

ATOS

Airborne Tactical Observation and Surveillance System



Footnote
during test, use of the joystick
nella fase di test, utilizzo del joystick



We apply our expertise in mission management and our cutting-edge sensor technology to deliver high performance, integrated solutions for ISR missions. We work in close cooperation with our customers to design solutions tailored on operational needs and ensure mission success.

ATOS is an advanced Airborne Mission System that integrates and manages various sensors and sub-systems in order to perform ISR missions.

The System adopts a Human Machine Interface improving the User Experience and reducing operator workload. With more than 60 operative systems around the world, ATOS has been enhanced over the years to meet new requirements and needs of many international customers.

The Suite of mission sensors and other mission equipment can be tailored to meet the specific operational needs of each end-user and can include Leonardo, third parties or GFE mission sensors and equipment.

ATOS MISSION MANAGEMENT SYSTEM

Main features

- › Real time collection and handling of mission sensors data
- › Maximum level of tactical situation awareness through the integration of navigation, geographical and mission sensor data
- › Mission sensors control
- › Automatic aiming of electro optical sensors
- › Flight plan management
- › Mission data recording and capability to store in a digital format high quality video
- › Mission data base management and data fusion
- › Mission briefing and reporting
- › Ground Control Station for mission planning/ following/debrief, simulation and training
- › Interoperability with NATO and national assets through STANAG implementation
- › Redundant configuration at hardware and software level
- › Cyber security compliant
- › Customisable configuration including ITAR-FREE solution



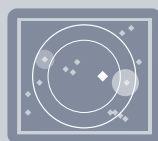
APPLICATION

- NATIONAL SECURITY**
 - Anti-Piracy
 - Counter terrorism
 - Border surveillance
 - EEZ control
- LAW ENFORCEMENT**
 - Fishery control
 - Illegal immigration
 - Illegal traffic
 - Anti-pollution
- SEARCH AND RESCUE**
- MILITARY**
 - Anti-surface warfare
 - Anti-submarine warfare

The image shows an aerial view of a coastline with various mission management system interface elements overlaid. These include a depth scale on the right side of the water (24, 250, 260, 270, 280, 300), a dashed line representing a flight path or search area, and several inset images: a top-down view of a sensor or sensor array, a map showing a flight plan, and a photograph of a military vehicle (likely a Humvee) used as a ground control station. A yellow diamond icon with the letter 'R' is also visible on the water surface.



**MORE THAN 60
 OPERATIVE SYSTEMS
 WORLDWIDE**



**MAXIMUM LEVEL OF
 TACTICAL SITUATION
 AWARENESS**

ATOS FOR ROTARY WING PLATFORMS

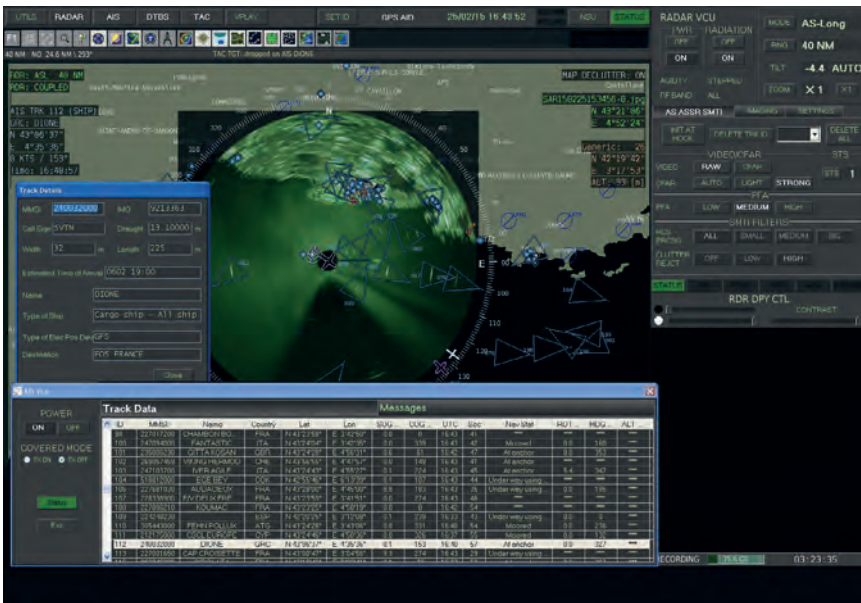
System functionality

- › Coastal and land surveillance
- › Day/night reconnaissance
- › SAR support and naval traffic control

System configuration

- › Mission Management System with one multifunction operator console
- › Nose or belly mounted multimode surveillance radar
- › Electro-optical/infrared HD turret
- › Automatic Identification System (AIS)
- › SAR Direction Finder (DF)
- › SATCOM communication (option)
- › V/UHF radios (option)





ATOS FOR SHORT AND MEDIUM RANGE AIRCRAFT

System functionality

- › Maritime Patrol
- › Land Surveillance
- › Day/night reconnaissance
- › SAR Support and naval traffic control
- › Electronic/Communication Intelligence (option)

System configuration

- › Mission management system with one or two multifunction operator consoles
- › Belly mounted 360° multimode surveillance radar
- › Electro-optical/infrared HD turret
- › Automatic Identification System (AIS)
- › SAR Direction Finder (DF)
- › ELINT/COMINT systems (option)
- › SATCOM communication (option)
- › V/UHF radios (option)

ATOS FOR LONG RANGE AIRCRAFT

System functionality

- › Long range surveillance and reconnaissance
- › Exclusive Economic Zone (EEZ) patrol
- › Search & Rescue Support and Naval Traffic Control
- › C4ISR and network-centric warfare
- › Electronic surveillance
- › Anti-Submarine Warfare (ASW)





System configuration

- › Mission management system with four multifunction operator consoles
- › Belly mounted 360° multimode surveillance radar
- › IFF interrogator integrated with the radar
- › Electro-optical/infrared HD turret
- › Automatic Identification System (AIS)
- › SAR Direction Finder (DF)
- › Electronic Support Measures (ESM) / EElectronic INTelligence (ELINT) system
- › Ku/Ka SATCOM communication
- › HF and V/UHF radios
- › Tactical data links
- › Ground control station
- › Sonics system
- › Stores Management System
- › Additional laptops on rest area for mission operations and crew coordination

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MM07800 09-19