

LEONARDO HELICOPTERS

# AW169

**Emergency Medical Services** 





## NEXT GENERATION VERSATILITY

## A TRUSTED PARTNER IN SAVING LIVES

The AW169 is the latest generation 5 tonne class helicopter belonging to the AWFamily of products, together with AW139 and AW189. Designed around the patient's needs, the AW169 is ideally suited to perform life-saving primary and secondary missions rescue services. With its leading-edge open-architecture avionics, a voluminous cabin, the best-in-class PC1 CAT. A performances and unique capabilities - such as the Auxiliary Power Unit (APU) Mode, the AW169 guarantees a rapid emergency response for both longdistance inter-hospital transport and Emergency Medical Services (EMS) operations, ensuring air medical professionals to be there when it counts the most, providing the patient with the best care.



### **DESIGNED AROUND SAFETY**

The AW169 meets the most stringent regulatory and operating safety standards (EASA & FAA), such as structural crashworthiness integral to the design of the airframe, fuel system and seats, including also full certification for bird strike resistance. In addition, the AW169 design includes features aimed at increasing safety of all occupants, such as a unique-in-class fully tested and exploitable 33 min `run-dry' capability for the main gearbox.

The Auxiliary Power Unit (APU) Mode, by maintaining left engine on idle, ensures continued operation of electrical system, avionics, environmental control system and medical devices, maintaining rotors stopped and without any limitation in time. This helps increasing operational safety while AW169 is on ground (i.e. during rendez-vous with ground ambulances).

Its full glass cockpit design, including latest generation advanced situational awareness technologies (HTAWS, TCAS II, ADS-B Out), helps reducing the crew workload. Taking also advantage of considerable One Engine Inoperative (OEI), granting up to 2 minutes 30 seconds at highest engine rating and providing no height loss also during hoisting operations, the AW169 grants maximum safety even in critical environmental conditions.

#### **READY FOR MISSION**

Typical EMS mission completion comprises:

- → Transversal or longitudinal stretcher in the cabin
- $\rightarrow$  Up to 4 crashworthy foldable seats with separate four point safety belts
- → Swiveling and tracking seats for longitudinal layout
- $\rightarrow$  2 crashworthy seats or furnishing rack in the rear cabin bay
- → Medical Rack
- → Oxygen supply cabinet and outlets
- → Environmental Control System Air Conditioning.

Further available options comprise a wide range of communication system, searchlight, external hoist system, direction finder, cargo hook system, integrated life rafts and floatation system.





## **CAPABILITY BEYOND THE NORM**

- → Superior performance in CAT A PC 1 operations
- → Full vertical CAT. A PC1 procedure
- → Spacious and bright passenger cabin
- Maximum cabin accessibility, with 65 cm ground clearance, simplifying patient's boarding
- Widest doors, 1.6 m width, allowing transversal stretcher loading also during hoisting operations
- → High ground clearance of main and tail rotors for unmatched safety level during the boarding phase.



#### PERFORMANCE

MAX CRUISE SPEED (@5,000 FT, ISA, MGW, MCP)	267 km/h (144 kts)
HOGE CEILING (ISA, MGW, TOP)	4,075 m (13,368 ft)
HIGE CEILING (ISA, MGW, TOP)	4,572 m (15,000 ft)
MAX RANGE (@5,000 FT, ISA, MGW)	785 km (424 nm)
MAX ENDURANCE (@5,000, FT, ISA, MGW)	4 h 14 min



## A FLEXIBLE CABIN SPACE

The AW169 boasts the largest cabin in its class, offering a versatile full EMS interior featuring the accommodation for up to 2 stretchers either longitudinally or transversally. The widest sliding doors facilitate the patient loading/unloading and hoisting operations involving stretchered patients, granting the possibility of a direct transversal loading of the stretcher into the cabin, reducing any possible risk or endangering maneuver. The cabin provides a real "flying hospital" environment, ensuring the medical crew entire access to the whole patient body and offering space for a full suite of the most advanced life-support equipment. In addition to the cabin, a large dedicated baggage compartment is available to store additional stretchers and loose equipment.

BAGGAGE VOLUME	1.40 m <sup>3</sup> (49.44 ft <sup>3</sup> )	
CAPACITY	Crew 1 to 2 pilots	
	Up to 2 stretchers + Up to 5 medical attendants	
CABIN VOLUME	6.30 m <sup>3</sup> (222.5 ft <sup>3</sup> )	



## **AW169 CHARACTERISTICS**

#### WEIGHTS (MGW)

_	Max Gross Weight	4,600 kg	10,141 lb
	Increased gross weight <sup>1</sup>	4,800 kg	10,582 lb

PROPULSION

Powerplant: 2 x Pratt & Whitney Canada PW210A1 Turboshafts with FADEC



#### DIMENSIONS

Overall length <sup>2</sup>	14.65 m	48 ft 01 in
Overall height <sup>2</sup>	4.50 m	14 ft 09 in
Rotor diameter	12.12 m	39 ft 09 in

(1) Available as a kit (2) Rotors turning

Leonardo Helicopters' Customer Support & Training team delivers efficient logistics and maintenance to boost helicopter availability and reduce lifecycle costs. Our 24/7 global network ensures reliable support for operators worldwide. Through Training Academies and a global network, we offer tailored programs for flight crews, operators, ground staff and maintainers, providing optimized after-sales support and solutions.



## SUPPORT SOLUTIONS

Leonardo Helicopters provides global, continuous support through an extensive MR&O network and field service reps at both our facilities and customer sites.

Our flexible Service Plans are tailored to meet specific needs, covering components, labor, and fixed-cost-per-flight-hour options with guaranteed service levels. The 24/7 Fleet Operations Centre (FOC) offers technical and logistical support for fleets worldwide.

Customers can access a full range of services, from spare parts and repairs to maintenance and advanced solutions, either individually or through integrated support. We ensure comprehensive material logistics and helicopter availability.

## **TRAINING & SIMULATION SOLUTIONS**

We provide a comprehensive training system with advanced synthetic training devices and a variety of courses for aircrew, rear crew and ground crew. Customers benefit from a 360° program combining live and virtual classrooms, practical training, in-flight activities, and inhouse devices, guided by expert instructors. Using AI for real-time data analysis, we offer personalized,

adaptive learning paths that improve students ability to handle diverse scenarios. Our expanding simulation capabilities include in-house developed devices like MITHOS, for realistic hoist operations, which is now connected with Full Flight Simulators (FFS) so that pilot and hoist operator can conduct mission training together, communicating and coordinating actions as if they are operating the same helicopter.

## **DIGITAL SERVICES**

We rely on flight data analysis, mission support and maintenance predictability as key elements of our strategy to develop value-added services for customers. The company offers a wide range of digital services to support the global fleet, including real-time technical assistance, distance learning, Health Usage Monitoring Systems (HUMS) and customized "turn-key" solutions.



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