivating nuclear-powered guided-missile cruisers and forthcoming destroyers may give the impression that the Russian Navy is moving into a new positive era of expansion and modernisation. However, a critical programme for the Navy and Russia is having significant difficulties; the SS-NX-30 *Bulava* submarine-launched ballistic missile. The *Bulava* is intended to be the principal weapon of the naval strategic nuclear forces, equipping the new *Borei*-class ballistic-missile submarines that will form the core of Russia's naval deterrent force. The first-of-class boat, the *Yuri Dolgurukiy*, is currently undergoing sea-trials and two further submarines are under construction at Sevmash; a fourth boat was due to commence building on the 22 December 2009 but has been postponed until 2010.[22]

The Russian Navy has stated that it intends to build eight *Borei*-class submarines,[23] each of which is to be armed with sixteen *Bulava* missiles. This is to sustain the naval component of Russia's strategic nuclear forces as its *Delta III* and *Delta IV* boats approach retirement. The missile has however, failed in eight of twelve tests with one 'successful' test reportedly being a partial failure (due to the failure of the missiles' third stage – also the cause of the most recent failed test).[24] The ongoing problems with the *Bulava* are symptomatic of a broader, pervasive problem afflicting the Russian Armed Forces; that is, the capacity and efficacy of the military-industrial complex. It is believed that the underlying cause of the continuing *Bulava* test failures is sub-standard components from sub-contractors in the supply-chain.[25] This is problematic though as other Russian submarine and ground-launched ballistic missiles – the SS-N-23, *Topol*, *Topol-M* and RS-24, are performing reliably in testing.

The *Bulava* is derived from the *Topol-M* design and is intended to provide an advanced solid-fuel-based submarine-launched weapon incorporating technologies to increase survivability vis-á-vis anti-ballistic missile systems. It is perhaps likely that the underlying cause of the problems affecting the

Bulava is related to operating an advanced missile incorporating new technologies in the more-demanding context of a submarine-based environment. Further, the continuing commitment to the missile expressed by the Russian Navy indicates that the problems with it are not insurmountable. In addition, the *Delta IV*-class boats, of which the Russian Navy operates seven, have at least 10 years of service remaining[26] and are being re-equipped with the improved *Sineva* variant of the SS-N-23; this does provide the Navy with some leeway vis-á-vis commissioning the *Borei*-class.

General Prospects

The developments of the past year are indicative of an increasing Russian interest in the development of a substantial naval capability. This was affirmed by President Medvedev in November, stating that 'Our objective is to invest more considerable sums in the Navy',[27] and to increase the presence of the Russian Navy globally. Despite the impact of the economic downturn on the Russian economy – Russia's GDP contracted by more than 8.5 per cent in 2009,[28] defence spending is planned to increase in 2010 by 3.4 per cent[29] and the naval share of the current defence budget is in excess of forty per cent.[30] Further, in spite of substantial government intervention in the economy, Russia's gold and currency reserves amount to more than $440 billion.[31]

At present, the Russian Navy faces significant challenges, including major readjustment as part of the ongoing military reform effort; this includes a near-halving of the current fleet (from 240 to 123 vessels) and a rationalisation of personnel, in particular with regard to the Officer Corps.[32] In the long-term, the aim of the Navy is to deploy 280-300 ships and submarines,[33] that is, a force comparable to the current strength of the US Navy. Technical and personnel readiness remains problematic with a number of incidents in 2009 being particularly noteworthy. This includes; the breakdown of the *Kilo*-class submarine *Alrosa* during a training exercise (the submarine was the only active boat in the Black Sea Fleet);[34] the crash of a helicopter whilst

attempting to land onboard the *Neustrashimy*-class frigate *Yaroslav Mudry* during the latter's sea trials;[35] and a reported fire aboard the *Slava*-class cruiser *Moskva* (flagship of the Black Sea Fleet).[36]

In terms of construction, Russia is shifting focus from the completion of projects from the immediate post-Soviet period and overhauling vessels in reserve (the *Ushakov*-class being a notable exception) to the construction of new ships. With regard to the submarine force, two *Typhoon*-class boats – the *Severstal* and *Arkhangelsk*, are to be reactivated and equipped with cruise missiles,[37] and construction of new multi-purpose nuclear-powered submarines will commence annually from 2011.[38] The latter will initially be *Yasen*/*Yasen-M*-class boats; the first-of-class *Severodvinsk* is due to commission in 2010 whilst the second boat, *Kazan*, commenced construction in July 2009; at least six *Yasen/Yasen-M*-class boats are planned.[39] The boats may be equipped with nuclear-armed cruise missiles.[40]

The most significant event of 2009 for the Russian Navy and the Russian Armed Forces in general, was the publication of the new *National Security Strategy of the Russian Federation until 2020*. This document is the basis for Russia's national strategy and provides the context for the forthcoming revised *Military Doctrine* and *Maritime Doctrine* documents. The central tenet of the *National Security Strategy* is the establishment of Russia 'as a world power which seeks to maintain strategic stability and mutually beneficial partnership in a multipolar [sic] world'. The steps the Russian Navy has taken in 2009 toward developing a high-end, globally deployable force with the means to project power at a significant level is intended to contribute toward the attainment of this objective.

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