

Export Projects of Russia's Naval Industries at IMDS-2021

By Yuri Laskin

The 10-th, Anniversary, International Maritime Defense Show (IMDS 2021). was held in St. Petersburg between 23-d to 27-th of June.

In the context of ongoing rearmament of the Armed Forces, the industries composed their expositions to meet demand of the main customer - Russian Navy. But the Salon did not turn into an internal Russian event. Rosoboronexport brought 27 official delegations from 25 states.

As Alexander Mikheev, Director General of Rosoboronexport, said "the company's order portfolio in the naval segment stands at about \$5.5 billion. It includes contracts for the supply and joint construction of ships and submarines, the supply of various weapons for them and coastal support equipment, as well as infrastructure projects."

At IMDS-2021 the Company showcased the most in-demand pieces of naval materiel at its stand.

For example, as Alexander Mikheev said that Rosoboronexport is considering the supply of Karakurt-E corvettes to six countries. Project 22800 corvette (export version –Project 22800E Karakurt-E) have incorporated all the latest achievements in the fields of high-precision weapons, self-defense, air defense systems and shipbuilding technologies. It is comparable in firepower to a frigate and equipped with the Club-N integrated missile system and the Pantsir-ME multi-channel anti-aircraft gun/missile system developed by the KBP design bureau of the High Precision Weapons holding.

Alexander Mikheev also told about export potential of the Rubezh-ME coastal defense missile system, mentioning, that "eight foreign customers are showing a strong interest in the Rubezh-ME". The Rubezh-ME coastal defense missile system enables a single launcher vehicle to search and engage a target by integrating weapon and target designation subsystems into a single platform. A strike group consisting of up to eight launcher vehicles can also be formed. The effectiveness of engagement of naval groupings and individual ships is achieved by employment of the Kh-35UE anti-ship missile (ASM) being developed and manufactured by Tactical Missile Corporation (KTRV) both in single and salvo firing. Being the further development of the Bal coastal missile system the Rubezh is much cheaper, as based on one vehicle unlike the Bal, based on three vehicles.

During IMDS-2021 the St,Petersburg diesel-electric submarine of Project 677 was showcased together with other ships in the Passenger Port of St. Petersburg. The submarine belongs to the latest generation of submarines and incorporates the most advanced technologies and materials. Its ammunition load includes Club-S missiles capable of engaging enemy ships and land targets, as well as torpedoes with a firing range of up to 50 kilometers. Rosoboronexport presented to potential foreign customers export version –Project 677E Amur-1650.

Severnoe Design Bureau (SPKB) presented an improved version of medium landing ship of Project 21810. The Project is export oriented. The designing company considers that this ship may be in demand for many potential customers whose naval forces operate in waters teeming with small islands, atolls where is a need for delivery of goods to the unequipped coast. As mentioned by Andrey Diachkov, CEO of the SPKB, the project has been finalized taking into account the urgent tasks of the implementation of various humanitarian missions that facing many fleets of the world today.

For this purpose, the ship is equipped with its own crane equipment, which makes it possible to operate with standard sea containers that can be placed both on the upper deck and in the bilge. The bilge is equipped with a mechanized container movement system for loading and unloading operations. The ship can also transport wheeled and tracked vehicles (up to 16 units), which can be unloaded onto the unequipped coast through the forward cargo port. In addition, two transport and landing boats of 17 meters each can be used to deliver cargo to the unequipped coast. The total transportation weight is 400 tons of various cargoes and capacity of 170 people. The armament is presented with modern complexes with a caliber of 30 and 57 mm, autonomous combat modules of a caliber of 12.7 automatic artillery. In the aft part there is a platform for receiving a medium helicopter (weighing up to 12 tons) or a helicopter-type UAV with a slip, in

which there are two Project 02800 assault boats, which can be launched and taken on the ship's motion.

Weaponry and equipment

As expected, the center of attraction for the HPW exposition was the Pantsir-M anti-aircraft missile and artillery complex (ZRAK) of the Shipunov KBP. "At present, the Pantsir-M complex is able to effectively deal with the newest means of attack. Pantsir-M fully ensures the solution of the ship's air defense missions," the HPW speaker claimed. The complex could be installed on a variety of vessels. "During the development of the Pantsir-M complex, great attention was paid to "flexibility" in the issue of integration with general ship systems. This allows installation on both newly built ships and re-equip previously built one," the speaker added.

KBP and HPW announced a serial production of the ADS amphibious assault rifle. The ADS characteristics on the surface are comparable to the AK-74M submachine gun while diving it is not inferior to the APS underwater assault rifle. The assault rifle employs "conventional" and underwater ammunition of the same caliber to use AK standard magazines.

KTRV had one of the largest expositions at the Salon. The company demonstrated its latest products including an export version of the "Packet" small-sized anti-submarine complex, MDM-2 sea shelf mine with a depth of 60 to 600 m and MDM-3 bottom mine. The attention of representatives of foreign delegations was attracted by the products of the St.-Petersburg Scientific Research Institute of Marine Engineering, KTRV subsidiary. The company presented a universal deep-sea homing torpedo (UGST), which surpasses foreign counterparts in terms of "cost-efficiency". UGST enjoys telecontrol capability, employs optimal search and targeting algorithms, a powerful warhead, as well as enhanced protection against hydroacoustic countermeasures.

During IMDS-2021, KTRV General Director Boris Obnosov announced the start of serial production of APR-3ME aviation anti-submarine missiles and the delivery of the first batch of missiles to the customer. The advantage of the missile is the ability to defeat underwater targets at a depth of 800 meters with sea waves up to 6 points and a target speed of 40 knots. At the same time, the Corporation is working on a "smart mining" system that will allow ammunition to independently select targets based on a number of parameters.

Unmanned systems were presented by a self-propelled underwater vehicle, which is part of the Alexandrite-ISPUM integrated mine search and destruction system, a small-sized reconnaissance submarine robot MPA and the CyberBoat-330 surface unmanned platform being developed by the «Granit-Electron» Concern and St.-Petersburg Polytechnic University.

Into the future - 2023

The Organizers claimed the IMDS-2021 had been a success despite the COVID-19 restrictions. The new dates in 2023 were not specified. Perhaps, the Salon will be shifted one more time to the town of Kronshtadt which is part of St.-Petersburg. The former island of Kotlin has been connected to the Northern capital with a highway while the existing Baltic Fleet facilities and berths can be employed for the ships and submarines demonstration. It is not clear if any exhibition complex could be ready within two year time. If not, the IMDS-2023 will be located at its present position.

Photos credit-Yuri Laskin



According to Rosoboronexport eight countries expressed their interest to «Rubezh-E» coastal missile system



«Odintsovo» project 22800 small rocket ship has extensive air defense based on «Pantsir-M» from HPW/ KBP



The ADS amphibious assault rifle went into serial production with HPW/ KBP



This time the ships were displayed at the berth of St.-Petersburg Morskoy Facade. In the background the most advanced surface combatants built by Severnaya Verf — «Admiral Kasatonov» frigate of project 22350 and «Gremyashchiy» (Thundering) corvette of project 20385



«Saint-Petersburg» conventional submarine of project 677 is the most advanced ship of the Russian non-nuclear underwater Navy