



ADVANCED CENTRIC SYSTEMS B.V

Sea / Air/ Land

AMPEOSS

AIRBORNE MULTI-PURPOSE ELECTRO-OPTICAL SURVEILLANCE SYSTEM



THE PROBLEM

Airborne surveillance is required in situations where a permanent ground-based surveillance layout is nonexistent, disabled or unable to provide effective coverage, when the territory to be covered is out of range, or when the operational circumstances demand enhanced or specialized coverage. Examples: sea search and rescue operations, out-of-area operations or operations behind enemy lines, long-range interdiction missions and so forth.

Airborne surveillance is also used in various law enforcement and HLS activities, such as border security and intrusion prevention, and even in civilian applications such as fishery management, environmental monitoring and agricultural supervision.

Dedicated mission aircraft, including surveillance aircraft, are technologically complex and highly elaborate airborne platforms designed, developed and built for a specific purpose. These platforms are normally costly and the specialized systems they carry require specifically trained operators and on-going, specialized technical and logistic support.

In many cases, military organizations and government agencies do not require (or cannot afford) a permanent fleet of surveillance aircraft. When such users seek an airborne surveillance solution, a more cost-effective option is required – like converting a standard aircraft to serve as an airborne surveillance platform.

THE SOLUTION

ACS presents AMPEOSS – Airborne Multi-Purpose Electro-Optical Surveillance System.

AMPEOSS consists of an aerial platform such as a fixed-wing aircraft (light aircraft or medium transport aircraft) or a helicopter, fitted with any one of the electro-optical surveillance payloads from the ACS range: ALRMS-DNSP (for long-range surveillance operations), VMS-ESOP (for medium-range operations) or VESPA (for short-range operations).

These dedicated electro-optical payloads enable AMPEOSS to perform intelligence gathering, surveillance and reconnaissance (ISR) missions as well as target acquisition, fire management and damage assessment missions, border patrol, maritime patrol and even environmental and agricultural monitoring missions.

The electro-optical payload is normally fitted to the aerial platform along with a dedicated workstation that controls the payload while the carrying platform is airborne. A ground control station rounds off the setup, thereby enabling the airborne platform to downlink the video and imagery data picked up by the payload in real time.

An airborne surveillance setup based on the electro-optical payloads from the ACS range (ALRMS-DNSP, VMS-ESOP or VESPA) offers a high-performance, cutting-edge airborne surveillance solution at the fraction of the cost of a dedicated surveillance platform.

KEY FEATURES & MAJOR ADVANTAGES

Features and Benefits

- Tailor-made airborne surveillance systems for an extensive range of applications:
- Military ISR (Intelligence, surveillance and reconnaissance)
- Target acquisition, fire management & damage assessment
- Surveillance for out-of-area operations & long-range interdiction missions
- Search and rescue

- Fishery management & agricultural supervision
- Environmental monitoring
- Law enforcement & HLS – border patrol & intrusion prevention
- Multiple-sensor imaging, targeting & monitoring payloads
- Stabilized, fully controlled turrets
- State-of-the-art electro-optical sensors
- Cutting-edge image processing
- Airborne workstation/ground station combinations enable long-range, real-time operation
- Specifications ALRMS-DNSP:
 - Diameter/width: 760x500mm
 - Height: 540mm
 - Payload weight: 98kg
 - Power consumption (average): 850W
 - Daytime sensors: color zoom camera + spotter camera
 - Thermal imager: 3-5 micron
 - Laser rangefinder: yes
 - ICCD: yes
 - Datalink: yes
- Specifications VMS-ESOP:
 - Diameter: 360mm
 - Height: 500mm
 - Payload weight: 37kg
 - Power consumption (average): 250W
 - Daytime sensor: color zoom camera + spotter camera
 - Thermal imager: 3-5 micron
 - Laser rangefinder: yes
 - ICCD: optional
 - Datalink: yes
- Specifications VESPA:
 - Diameter: 280mm
 - Height: 400mm
 - Payload weight: 16kg
 - Power consumption (average): 98W
 - Daytime sensor: zoom camera
 - Thermal imager: 3-5 micron
 - Laser rangefinder: yes
 - Datalink: yes