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Elbit Systems-Silver Arrow, Israel

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See also ADM001676, UAV 2002 conference & Exhibition., The original document contains color images.
Silver Arrow

Presents

HERMES 180

Maiden Flight
15-5-02
Design Drivers

Reconfiguration rather than a new design
Configured to meet Brigade to Division Requirements

Intra-Operability & Interoperability

No compromise on endurance:
Less L&R effort,
multiple missions sorties,
longer / remote missions achievable

Low Risk, High VFM

Robustness / Weather Resistance

Rapid Deployment by C-130

No compromise on High Quality Payloads (weight, volume, power):
IMINT quality, SAR/GMTI capability,
survivability by ‘standoff’ flight
Icing Resistance
- Icing Sensor
- Pitot Heating
- Active De-Icing by Role-Fit
- Propeller protected by oil

Platform:
- Ceiling > 15,000 ft
- Endurance > 10 h
- Light Weight, Composite Material Structure
- Installation Space

Avionics:
- Dual Redundant Avionics
- MIC-FFC Architecture
- Modern, reduced-size & Weight Hw Design, based on proven HERMES avionics.

Parachute:
- Parachute Recovery
- Emergency Recovery
- Wheeled or Air-bags Configuration

Engine (UEL 741)
- Proven & Mature
- High Power/weight Ratio
- Low Fuel Consumption
- UK Design & Production
Multiple, Field Configurable L&R Methods
Multiple, Field Configurable L&R Methods

Air-Bags Configuration

Launch by Hydraulic Launcher; Recovery by Parachute and Air-Bags

Wheeled Configuration (1)
Rail Launch & ATOL Landing as main method. Only 100m rough strip is required.

- Minimize Parachuting
- Shorter Turn-Around time and effort
- Adequate for many peacetime / training / Wartime situations

Wheeled Configuration (2)
Wheeled, Automatic Takeoff and Landing.

- Adequate for situations where longer strip is available
- No launcher required

Minimize Parachuting
Shorter Turn-Around time and effort
Adequate for many peacetime / training / Wartime situations
Sensor to Shooter Provisions
Sensor to Shooter Provisions

- High Accuracy target location (INS, LRF, processing)
- Coordination with Pilots / Artillery
- Triple sensors Payload: CCD, FLIR, Laser Designator
- C^4^I Integration
- Accurate Artillery Adjustment