



AgustaWestland GrandNew



**LEONARDO**  
HELICOPTERS



**AW109**  
GRAND NEW

## SEE FURTHER. GO ANYWHERE

### MEETING OPERATIONAL DEMANDS

- Powerful but environmentally aware - top performance with low environmental impact
- Safety by design: cocoon-type high strength airframe and crash resistant systems
- Automatic navigation from departure to approach
- Glass-cockpit for reduced crew workload and excellent external visibility
- Improved pilot situational awareness for safer operations





## NEW AVIONICS FOR NEW CAPABILITY

Single pilot IFR; dual control cockpit configuration, based on a full digital avionics system architecture.

## COMPLIANCE WITH NEXT GENERATION REQUIREMENTS

The GrandNew's breakthrough avionics suite is fully compliant with CNS (Communication Navigation and Surveillance) requirements, through RNAV (Area Navigation)/RNP (Required Navigation Performance) GNSS based navigation and ADS capabilities, thanks to:

- Dual GPS / SBAS (Satellite Based Augmentation System) receivers, dual Air Data System (ADS), dual Attitude and Heading Reference System (AHRS), dual VOR / ILS system, radar altimeter, ADF, and DME
- Mode S Transponder with ADS-B (Automatic Dependent Surveillance - Broadcast) capabilities.

## AUTOMATIC NAVIGATION FROM DEPARTURE TO APPROACH

The GrandNew sets a new benchmark for operational capability; a state-of-the-art navigation suite, based on a dual Flight Management System (FMS) and an advanced digital dual-duplex 4-axis autopilot incorporates advanced 'point in space' navigation and GNSS / SBAS capabilities for lateral and vertical guidance during in-flight procedures, including approach operations to LPV minima.

## GLASS-COCKPIT FOR REDUCED CREW WORKLOAD AND EXCELLENT EXTERNAL VISIBILITY

An ergonomic glass-cockpit integrates FMS, SVS, and HTAWS functions to reduce crew workload, enhancing mission capabilities and safety during all operations. An optional dedicated 8.4" central cockpit display increases situational awareness and allows the pilot to monitor and implement systems such as:

- Digital Map System
- Enhanced Vision System
- FLIR (Forward Looking Infra Red)
- Cargo hook cameras.

## VISION SYSTEMS: A NEW LEVEL OF SITUATIONAL AWARENESS



### FULL GLASS COCKPIT

- Fully integrated avionics
- 4-axis digital autopilot

### SYNTETIC VISION SYSTEM (SVS) / HIGHWAY IN THE SKY (HITS)

- Shows a realistic view of the surrounding topography
- Provides terrain and obstacle awareness, even in low visibility flight conditions (e.g. clouds, bad weather, night-time).
- Provides three dimensional guidance along the defined flight plan.

### HELICOPTER TERRAIN AWARENESS AND WARNING SYSTEM (HTAWS)

- The detailed internal terrain map provides situational awareness, dramatically increasing safety
- Terrain Display is available on PFD and MFD alerting the pilot to hazardous flight or approach conditions.

### ENHANCED VISION SYSTEM (EVS)

- EVS enhances day / night operational safety and situational awareness where visibility is limited
- See through darkness, smoke, smog, dust, light fog as in a VFR flight.

## MULTIROLE BY NATURE

### CORPORATE / VIP

#### Extending your comfort

Passengers will experience the smoothest ride and the highest levels of comfort, thanks to GrandNew's low noise, low vibration and spacious cabin. High safety standards are ensured by crashworthy seats, airframe and fuel tanks, and by excellent OEI flying capabilities.

### EMS / SAR

#### Rapid intervention, efficient response

The GrandNew design combines a state-of-the-art avionics suite, excellent external visibility and a flexible cabin arrangement to ensure successful completion of any EMS mission. Top class performance and unrivalled situational awareness enables operations in the most severe conditions, including in high altitudes and in harsh weather.

### OFFSHORE / PASSENGER TRANSPORT

#### Productivity at the highest level

The GrandNew can be configured to meet the demanding safety standards required for offshore operations. Unique Cat. A Class 1 performance ensures safe operations even at high temperatures. High cruise speed and the capacity for up to 7 passengers in a new interior, offer the lowest in class fuel burn per pax/nm, contributing to outstanding operating economics.

### LAW ENFORCEMENT / BORDER PATROL

#### The finest advantage

The GrandNew is the perfect solution for law enforcement missions, combining superior manoeuvrability with an extensive state-of-the-art mission equipment. The new avionics suite minimises pilot workload and improves external visibility to enable complete mission focus.

### UTILITY

#### Outstanding flexibility in role

Exceptional stability and OEI performance ensure safety, critical for challenging utility roles such as aerial filming, HPS (Harbour Pilot Shuttle) and offshore wind farm maintenance. With a large, easily accessible modular cabin, the GrandNew can be configured to meet these specialised missions.

## PERFORMANCE

### BEST-IN-CLASS PERFORMANCE

The GrandNew uses powerful turboshaft engines, a streamlined fuselage, new transmission and main rotor technology to provide operators with best-in-class performance, very high maximum cruise speed and unmatched OEI capability.

### MAIN PERFORMANCE CHARACTERISTICS

- New generation powerful PW207C engines with FADEC
- Full VTOL Cat. A Class 1 performance for safe operations
- High HIGE, HOGE capability
- 30 min dry run capable main gear box.



### ENVIRONMENTALLY FRIENDLY AND COST-EFFECTIVE

- The GrandNew is designed for aerodynamic efficiency, low drag and reduced fuel burn, resulting in minimised environmental impact and attractive operating economics
- Noise impact is reduced through the advanced rotor design and optimised GPS-based procedures
- Environmentally aware manufacturing processes
- Low emissions from high-technology powerplant
- Advanced manufacturing technology incorporating composites.

### WORLDWIDE SUPPORT

An evolution of the proven A109 platform, the GrandNew benefits from an extensive global network of customer representatives, technicians and engineers, complemented by repair, overhaul and spares facilities throughout the world. Full Level-B3 flight simulators are available for pilot training and maximised safety.

### GRANDNEW CHARACTERISTICS

Max Take-Off Weight	3,175 kg	7,000 lb
Powerplant	2 x Pratt & Whitney Canada PW207C	
Power Rating - AEO TOP	2 x 548 kW	2 x 735 shp
Cruise Speed	289 km/h	156 kt
Hover IGE	4,750 m	15,600 ft
Hover OGE	3,050 m	10,000 ft
VTOL Category A	950 m	3,100 ft
Service Ceiling	4,880 m	16,000 ft
Maximum Range <sup>(1)</sup>	859 km	464 nm
Maximum Endurance <sup>(1)</sup>	4 hrs 31 min	
Crew / Passengers	1 or 2 pilots and 7 or 6 passengers	

<sup>(1)</sup> at 5000 ft, no reserve, 5-cell fuel system



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