

SEEKER II

UAV Surveillance System



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SYSTEM FEATURES

Seeker is an Unmanned Air Vehicle (UAV) Surveillance System, with the following features:

- 250 km slant-range surveillance operations
- Up to 10 h endurance
- Up to 18 000 ft service ceiling
- Up to 40 kg multi-mission payload (fuel excluded)
- Range-extension capability via passing control

The system consists of the following:

- Four to six air vehicles
- Mission control unit
- Tracking and communication unit
- Payloads
- Field support equipment
- An optional tactical ground station



THE SYSTEM

The Seeker II system operates at ranges of up to 250 km from base and provides:

- Real-time day and night reconnaissance
- Target location
- Artillery fire support
- Electronic intelligence

Its reliable communication link, modular design, high mobility and self-contained support provide an advanced system that has passed the real test of operational use.

UNMANNED AIR VEHICLE (UAV)

Various UAV variants have an all-composite, low-drag airframe that ensures optimum performance. The UAV's highly efficient engine and large fuel capacity allow endurance of up to 10 h. This, combined with a service ceiling of up to 18 000 ft and a payload capacity of up to 40 kg, puts it in a class of its own.

An on-board directional antenna gives high resistance to jamming and enables real-time communication up to 250 km from base.

MISSION CONTROL UNIT (MCU)

The MCU provides the main interface between the mission control crew and the UAV. Its features include:

- Mission planning
- UAV monitoring and control
- Communication control
- Payload control: optical and ESM
- Mission simulation

Workstations have identical hardware, with dedicated software enabling specific functions.

TRACKING AND COMMUNICATION UNIT (TCU)

The TCU contains the tracking and communication equipment that maintains contact with the UAV. It is an unmanned, separate unit that can be located up to 80 m from the MCU, enabling it to be positioned for optimum line-of-sight communication.

PAYLOADS

The Seeker II UAV can carry several different payloads by using a 'plug and play' methodology.

Daylight payloads such as the Super Colour Payload (SCP) offer Fields of View (FOVs) down to less than one degree.

The Multi-sensor Payload (MSP) provides the capability to operate at night. There are MSP variants that have fixed FOVs and also continuous zoom capabilities.

An Electronic Surveillance Payload (ESP) is available for emitter location, with a high probability of interception of search radars. The man/machine interface for the ESM is integrated into the GCS. This provides the system with an Enemy Electronic Order of Battle (EEOB) through emitter identification and location.

TACTICAL GROUND STATION (TGS)

The optional TGS provides Seeker II with the capability of an extended range of 250 km, enabling an effective operational range of 400 km (50 km overlap).

The TGS is a self-sufficient, compact, mobile UAV control station, with functions similar to those of the main Seeker II MCU and TCU. It takes over UAV control.

The TGS allows control of the Seeker II UAV and its payloads, providing total mission independence.