

ORLIK UAV PROGRAMME: CONTRACT WORTH PLN 800 MILLION. FIRST DELIVERIES IN 2021

Delivery of eight tactical short range Orlik UAV packages (with 40 examples of PGZ-19R UAV in each set) is envisaged by an agreement signed by and between the Armament Inspectorate of the Polish MoD and the PGZ Group. The sets are worth PLN 789.7 million, with optional procurement of another 4 packages included.

Signing of the agreement on 30th November 2018, concerning acquisition of Orlik short range tactical UAVs, results from a decision made by the Polish Ministry of Defence, assuming that the programme in question has to be completed with the use of the domestic industrial potential. During the Air Fair 2017 event, Polish Armaments Group, Bydgoszcz-based WZL No. 2 facility, along with the PIT-RADWAR S.A company, in presence of the Secretary of State at the Polish Ministry of Defence, Bartosz Kownacki, have signed an agreement that brought a consortium to life, the objective of which would be to participate in a procedure carried out by the Armament Inspectorate, with a goal to procure "Orlik" short range tactical UAV systems for the Polish Armed Forces. The consortium was offering the PGZ-19R system based on the E-310 UAV that had been developed earlier. This platform constitutes the key element of the system.

The aircraft has wingspan of 5.4 metres, it is 2.8 meters long and 0.7 m high. It may be contained (for transport/storage purposes) in a box of the following dimensions: 3x0.7x0.6 m. It takes up to 30 minutes to ready the PGZ-19R platform for a mission. 90 kilograms is the maximum take off weight, the aircraft may carry payload of 20 kilograms. Payload includes an optronic sensor (daytime camera, thermal imaging camera, laser rangefinder and laser target designator). PGZ-19R has also been fitted with a Synthetic Aperture Radar.



Conclusion of the Agreement. Image Credit: Armament Inspectorate

The UAV has endurance of 12 hours at altitude of up to 5000 meters. Cruising speed is defined as 120 to 180 kilometers per hour. The operational radius is limited by the capabilities of the communications system - maximum radius is 150 km from the base station, while maximum mission endurance is 12 hours. Landing may take place in a conventional manner, or with the use of a parachute embedded in the top part of the fuselage. Take off takes place from a mobile launcher, towed by an all-terrain vehicle.

PGZ-19R is a system that has been designed for the purpose of carrying out reconnaissance in a variety of terrain and weather conditions, at night and during the day. According to the requirements issued by the Ordering Party, the system consists of 11 elements forming a full package:

- UAVs (5 examples),
- Mobile Take Off Launcher,
- Logistics Vehicle,
- Ground Control Station,
- Ground Data Terminal,
- Detachable Video Terminal,
- Portable Video Terminal.

The order, the value of which is defined as PLN 789.7 million zlotys, concerns 8 PGZ-19R systems that are to be delivered between 2021 and 2023, with optional procurement of another 4 systems (order completion between 2023 and 2026). That means that in total, 40 tactical Orlik UAVs would be introduced into use, with optional procurement of another 20 planned for the future.

The decision on planned acquisition of those aircraft has been announced by the Secretary of State at the Polish Ministry of Defence, Wojciech Skurkiewicz, in February this year. Skurkiewicz was mentioning a plan to order four Orlik systems in the second quarter of 2018 at the latest (4 UAVs in each system), with deliveries scheduled to happen before 2022. Then, optional procurement of another 8 systems later was also mentioned. Ultimately, not only did the quantity of systems ordered in the first batch go up, but also the number of airframes included in each system increased.

One needs to note that the price does not pertain solely to the systems, as it also concerns introduction of integrated supply chain and training system, along with a start-up package for operations and operator/personnel training, with regards to operation of the Orlik system.