



NAVAL POSTGRADUATE SCHOOL

A Study of the Russian Acquisition of the French *Mistral* Amphibious assault warships

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The views expressed are his alone and do not represent those of the Department of the Navy or any U.S. government agency

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POSTGRADUATE SCHOOL French BPC Mistral and Tonnere



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- Basic Russian amphibious capabilities
- Mistral capabilities
- Russian Intentions
- Question and Answer period



POSTGRADUATE Comparison of Russian Amphibs



Mistral LHD/BPC



Ivan Gren LST



Ivan Rogov LPD



Ropucha LST



Alligator LST



Polnocny LST



Russian Amphibious Capability

	Project 771 Polnocny LST	Project 1171 Alligator LST	Project 775/775M Ropucha LST	Project 1174 Ivan Rogov LPD	Project 1171.1 Ivan Gren LST	Mistral BPC
Year Class IOC	1967	1964	1975	1976	Scheduled for 2012	2014
# in service	1-6	4	15	0 likely	2 building	4 planned
Length (meters)	75	113	112	157	128	200
Displacement (tons)	772 tons	4,700 tons	4,471 tons	14,000 tons	Est 5,000 tons	21,947
Range (nm)	1,000	8,000	6,000	7,500	3,500	11,000
Max Speed (kts)	19	18	17.5	19	18	19
Military Troop Lift	180	300	190	522	300	450-900
Military Vehicle Lift	6 MBT	20 MBT	10 MBT or 24 APC	up to 53 MBT or 80 APC	13 MBT or 36 APC	13 MBT / 60 vehicles
Crew Size	42	55	95	239	100	188
Helicopters	none	none	none	4 Ka-29	1 Ka-29	16 Ka- 29/52
Landing Craft	none	none	none	3 ACV or 6 LCM	unknown	4 LCU / 2 LCAC

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Intentions / Reasons

- Official Russian statements
 - Command and control
 - Troop transport
 - Kuril Island defense
 - Humanitarian assistance missions
- Thesis conclusion
 - Technology was priority
 - System based acquisition vice capability
 - No glaring need for a LHD in Russian Navy
 - LHD are a means to the end (naval modernization) not the end themselves
 - Side benefit of a LHD was opportunity for new domestic helicopter production
 - Soft power missions and presence in Far East and Arctic



Questions?





Backup slides



Russian Shipyard Capabilities

	Sevmash	Baltiysky Zavod	Admiralty Shipyards	Far East Plant Zvezda	Severnaya verf	Yantar	Amur Shipyard
Number of Slipways suitable for <i>Mistral</i>	3	2	2	0	0	0	0
Length / Width	302m x 44m	350m x 36m	259m x 35m	192 m x 32m	168 m x 20m	306m x 24m	200m x 23m
Max Crane weight	520 tons	80 tons	200 tons	100 tons	100 tons	80 tons	100 tons
Max Tonnage	unknown	100,000 tons	70,000 tons	unknown	12,000 ton	12,000 ton	unknown
	The <i>Mistral's</i> length is 199 meters by 32 meters wide, and empty she weighs 17,000 tons						



Construction of *Mistral* class





Other Amphibs considered



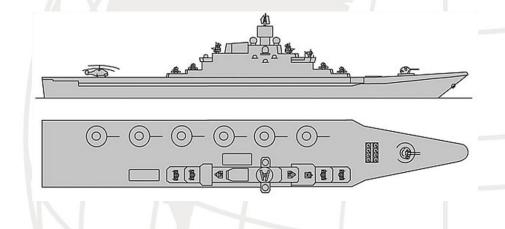
Johan de Witt



Dokdo



Juan Carlos



WW.NPS.EDU Project 11780 Kherson



Amphibious Warships Considered In Russian Tender

	Mistral	Juan Carlos	Dokdo	Johan de Witt	Project 11780 Kherson (unbuilt)
Туре	LHDM/BPC	LHD	LPD	LPD	LHA
Country of Origin	France	Spain	South Korea	Netherlands	Russia
Length (meters)	199	230.8	200	176.4	200
Beam (meters)	32	32	32	29.2	50
Displacement (tons)	21,947	27,514	19,305	16,948	30,000-40,000
Range (nm)	11,000	9,000	unknown	10,000	5,000
Troop lift	450 (900 for short durations)	902	700	555	1,000
Vehicle lift	13 MBT / 60 Armored vehicles	46 MBT	10 MBT	33 MBT / 170 APC	unknown
Helicopters	16	30	10	6	25
Helicopter landing spots	6	6	5	2	6
Landing craft	4 LCU / 2 LCAC	2 LCAC	2 LCAC 4 LCVP + 2 LCU / 2 LCM		2-4 hovercraft
Crew size	188	243	400	701	unknown
Speed (kts)	19	21	22	19	30
Propulsion	Diesel electric / 2 Podded propulsors	CODAGE / gas turbine, diesel, 2 podded propulsors	CODAD / 2 shafts	Diesel electric / 2 podded propulsors	Steam turbines

CODAD – Combined diesel and diesel – 2 engines powering one propeller.

CODAGE – Combined diesel and gas turbine powering a generator which powers electric motors



Graving and Drydock Capabilities in Russia

Permanent facilities

	Sevmash	Baltiysky Zavod	Admiralty Shipyards	Far East Plant Zvezda	Severnaya verf	Yantar	Amur Shipyard
Graving dock size	159m x 325m	None	None	140m x 18m	360m x 55m*	None	None
Floating drydocks	None	None	92m x 27m	None	169m x 29m	150m x 29m	None
* - According to OPK, this drydock is currently under construction							

Floating drydocks

Type	Size	Maximum Capacity		
PD-50	330 x 67 meters	80,000 tons		
PD-41	305 x 67 meters	80,000 tons		
PD-81 (2)	250 x 38 meters	29,300 tons		
Project 2121	199 x 42 meters	25,000 tons		

These are located in the vicinity of Roslyakovo, Severmorsk, Murmansk, Chazhma Ship Repair Facility in the Far East and the Novorossiysk Shipyard



Admiral Kuznetsov in drydock

