



# Groza-O

multicopter operator detection system

# Designation

Automated search in the field and video registration of the multicopter operator.

## Performed tasks:

- detection and direction-finding of the multicopter controller signals;
- locating the multicopter operator via direction-finding of the controller from several points in space;
- automated flight with a bearing on the multicopter operator, photo and video registration of the operator.



# Composition

Guided aerial platform based on Matrice 600 Pro hexacopter with:

- two-channel digital receiver with a digital signal processing device;
- direction finding antenna;
- video camera;
- data communication system.

Ground control post:

- rugged laptop;
- two-band data transmission system;
- antenna system on a tripod.

Manual controller:

- controller with a visual data transmission system
- tablet computer

Special software:

- aerial platform control;
- direction-finder control;
- operator positioning;
- video registration of the operator.



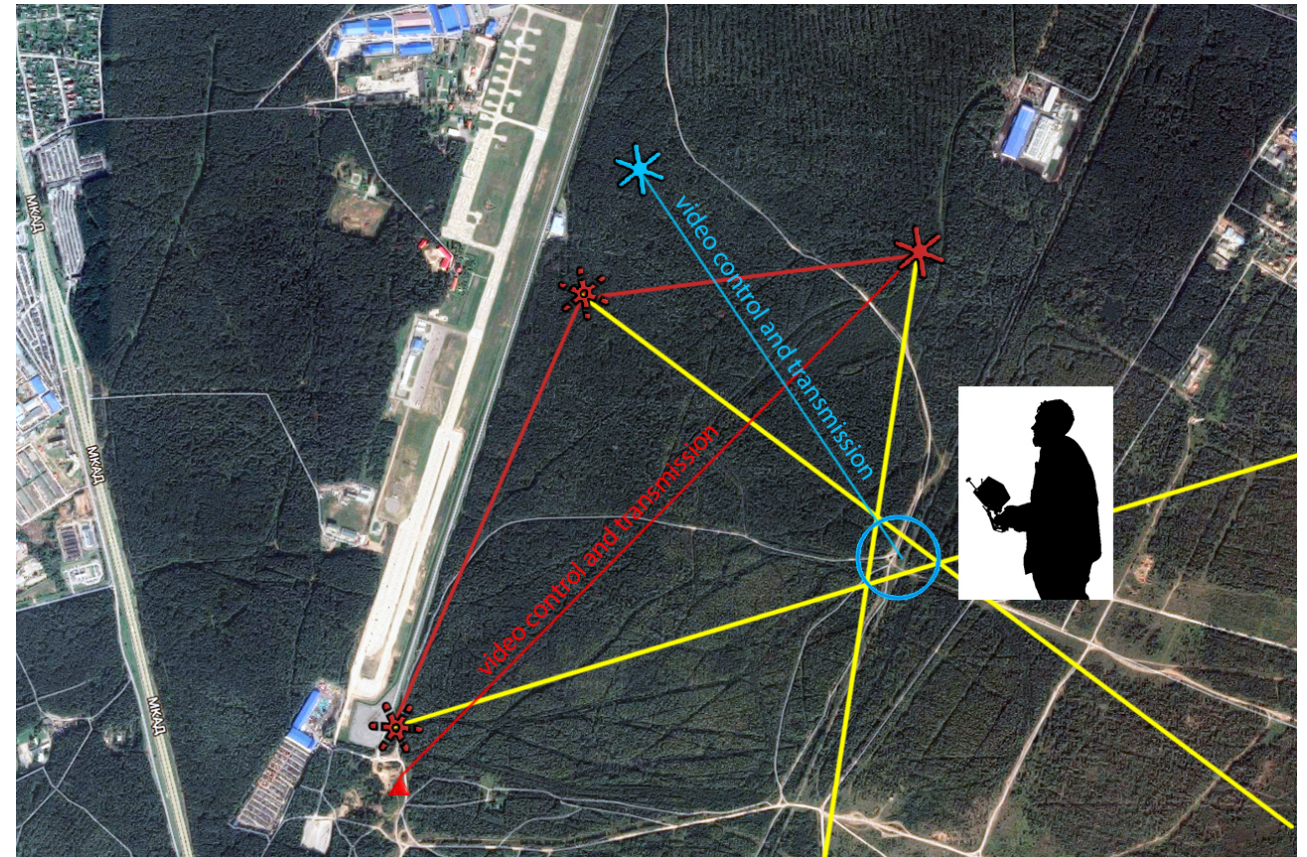


# Methods of employment

Detection of the multicopter is followed by the launch of the guided aerial platform to the altitude of 50-100 m, and search and direction-finding of the multicopter controller signals. Search for the operator is carried out in one of the two ways:

1. Locating the operator using the goniometry method.

The aerial platform takes the bearings of the controller from several points in space. An extraction team is sent to the intersecting point of the direction-finding bearings (where the operator is located).

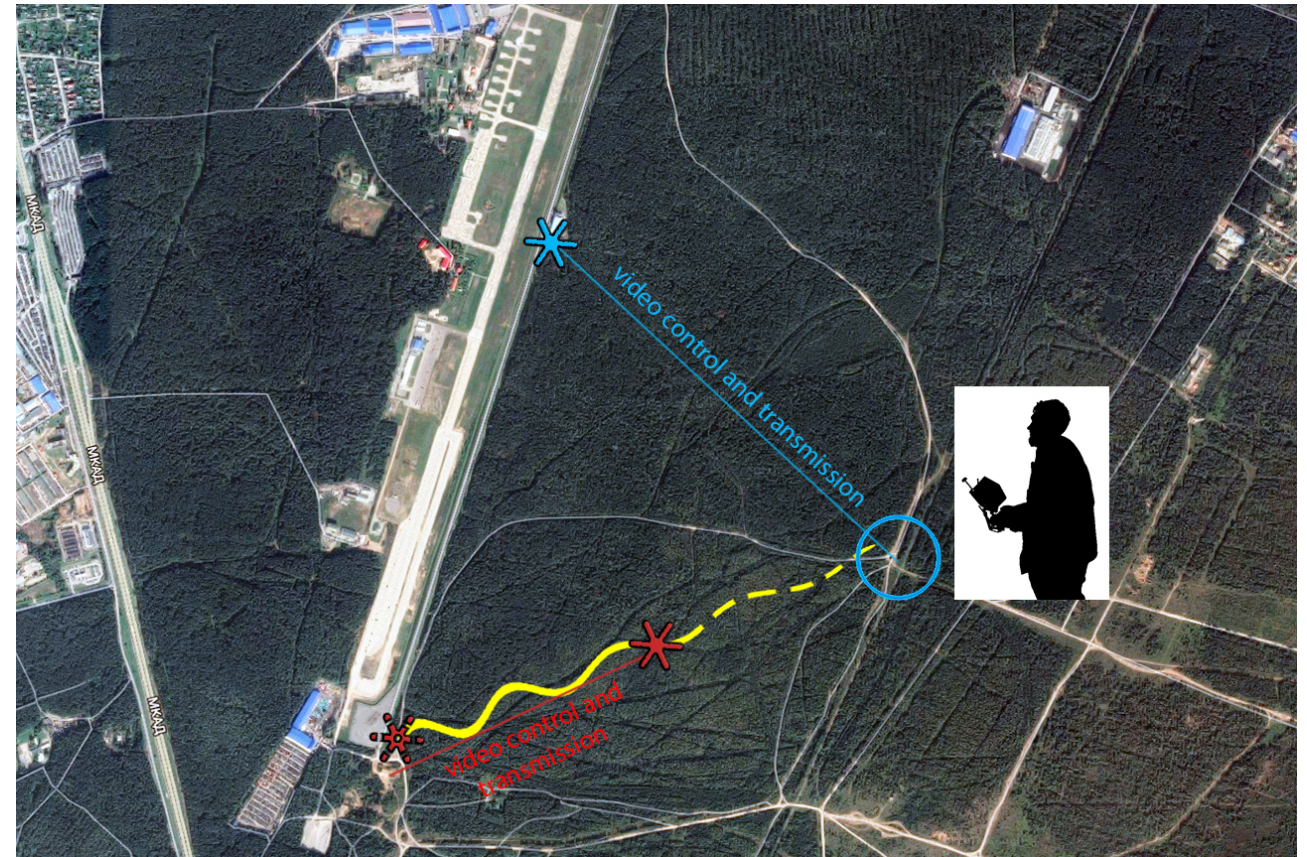




# Methods of employment

2. Search for the operator using the bearing.

The aerial platform flies automatically, oscillating and constantly taking the bearings of the controller. Simultaneously it carries out the visual search and video registration of the operator's actions.



# Specifications

Detection and direction-finding frequency range	900-6000 MHz
Direction-finding accuracy	not less than 5°
Flight endurance	up to 30 min
Flight range	up to 2 km
Range of detection of the controllers	up to 2 km
Launching preparation time	not more than 3 min
Video format	up to 1080p60
Aerial platform size	
in transport position	600x700x600 mm
in flight	1140x1140x600 mm
Flight weight	10 kg