AERIAL ISR

Aerial ISR (Intelligence, Surveillance and Reconnaissance) is Aeronautics’ turnkey solution for converting a utility helicopter or fixed-wing aircraft into a platform for high-quality aerial surveillance. AISR enables the performance of defense, security or civilian missions using electro-optic, infrared or other sensors.

AISR SYSTEM - MAIN FEATURES

- Advanced day/night tactical observation system, with full digital recording for accurate post-mission analysis and debriefing.
- Mission Computer for mission planning, mission management capabilities (planning before or during the flight), and processing tactical information.
- Digital Map Display (at various scales)
- Integration of the various aircraft sensors and generation of a real-time tactical picture
- Data and video (targets) storage data bank for mission support
- Increased navigational precision (with GPS/INS location)
A choice of advanced payloads are available, offering high quality ISR coverage, day or night, and featuring:

- Full Stabilization for a clear, steady image
- Video Tracker
- On-Screen Graphics
- Video Image Enhancement
- Night Channel advanced cooled FLIR with continuous zoom
- Daylight Channel high resolution CCD with continuous zoom
- Laser Illuminator/Range finder/Designator

Cockpit C4I Upgrade

Cockpit installation of control joystick to operate the EO/IR payload, or any additional installed payload, and display of digital map and payload video on a special screen mounted on the flight control panel of the aircraft (The installation is carefully planned to optimize user comfort and to avoid interference with other cockpit tasks).

Cabin Console for Payload Operator

A Payload Operator Station (POS) with open and flexible architecture is installed in a standard rack, while video and data are also monitored on a Digital Map Display (DMD) in cockpit, to aid navigation and coordination with pilot.

Data link

LOS (Line Of Sight) Downlink channel transmits payload video and telemetry in real time from the AISR aircraft to users on ground, such as headquarters and field commanders in the operational scenario.
LOS Uplink channel enables direct remote operation of the AISR payload from a ground station.
SATCOM channel extends data link range beyond LOS.

Integration to Ground C4I Networks

The flexibly-configurable system architecture enables AISR payload monitoring and remote operation, at ranges up to 150 km LOS or to virtually unlimited range using SATCOM solutions. The system may readily be integrated with the Customers’ existing C4I system to enhance tactical situational awareness.