



Russian Navy Adopting Modular ‘Shipping Container-Based’ Weapons

OE Watch Commentary: According to the accompanying excerpted article from *Izvestia*, the Russian Federation will soon be testing modular shipping container-based weapons. These containers will be based upon standard sized 20- and 40-foot shipping containers, and will allow a given ship to be outfitted for air defense, antishipping/antisubmarine warfare, or a variety of other purposes. These weapons modules will reportedly be rapidly deployable (airmobile) and able to be integrated into a ship’s power and command-and-control systems. According to *Izvestia*, Russia is already building ships designed to employ such containerized weapons, including the Project 22160 “Vasily Bykov” patrol ships, Project 20386 “Derzkiy” corvettes, and Project 23550 “Ivan Papanin” icebreakers.

The idea of a modular shipping container-based weapon is not new in the Russian Federation. The Russian company Concern Morinformsystem-Agat has marketed the Klub-K shipping container-based antiship missile system for the last decade. Interestingly, this system was not envisioned to be deployed on warships, but instead to give civil shipping a covert military capability. Apparently, the Russian Navy noticed the utility of such a system. **End OE Watch Commentary (Bartles)**

“A ship can be configured for a specific task which may arise at any given time...Why maintain both a strike and an antisubmarine warfare ship, when it is possible to make do with a single ship? If strike assets are needed, install them. If the need emerges to organize an antisubmarine defense, change the container and its servicing crew. This, incidentally, makes it possible to avoid keeping specialists on the staff of the ship to operate the contents of the container.”

-Dmitriy Boltenev, Military Expert



Container missile system Klub-K.

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Continued: Russian Navy Adopting Modular 'Shipping Container-Based' Weapons

Source: Roman Krezul and Alexey Ramm, "Контейнер с прицелом: боевые модули ВМФ протестируют до конца лета (A Container with a Gun Sight: Combat Modules for the Navy Will Be Tested Before the End of the Year)," *Izvestia Online*, 22 July 2020, <https://iz.ru/1038280/roman-kretcul-aleksei-ramm/konteiner-s-pritcelom-boevye-moduli-vmf-protestiruiut-do-kontca-leta>

Testing of new modular systems will be done in the Northern Fleet before the end of the year, a source in the military establishment informed Izvestiya. They are placed in ordinary 20- and 40-foot maritime containers. For their part, the containers are placed on board various types of ships with constructions that permit their installation. The containers are mounted on the deck or in a space below the deck. They are connected to the ship's electrical power system and integrated into the overall control system. If necessary, these weapon systems can operate autonomously, without being connected to the ship's power network.

Currently, several types of ships that are especially designed for the use of the container systems are being built for the Russian Navy. Specifically, these include the Project 22160 "Vasiliy Bykov" patrol ships, the Project 20386 "Derzkiy" corvettes, and the Project 23550 patrol icebreakers of the "Ivan Papanin" class...

Depending on their missions, systems of the most varied kinds can be installed in the containers. For example, a hydroacoustic station and torpedo launchers can be installed for antisubmarine defense. Another variant could include antiship or cruise missiles. If necessary, a powerful air defense system based on the "Redut" and "Pantsir-M" systems could be installed in such a container on board a ship...In addition to the combat modules, containers are also being developed to house unmanned aerial vehicles, submersible devices, and a module for performing hydrographic work.

Containers with the necessary set of weapons or equipment can be delivered by a transport vessel or aircraft to any region of the world's oceans and they can be installed on board in a matter of hours. As a result it is possible to create an air defense region or to conduct monitoring of the activity of submarines in any region of the world. A medical container module consisting of an operating room and an intensive care ward has also been developed. It can be deployed as part of humanitarian operations along the coast of countries that have suffered natural disasters...

Military expert Dmitriy Boltenkov notes that the concept of the transition of the fleet to the modular principle has long been under development. "Industry has developed and has begun to manufacture ships able to carry various means of container weaponry on board. Now they need to be tested," the expert told Izvestiya. "A ship built using the modular principle is essentially a platform, a kind of Swiss Army Knife. It is very important the Navy proceeds to the practical testing of the new system. It needs to be practiced, and this is not a simple task. For example, Denmark, which developed the shipping container system, was unable to implement the system."

The specialist noted that the modular system allows tasks to be accomplished faster, more effectively and cheaper. "A ship can be configured for a specific task which may arise at any given time," explained Dmitriy Boltenkov. "Why maintain both a strike and an antisubmarine warfare ship, when it is possible to make do with a single ship? If strike assets are needed, install them. If the need emerges to organize an antisubmarine defense, change the container and its servicing crew. This, incidentally, makes it possible to avoid keeping specialists on the staff of the ship to operate the contents of the container."



Project 22160 patrol ship "Dmitriy Rogachyov".

Source: Russian Ministry of Defense, https://en.wikipedia.org/wiki/Project_22160_patrol_ship#/media/File:«Дмитрий_Розачёв».jpg, CC BY 4.0