



Palantin EW System

Source: The Ministry of Defense of the Russian Federation, https://function.mil.ru/news_page/country/more.htm?id=12226385@egNews Attribution: CC BY 4.0.

Details of Russia's Palantin Electronic Warfare System

By Chuck Bartles
OE Watch Commentary

The Russian Ground Forces have a three-tiered system for electronic warfare (EW). At the maneuver brigade and division levels, each has an EW company that focuses on tactical tasks; at the combined arms army level, each has an EW battalion that focuses on operational-tactical tasks; and at the military district level, each has an EW brigade that focuses on strategic tasks. The accompanying excerpted articles from *Izvestiya*, a large-circulation Russian daily newspaper, and the website of the *Ministry of Defense of the Russian Federation*, describe the capabilities of the primary EW system at the combined arms army level. (In particular, it notes the system's maximum range (1,000 km); ability to jam jammer of conventional and software defined radios, and also function as signals intelligence platform to) Just as the Borisoglebsk-2 EW system is the primary and latest EW system for maneuver brigade/division-level EW companies, the Palantin EW system is the primary and latest system for combined arms army-level EW battalions.

“The Palantin electronic warfare system calculated how to: protect from unmanned aircraft; disrupt guidance systems of conventional and weapons of mass destruction; and also discovered and jammed cellular and trunk communication channels.”

Source: Anton Lavrov and Aleksey Ramm, “Таси волну: юг России закроют непроницаемые «глушилки» (Extinguishing the Wave: Impenetrable “Jammers” Will Close Russia’s South),” *Izvestiya* (a large-circulation Russian daily newspaper), 24 November 2020. <https://iz.ru/1091042/anton-lavrov-aleksei-ramm/gasi-volnu-iug-rossii-zakroiut-nepronitcaemye-glushilki>

...A decision in principle was made to equip all Army EW battalions in the Southern Military District with the latest Palantin systems, sources in the defense department told *Izvestiya*. They are intended to suppress military radio communications equipment and unmanned vehicles including small ones. It is an all-inclusive design will also make it possible to suppress radio relay stations and satellite communications ground terminals...

According to a report from the Defense Ministry Press-Service, the Palantin was tested a year ago for the first time in exercises near Voronezh. With its help, a battalion tactical EW group was drilled in suppressing communications in a belt of up to 1,000 km and to protect troops from the use of a hypothetical enemy's precision weapon...

The saturation of the Southern Military District with the latest EW equipment is no surprise, the expert believes. It is precisely here that there are the most points of collision of Russia's interest with West, as well as with the post-Soviet states. It is sufficient to refer to Crimea, Abkhaziya and South Osetiya...The latest Palantins have been arriving in line units since 2018. The mobile system is accommodated on several four axle “KamAZ” truck chasses. It can be deployed from the transport to the combat position in a half hour.

According to information from the developers, the machine knows how to “jam” network and trunk communications channels, to suppress tactical enemy radio communications in the ultrashort and short wavebands. The most important feature of the system was stated to be the ability to effectively operate against modern and future radios, which are able to flexibly change their frequencies and working logarithms – so-called software-defined radio systems (SDR). Much older EW systems cannot effectively counter them.

The Palantin's' equipment and new software will make it possible as well to get integrated information from various EW and radio assets and transmit it to a higher headquarters. As result, it is possible there to track online the situation in the ether and to make a decision on the synchronized use of various electronic warfare machines.

According to information from the Defense Ministry, the system can also operate in a broadband mode, as well as imposing targeted jamming for concrete sectors and characteristics of a radio signal, that allows it to operate in various different conditions. Both an entire area, as well as some specific transmitter or receiver can be suppressed.

The machine combines within itself the functions of radio intelligence collection and radio suppression. Thus, for example, studying the ether, it can detect not just the presence of a nearby drone, but also calculate the orienting coordinates of its operator, and then suppress the control signal between him and the drone, rendering the device helpless....

Continued: Details of Russia's Palantin Electronic Warfare System

Continued Source: “Специалисты РЭБ общевойсковой армии ЗВО подавили систему связи условного противника в ходе испытаний комплекса «Палантин» в Воронежской области (Electronic Warfare Specialists of a Combined Arms Army in the Western Military District tested the ‘Palantin’ Electronic Warfare System in the Voronezh Region),” *Ministry of Defense of the Russian Federation (official website of the Russian Federation Ministry of Defense)*, 20 July 2021. https://function.mil.ru/news_page/country/more.htm?id=12373034@egNews&print=true

...[M]ore than 100 servicemen of a separate EW battalion of a Western Military District Combined Arms Army took part in the tests of the Palantin complex, about 15 pieces of weapons, military and special equipment were involved.

In the Voronezh Region, specialists of a separate electronic warfare battalion of a combined arms army of the Western Military District distorted GPS signals and suppress the radio communication systems of a notional enemy during operational tests of the Palantin electronic warfare (EW) system.

As part of the tests, recently drafted servicemen of the spring draft took part in a road march to an assembly area, and then, with officers, warrant officers and contract servicemen, completed tasks to reduce the reconnaissance and offensive capabilities of a notional enemy.

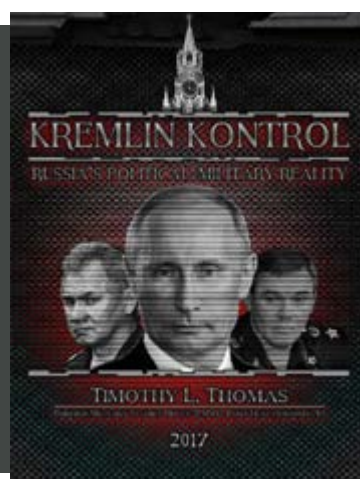
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