



LEONARDO SHOWCASES AW249 HELICOPTER NEXT GEN DESIGN AND CAPABILITIES

News / Manufacturer



AW249 next generation exploration and escort helicopter had its international public premiere at Eurosatory during an official ceremony attended by representatives from industry, Italian Defence and international delegations. The result of the strong collaboration between the Italian Ministry of Defence and Leonardo, the AW249 (designated AH-249A NEES - Nuovo Elicottero da Esplorazione e Scorta – known as the ‘Fenice’) is the only Western clean-sheet combat helicopter design, in development to meet stringent emerging operational requirements for the next 30+ years. It leverages capabilities and technologies not available elsewhere today, uniquely and ideally bridging a further gradual evolution of military vertical lift.

Lorenzo Mariani, Co-General Manager of Leonardo, said: “The AW249 epitomises the key winning factors and enablers we’ve identified in our defence and security strategy: digital and with a strong use of AI technologies, connected in a multi-domain/net-centric scenario, cyber-protected, with great autonomy, and capable of collaborative operations with remotely piloted systems. All of this is fully embedded into an advanced system leveraging the very best of our competitive position in the rotorcraft and airborne electronics field. This is why we also believe this is a sector we can

contribute to a stronger coordinated effort in Europe. We're confident the AW249's characteristics and possibilities represent a highly competitive value proposition also for the international market."

Gian Piero Cutillo, Managing Director of Leonardo Helicopters commented: "With the AW249 we've reached the top, and possibly even pushed the boundaries beyond expectations, in our military rotorcraft know-how. We've demonstrated we can bring all new technologies and mission capabilities forward, making tomorrow possible today to the benefit of our military partner. The collaboration with the Italian Army, its forward-thinking guidance and clear requirements were fundamental for this endeavour. I'd like to thank the Italian Defence Authorities for their strong support."

To manage a rapidly evolving scenario, the AW249 features a complete open architecture with significant further growth and system/capability adaptation to respond to the demanding market requirements. In addition to high performance (speed, range, power margin and payload, Hot&High conditions, manoeuvrability for unmatched nap-of-the-earth flight), core to the AW249 is its ability to be fully integrated and interoperable in the modern multi-domain battlefield (air-land-sea-space-cyber). The AW249 features an advanced large area display human-machine-interface and touch screen/gesture recognition devices in the tandem-seating cockpit and a highly sophisticated Leonardo-developed Battle Management System. Displays and a modern pilot helmet enable the crew to rapidly access critical information on flight, navigation and the mission provided by multiple sensing and advanced connectivity.

The AW249 can perform a variety of missions including aerial escort, close air support, close combat attack and air interdiction. The helicopter can also act as the information acquisition element of a C4 system (ISTAR), using the surveillance systems (either its own or the ones of cooperating units) to scan the territory, identify ground units (both friend and foe) for its own use or to disseminate the information through a secure channel to the Command & Control Centre. Therefore, the AW249 best leverages the advanced crewed-Uncrewed teaming opportunities. Powerful engines enable operations in the most extreme conditions with shipboard operational capability designed in from the start. The AW249 is equipped with a flexible weapon system that includes guided and unguided 70mm rockets, air-to-air infrared guided missiles, and air-to-ground radio frequency or fibre optic guided missiles in addition to a 20mm 3-barrell Gatling gun. Outstanding survivability leverages on an advanced Integrated Defensive Aids Suite (IDAS), together with armoured seats and ballistic tolerant fuel tanks, crashworthiness and low detectability and in addition to the superior situational awareness delivered by its navigation and sensor-fusion ability. The AW249 is being developed also with digital simulation capabilities and a state-of-the-art technical support and training service approach in mind, benefitting from high fidelity mission simulation and virtual reality and prescriptive maintenance via data gathering and analysis, among others.

With a maximum take-off weight of 8.3 ton, the AW249 is being developed to replace the Italian Army's AW129 fleet which is nearing the end of its life-cycle. An AW249 prototype carried out its maiden flight in summer 2022. Four prototypes have been built since then, with two flying aircraft involved in performance, system integration and payload testing and two more now completed and to start testing soon. The production contract is expected soon, with deliveries to the Italian Army to begin in 2027. The AW249 is available for the export market thanks to its outstanding capabilities and modern design.

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