



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



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Cold Wars 2001

Admiralty Trilogy Seminar

Outline



Russian and Soviet Navies

- ◆ **Historical survey - Michael Harris**
 - Post Tsushima 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**



Post Tsu-shima Shock

Russian and Soviet Navies

- ◆ **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 put Russia as 5th naval power by 1914**



World War I

Russian and Soviet Navies

- ◆ **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 Tsushima was still present**
- ◆ **Biggest contribution was the recovery of German code books by *Pallada* and *Bogatyr***



The Revolution

Russian and Soviet Navies

- ◆ **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**



Post Revolution Navy

Russian and Soviet Navies

- ◆ **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**



Pre- World War II

Russian and Soviet Navies

- ◆ **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**

World War II



Russian and Soviet Navies

- ◆ **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**

Soviet Naval OOB



Russian and Soviet Navies

◆ As of Jan 1, 1939

	Arctic	Baltic	Black	Pacific
Battleships	-	2	1	-
Cruisers	-	1	4	-
Flotilla Ldrs	-	1	2	-
Destroyers	3	12	9	2
Submarines	7	56	31	70

◆ But Soviets had major building program still ongoing, so . . .

Cold War



Russian and Soviet Navies

- ◆ **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 Khrushchev comes to power
- ◆ **Khrushchev has a radically different view of the Navy**
 - Nuclear forces and small cruise missile armed ships
 - Admiral Kuznetsov sacked for disagreeing with Khrushchev
 - 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**



High Tide

Russian and Soviet Navies

◆ As of May 1991

SSBN:	60	CVG:	1	FF:	44
SSGN:	43	CVHG:	4	FFL:	145
SSN:	60	CHG:	2	PGG:	74
SS/SSG:	115	CGN:	3	PG:	50
		CG:	25		
		DD/DDG:	37		

◆ 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



Post Cold War - The Crash

Russian and Soviet Navies

◆ 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 | -- 1 CVG |
| – 10 SSGNs | -- 2 CGNs |
| – 22 SSNs | -- 6 CGs |
| – 27 SSs | -- 19 DD/DDGs |



Naval Technology

Russian and Soviet Navies

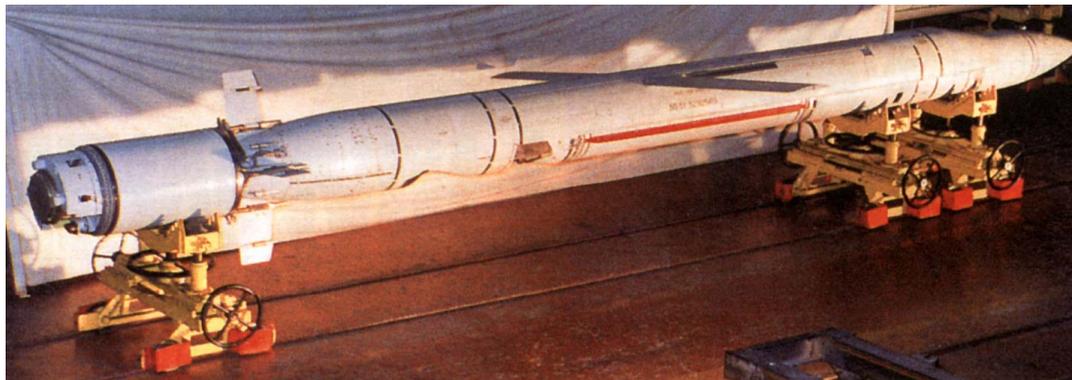
- ◆ **Russia/Soviet Union have had some outstanding designers of naval platforms and systems**
 - Admiral Makarov - the soft armor-piercing cap
- ◆ **During WWII, little to brag about in the naval developments**
 - Stalin focused on the land war
 - Naval assets performed “land warfare” duties
 - Reasonable submarine and coastal craft designs
- ◆ **The Cold War and its wartime funding brought about a renaissance in naval systems**



Naval Weapons - ASCMs

Russian and Soviet Navies

- ◆ **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

Russian and Soviet Navies

- ◆ **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**





Naval Weapons - Mines

Russian and Soviet Navies

- ◆ **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

Russian and Soviet Navies

- ◆ **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

Russian and Soviet Navies

- ◆ **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**

Russian and Soviet Navies

- ◆ **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





Kursk - A Dead Boat

Russian and Soviet Navies



- ◆ Despite earlier announcements by Russian officials, the first 20 meters of the Kursk's bow is completely destroyed



Kursk Debris

Russian and Soviet Navies

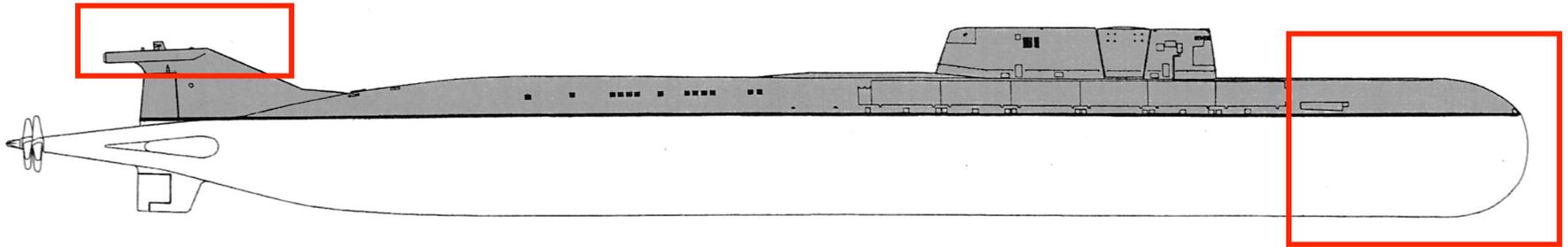


◆ Debris from the *Kursk*



Raising the *Kursk*

Russian and Soviet Navies



- ◆ 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