

July 2016

Leonardo-Finmeccanica: AW159

The AW159 is a purpose designed fully marinised military helicopter benefiting from the development of the Super Lynx 300 and optimised for land, maritime and littoral operating environments. The AW159 provides significantly greater payload than its predecessor, new engines and advanced sensors, communications and data management systems making it an ideal naval and utility platform to meet a wide range of requirements

The all new airframe incorporates new features such as monolithic structural panels to reduce weight and parts count, while the airframe has also been designed from the outset to provide a weight growth capability during the service life of the aircraft. The aircraft has been designed from the outset with a mass growth provision to allow incremental cost-effective capability upgrades from the In Service Date Maximum All Up Mass (MAUM) of 5790 kg through to an Out of Service Date MAUM of 6250 kg. The AW159 has a comprehensive and highly capable integrated avionics suite, enabling advanced navigation, communication, theatre integration and stores management functionality. The mission sensor options include a state-of-the-art radar, active dipping sonar, electro-optical imaging, electronic surveillance measures and an integrated self-defence capability. The crew data will be presented on four large configurable cockpit displays giving improved situational awareness through rapid gathering and analysis of tactical information. The AW159 has a semi-rigid rotor head which gives it high agility and the same legendary ship operating capabilities of the Lynx helicopter. It is also fitted with composite rotor blades utilising the same technology that enabled the Lynx to break the world helicopter speed record. The AW159 is powered by a pair of LHTEC CTS800-4N engines, each providing up to 1,361 shp, which gives the aircraft exceptional performance, even in hot and high environments. The engine installation also incorporates exhausts with built in IR suppression to provide increased survivability.

The AW159 is offered with a range of weapons to provide both an offensive and self-protection capability including air-to-surface missiles, torpedoes, depth charges and a pintle mounted General Purpose Machine Gun or M3M Heavy Machine Guns (HMG).

The UK MoD is receiving 62 AW159s including 34 for the British Army and 28 for the Royal Navy for its Surface Combatant Maritime Rotorcraft Capability. The British Army and Royal Navy AW159, designated the Wildcat, have a common fully marinised airframe with provisions for a range of mission and role equipment to enable it to perform land, littoral and maritime roles. The AW159 has also been chosen by the Republic of Korea Navy and the Philippine Navy.

The AW159 WIST (Wildcat Integrated Support and Training) comprehensive support programme for the UK MoD transfers risk to industry through the concept of Integrated Operational Support with warranted direct operating costs and maintenance man-hour guarantees, reducing the through life support costs for the customer.