

AW newsletter

Spring 2021

FIRST TH-73A UNVEILED TO US NAVY

Leonardo held a ceremony to unveil the first TH-73A training helicopter to the US Navy at our campus in Philadelphia. The event marks an important milestone in the programme, which will see the TH-73A serve as the Undergraduate Advanced Helicopter Training System for current and future student aviators for the US Navy, US Marine Corps, and US Coast Guard as well as NATO allies.

The TH-73A is based on the IFR variant of the commercial AW119Kx and is replacing the ageing fleet of TH-57B/C Sea Rangers. The total requirement is for 130 aircraft with completion due in 2024. Leonardo was awarded an initial contract valued at \$177 million for 32 aircraft by the US Department of Defense in January 2020. In November 2020, the DoD exercised options for an additional 36 aircraft through a \$171m fixed-price contract.

To support the new fleet, we will be building a comprehensive 100,000 sq ft helicopter support centre. The facility will provide customer support and maintenance services at Whiting Aviation Park, directly across the runway from NAS Whiting Field in Florida where all student helicopter pilots for the Navy, Marines and Coast Guard train along with several NATO allied nations.

The unveiling of the first TH-73A took place under the backdrop of the Stars and Stripes in a ceremony attended by Vice Admiral Kenneth Whitesell, commander of Naval Air Forces and Commander, Naval Air Force U.S. Pacific Fleet; Rear Admiral Gregory Harris, Director of Air Warfare Division (N98); and Captain Holly Shoger, Program Manager of Naval Undergraduate Flight Training Systems Program. Also attending the ceremony was Leonardo Helicopters Managing Director Gian Piero Cutillo and members of local, state and federal elected delegations, including Congressman Donald Norcross and Philadelphia Mayor Jim Kenney.

With a powerful and reliable Pratt & Whitney PT-6 engine, dual safety and hydraulic systems and advanced digital avionics by Genesys Aerosystems, the TH-73A can perform every manoeuvre in the US Navy's training syllabus for seamless transition from basic to advanced operational training.



TH-73A INSTRUCTOR PILOT TRAINING RAMPS UP

The TH-73A programme is gathering speed. With first deliveries of helicopters to the US Navy now under way and initial provisioning of spares delivered, we have also completed the training of 34 US Navy instructor pilots.

The training programme, led by AgustaWestland Philadelphia Corporation (AWPC), has already logged more than 900 hours over a period of just 10 months using just two AWPC-owned aircraft. Amounting to a little less than 50 hours per month per aircraft, these remarkable numbers prove the solid foundation and flexibility of the AW119 platform.

AWPC is responsible for both instructor pilot and currency training. To accomplish that goal, AWPC Part 145 has retrofitted two VFR AW119Kx helicopters in an IFR configuration. Due to the COVID-19 pandemic and restrictions on travel, training has been performed in Florida rather than Philadelphia as originally planned, adding complexity to the programme.

AWPC promptly set up training operations in Crestview, FL dispatching instructor pilots, technicians to perform necessary maintenance on the helicopters, tech reps to support operations, quality personnel, and moving a significant amount of inventory.

As well as the team in Florida, the AWPC Customer Support, Services and Training (CSS&T) team has been providing extensive support from Philadelphia. This includes Product Support Engineering providing technical guidance on any potential engineering issue; Material Dept and the Warehouse forecasting, stocking, shipping and replenishing all the materials to keep the aircraft in service; and Customer Support Management coordinating the effort. There has been particular focus on looking ahead and collecting all expected and future requirements to minimise the impact of any potential issues.

This collective effort resulted in the training being performed completely on schedule, recovering a few delays due to inclement weather; performing entirely Instrument Flight Rules (IFR) operations during days where it wasn't possible to perform according to Visual Flight Rules (VFR); and successfully completing ferry flight missions to and from Corpus Christi Naval Air Station.

The success of this initial training operation represents the perfect way to start our journey serving the US Navy and the success of the entire TH-73A Programme.



PHI REACHES 50,000 FLIGHT HOURS WITH AW139 FLEET

In just over 10 years of service, PHI Aviation has totalled more than 50,000 flight hours with its fleet of AW139s in support of offshore transport missions.

In 2010, PHI first introduced 10 AW139s to service and continues to operate the helicopters in the Gulf of



Mexico, Trinidad, Cyprus and Australia. Backed by an unprecedented combination of service, hard work, innovation and quality partnerships that focus on collaboration, the AW139 will continue to play a leading role with PHI Aviation well into the future.

Recognised industry-wide for the relentless pursuit of safe, reliable helicopter transportation, the company has flown more than 12 million flight hours since its formation in 1949.

Taking on some of the most challenging assignments in aviation, PHI delivers high quality support for offshore energy, search and rescue, government services, onshore mining and marine pilot transfer missions.

With a fleet of more than 200 helicopters spanning across continents, the company offers the highest standards and develops innovative solutions that keep customers flying safely—even in the toughest conditions.

LANDMARK FOR BABCOCK SCANDINAVIAN AIR AMBULANCE'S AW169 FLEET

Babcock Scandinavian Air Ambulance has reached an important milestone with its AW169 fleet exceeding 10,000 flight hours.

Babcock Scandinavian Air Ambulance, part of Babcock International Group, has bases spread across Sweden and Finland, and is Scandinavia's largest air ambulance company.

The company began operations in 2001 with two helicopter bases in Stockholm and Östersund. Since then, several bases with helicopters and aircraft have been added across Sweden. The AW169 entered service with the Air Ambulance service in 2017 and a sixth AW169 was delivered in 2019.

The versatility of the AW169 is demonstrated by its deployment in a wide range of missions including VIP and offshore transport, while it is playing an important role in HEMS operations where lives are on the line every day.

We are proud to be part of Babcock Scandinavian Air Ambulance's success and we congratulate the organisation for achieving such a significant landmark.



A year on from Leonardo's acquisition of the Swiss company Kopter Group, we have welcomed the newest addition to our helicopter product range with the rebranding of the SH09 as the AW09.

The AW09 fits perfectly into our existing portfolio and strengthens our position in the strategically important single-engine market, which continues to be one of the most dynamic segments worldwide.

Featuring next-generation performance, the latest safety standards and advanced technologies, the AW09 demonstrates our commitment to innovation and will pave the way for further advances in vertical flight.

The aircraft will continue to be developed at our Kopter site in Switzerland as part of a wider plan that will see Kopter become a Centre of Competence for new light helicopters and an incubator of new technologies for vertical flight.

Kopter will contribute to the development of new hybrid and electrical propulsion systems and will play an important role in the framework of our strategic vision: Be Tomorrow - Leonardo 2030.

Meanwhile, the AW09 P3 prototype has now logged more than 50 hours in its new configuration with the next prototype PS4 scheduled to fly later this year followed by PS5. The AW09 offers increased modularity, modern electronic systems and built-in connectivity combined with the largest cabin and cargo hold in its class. It features outstanding flight characteristics including fast cruise speeds and excellent hot-and-high performance as well as a low noise signature.



50 YEARS SINCE MAIDEN FLIGHT OF LYNX

On March 21st 1971, a bright yellow prototype Lynx helicopter took to the skies in Yeovil for the first time as Chief Test Pilot Ron Gellatly piloted XW835 on two short flights lasting 10 and 20 minutes.

On board with him were Deputy Chief Test Pilot Roy Moxam who flew as co-pilot and Flight Test Engineer Dave Gibbings, responsible for instrumentation management, stress data monitoring and back-up observations.

Fifty years on, the enduring capability of the Lynx is still being realised around the world as Leonardo has established a world-leading role in the naval helicopter market. Over those five decades the aircraft continued to evolve to meet the demands of operators on land and at sea with several new variants entering service equipped with ground-breaking technologies.

Nine customers still operate the aircraft today for missions as diverse as anti-surface warfare, anti-submarine warfare, battlefield support, search and rescue, coastal protection, and light utility. Current operators of Lynx variants include the Brazilian Navy, Royal Malaysian Navy, and South African Defence Force.

The Lynx has featured several new technologies over the years including the British Experimental Rotor Programme (BERP) blades that increased both speed and lift, which were later adopted on all Lynx/Super Lynx variants as well as the AW101.

The aircraft achieved some notable firsts too, not least the breaking the world helicopter speed record 35 years ago when G-LYNX reached speeds of 249 mph / 216 kts.

The legacy of the Lynx continues to live on. The AW159 offers customers next-generation capability in this market segment and has proven its value in both land and maritime environments. Half a century on from that first Lynx flight, we're proud that the test programme was the prelude to a remarkable success story for one of the most iconic helicopters ever to enter service.



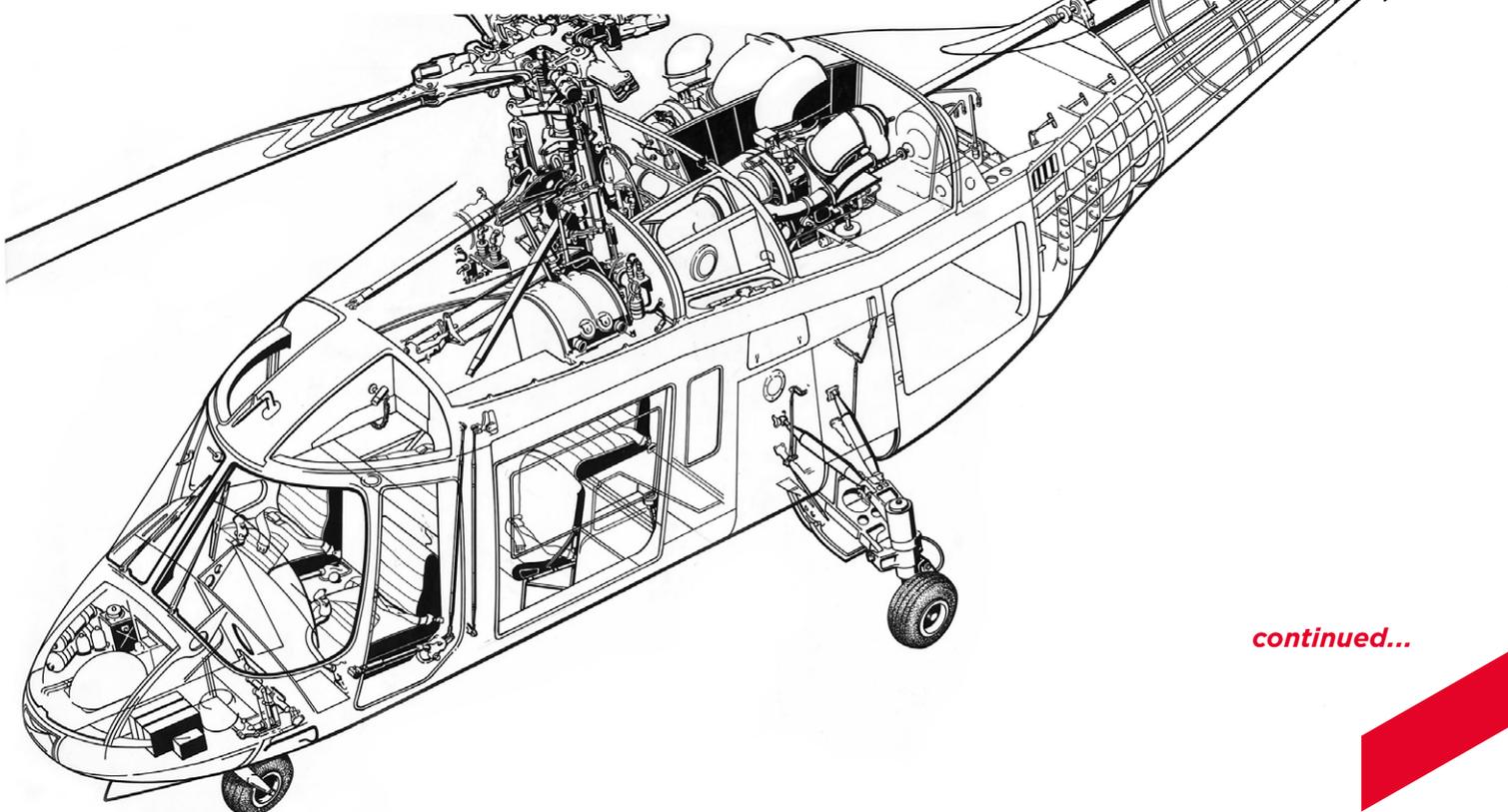
10 THINGS YOU DIDN'T KNOW ABOUT... A109

We are approaching a very important anniversary for the A109: 50 years since its maiden flight. The A109 prototype flew for the first time piloted by Ottorino Lancia on August 4th, 1971. The results were highly encouraging. It was the start of a new era for us and of a remarkable story for the A109, which was set to become a vital part of our product portfolio.



Here's how the A109's journey unfolded...

- 1** On September 19th, 1969 Bruno Lovera, responsible at the time for design and execution of several helicopter models at Agusta S.p.A, sent a request to Domenico Agusta to authorise the construction of three prototypes of a new revolutionary helicopter model, named A109, with spare parts, to complete all the tests needed for certification. It was the right time for the company to make the change from manufacturing licensed products and enter the market as an independent player among the world's eight major helicopters OEMs.
- 2** The A109 was, for the first time, a purely Italian creation with Agusta taking responsibility for certification. It was also a landmark because this was not the domestic certification of an aircraft already certified abroad or a derivative prototype. Another first was that the A109's certification process was performed not only in with the Italian authority but also in parallel with the FAA.



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3 On September 20th, 1971 a report was presented, complete with drawings, for the final version of the A109. This was the foundation of all further development of the helicopter.

4 The A109 was equipped with new and state-of-the-art features, that made it unique such as the four-blade main rotor, of aluminium alloy with a non-structural honeycomb trailing edge with hydraulic dampers to allow high speeds and a drastic reduction of the vibration level, and excellent manoeuvrability. Or the semi-rigid two-blade tail rotor made of metal with a symmetrical air foil section which limited flapping.

5 Another first was the fully retractable gear of the A109 to obtain an optimum aerodynamic design of the fuselage, to absorb loads from landing and taxiing, and enhance mobility on the runway thanks to a steerable nose wheel gear and differential braking on the two wheels. While the main transmission was of a three-stage reducer type which allowed the two engines to be independent so that any eventual failure of one would not compromise the other.



6 On August 28th 1975 the A109 was certified by RAI (Registro Aeronautico Italiano - Italian Aeronautical Register) and a couple of days later it received the Type Certificate by the FAA. It is a very important achievement as this new twin-engine helicopter could then enter the civil market in the USA, taking the company into the world of leaders of rotorcraft OEMs.

7 The certification describes the model as an eight seater (including the pilot) with a total maximum weight of 2,400 kg and an empty weight of 1,400 kg; a main rotor with four fully articulated blades; a semi-rigid two-blade tail rotor; two Allison 250-C20 engines, dual engine power of 692 SHP and single engine power of 400 shp and a VNE speed of 168 knots.



8 The first deliveries started in 1976, to government and para-military customers, both in Italy and abroad. Most of the Italian Armed Forces, from the Italian Army to the Police, the Carabinieri, Guardia di Finanza and the Department of Civil Protection, deployed the A109 in different configurations and for different missions. We produced about 1,000 units of the A109, sold to both to civil and government operators, in more than 50 countries, for different missions and in different versions, developed over the years.

9 The A109 becomes a global icon of the new and modern helicopter and it stars in movies such as in Steven Spielberg's 1993 film Jurassic Park, an A109 with the InGen marking is used to transport a group of scientists to an island off the coast of Costa Rica populated by cloned dinosaurs. In Chuck Russell's 1996 film The Eliminator - Eraser starring Arnold Schwarzenegger, an A109 is used to transport federal agents. In Tarsem Singh's 2000 film The Cell, an A109 is used to transport the comatose serial killer to a research facility. In the 2002 film Kingdom of Fire, an A109 is used by former US soldiers to trap and take down dragons. In the 2004 Film Agent Cody Banks 2 - Destination London, in a cut sequence, the helicopter appears together with an MD 600 while the same helicopter is used in other scenes for filming.

10 The legacy of the A109 was taken over by the A109 Power, which starts a new success story.

AW101 FLEET REACHES 500,000 FLIGHT HOURS

The global fleet of AW101 helicopters has surpassed half a million flight hours, cementing the aircraft's reputation as a platform capable of performing the most demanding missions in the harshest operating conditions.

The milestone reflects the versatile capabilities of the three-engine helicopter, which has exceptional survivability characteristics. There are around 200 aircraft in service across four continents conducting operations ranging from Search and Rescue (SAR) to personnel recovery, tactical troop transport, Anti-Submarine Warfare (ASW) and Anti-Surface Warfare (ASuW).

One leading operator has exceeded 7,500 hours on a single aircraft, while the global reach of the AW101 extends from North America to the Middle East, Europe, Africa, and the Asia-Pacific region. Poland and Norway are among customers with units currently on order.

The AW101 continues to perform vital missions. The Royal Navy, for example, will use its AW101 Merlin Mk2 helicopters to keep watch over the upcoming Carrier Strike Group (CSG) deployment and the surrounding seas, protecting the CSG from enemy submarines, surface vessels, aircraft and missiles. The AW101 Merlin Mk4 is also transporting personnel and supplies as well as performing amphibious air manoeuvres for ship-to-shore operations if required.

Other operators of the AW101 include the Italian Air Force, the Royal Danish Air Force, and the Portuguese Air Force. The Italian Navy has deployed the AW101 in a wide range of roles in recent years, while the Royal Canadian Air Force has operated the CH-149 Cormorant variant since 2001 undertaking thousands of lifesaving SAR missions in the most extreme conditions.



10TH 'SAR QUEEN' SUCCESSFULLY DELIVERED TO NORWAY

Despite the challenges posed by the ongoing Covid-19 pandemic, we have successfully delivered the 10th AW101, and more recently delivered the 11th aircraft. All-Weather Search and Rescue (AWSAR) helicopter to the Norwegian Ministry of Justice and Public Security. The remaining five aircraft out of 16 on order are currently being assembled, integrated and tested at our site in Yeovil.

330 Squadron of the Royal Norwegian Air Force, which operates the helicopter, has completed more than 200 flight hours, largely on SAR operations, including several life-saving missions in the tough Norwegian environment, such as a night-time mountain rescue, an offshore rescue, as well as a challenging emergency transportation.



Delivery in Covid times

On 4th March, a flight crew comprising Senior Test Pilots Lee Evans and Miles Barnett from Leonardo Helicopters (UK), completed the customer delivery while adhering to the most stringent Covid-19 operating procedures.

The crew wore Respiratory Protection Equipment (RPE) and Personal Protective Equipment using their innovative helmet and oxygen mask, developed on-site in Yeovil. It allows the crew to operate the aircraft while closely alongside each other in the cockpit.

This unique technology uses an oxygen mask, which is compatible with existing helmets/visors, and has a built-in microphone for comms, plus a hose, which is connected via a standard filter from an RPE facemask. The crew employed additional procedures specifically for this transit including returning immediately via a chartered aircraft to minimise contact with the Norwegian customer.

During the five-hour flight, the crew used the AW101's full icing clearance and state-of-the-art navigation and flight control systems. Barnett explained: "With this reasonably simple task of delivering the AW101 to our customer in Norway, we utilised a broad selection of its capabilities to make the transit safer, easier, and more efficient. Systems ranged from the all-weather ice protection and comprehensive automatic flight controls to the integrated multi-sensor and cockpit display system. This demonstrated why the AW101 is the perfect solution for the long-range SAR role."

Evans added: "The AW101 NAW SARH is simply the most capable long-range search and rescue helicopter on the planet. In the most extreme conditions, it can utilise the range and on-board suite of integrated 'latest generation' sensors to reach, find, rescue, care for and recover survivors back to safety."

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Ørland has become the second SAR base to begin operating the AW101 'SAR Queen' in Norway following on from Sola which started operations in September 2020. As the AW101 takes over the duties of the much-loved Sea King, 'go-live' of a second base is a significant milestone for the programme. The next and most northerly Base, Banak, is expected to go live at the end of 2021.

Work is now under way to confirm the operational capability and resilience of the support solution. All crews, support staff, tooling, infrastructure, ground-based training aids and spares have been established and tested in readiness for the start of operations. With an intense month of flying now planned, the aircraft, crews and supporting units will be put through their paces and will set the tone for operations ahead.

Operating with a crew of four to six, the AW101 can rescue more than 20 survivors in a single mission while

simultaneously delivering specialised trauma treatment with a dedicated medical team. The wide cargo door and versatile rear ramp enable uncompromised recovery of casualties, stretchers and equipment.

Each aircraft features an advanced SAR equipment package, including Leonardo's multi-mode Osprey Active Electronically Scanned Array (AESA) surveillance radar, which provides 360° coverage. The large cabin doors and rear ramp provide easy access into the 27m³ cabin which has stand-up headroom throughout.

The AW101 Norway Training Centre at Stavanger Sola Airport includes an AW101 Full Flight Simulator which continues to support the training of Norwegian aircrew and is available to other AW101 customers.



AW101 'SAR QUEEN': THE SQUADRON VIEWPOINT

The AW101 'SAR Queen' is transforming the all-weather Search and Rescue (SAR) capability of the Royal Norwegian Air Force. One member of 330 Squadron which operates the aircraft gives a first-hand account of how the AW101 is taking SAR capability to a new level.

I have almost 30 years of SAR experience with the Sea King. Having flown the AW101 for the last two and a half years, I would argue that the helicopter improves SAR operations in every aspect. We all loved the Sea King, but we would never go back because the AW101 is like skipping at least three generations of aircraft development.

In general, it is a superb helicopter for SAR operations. Even in the short period of time we have operated the aircraft so far, we've been able to conduct missions more efficiently and with less risk for the crews.

In our role, where we fly in challenging conditions and close to mountains and other terrain, you must be able to trust the equipment, and the AW101 gives us that trust.

The two most important capabilities in SAR operations are the ability to find what you are looking for effectively and maintaining situational awareness. The AW101 enables us to do both.

The helicopter reduces crew workload which means we can concentrate on flying the mission. The combination of the Osprey radar, mapping and sensors gives us a complete picture of where we are at all times. That should never be underestimated because it is what keeps you safe.

Enhanced performance

The AW101 has improved almost every aspect of Search and Rescue compared with the Sea King. In normal helicopter altitudes below 2,000 feet, the AW101 is 20kts faster in normal cruising speed and probably around 30kts when using maximum speed. The speed advantage increases further at altitudes above 2,000 feet, which is a big advantage in the mountainous terrain of Norway.

The SAR equipment carried on board enables us to operate safely in all the different environments, including rough sea hoisting, mountain rescue, waterfalls, glaciers and more. When casualties are on board, the medics have the essential equipment of a hospital emergency room to treat the patients in flight.

The Osprey radar plays a crucial role in our operations too, allowing us to search for and identify small targets over a very wide search area. It effectively gives us two integrated pictures at the same time because we are able to operate two modes simultaneously. This means we can maintain situational awareness while conducting maritime surveillance. It's a great capability to have.

Night-time rescue

One of the first missions with the AW101 was to rescue four climbers stuck on a mountainside at night. Low clouds made the transit into the area difficult. By using the full capacity of the navigation systems, digital maps, radar and autopilot we managed to make a safe transit from above the clouds to the survivors. The hoisting operation was conducted almost without pilot intervention on the controls because of the accuracy of the hover mode under prevailing wind conditions (calm winds).

A step-change in capability

In conclusion, I would say that the AW101 brings us an entirely new level of capability. It is ideally suited to our requirements and we are increasing our hours on the aircraft as we fly more and more missions. We look forward to many more years of successful operations.



EXPLORE THE LEONARDO HELICOPTERS TRAINING ACADEMY NEW COURSES CATALOGUE

We have enriched our training courses which offer students the most comprehensive selection of training services. This enhanced package of courses underlines our commitment to providing outstanding flight and maintenance training enabling customers to achieve the highest level of safety and efficiency in their operations and maintenance with our helicopters.

- ▶ As the world continues its recovery from the Covid-19 pandemic, we have adjusted our services to make access to training easier and more efficient for our customers.
- ▶ In response to these unprecedented times, Leonardo Training Academy has invested in a secure and safer tomorrow, creating a new Learning Platform, remaining focused on our customers' needs. AW Live Training allows students to join live, instructor-led training sessions benefiting from real-time interaction and collaboration wherever they are located. This service is available both via web browser and in the AWTraining application.
- ▶ We offer an extensive programme fully dedicated to HEMS Operational Training, including support for technical crew members, medical crew and ground handling personnel. Here we teach our students an operational philosophy that enhances safety, standards and efficiency to guarantee mission effectiveness.
- ▶ We have introduced a wide range of FAA Training Courses for the AW169 together with a focus on the brand new Training Academy in Philadelphia.

Leonardo Helicopters training courses are designed to exceed regulatory requirements and the most demanding training requirements of operators.

To discover more about our new training courses catalogue, visit:

[LEARN MORE >](#)



SUCCESSFUL EMS DEMONSTRATION TOUR FOR AW109 TREKKER

The AW109 Trekker has completed a successful demonstration tour across the UK and Ireland to highlight the capabilities of the helicopter in the Emergency Medical Services (EMS) role.

Thanks to excellent support from SAF Hélicoptères, we were able to give EMS operators, pilots, charities, and medics hands-on experience of the latest addition to the AW109 family as the aircraft touched down at several bases across the British Isles.

The AW109 Trekker is our new multi-role light twin helicopter which provides the perfect solution for EMS operators in the UK and Ireland. It features class-leading performance, the most advanced safety features, and a robust skid undercarriage design. The helicopter builds on the strong heritage of the AW109 family with more than 1,100 aircraft in service amassing 2.5 million flight hours across the fleet.

EMS operators benefit from the exceptional characteristics of the AW109 Trekker, which include its high cruise speed, efficient take-off and landing profiles and spacious cabin to enhance mission effectiveness.

The smart cabin design allows entire access to the patient, while the AW109 Trekker also embeds cutting-edge technologies including pilot aids such as SVS, HTAWS, and Highway-in-the-Sky. The helicopter is optimised to ensure lowest-cost and efficient operations that reduce environmental emissions.



Read more about the demo tour on the dedicated website:

[LEARN MORE >](#)

SUPPORTING THE UK'S CARRIER STRIKE GROUP DEPLOYMENT

A huge team effort from Customer Support Services & Training (CSS&T) UK came to fruition at the beginning of May as the UK's new aircraft carrier HMS Queen Elizabeth and her Carrier Strike Group sailed for the first time on operational deployment.

The aircraft embarked are Merlin Mk2s in both the traditional Anti-Submarine role and the new Airborne Surveillance and Control configuration with the Thales supplied radar and mission system known as CROWSNEST, which is developed from the system previously fitted to the Sea King Mk7.

Also embarked are the new Merlin Mk4 Intra Theatre Lift helicopters converted in Yeovil from the Merlin Mk3s previously operated by the Royal Air Force; and Wildcat fitted for the first time with the Thales Martlet missile system.

The CSS&T effort to support the deployment has involved many people over the last five years. This has included designing and supplying ground support equipment and technical publications for both maintainers and aircrew, operator training and modification of the aircraft to fit the new systems and capabilities.



During the deployment, the CSS&T team will be working to ensure success by keeping the aircraft flying with spares and technical support through the Integrated Operational Support programmes for Merlin and Wildcat. For the first time Aircraft Services has deployed a Field Service Representative, Connor Flavell, on a Naval exercise. It will be an opportunity for Connor to gain vital first-hand experience of how our aircraft perform.

SECURITY & POLICING FOCUSES ON THE ROAD TO RECOVERY

Resilience, recovery and rebuild were the three key themes at Security & Policing 2021, the annual UK Home Office event, which was held virtually for the first time in March due to ongoing restrictions related to the Covid-19 pandemic.

We had a strong presence at the three-day digital event, which attracted more than 190 industry exhibitors and almost 10,000 registered attendees including 1,700 international participants.

Addressing future challenges in the law enforcement and security arena, the event tackled some of the most pressing issues facing governments and industry professionals ranging from counter-terrorism to border and transport security, cyber threats, major event security and the ongoing need to protect critical national infrastructure.

Leonardo's presence in the virtual 'exhibition hall' presented six different capabilities: Cyber and Border Security; Counter Unmanned Aircraft Systems (C-UAS), Rotary Wing UAS; Radar and Electro-Optics; Law Enforcement and SAR Helicopters; and Services and Training. Over the three days we welcomed more than 500 attendees including the main delegations to our online stand.

Security Services remains an important segment for our products and we highlighted the capabilities of both the AW169 and AW109 Trekker, which are optimised for demanding security applications. We also featured AWHEREO – our Rotary Unmanned Air System (RUAS) – which is a state-of-the-art, dual-use platform capable of operating day and night over land and sea.

We look forward to Security & Policing 2022, scheduled for March next year, when we hope to be able to meet in person again!



THE FUTURE FOR MILITARY HELICOPTERS

How will the direction of the military helicopter market change in the coming years? That was the focus for the annual International Military Helicopter conference, which this year was held virtually due to the Covid-19 pandemic.

Our presence at the three-day conference, organised each year by Defence IQ, included colleagues from both the Helicopters and Electronics Divisions. We presented Leonardo's land and maritime rotary wing capabilities covering the complete portfolio of specialised and dual-use helicopters relevant to military customers, as well as the AWHEREO Unmanned Aircraft System (UAS).

The growing influence of UAS was a key theme of the event and Leonardo was represented on an industry panel entitled 'Translating Concept into Globally Relevant Capabilities'.

You can find out more about our military helicopter capabilities via this dedicated microsite:

[LEARN MORE >](#)

The conference looked in detail at future land helicopter capabilities and some of the main programmes, particularly those from the United States. This included the Future Vertical Lift (FVL) programme to build next-generation military helicopters, such as Future Attack Reconnaissance Aircraft (FARA) and Future Long-Range Assault Aircraft (FLRAA).

Overall, the conference was a valuable opportunity for us to engage with customers and help to shape Leonardo's strategy and future product offerings.



AW609 AC4 NOW IN ITALY

The 4th AW609 (AC4) was shipped to Genoa's harbour in Italy, where it was offloaded to then fly to our headquarters in Cascina Costa.

AC4, fully representative of the final production configuration, was built on the newly established production line in Philadelphia. We welcomed the AC4 in Cascina Costa on March 2nd. The aircraft will be there to leverage on some unique test assets located at Cascina Costa, in order to support the final stage of programme testing ahead of civil certification.

We now have the final production configuration of our tiltrotor both in US and in Italy as activities will proceed in parallel with FAA and EASA.

Furthermore, when appropriate, AC4 will also allow customer-dedicated demonstration activities for European operators and other potential users worldwide, mirroring similar activities to be carried out by aircraft in US for customers in the Americas and other geographies.

The transfer of AC4 to Italy brings the programme to the next market-oriented stage. The industrialization, customer service and training service of the AW609 programme intensifies in Philadelphia through the new training academy and new final assembly hangar.



SATELLITE NAVIGATION FIRST IN ITALY



The goal of making helicopter flight even safer, more efficient and sustainable has moved a step closer thanks to the creation of the first satellite navigation procedures for helicopters in Italy. We've been working in partnership with ENAV, Italy's air navigation service provider, to test and validate Performance Based Navigation (PBN) procedures in the region of Apulia.

PBN will enable operators to make better use of increasingly crowded airspace. It will mean, for example, that passenger transport, Emergency Medical Services (EMS), disaster relief and firefighting missions can be conducted in all weather conditions, both day and night.



The initial route chosen for the tests was between Foggia and Tremiti S. Domino Island, and involved an AW169 operated by Alidaunia, which provides helicopter transport to and from the Tremiti Islands as well as EMS support to the local community.

PBN procedures use advanced satellite navigation and avionics to optimise airspace and improve operational safety by enabling greater navigation, approach and landing precision. PBN can be combined with or replace existing land-based radio navigation systems. The innovative approach could also have a positive impact on emissions and noise through the adoption of dedicated routes and lower fuel consumption.

The Foggia to Tremiti S. Domino Island route is the first in a network that is being developed locally to support the helicopter operations of the regional heliport network called Rete Eliportuale Puglia. The demonstration activity is also the first carried out since Leonardo and ENAV announced a letter of intent in October 2020 to offer services to helicopter operators in the field of advanced instrument navigation.

Leonardo - Società per azioni

Registered Head Office:

Piazza Monte Grappa, 4 - 00195 Rome - Italy

Tel. +39 06 324731 - Fax +39 06 3208621

Leonardo Helicopters

Head Office:

Via Giovanni Agusta, 520 - 21017 Cascina Costa di Samarate - Italy

Tel. +39 0331 229111



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