



indra

SECURITY AND DEFENSE

PELICANO

Security and defense in five continents

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Unmanned Platforms Systems (UAS) Multisensor & Multiplatform

Pelicano

Indra will be one of the first companies offering an unmanned helicopter prepared to cover the operational necessities of the Armed Forces: the Operational AVTOL UAVs System of rotary wing called Pelicano. It will be in service by 2012.

Pelicano system architecture is made up of three or four unmanned helicopters and one control station, allowing capacity to operate 24 hours per day during long periods of time. Its design has been developed to comply with the requirements and necessities of the armed and security forces.

Pelicano's capacity of take-off and vertical landing (AVTOL) and small size make this UAV a perfect solution to support any kind of naval operation.

It has been designed to support surveillance tasks, maritime traffic control, frontiers control, fight against activities of illegal immigration, drugs trafficking, arms traffic, piracy and for rescue operations, deploying from a naval platform or a ground base. Likewise, it will be prepared to be used, both in intelligence missions and emergencies management, like natural or environmental disasters, implying tracking, surveillance and reconnaissance of wide areas, avoiding any human lost.

Indra has based the system in a medium size helicopter from the Swedish company CybAero and will incorporate the most advanced technological systems to adapt it to military and civilian operational necessities.

Among the sensors to be integrated in the platform are electro-optical/infrared systems, able to obtain high resolution images from a high height. It will be prepared to integrate a light radar, just as electronically surveillance systems and CBRN sensors.

Indra also designs the ground segment controlling the UAV and receiving in real time images, taking care of the data link. Pelicano System will be integrated in the vessel command and control system, so it will be an extension of the vessel surveillance system, complementing the rest of the onboard radars and sensors.

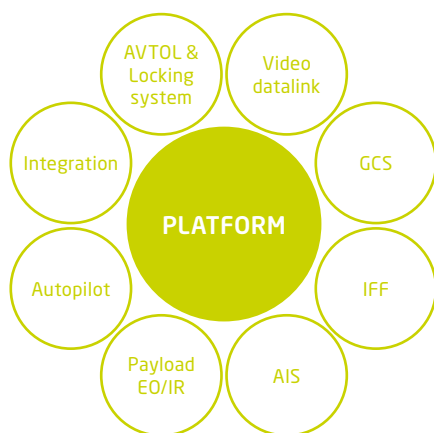
In respect to logistics, it can be transported easily in 4x4 vehicles and in transport aircrafts.

Autonomous Tactical AVTOL UAV with advanced capacities

- Heavy fuel engine (JP5)
- Payload: Gyro-stabilized MMP EO/Thermal (IR) Camera
- T-50 IFF Modes 1, 2, 3/A, 4 (version 2,5 kg) (upgradable to Mode 5)
- AIS (Automatic Identification System)
- Automatic Take-Off and Landing (ATOL) System for vessels, suitable also to be use on ground operations
- Locking system compatible with available ship decks

Growth potential

- Light Radar Ka-SAR
- EW
- CBRN Sensors
- Light Armament / Weapon



Technical characteristics

WING	
Main rotor blades diameter	3,30 m
FUSELAGE	
Tail rotor length	3,40 m
Length incl. both main rotor & tail blades	4,00 m
Maximum width	0,96 m
HEIGHT	
Total height	1,20 m
WEIGHT	
Maximum Take-Off Weight (MTOW)	200 kg
Maximum payload weight	30 kg
Maximum Fuel Capacity	52 liters
ACTUATIONS	
Maximum Velocity (VNE) MSL.ISA	185 km/h
Cruise Velocity	90 km/h
Endurance (Maximum fuel and minimum payload)	4h - 6h
Maximum mission range / Data Link distance	100 km
Maximum operation altitude	> 3.600 m (MSL)
Maximum withstand wind to take-off and landing	10 m/s = 36 km/h
Take-off and landing characteristics	Vertical
Take-off and landing automatism	ATOL
ENVIRONMENTAL CONDITIONS	
Temperature limitations (operational)	From -40°C to +55°C
Temperature limitations (ignition)	From -10°C to +55°C
Rain and snow operation	Moderate
Storage conditions	From -10°C to +60°C



ISO 9001:2000



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Project financed through
Spanish Ministry of
Industry, Tourism
and Commerce



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