

MUSECO



Aerial Reconnaissance and Surveillance System



**Daylight and
IR sensors**

**Video transmission
in real-time**

**Data link range
exceeds 100 km**

**Land and sea
based operation**

Heavy-fuel propulsion



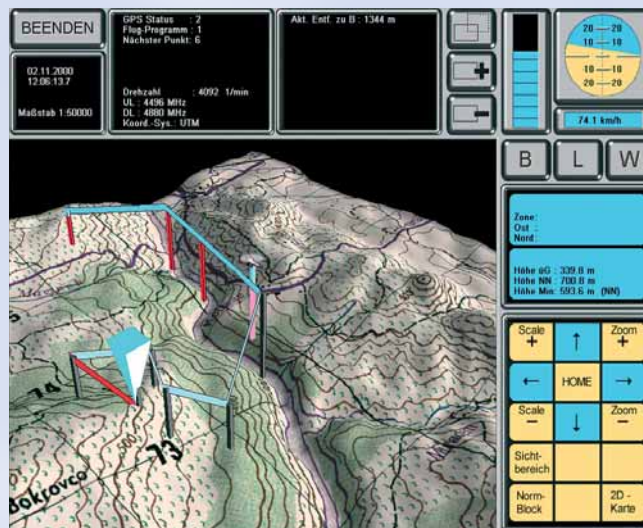


The MUSECO Drone System

MUSECO is a high-efficiency, easy-to-operate unmanned VTOL aerial reconnaissance system. This system combines the mission-tested avionics of the LUNA fixed-wing drone from EMT with the innovative VTOL platform concept from SWISS UAV. Heavy-fuel propulsion and modular payloads permit the most diverse applications in the field of fully autonomous night and day reconnaissance and surveillance missions, radio relay functions, or for the support of rescue missions.



Protected workstations for MUSECO control crew



3D mission planning

The integrated mission planning and flight control system has set a new benchmark for the German Bundeswehr with more than 5000 reconnaissance missions. A multitude of software tools is available for the evaluation of reconnaissance results, taking into consideration individual customer requirements.

Technical data

Aircraft: Robust carbon-fiber/aluminum design with heavy-fuel 14 kW turbo shaft propulsion.
Rotor diameter: 300 cm, 3-blade system, MTOW: 75 kg.
Fuselage dimensions: (L x H x W): 275 cm x 95 cm x 86 cm
Max. payload: 25 kg
Endurance: approx. 2 h

Ground station: On account of the modular and compact design, the ground station can easily be integrated into ships or land vehicles, for example. It provides several workstations equipped with high-resolution color monitors for real-time image evaluation, 3D mission planning, and aircraft control (virtual cockpit). The ground station permits repeated replay of the entire flight mission for post flight evaluation, simulation, and training.

Avionics: Navigation, autopilot and aircraft system manage-

ment are fully digitalized, sensor module with attitude gyro, rate sensors, magnetic compass, air data sensors, and accelerometers.

Data link: Duplex microwave link, directional antennas in aircraft and ground station, real-time transmission, range > 100 km.

Sensors: 3-axis stabilized, swiveling modular E/O sensor platform, 26-fold zoom.

Optional: High-resolution IR cameras or digital still cameras, meteorological sensors, gas and particle samplers, radio relay, minesweeping sensors, radioactive contamination sensors, and many more features.

Subject to technical change.



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