



The S-350 Vityaz Air Defense System

OE Watch Commentary: The S-350 Vityaz air defense system is the result of a joint Russia-South Korean venture that consists of a 50K6E command post (capable of servicing up to eight launchers), 50N6E multifunctional radar, and the 50P6E launcher (with 12 missiles). Although the S-350 lacks the range of the S-400, its capability to fire three missile types: the 9M96E2 (120km), the 9M96E (60km), and the 9M100 (10km), provide a significant advantage over the S-400, mainly that the S-350 does not require a short-range system such as a close range Pantsir-S1 or Tor missile system to protect it from cruise missiles and other “close” threats.

The S-350 is reportedly a more capable system than the S-300 and foreign counterparts because of: the superiority of the 50N6E X-band multifunctional radar; the automation of target detection, targets tracking, and missile launch systems; the increased number of simultaneously tracked targets and increased rate of fire for repulsing mass cruise missiles strikes, other offensive air weapons (including UAVs), and precision munitions; improved operating characteristics that decrease maintenance issues and provide increased reliability. In general, the S-350 is purported to have greater capabilities, but lower operating costs than the S-300 and foreign counterparts.

The accompanying excerpted article from *Gazeta.Ru* discusses how the S-350 will replace the S-300 and Buk-M1-2 in the Russian Aerospace Forces. In addition, as with other air defense systems, the S-350 will be fielded in a naval variant (the ship-borne Poliment-Redut) to reduce costs through economies of scale. If the S-350 Vityaz meets expectations, this joint Russia-South Korean venture could be successful not only as a domestic weapon system to supplement the S-400 and eventually S-500, but also as an export item for countries wishing to upgrade their air defense capabilities. **End OE Watch Commentary (Bartles)**

Source: Rafael Fakhrutdinov: “Российские военные получают новейший зенитный комплекс «Витязь» (The Russian Military Will Get the Latest ‘Vityaz’ Air Defense Complex),” *Gazeta.Ru*, 30 December 2018. <https://www.gazeta.ru/army/2018/12/30/12114157.shtml>

The new S-350 “Vityaz” air defense missile complex will arrive in the Russian Aerospace Forces inventory next year, the Russian Ministry of Defense Information and Mass Communications Department reported. Besides this, the RF VKS will obtain approximately 10 sets of Pantsir-S air defense missile-gun complexes and S-400s...

“Conversations about the development of nonstrategic missile defense system (NPRO) have already been conducted for a long time, furthermore, the state tests of the S-350 Vityaz mobile complex, which should arrive to replace the S-300 and Buk-M1-2, are being conducted right now”.

For example, one launcher of this complex transports 12 missile interceptors, despite the fact that the S-300 has a total of four. What is more, Vityaz will have a greater number of channels, which permit it to fire at more targets simultaneously. But we need to point out that, if necessary, one can also accommodate the launchers on ordinary trucks with the possibility of their camouflage”, the expert indicated.

And, in the analyst’s words, camouflaging them as ordinary cargo motor vehicles will permit the NPRO complexes to be inconspicuous for the probable enemy’s reconnaissance systems, “whose spies can hypothetically stroll along the streets of Russian cities”...

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Air Defence System “Vityaz” (english “Knight”).

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