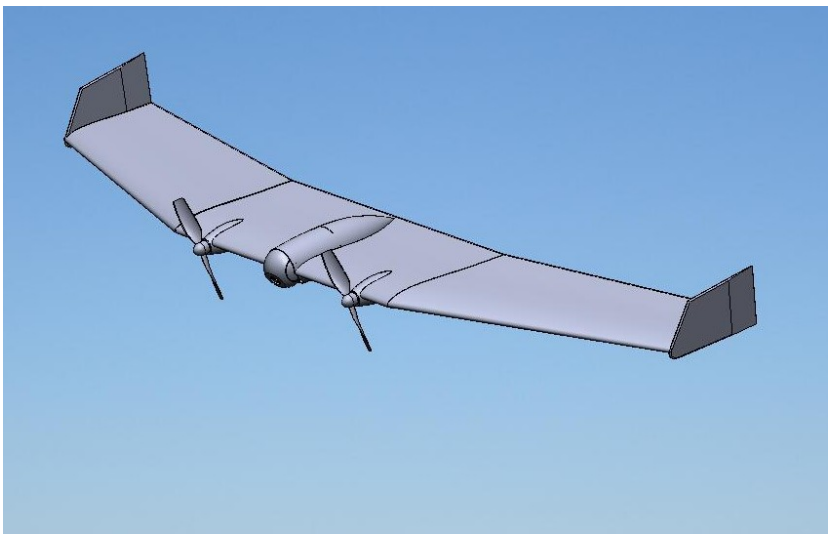
HAES 90 “Electric ray”

Mission
The HAES 90 “Electric ray” is a mini unmanned carrier and is intended to assure fast reconnaissance capabilities directly in a field. Recon soldier carries the “Electric ray” in a special bag.



Features
Start is engaged manually throwing by hand. The carrier is powered by electric engines. Operation service is characterized by low noise and service range and is maximally 10 km. The data are transferred to operator that is using portable monitoring device IRS (Image Receiving System). This device is able to control on-board camera which is monitoring surveyed areas. Telemetry data describing a flight speed, an altitude and a location are sent from the UAV. This data are displayed using geodetic background which is included in portable device GDT (Ground Data Terminal). IRS and GDT terminals have own batteries and thus are independent on external power supply.

Background
The carrier can be ready to flight in 5 minutes after reaching desired start point. For long-time missions, the carrier is equipped with an autopilot. Flight endurance is limited by battery capacity and is 60 minutes. After landing only 5 minutes is necessary to pack the carrier into a bag and then a recon soldier can imminently leave his position.
Three “Electric rays” have been built to date.

General Characteristics of HAES 90 “Electric ray” V1.0
Primary function: mini unmanned carrier
Prime Contractor: HAES Group (**Ha**cker Model Production and **E**volving **S**ystems Consulting)
Power plant: electric engine w/ propeller
Speed: 30 - 90 km/h
Ceiling: 300 meters
Range: 10 kilometers
Endurance: 60 minutes
Cost: TBD
Initial operating capability: TBD
Inventory: Demonstrators, 3; Active force, 0

Point of Contact
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