

# Hermes 450

UAV SYSTEM Sentinel in the sky



*Silver Arrow* A Subsidiary of



# HERMES 450

## AIRBORNE VEHICLE

### Performance

Max. mission radius	200 Km
Max. endurance	20 hours
Operational altitude	18 Kft
Max. speed	95 kts
Cruise speed	70 kts
Stall speed	42 kts
Max. rate of climb	900 fpm

### Technical data

Wing span	10.5 m
Fuselage length	6.1 m
Takeoff weight	450 kg
Max. usable fuel	105 kg
Max. payload weight	150 kg
Payload volume	300 liters
Payload power available	1.6 kw
Total engine power	52 hp @ 8,000 RPM

### Features

- ▶ A high wing, V tail optimal aerodynamic configuration
- ▶ Light composite structure
- ▶ UEL AR-80-1010 rotary engine with a pusher propeller
- ▶ Redundant flight computer avionics and power supply
- ▶ Fully autonomous flight with in-flight redirection
- ▶ Optional DGPS automatic take-off and landing

## PAYLOADS



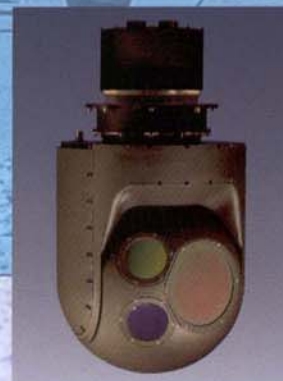
### TESAR

- ▶ Real time SAR imagery
- ▶ Wide area coverage, strip & spot
- ▶ Ground Moving Targets Indication (GMTI)



### DSP-1

- ▶ Stabilized day and night E/O sensor
- ▶ Provides real - time video imagery
- ▶ Suitable for low - end performance requirements



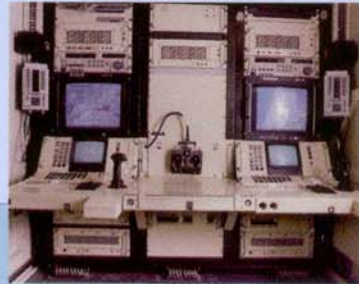
### COMPASS

- ▶ Multi stabilized platform: FLIR, B/W or color CCD, optional laser range finder
- ▶ Provides real - time imagery
- ▶ Suitable for high - end performance requirements

# SENTINEL IN THE SKY



Mobile S-280 shelter



Mission and payload consoles



Mission display

## Features

- ▶ Mobile or fixed installation
- ▶ Side by side identical (H/W & S/W) consoles for mission and payload control
- ▶ Ruggedized COTS H/W
- ▶ Advanced friendly MMI

## Functions

- ▶ Mission planning
- ▶ Preflight and postflight
- ▶ In-flight mission control
- ▶ Payload control
- ▶ Payload information processing and storage
- ▶ Data link management
- ▶ Mission log
- ▶ Mission simulation

## Major assemblies

- ▶ S-280 type shelter including 2 or 3 19" consoles, displays, computers, recorders and hard-copy printer
- ▶ External power supply (generator and emergency batteries)
- ▶ Tactical communication
- ▶ GDT (Ground Data Terminal) on trailer
- ▶ RVT (Remote Video Terminal)
- ▶ FLT (Flight Line Tester/Loader)



GDT - Ground Data Terminal

## Communication

- ▶ Line-Of-Sight (LOS) wide-band digital link with backup
- ▶ Integration capability of beyond- Line-Of-Sight (BLOS) wide-band digital satellite link

# GROUND CONTROL STATION

# APPLICATIONS

## Military

- ▶ Real and non-real time reconnaissance and surveillance
- ▶ Artillery fire adjustment
- ▶ Communications relay
- ▶ Maritime surveillance
- ▶ Damage assessment

## Non-military

- ▶ Drug interdiction
- ▶ Coastal patrol
- ▶ Environmental supervision
- ▶ Border patrol
- ▶ Nuclear accident appraisal
- ▶ Forest and wildlife inspection
- ▶ Meteorological and atmospheric research



**Silver Arrow** A Subsidiary of



Advance Technology Center P.O.Box 539, Haifa 31053, Israel  
Tel. 972 4 8315315, Fax. 972 4 8550002, 8551623, Web site: [www.elbit.co.il](http://www.elbit.co.il)