



ANGELS

ADVANCED NEXT GENERATION LANDING SYSTEM

LANDING SYSTEM FOR HELICOPTERS

ANGELS is an innovative, high precision guidance system for helicopters, which provides support to VFR Approach and Landing operations in critical situations (bad visibility/ weather, curved approach paths...)

MAIN FEATURES

- Increases Pilot's Safety
- Reduces Pilot's Workload
- Increases efficiency of helicopter operations
- Allows safe landing on NUIs (Normally Unmanned Installations)
- Night Vision Goggle compatible



CHARACTERISTICS

- Ground Based Approach System
- Based on ADS-B Technology
- Information displayed on iPad
- System compliant with ICAO annex 10 vol 4
- Cloud Management
- Remote Software Update
- Redundant Power Supply
- Low Operational Costs

DESCRIPTION

ANGELS provides a precision lateral and vertical guidance to the helicopter approaching and landing on a helipad.

ANGELS is able to capture the cinematic parameters of the helicopter from the ADS-B transponder installed on board, such as time, position, velocity and trajectory as well as the local weather conditions on the helipad (wind, pressure, humidity).

Before initial approach, a patented special algorithm can calculate and suggest to the pilot the best approach path, taking in consideration the weather conditions on the helipad.

During final approach, the algorithm provides precision lateral and vertical alignment relative to the desired approach path and uplink it in real-time to the helicopter through the ADS-B transponder.

The pilot controls the aircraft so that the approach indicator remains centered on the display to ensure that the aircraft is following the desired approach path.

Ground Station Modules	<ul style="list-style-type: none"> • ADS-B Receiver • ADS-B Transmitter • GNSS Receiver • Control Unit • Power Management Unit • Air Conditioning Unit (option) 	Electrical characteristics	<ul style="list-style-type: none"> • Power Supply: 110-240 VAC, 50/60 Hz • Power consumption: <350 W
Radio Interface	<ul style="list-style-type: none"> • ADS-B input 1090ES/UAT • ADS-B output 1090ES/UAT 	Signal Interface	<ul style="list-style-type: none"> • Data input / output via RS-232, Ethernet, RS-422 NMEA, USB
Alarms (Local/ Remote)	<ul style="list-style-type: none"> • Power Fail • System fail 	Environmental	<ul style="list-style-type: none"> • Operating temp: -40°C / +70°C • Humidity: 10-90% • Enclosure: IP54 (complying to EN 60529)
Physical characteristics	<ul style="list-style-type: none"> • Aluminium case with marine treatment and polyurethane; painting on polyester primer • Dimensions: 600x600x750 mm • Weight: 50 kg 	Equipment interface	<ul style="list-style-type: none"> • GNSS Antenna • ADS-B Antenna • Weather Station
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