



## The Proliferation of Russian Reconnaissance UAVs

**OE Watch Commentary:** The accompanying excerpted articles discuss the deployment of specialized reconnaissance UAVs and reconnaissance UAV units in the Russian Armed Forces. In the last 10 years, the Russian Armed Forces have made great efforts to increase UAV capabilities. In the Ground Forces, these efforts have included adding UAV companies to motorized rifle/tank brigades and divisions. The UAVs in these companies are intended to be multifunctional, by being equipped with modular payload systems so the UAVs may function as a reconnaissance, signal relay, or electronic warfare asset as needed. Multifunctional UAVs were deemed important as there were relatively few of these high-value assets, and commanders wanted the capability to prioritize their use. In the last few years, UAVs have become increasingly more common, and may now be found in other formations, such as artillery brigades. In order to better support more specialized roles, Russia is now developing dedicated reconnaissance UAVs. The accompanying excerpted *Izvestiya* article discusses the fielding of one such specialized reconnaissance UAV, the Orlan-30 [Орлан-30]. The Orlan-30 will reportedly increase the effectiveness of the firing of precision-guided munitions as well as aviation-delivered munitions.



*Forpost UAV.*

Source: Vitaly Kuzmin via Vitalykuzmin.net, <https://www.vitalykuzmin.net/Military/InnovationDay2013/i-XbXGgKZ/A>, CC BY-NC-ND 4.0

The primary role for UAVs in the Russian Aerospace Forces (VKS) has been reconnaissance, and although certain ‘strike’ UAV variants are in development, reconnaissance will continue to be the primary role of VKS UAVs for the foreseeable future. The excerpted article from *Krasnaya Zvezda* discusses Russian plans for a longer range reconnaissance UAV, the Forpost-R (R -- Reconnaissance). The Forpost-R is designed for conducting persistent surveillance, target acquisition, and other intelligence-related tasks. It can operate within a radius of up to 250 km from the operator’s location, reach speeds of over 200 km per hour, operate with a flight ceiling of up to 6 km, and stay aloft for up to 18 hours. The final accompanying article from *Izvestiya* discusses how the Forpost-R will be part of the first long-range reconnaissance UAV unit in the Russian Armed Forces. Russia reportedly intends to eventually replace the Forpost-R with the ‘Altius’ UAV which is still in development. An Altius UAV system consists of two unmanned aerial vehicles and a ground control station. The Altius has twin engines, and is a reconnaissance-strike system that weighs a hefty 6 tons. Operationally, the Altius is projected to be capable of loitering for up to 48 hours, has a cruise speed of 150-250 km per hour, can carry an approximately one ton payload, and fly thousands of kilometers. If successfully fielded, the Altius is not only expected to replace the Forpost-R, but also the Su-24MR reconnaissance aircraft. **End OE Watch Commentary (Bartles)**

***“The appearance of the new drone in the troops will seriously increase the effectiveness of the firing of precision-guided munitions and also the accuracy of the strikes of guided aircraft bombs.”***

***“The first detachment of long-range reconnaissance unmanned aerial vehicles will soon appear in the Russian Armed Forces.”***



## Continued: The Proliferation of Russian Reconnaissance UAVs

**Source:** “«Орлан-30» найдет цели для артиллерии (The Orlan-30 Finds Targets for Artillery),” *Izvestiya Online*, 2 October 2019. <https://iz.ru/925283/aleksei-ramm-bogdan-stepovoi/dron-v-stroi-orlan-30-naidet-tseli-dlia-artillerii>

### ***The Orlan-30 Finds Targets for Artillery***

*The unique “Orlan-30” unmanned aerial vehicle complex will arrive in the Russian Army inventory next year...The “Orlan-30” can conduct target reconnaissance and transmit their precise coordinates using the GLONASS and GPS global navigation systems. The laser “illumination” of targets will be used during the firing of guided artillery projectiles and also during the guidance of precision-guided aircraft bombs, Izvestiya’s interlocutors in the Ministry of Defense explained. In their words, the “Orlan-30” has proven itself both during its baptism by fire in Syria and also within the “Tsentr-2019” maneuvers...*

*At the beginning of August, the Military Department posted on its website a video recording, which was made in Syria. In it, a terrorist pickup that was hidden under a bridge is being destroyed by a mortar round. In the process, it is impossible to guess precisely which drone adjusted the artillery fire – the UAV’s designation is not specified in the credits, and the unmanned aerial vehicle itself did not end up in the frame. However, several Izvestiya sources immediately pointed out that the clip with the “Orlan-30’s” work (although also without identifying the new aircraft) has already been officially published on the Web.*

*The appearance of the new drone in the troops will seriously increase the effectiveness of the firing of precision-guided munitions and also the accuracy of the strikes of guided aircraft bombs, Military Expert Anton Lavrov thinks. “Laser ‘illumination’ of the targets will help to achieve the sniper accuracy of artillery”, the military expert told Izvestiya. “The ‘Orlan-30s’ will have to closely work with heavy artillery. For example, with the ‘Tyulpan’ 240-millimeter mortars, in the arsenal of which are ‘Smelchak’ guided mortars. And the 152-millimeter artillery systems use the ‘Krasnopol’ family of guided projectiles. The flight of these munitions is corrected using a laser mark of the target in the terminal trajectory”...The Orlan-30 is also indispensable in the event of the employment of guided aircraft bombs – they are cheaper than the missiles and munitions, which were extensively used in Syria.*

*Outwardly, the new drone resembles its predecessor, the “Orlan-10” UAV. However, its launch weight is approximately 30 kilograms, nearly two times more than the “Orlan-10”. This unmanned aerial vehicle can fly to a distance of up to 300 kilometers from the command and control point with a cruising speed of 150 kilometers per hour. The flight duration – is more than five hours. Those characteristics permit the conduct of effective reconnaissance far beyond the front line.*

*The implementation of the plug-in architecture of the drone’s development permits the change of the payloads and the variation of the composition of the airborne equipment. The unmanned aerial vehicle will be launched into flight using a catapult, which will help to use it from small clearings and to save fuel. Any UAV can operate as a communications relay for the remaining aircraft...*

**Source:** Marina Shebakova, “Завершаются испытания нового беспилотного комплекса «Форпост-Р» (New Forpost-R UAV System Nears End of Testing),” *Krasnaya Zvezda Online*, 23 August 2019. <http://redstar.ru/zavershayutsya-ispytaniya-novogo-bespilotnogo-kompleksa-forpost-r/>

### ***Russia’s New Forpost-R Reconnaissance Drone Nears End of Testing, Delivery Due in 2020***

*Serial delivery of the Forpost-R [Форпост-Р] to the forces will begin in 2020 under a contract between the Russian Ministry of Defense and Ural Works of Civil Aviation.*

*It is a total upgrade of the already tried and true Forpost system. Only the external contours remain the same. The aircraft is made of domestically produced structural materials and comes with up-to-date radioelectronics, communication lines, a ground-based control station, and Russian-made software. The Forpost-R also has the modern domestically produced APD-85 engine...*

*The system has acquired new capabilities thanks to advanced Russian developments that make possible round-the-clock intelligence gathering using not only optical but also radioelectronic and radar means, which is unique for a drone of this class. A new radio link enables the system’s operating range to be extended by 100 km and has enhanced protection against interference by foreign technologies...The Forpost-R weighs about 500 kg..*





## Continued: The Proliferation of Russian Reconnaissance UAVs

**Source:** Aleksey Ramm and Bogdan Stepovoy, “Тихий дрон: армия получит первый отряд беспилотных разведчиков (Silent Drone: Army to Get First Detachment of Reconnaissance Drones),” *Izvestiya Online*, 24 September 2019. <https://iz.ru/915258/aleksei-ramm-bogdan-stepovoi/tikhii-dron-armiia-poluchit-pervyi-otriad-bespilotnykh-razvedchikov>

### *Silent Drone: Army to Get First Detachment of Reconnaissance Drones*

*The first detachment of long-range reconnaissance unmanned aerial vehicles will soon appear in the Russian Armed Forces, sources in the Ministry of Defense told Izvestiya. The unit, which will be formed in the Western Military District, will be equipped with the latest Forpost-R UAVs, but will later be replaced by the prospective Altius UAVs. This will seriously increase the combat capabilities of Russian troops in the western strategic sector, according to experts interviewed by Izvestiya. The unmanned aerial vehicles will be able not only to conduct reconnaissance and strike with precision bombs and missiles, but also “light up” targets for Iskanders or Kalibrs.*

*The unit, armed with unmanned aerial vehicles (UAVs), will be deployed in Shatalovo, Smolensk Oblast...Shatalovo airfield is located at an important geographical point, from where it is possible to control all transport lines of communications leading to Moscow and central Russia from the west, according to military expert Anton Lavrov.*

*“Altius drones, which will have a virtually unlimited range, will be able to patrol the most important section of the western border,” he told Izvestiya. “They will not only control the border with Belarus without problems, but will be able to fly along the cordon all the way to the Baltic Sea in the north. In the south, the entire northern border of modern-day Ukraine will be under their supervision. The fact that the first detachment of new reconnaissance drones will be stationed in Smolensk indicates that the Armed Forces are paying close attention to the western strategic sector.*

*The new equipment will strengthen the grouping of the Army in the west of the country, the expert believes. Domestic drones can be integrated into a single information loop together with strike systems located on the ground, in the sky, and on the water. Such capabilities allow for the integrated use of weapons up to Kalibr or Iskander missiles. Their crews will be able to use real-time information coming from reconnaissance drones. Strikes using precision bombs and missiles, which are on board the unmanned aerial vehicle, will be carried out on the operator’s command.*

*The UAVs are not only capable of acting in the interests of the Ground Forces, but also of the country’s Aerospace Forces. And over time, Altius unmanned aerial vehicles will be able to replace Su-24MR reconnaissance planes, which have practically exhausted their service life, but are still in service, the military expert said...The device’s specifications will allow it to accommodate the most state-of-the-art weapons systems, including cruise missiles or guided bombs.*



Orlan-30 UAV.

Source: Vitaly Kuzmin via VitalyKuzmin.net, <https://www.vitalykuzmin.net/Military/ISSE-2013/i-fsGMFVC/A>, CC BY-NC-ND 4.0