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, allweather SAR and MEDEVAC missions even in icing conditions, with advanced avionics and rapid start up.

The aircraft benefits from an industryleading 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
- Hover Point Approach (HPA)

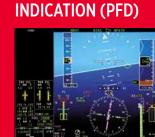
#### MISSION CONSOLE DISPLAY





SEARCH PATTERN

PREVIEW



MARK ON TARGET

## MARK ON TARGET PREVIEW (MFD)





- 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)
  - 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).





#### 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



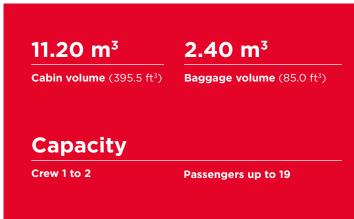
### SPACE AND ACCESSIBILITY

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).





#### CHARACTERISTICS

#### WEIGHTS (MTOW)

<ul> <li>Max gross weight</li> </ul>	8,300 kg	18,298 lb
<ul> <li>Optional gross weight <sup>(1)</sup></li> </ul>	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

<ul> <li>Take off power (5 min)</li> </ul>	2x1,479 kW	2x1,983 shp			
<ul> <li>Maximum Continuous Power</li> </ul>	2x1,395 kW	2x1,870 shp			
Safran Aneto-1K					
<ul> <li>Take-off power (5 min)</li> </ul>	2 x 1,905 kW	2 x 2,553 shp			
Maximum Continuous Power					

#### CAPACITY

Crew 1-2

> Passengers Up to 19 (16 for OGP standard)

#### DIMENSIONS

>	Overall length <sup>(2)</sup>	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

<sup>(1)</sup> Max take-off weight for AW189K version
<sup>(2)</sup> Rotors turning





Leonardo Helicopters is making significant changes to the provision of its Customer Support and Training services. Leonardo Helicopters has launched a companywide "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 cutting-edge solutions to perform flight planning activities and HUMS data analysis.



#### OUR MOBILE APPS - STAY TUNED!





AW TeamUP





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