From Russia, To Russia: Russian/Soviet/Post-Soviet Navies

Christopher Carlson
Cold Wars 2001
Admiralty Trilogy Seminar
Russian and Soviet Navies

Outline

◆ Historical survey - Michael Harris
  – Post Tsu-shima Shock
  – World War I
  – The Revolution
  – World War II
  – Cold War
  – Post Cold War

◆ Strategy & Tactics
  – Successful at defense/coastal naval warfare
  – Failure at offensive/blue water naval warfare

◆ Russian Naval Technology - Chris Carlson
  – Weapons - shells, torpedoes, mines, missiles
  – Platforms - submarines, WIGs, SES

◆ Kursk Tragedy
Following defeat by Japan in 1904-05, Russia dropped from 3rd ranked navy to 6th.

Significant reforms in the Russian Navy:
- 1905 Naval Ministry replaces Naval Authority
- 1906 Naval General Staff created

Main focus of Navy is follow-on war with Japan until 1911, when Germany becomes main concern.

Large building program puts Russia as 5th naval power by 1914.
Strategy: Defensive
- Protect the Homeland
- Guard the Army’s flanks
- Main theater: Baltic Sea, Black Sea

Few dreadnoughts - fleet engagements not an issue
- Significant numbers of small combatants
- Coastal or littoral warfare
- Heavy emphasis on mine warfare and submarines

Individual units display exceptional courage and capability, the cloud of Tsu-shima was still present

Biggest contribution was the recovery of German code books by Pallada and Bogatyrr
The Revolution

- March 1917 - Food riots and demonstrations
- Czar abdicates, Provisional Government continues war effort
- November 1917 - Bolshevik Coup in Petrograd
  - Succeeded in part due support of the Baltic Fleet
  - Cruiser Aurora’s firing on the capital
- Bolsheviks sue for peace with Central powers
  - Peace treaty signed in February 1918
  - Large portions of the Russian Fleet captured or scuttled
- Counter-revolution in 1918
- Reactivated Bolshevik Baltic Fleet neutralized in 1919
- Counter-revolution over by 1920
1921 Kronstadt mutiny of Baltic Fleet leads Communist leaders to reconsider the war footing of the ‘revolution’ and strategically look at the Soviet Union in different light

By 1925 Fourteenth Party Congress recognizes need to increase defense and sets tone for major building programs

1926 - First Five Year Program

During the 1930s, Soviet Navy concentrated on
- Development of new naval guns
- Improvement in anti-aircraft guns
- Increased warhead and accuracy of torpedoes
- Increased depth, warhead and operating life of mines
1935 - Soviet Union support the Republicans in the Spanish Civil War

1936 - Stalin decides to build a ‘big-ship’ Navy
- Opposition is removed during 1936-7 purges
- Plan was for 19 battleships and 20 cruisers by 1943; lack of money, industrial capability and war interfered

1939 - Winter War against Finland
Strategy: Defensive
- Protect the Homeland
- Guard the Army’s flanks
- Main theaters: Northern/Arctic, Baltic Sea, Black Sea

Few dreadnoughts and no aircraft carriers
- Again fleet actions are not an option
- Significant numbers of small combatants
- Coastal or littoral warfare
- Large scale use of small amphibious operations
- Heavy emphasis on mine warfare and submarines

Maintaining sea lines of communication becomes vital to the Soviet war effort
As of Jan 1, 1939

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But Soviets had major building program still ongoing, so . . .
Cold War

After WWII, the Soviet Union faced
- A huge US Navy: Full Two-Ocean Navy
- A US with nuclear weapons
- Shattered economy
- Resurfacing of hostile feelings toward Communism

Stalin revives large Navy plans
- Begins building infrastructure
- Stalin dies in 1953
- Nikita Kruschev comes to power

Kruschev has a radically different view of the Navy
- Nuclear forces and small cruise missile armed ships
- Admiral Kuznetsov sacked for disagreeing with Kruschev
- Admiral Sergei Gorshkov replaces Kuznetsov
Cold War Arms Race

Russian and Soviet Navies

◆ Sergei Georgiyevich Gorshkov
  – Successful WWII commander (Azov and Danube Flotillas)
  – Russia’s Tirpitz: possessed vision and energy

◆ Supports a true blue water navy after
  – Commission of USS Washington (1959)
  – Huge US SSBN build program - 41 SSBNs between 1960-67
  – Cuban Missile Crisis (1964)
  – Vietnam War

◆ Brings about one of the largest naval buildups in history
### As of May 1991

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### Soviet Naval OOB

- Submarines: 278
- Surface Combatants: 385
- Amphibious Assault: 67
- Mine Warfare Ships: 68
- Strike Bombers: 185
- Fighters: 400
- MPA: 480
- Recon/EW: 200
- ASW Helos: 50
Russian and Soviet Navies

Post Cold War - The Crash

◆ December 1991
  – Collapse of the Soviet Union
  – Russia possess the vast majority of the naval assets

◆ March 2001
  – Huge reductions in the naval OOB
  – Russia cannot afford the cost of a large ocean going navy
  – Returning to its coastal defense roots

◆ Present OOB - Many ships in OOB cannot go to sea!
  – 15 SSBNs
  – 10 SSGNs
  – 22 SSNs
  – 27 SSs
  -- 1 CVG
  -- 2 CGNs
  -- 6 CGs
  -- 19 DD/DDGs
Russia/Soviet Union have had some outstanding designers of naval platforms and systems

- Admiral Makarov - the soft armor-piercing cap

During WWII, little to brag about in the naval developments

- Stalin focused on the land war
- Naval assets performed “land warfare” duties
- Reasonable submarine and coastal craft designs

The Cold War and its wartime funding brought about a renaissance in naval systems
Russian and Soviet Navies

Naval Weapons - ASCMs

◆ Soviet Union pioneered the development of the anti-ship cruise missile (ASCMs)
  - SS-N-2 Styx first widely used missile
  - Claimed the first victim on October 21st 1967 (Eilat)
  - Developed supersonic ASCMs
  - Developed a satellite targeting system

◆ Today Russian arms manufacturers offer three different ASCMs on the arms market
Naval Weapons - Torpedoes

- Soviet Union fielded a number of torpedoes based on captured German WWII technology
  - Wake-homing torpedo
  - Rocket propulsion
  - Large caliber torpedoes

- Developed an unique high-speed torpedo - SHKVAL
Soviet Union had considerable experience in the use of mines during both world wars
- Develop advanced bottom mines
- Propelled warhead mines

Russia still has the most robust mine development industry in the world
Submarines

- The submarine has always been central to the Russian/Soviet navies - the Soviet Union pioneered
  - High speed, deep diving
  - Large special purpose boats
  - Very quiet, multi-purpose SSNs
- The largest attack submarine is the OSCAR II SSGN
Surface Ships

The Soviet Union, and now Russia, pursue some of the most unique warship designs in the world:

- Large Surface Effect Ships
- Large Air-Cushioned Vehicles
- Wing-in-Ground Effect

Limited sales on the world market.

More traditional destroyer/frigate designs doing better than the unique, more complex ships:

- China buying two Sovremennyy class DDGs
- India buying three Talwar class FFs (Super Krivak)
Kursk Tragedy

- OSCAR II hull 10 - *Kursk*
  - Northern Fleet’s flagship
  - Conducted Mediterranean Patrol
  - Conducting ASUW evolutions during SUMMEREX 2000

- Suffered two explosions early on the 12th
  - First explosion was about 100 kg of HE
  - Second explosion was on the order of 4 - 7 tons
  - 3.5 to 4.1 Richter scale
Despite earlier announcements by Russian officials, the first 20 meters of the Kursk’s bow is completely destroyed.
Debris from the *Kursk*
Raising the *Kursk*

- Cut off the first 20 meters of the *Kursk*
- Remove towed array tube
- Add strengthened lifting points (800 tons ea)
- Attach cables to heavy lift platform
- Raise *Kursk* off bottom to a shallow depth
- Slide a submergible barge under the *Kursk*
- Raise barge and submarine to the surface