



# Soviet Era Frigate Update Includes Pantsir Air Defense System

**OE Watch Commentary:** The upgrade of the Russian Pacific Fleet has been getting a lot of press lately (see “Going Blue by 2030: Upgrading and Refitting the Pacific Fleet,” *OE Watch*, July 2020). As the accompanying passage from *Izvestia* reports, now the refit of the ASW/Frigate ship Marshal Shaposhnikov will also include the lethal Pantsir missile/gun air defense system. The Soviets and now Russians have built a large number of air-defense missile systems, but they have not abandoned anti-aircraft artillery. Many of their tactical air defense systems combine guns and missiles on the same platform. Space is limited on board ship and the question is, how many modern systems can one put on a 35-year-old hull and still achieve maximum effectiveness? The Dalzavod yard in Vladivostok is finding out. **End OE Watch Commentary (Grau)**

***“The upgraded frigate Marshal Shaposhnikov will have an impenetrable shield. Installing the Pantsir-M anti-aircraft missile and gun system... is ... being worked on. Pantsir has the firepower to destroy any enemy aircraft, helicopter, cruise missile, or drone within a radius of 20-30 kilometers. Experts say that this will make the frigate, whose main weapon should be the Tsirkon hypersonic missile, invincible.”***

**Source:** Aleksey Ramm and Bogdan Stepovoy, “Russian Frigate Marshal Shaposhnikov will gain Pantsir Air Defense System during Refit,” *Izvestia*, 15 June 2020. [iz.ru/1022607/aleksei-ramm-bogdan-stepovoi/narastili-pantsir-fregat-marshal-shaposhnikov-osnastiat-novoi-pvo](https://iz.ru/1022607/aleksei-ramm-bogdan-stepovoi/narastili-pantsir-fregat-marshal-shaposhnikov-osnastiat-novoi-pvo)

## ***Russian Frigate Marshal Shaposhnikov will gain Pantsir Air Defense System during Refit***

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*Several options for installing the Pantsir-M on the Project 1155 Udaloy-class frigate ... are being considered according to Defense Ministry ... There are some technical challenges determining the weapon's optimal location. Stern and amidships are currently under consideration. The Shaposhnikov was commissioned in 1986, when the requirements of ships were different and the dimensions of the air defense systems available to the Navy were different than those of today.*

*The frigate is currently at the Dalzavod ship repair center, which is completing its refit. As part of that work, more than 20 percent of the superstructure was removed and rebuilt from scratch, and the outboard fittings have been replaced. These changes are needed so that the ship can take the most modern equipment including missile and gun systems.*

*The Shaposhnikov was built as a large ASW [antisubmarine warfare] ship and had no strike missiles or powerful air defenses because it had a narrow specialization -- to hunt submarines. At sea, these ASW ships are supposed to operate in conjunction with project 956 Sovremennyy-class destroyers, which have strike and anti-aircraft missiles. The result was that they were effective at killing enemy submarines but unable to attack targets on land, and they were helpless against missiles and aviation. The Shaposhnikov was armed with the Kinzhal close-quarters anti-aircraft missile system and the AK-360 30-mm automated anti-aircraft gun.*

*The I is the naval version of the Russian ground troop's anti-aircraft missile and gun system, the I. Military historian Dmitriy Boltenkov told Izvestiya, that “The arrival of the Pantsir will significantly increase the frigate's air defense capabilities against cruise missiles, UAVs, and smart bombs.” In terms of range and target engagement effectiveness, the Pantsir greatly outperforms the Kinzhal, which was developed in Soviet times. The ground version received its baptism of fire in Syria, where it acquitted itself well. It has already been tested aboard warships and is fitted on ... the Karakurt-class small missile ship Odintsovo, which is currently completing sea trials and is being made ready to join the fleet. In the future, all small missile ships of this class will carry the new anti-aircraft system.*

*Each Pantsir-M unit incorporates eight missile launchers and two six-barreled 30-mm automatic cannon. The system's purpose is to protect ships of various displacements against massed attack by cruise and antishipping missiles, smart bombs, drones, and also aircraft and helicopters.*

*The Pantsir implements the principle of dual-layer air defense. It can protect surface craft against practically any type of enemy attack from the air within a range of 20-30 kilometers using its anti-aircraft missiles. Weapons systems surviving that encounter the rapid-fire 30-mm guns, which can complete their destruction within a radius of 4 kilometers. By comparison, the Kinzhal has only missiles and engages targets at up to 12 kilometers.*

*When the refit is complete the Marshal Shaposhnikov will be a versatile ship. It will be able to track and kill enemy submarines and deliver missile strikes against surface and ground targets. During its refit, the frigate will have Kalibr launchers installed on it. These missiles have a range of at least 1,400 kilometers, and their low flight altitude and highly precise navigation make them invisible even to the most hi-tech detection systems.*

...

*The ship's modernization is not proceeding as quickly as one would like: Handover to the fleet was due to take place at the end of last year. The long-term plan is to upgrade Pacific Fleet ships along similar lines.*