ORION-E

STRIKE AND RECONNAISSANCE MEDIUM-ALTITUDE LONG-ENDURANCE (MALE) UNMANNED AIRCRAFT SYSTEM

KRONSHTADT

ORION-E

Medium-altitude long-endurance (MALE) strike and reconnaissance unmanned aircraft system "Orion - E" provides:

- Air patrolling of designated areas
- Additional exploration of ground facilities
- Evaluation of the strikes impact
- Topographical survey
- High resolution aerial photography
- Terrain mapping in the radar range
- Quality control of camouflage of own troops
- SIGINT and ELINT intelligence
- Enemy's avionics countermeasures using the electronic warfare equipment
- Destruction of small stationary, mobile and moving objects, military equipment and enemy manpower in places of concentration and on the march
- Target designation for the aviation and artillery

COMPOSITION

Medium-altitude long-endurance (MALE) unmanned aircraft system "Orion - E"

Number of UAVs per system depends on customer's requirements and varies from 2 to 6 UAVs.

For transportation and storage UAVs are placed in shipping containers - one UAV per container.

Ground control station (GCS)

provides UAS control and operation:

- UAV automatic takeoff and landing
- control of the UAV flight and its payloads
- processing and storage of data received from the UAV, its payloads and ground systems of the complex
- interaction with external consumers of information

Mobile Ground Control Station

INTERCHANGEABLE PAYLOADS

A set of on-board equipment with an open architecture for the implementation of modifications according to customer requirements with the ability to install various payloads, incl. satellite data transmission system, as well as:

- EO/IR
- Airborne radar system
- SIGINT
- Electronic warfare equipment
- Aviation armament set

SATELLITE COMMUNICATIONS SYSTEM (SATCOM)

Provides the transmission of command-telemetry and payload information at unlimited distance from the GCS

- Allows for stable data exchange with UAVs performing tasks in areas with difficult terrain (in the mountains, at low altitudes and long distances, etc.)
- Increases the stability of data transmission due to the presence of two alternative data transmission channels
- Provides the ability to perform reconnaissance and strike missions over the water far from the coastal infrastructure
- Provides the ability to control the UAV from a centralized control center located at any point on the globe
- Provides the ability to simultaneously receive information from the UAV payloads by several consumers located at any distance from the UAV

AIRCRAFT ARMAMENT SYSTEM

Orion-E UAV is equipped with three hard points: two are under the wing consoles and one is under the fuselage.

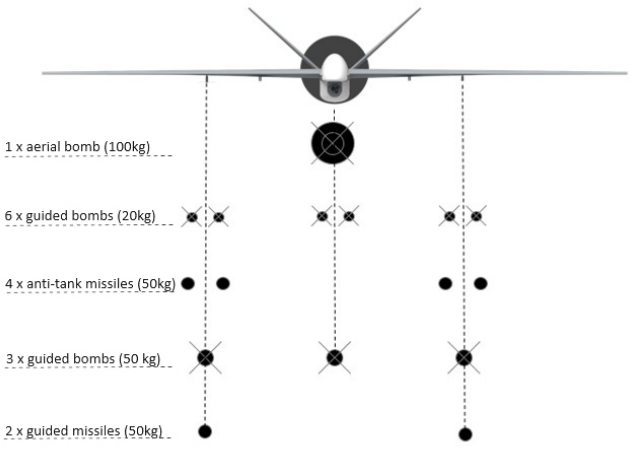
TECHNICAL FEATURES

PARAMETER	VALUE
Dimensions, m	
Wing span	16
Height	3
Length	8
Weight, kg	
Maximum take-off weight	1150
Maximum payload weight	250
Speed, km/h	
Cruising speed	200
Maximum flight altitude, m	7500
Flight endurance: - maximum, h - with standard payload, h	 Not less than 30 Not less than 24
Radius of application:	
direct radio visibility from RM, km	250
Using SATCOM, km	unlimited

AVIATION WEAPONS:

Laser-, satellite- and TV-guided air weapons can be used:

- Up to 50 kg guided aerial bombs
- Up to 100 kg aerial bombs
- Up to 50 kg guided missiles.



Possible arrangements of air weapons of the Orion UAV aircraft armament system

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