

HELICOPTERS DIVISION

AW189 RESCUE SERVICES





LATEST GENERATION CAPABILITIES

THE MISSION WILL NOT WAIT

Belonging to the AWFamily of products, the AW189 is designed for long range, all-weather SAR and MEDEVAC missions even in icing conditions, with advanced avionics and rapid start up.

The aircraft benefits from an industry-leading 50 minutes 'dry-run' capability on the main gearbox. Damage tolerance, redundant systems, energy absorbing landing gear, fuselage and seats ensure unparalleled safety and survivability.

The AW189 features a low workload fully integrated glass cockpit, comprehensive sensor options and spacious constant section cabin equipped to ensure operational capability in the most challenging conditions. The AW189, equipped with new Safran Aneto-1K engine, will extend the range of operations of the aircraft to high altitude and high temperature conditions.





THE DIGITAL REVOLUTION

Using advanced in-house developed avionics and systems, the AW189 SAR cabin and cockpit are integrated to provide a single digital environment. This enables more efficient reliable information management and reduced crew workload resulting in greater mission capability and effectiveness.

The advanced SAR open-architecture avionics suite includes:

- Search Mode and Patterns
 - Modes: Transition Down, Transition Down to Hover, Transition Up, Mark On target, Winchman Trim
 - 5 Search Patterns: Expanding Square, Multi sector, Creeping line, Parallel and Expanding line, a new capability that only AW189 offers today on the market
 - · Real time "Preview" of each search patterns
- "Rendez-vous" functions on Moving Waypoints
 - Direct intercept, pilot defined intercept, vessel track intercept

SEARCH PATTERN

Hover Point Approach (HPA)

MISSION CONSOLE DISPLAY

Full Mission Equipment Integration with Flight Management System (FMS)

- Full integration of SAR mission Equipment (Digital Map, FLIR, Direction Finder, AIS transponder, Weather Search Radar)
- Up to 20 Moving targets (manual input or acquired by sensors, eg: AIS Transponder, Weather Search Radar and Direction Finder)
- Flight Management Window (FMW)

MARK ON TARGET

- Provides real-time performance on the Multifunction Display
- Obstacle Proximity Lidar System (OPLS)
 - Provides the pilots with the safety clearance from the helicopter and the surrounding obstacles (for example hoisting operation near cliffs).

AW189 SAR provides several other technological features as: SATCOM with flight following, V/UHF AM/FM Tactical radio, HF radio, Direction Finder, AIS Naval Transponder, Internal and external NVG compatibility, Digital Map System, Digital Video Recorder multichannel, ADELT, TCAS II, Full or Limited Ice Protection System (FIPS/LIPS).

MARK ON TARGET







CAPABILITY BEYOND THE NORM

- · Bubble cabin windows
- Fully integrated avionics system, with four 8" x 10" color active matrix liquid crystal displays (AMLCD)
- Weather/Search radar
- Searchlight
- Electro-Optic/Infra-Red (EO/IR) Device
- Taxiing lights
- Swiveling light for rescue hoist (belly mounted)
- Emergency floats (up to Sea State 6 ditching capability)
- · Cargo Hook
- · Heavy duty landing gear
- External Life Rafts
- · External Loudspeaker
- · Extended range fuel tank
- Wide sliding doors
- Up to 30 minutes performance in HOGE
- Rescue hoist/single or dual type
- Rescue hoist camera
- Fully articulated main and tail rotors

PERFORMANCE (ISA, MGW)

AW189

General Electric CT7-2E1 (ISA, SL, 8,300 kg)

3,300 kg) (ISA, SL, 8,300 kg)

AW189K

Safran Aneto-1K

VNE (ISA)

313 km/h (169 kt) **313 km/h** (169 kt)

MAX CRUISE SPEED (SL)

287 km/h (155 kt) **292 km/h** (158 kt)

HIGE (TOP)

3,948 m (12,953 ft) **4,572 m** (15,000 ft)

HOGE (TOP)

2,893 m (9,490 ft) **2,797 m** (9,178 ft)

MAXIMUM RANGE (STD)

1,206 km (651 nm) ⁽¹⁾ **851 km** (460 nm)

MAXIMUM ENDURANCE (STD)

6 h 11 min ⁽¹⁾ 4 h 15 min

 $^{ ext{(1)}}$ No reserve, with "Extended Range" auxiliary fuel tanks capacity



SPACE AND ACCESSIBILITY

The AW189 features the largest cabin in its class and spacious baggage compartment accessible from the passenger cabin in flight as well as from two external doors.

Benefits include:

- Large and flat floor space, with accommodation for two stretchers on the floor (either longitudinally or transversally positioned), mission console and eight or more personnel, guaranteeing easy access to the entire patient's body from both sides
- Accommodation for a full suite of advanced life support equipment with rear storage compartment accessible in flight
- Easy reconfiguration, with fixtures and provisions for a number of self-contained systems including a threestretcher MEDEVAC solution
- Large sliding doors for easy patient entry or egress, both when the helicopter is on ground and during winching operations
- Dual NVG displays mission console with sliding and rotating operator seat complemented by large bubble window for enhanced external visibility
- · Customised floor protection solutions (Sea Tray tub).





CABIN VOLUME 11.20 m³ (395.5 ft³)

BAGGAGE VOLUME 2.40 m³ (85.0 ft³)

CAPACITY Crew 1 to 2

Passengers up to 19

AW189 CHARACTERISTICS

Weights (MTOW)

| Max gross weight | 8,300 kg | 18,298 lb |
|---------------------------|----------|-----------|
| Optional gross weight (1) | 8,600 kg | 18,960 lb |

Propulsion

2 x General Electric CT7-2E1 Turboshafts with FADEC (2,000 shp class each) and 1 x Safran e-APU (60 kW)

or

2 x Safran Aneto-1K Turboshafts with FADEC (2,500 shp class each) and 1 x Safran e-APU (60 kW)

Engine Ratings

GENERAL ELECTRIC CT7-2E1

| Take off power (5 min) | 2x1,479 kW | 2x1,983 shp |
|--------------------------|------------|-------------|
| Maximum Continuous Power | 2x1,395 kW | 2x1,870 shp |
| | | |

SAFRAN ANETO-1K

| Take off power (5 min) | 2 x 1,905 kW | 2 x 2,553 shp |
|--------------------------|--------------|---------------|
| Maximum Continuous Power | 2 x 1,807 kW | 2 x 2,422 shp |

Capacity

| Crew | 1-2 |
|------------|--------------------------------|
| Passengers | Up to 19 (16 for OGP standard) |

Dimensions

| Overall length ⁽²⁾ | 17.57 m | 57 ft 8 in |
|-------------------------------|---------|-------------|
| Overall height ⁽²⁾ | 5.07 m | 16 ft 7 in |
| Rotor diameter | 14.60 m | 47 ft 11 in |

⁽¹⁾ Max take-off weight for AW189K version



⁽²⁾ Rotors turning



Leonardo Helicopters is making significant changes to the provision of its Customer Support and Training services. Leonardo Helicopters has launched a company wide "TeamUp" initiative spanning the entire breadth of the Support and Training delivery activity.



SUPPORT SOLUTIONS

The Leonardo Helicopters Customer Support & Training worldwide network delivers an extensive range of support solutions that are tailored to meet the Customers' unique requirements ranging from routine spares & repairs, component availability solutions and frontline manpower support through to fully Integrated Operational Support solutions.

TRAINING SOLUTIONS

Leonardo Helicopters designs, develops and delivers integrated training solutions and services for our helicopters in the live and virtual training domains, from type conversion through to full operational and mission capability.

ADVANCED SERVICES

Leonardo Helicopters continues to focus and improve the Customer's experience, leveraging on innovation and latest technology, to deliver the best services and solutions in its class. Skyflight Mobile and Heliwise represent our key advanced services, which provide Customers with cuttingedge solutions to perform flight planning activities and HUMS data analysis.



OUR MOBILE APPS - STAY TUNED!







AW Training



Heliwise



Skyflight Mobile

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