

Civil Training
Capabilities and Services



INTRODUCTION

Leonardo Helicopters, Original Equipment Manufacturer (OEM) of AgustaWestland products, believes that delivering world class training services and solutions is an essential part of our commitment to supporting our customers in delivering operational success.

Leonardo Helicopters is an established provider of training services and solutions to our customers through the worldwide network of Training Academies and approved Training partners, as well as at customer locations. Delivering upon our commitment to be closer to our customers in a real sense, allowing all operators to have access to world class OEM approved courses and simulation.

As the OEM, Leonardo Helicopters is ideally situated to ensure that our simulation devices and training content contain the most accurate aircraft data and characteristics. Consequently, training on the ground, in simulators or in the air, is of the highest benefit, fidelity and safety.

Leonardo Helicopters remains committed to developing and expanding its training offerings to meet the current and future training needs of all customers.

AIRCREW TRAINING

Leonardo Helicopters provides versatile, high performance, helicopter training. Applications include training aircrew to fly and operate multi-engine helicopters, processing complex operational information at high speeds, often at low level in harsh environments.

Type and Role Conversion:

Leonardo Helicopters is a world leader in rotary wing type and role conversion training, having over 60 years experience of delivering high quality training to aircrew and technicians. The services start by analyzing the training needs and include a wide range of civil certified type training courses along with basic training, refresher training and complete turnkey solutions and services, which may be located at customer sites. Using the latest Level D Full Flight Simulators, Leonardo Helicopters provides comprehensive type, role and operational aircrew training to enhance safety, crew performance, operational efficiency and readiness.

TRAINING CAPABILITIES

Leonardo Helicopters offers a wide range of courses for its Commercial Operators, courses for aircrew, rearcrew, maintainers and supporting staff.

The courses cover all aspects of Helicopter operations from type conversion courses and recurrent training courses through to full crew operational training courses developed to promote crew resource management and ensuring that the whole crew works together to deliver your mission.

Leonardo Helicopters delivers a blend of pre-course distance learning, classroom based instruction and a range of training and simulation devices to ensure that competencies are achieved in the most cost effective and safest manner.



Type Rating Courses :

Leonardo Helicopters Flight Crew Type Rating courses are designed to exceed regulatory requirements and the training requirements of the most demanding helicopter Operators.

Leonardo Helicopter Flight training solutions are designed by experienced pilots and instructional engineers with the deepest knowledge of Leonardo Helicopters features, design characteristics, capabilities and commercial air transportation regulations.

All Type Rating Courses are delivered by highly experienced, fully qualified instructors whose certification process ensure the highest level of knowledge and standardization.

The Leonardo-designed courseware is based on Instructional System Design approach.

Recurrent Courses:

The recurrent courses include ground and flight training. The ground training portion can be delivered by Instructors, via Web Based Learning of CBT (Computer Based Trainer), depending on your needs.

The flight training portion of the course can take place in flight simulator, available through our growing global network of training facilities, and fully prepares for a Proficiency Check.

Advantages of Leonardo Helicopter Division Flight Crew **Type Rating and Recurrent Services:**

- OEM Instructors knowledge and experience;
- Leonardo Helicopters' knowledge of the training device;
- Most Updated OEM Data available at the Leonardo Helicopters' Training Network;

- Mutual benefit and sharing of the OEM techniques as well as operator feedback;
- Lowest cost for you.

SIMULATOR TRAINING SYSTEMS FULL FLIGHT SIMULATOR (FFS) AND FULL MISSION SIMULATOR (FMS)

Leonardo Helicopters' Full Flight Simulators (FFS) and Full Mission Simulators (FMS) are devices capable to fully train aircrews in normal, operational/mission and emergencies conditions.

The FFS is designed in order to meet both civil and military regulation standards. As civil Authority standards, both FAA and EASA CS-FSTD(H) Level D qualifications have been achieved. The design provides high-fidelity the helicopter flight dynamics and handling qualities, other than the complete cockpit instruments and avionics simulation. High performance visual and motion cues provide the aircrew with highly realistic and effective training, reproducing the real flight environment in all weather, light, terrain and operational. The use of high level FFS/FMS, in the modern training programs, allows the significant reduction of live flight training (using the aircraft), with consequent reduction of hazards/risks and associated costs. The FMS provides also the simulation of a/c armament and mission systems in a dynamic tactical environment to fulfil the most demanding military requirements. FFS/FMS are capable to operate in distributed simulation environments (e.g. HLA).



SIMULATOR TRAINING SYSTEMS FLIGHT TRAINING DEVICE (FTD)

The Leonardo Helicopters Flight Training Devices (FTD) have the capability to train the aircrew in normal, operational and emergencies procedures. The Leonardo Helicopters FTD is capable to implement the necessary features to be qualified to all civil and military standard FTD levels, also including specific Customer training requirements. The Leonardo Helicopters FTD features the Leonardo developed flight dynamics, avionics and aircraft software modelling. The FTD is a Fix based device with an open visual system providing very effective training for pilots in the type rating, recurrent and operational training. This device therefore allows to gain credits for VFR and IFR Training and for the majority of malfunctions and emergency scenarios.



SIMULATOR TRAINING SYSTEMS: VIRTUAL INTERACTIVE PROCEDURAL TRAINER (VIPT)

The Virtual Interactive Procedural Trainer reconfigurable (among different Leonardo helicopters types) and deployable cockpit trainer. The device employs advanced graphical visualization techniques to simulate the helicopter cockpit in a virtual environment, where cockpit controls, equipment, systems and components are faithfully reproduced, using interactive graphics and touch screen technology. FirstFlight is a powerful, cost effective procedural and familiarization training tool which allows pilots to learn through practical application. The system enables trainees to rapidly and efficiently get familiar with themselves with cockpit controls and avionics systems, developing procedural proficiency very cost effectively. Additionally, the VIPT can be fitted with the following optional kits: Dual Flight Controls, Digital Control Loading and Advanced Visual System . VIPT training takes advantage also from its capability to be reconfigured among the AW Family and its various cabin layouts, avionics systems and helicopter plants.



MAINTENANCE TRAINING

As the Original Equipment Manufacturer, we have in parallel access to Leonardo product design and systems data. We combine these data with our knowledge and 60 year heritage in Helicopter Maintenance Training to provide the highest effectiveness Maintenance Training Solution.

Leonardo Helicopter Division Training has been the leading manufacturer to embed High Technology training tools in its Maintenance Training courses.

The state of the art technology applied to our range of Maintenance Training courses brings safety and effectiveness of our courses to the next level.

In the latest development the Maintenance Training now features improved practical elements leveraging on two fundamental, in-house-engineered blocks, the Leonardo Helicopters Full Maintenance Training Simulator (MTS) and the Leonardo Helicopters Virtual Maintenance Trainer (VMT) with the aim of providing a highly specialized – effective and competence oriented training.

Leonardo Helicopters Training has implemented VMT in all 139, 169 and 189 Maintenance Training courses to improve the offering. The VMT Simulation environment has a valuable and effective role in maintenance training. The VMT is based on an emulation approach for maintenance training that supports maintenance technicians in developing superior knowledge and skills required to maintain helicopter via the correct application of maintenance procedures and in advanced troubleshooting analysis to correctly diagnose faults. The VMT provides a complete and flexible training environment. The instructor can set up and activate emulated fault conditions. Fault conditions can be investigated and solved by the student who does not wait his trainee time doing and repeating low-value tasks (i.e. unscrew bolts to open panels, etc.) and focusing his efforts on more important and useful activities.

By combining the expertise of Leonardo's highly qualified Practical Training Instructors with the most effective maintenance training devices in the industry we are supporting higher skills acquisition for technicians who are better prepared to safely support your aircraft, furthermore, combining practical training with theory course will drastically reduce the time of training, almost eliminating the need for OJT (On the Job Training) on their return to base.

Leonardo Helicopters technology and range of training aids, together with our top team of highly qualified Instructors allow maintenance engineers to perform in a real helicopter world.

Courses are designed on real life maintenance procedures, combining helicopter and system knowledge with hands on operations.

The unique and unmatched range of Maintenance Training Simulators provide for additional and unrecorded benefits to the maintenance training experience.

VIRTUAL MAINTENANCE TRAINER (VMT/HELISMART)

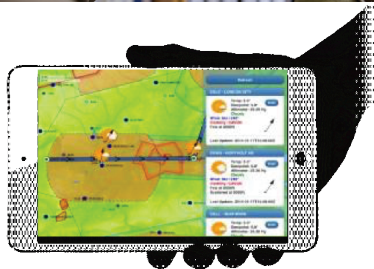
HeliSmart is based on a simulation approach for maintenance training that supports technicians to develop the knowledge and skills required to maintain helicopters, correctly applying maintenance procedures and troubleshooting analysis to diagnose and correct faults. HeliSmart uses advanced 3D graphics to simulate helicopter systems and related maintenance operations in a virtual environment, in a stand-alone or instructor's lead classroom configuration. Within HeliSmart the full helicopter equipment location, systems and components are faithfully reproduced with a complete interactive and coherent simulation of the helicopter systems, avionics and ground equipment as needed to perform the maintenance tasks. It represents an easy to use and a cost-effective training solution particularly suitable for training maintenance engineers. It is also a highly effective aid to familiarisation with the helicopter systems and mechanical structure.



TRAINING & FLIGHT SERVICES SKYFLIGHT WEB SERVICE

As part of the Company vision to «ThinkCustomer» Leonardo Helicopters has launched a companywide Service Excellence initiative covering the entire Support and Training delivery performance.

Skyflight is a Flight Planning Web Service to deliver value without the ownership of specific costs and risks. It has been designed to support Customers in their Flight Planning activities whilst operating with



the AgustaWestland family of products. Customers will be given with aeronautical information, a real-time stream of environmental and meteo data. All these data will be uploaded on the helicopter FMS and used for performance calculations. It is also possible to proceed to a rapid upload and download of the flight on the aircraft system. Skyflight Web Service is accessible through tablet devices by means of a dedicated Skyflight App, designed with a modern and intuitive layout. By using the only touch screen many functions can be performed such as weight and balance, Route planning, Airspace and Terrain collision Warnings, Precise Performance computation (based on flight manual, e.i. fuel flow e CoG), International Flight Plan Report preparation. All data will be available on vector maps that will display also NOTAMs, Meteorological Data (METAR & TAF).

TRAINING & FLIGHT SERVICES DISTANCE LEARNING AW139/AW169/AW189

Leonardo Helicopters is committed to keeping pace with global training technologies and practices, developing world class training, learning technology and simulators, providing our customers with access to high fidelity training, adding real value to organizational effectiveness. Leonardo Helicopters believe that learning is not only for the classroom or just a one-time event – that’s why we firmly believe in Blended Learning - The concept of Blended Learning is based on the idea that learning is a continuous process. Distance Learning fully reflects this philosophy.

Student Benefits: Leonardo Helicopters’ Distance Learning training allows students access to course material in advance, before arriving at one of the Leonardo Helicopters Training Academies or Authorized Training partners. By working through the detailed online content at their own pace, students arrive at their chosen learning center with a solid baseline understanding of the aircraft, its systems, maintenance philosophy, manuals and terminology. Leonardo Helicopters’ Learning Content Management System will

MULTIMEDIA APPROACH BRING YOUR OWN DEVICE FOR TRAINING

Leonardo Helicopters Division Training Academy App “AW Training” is the gateway to allow students access to the helicopter training courses information via their own devices (iOS, Android).



This application will enhance the customers’ learning experience before they even reach the Training Academy classroom. All training notes and files stored during the training will be accessible anywhere, and at any time, on personal devices.

The features offered by Leonardo Helicopters Training are as it follows:

- Multi-language (up to 23 languages available);
- Quick access, download and view course resources;
- View calendar events;
- Upload file (audio, pictures, photo, video, etc.) into private file area;
- Send messages to other course participants;
- Browse and download your private course files;
- View and reply to forum discussions;
- Receive information from instructors (e.g. slides with notes).



monitor students' progress and will allow them to interrupt and start over any lesson. By using Distance Learning as a pre-course requirement, learning objectives can be obtained with a 50% time saving compared to a traditional class. This approach involves significant savings in costs, improved pass rates and most importantly student understanding.

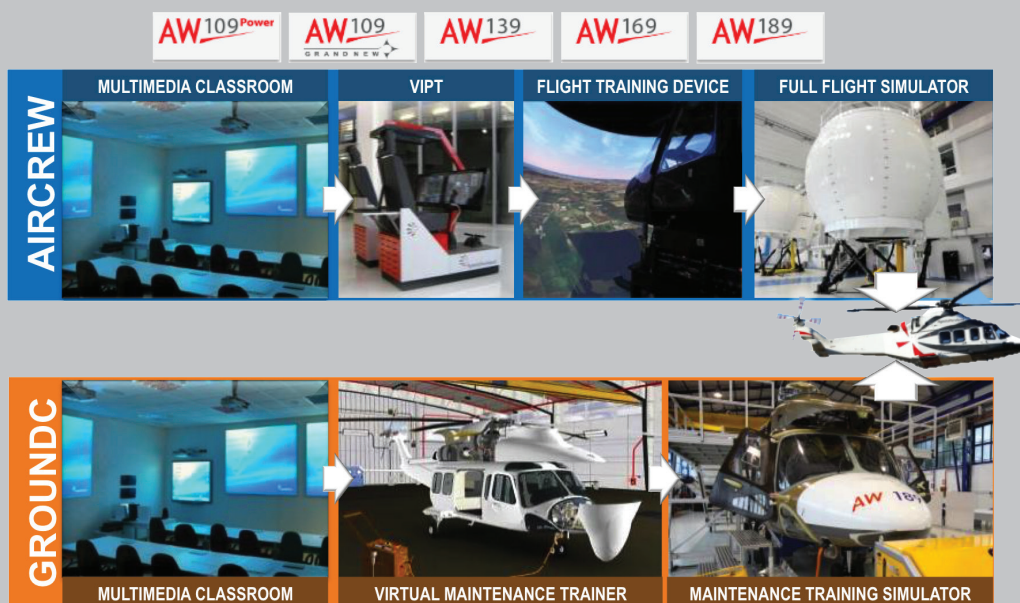


INTEGRATED TRAINING SERVICES & SOLUTIONS

Leonardo Helicopters training is designed for through-life effectiveness from the outset, as a fully integrated accompaniment to long term operational support solutions, including flight/mission planning and logistic support systems.

Advanced multimedia technology is available in the classroom and via web-based learning, with part task trainers and simulators ensuring a cost-effective allocation of training tasks. In particular:

Our customers receive highly effective training solutions, designed to maximize operational performance, safety and effectiveness. This includes full flight simulation to deliver a range of flight and mission training including VIP transport, offshore, emergency and SAR operators.



APPROVALS & CERTIFICATIONS

GENERAL UNI EN 9100:2009 / AS 9100 Rev.C
UNI EN ISO 9001:2008

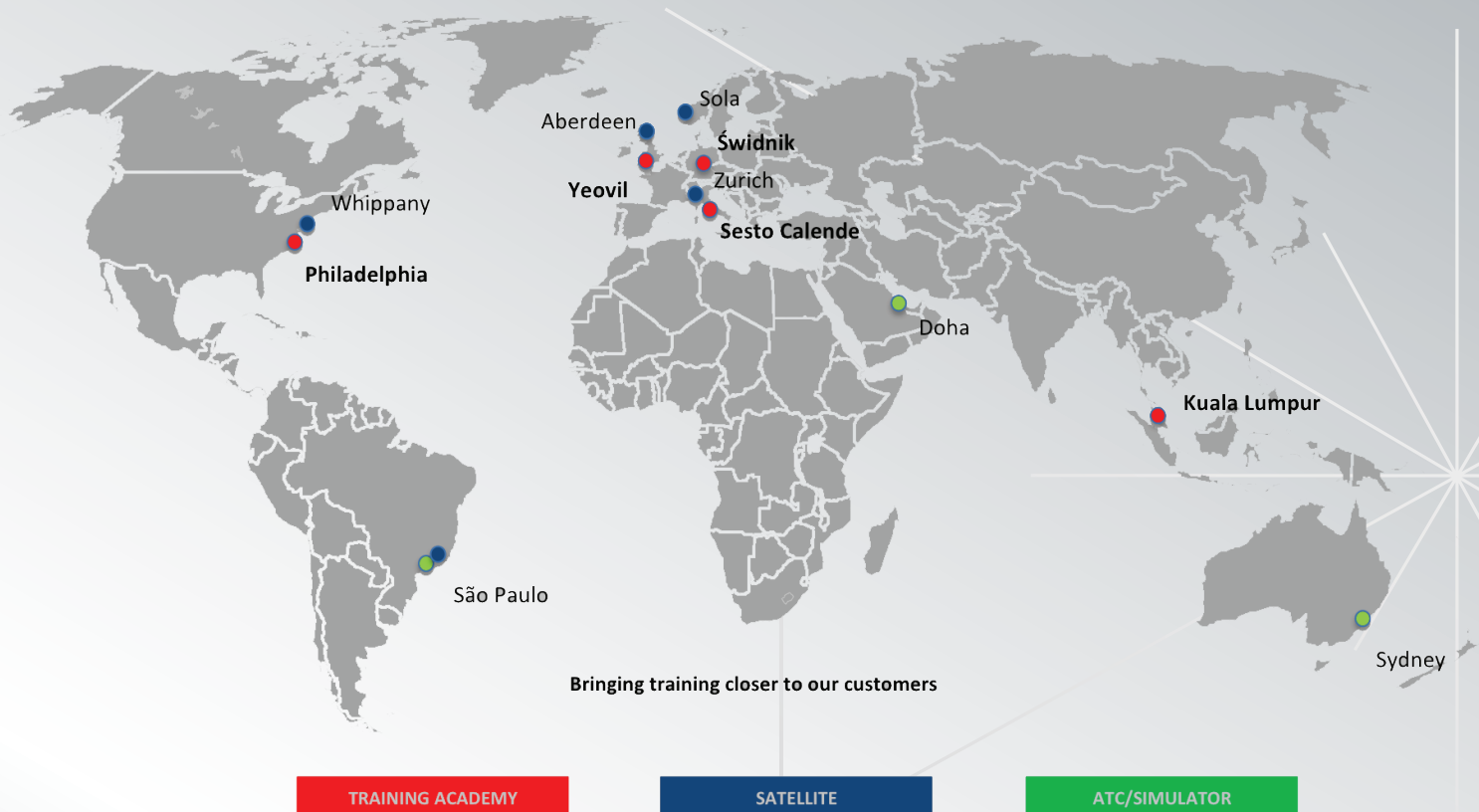
PILOTS Approved Training Organisation (ATO) according to EASA Part-ORA delivering Part-FCL courses
FAA Training Centre according to FAA Part-142 since June 2007 for AB/AW139

SIMULATORS PART-FSTD Lev. D (formerly JAR FSTD-H)
FAA Level D (as per AC120-63) since 2007
FAA Part 60 since 2010

TECHNICIANS EASA Part-147 for Basic and Type Training
AER (EP).P-2147 - Italian MoD MTO Approval

The Training Academy and Rotorsim are also approved by other relevant Aviation Authorities such as Transport Canada, CASA Australia, FATA Russia, Brazil ANAC, Japan JCAB, Hong Kong CAA, Qatar QCAA, OMAN CAA, China CAAC, UAE GCAA, India DGCA and many others.

TRAINING CIVIL NETWORK



TRAINING TARGETS

SAFETY

we have been established to provide training solutions designed to raise the safety of operations and so that our customer operates safely our products

CUSTOMER SATISFACTION

customer needs and expectations are at the heart of our operation

OPERATIONAL EXCELLENCE

enhancing operational effectiveness through courses designed to improve capability, highly qualified instructors, superior customer service team and a first class range of learning technology and facilities

INNOVATION

of the training delivery and learning solutions to maximise learning experience through technology and learning style evolution

WORLDWIDE SERVICES

leveraging on our network of domestic Satellites and ATC complemented by E-learning

Please contact our Training Account Manager to discuss contents, scheduling and pricing at the following web address:
<http://www.leonardocompany.com/customer-support/elicotteri-helicopter/support/directory>



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