



HELICOPTERS

EUROCOPTER SA330 Puma

As a Eurocopter certified Maintenance Center for the SA330 Puma helicopter with in-house capability for all repair and overhaul work we have a diverse client-list, including the Armed Forces of France and Portugal. We are also a Turbomeca certified Maintenance Center for the repair, overhaul and modernization of Turmo III C4 and IVC engines, and for the intermediate maintenance (inspections for up to 500 hours) on Makila engines.

We provide assistance for Eurocopter Puma operators; either at our own premises or at the client's.

Of the many types of modifications in our portfolio, we specialize in the avionics upgrade for the SAR model and the upgrade from the Turmo engine to the Makila.

- SERVICES**
- ▶ P2 / P4 Overhauls of the aircraft structure
 - ▶ Major Repairs
 - ▶ Design and Execution of structural and avionic modernizations
 - ▶ Overhaul of the main rotor head and the tail rotor transmission shaft
 - ▶ Overhaul of all mechanical, hydraulic and electronic components
 - ▶ Main Rotor and Tail Rotor blade repairs, Classes 1 and 2
 - ▶ Dynamic balancing of the rotor

EUROCOPTER Alouette II / III

Our AS319 Alouette helicopter maintenance capability was developed and improved during the 70's & 80's, when a significant number of A/C, both Portuguese and Angolan Air Force aircraft arrived for repairs after having suffered serious damage during operations. This experience has allowed us to develop unparalleled capabilities to overhaul and repair the aircraft. You may count on us as an "Integrated Service Station". All work is carried out in strict compliance with the most recent manufacturer's manuals, using the highest quality components produced by the original (OEM) or other duly certified manufacturers.

- SERVICES**
- ▶ Disassembly/Assembly of the aircraft
 - ▶ Repairs, Re-alignment using a master alignment fixture, Remanufacturing or Replacement of the entire main structure
 - ▶ Overhaul and Testing of the Turbomeca Artouste III engine
 - ▶ Overhaul and Testing of main and tail rotor transmission boxes
 - ▶ Overhaul and Testing of main and tail rotor heads, together with the respective accessories
 - ▶ T1 and T2 inspections
 - ▶ "Grande Visite" (GV) Inspection
 - ▶ Special Inspections and Compliance with technical instructions

AGUSTAWESTLAND EH101

Due to its large experience of more than 38 years on helicopters maintenance, OGMA can also provide support to the AW EH101 Helicopter. This support consists of quality customer and product support management, material support service management, technical support service and aircraft maintenance services.

- CAPABILITIES**
- ▶ Logistic Support
 - ▶ Fleet Management
 - ▶ Engineering
 - ▶ Heavy Maintenance



FACILITIES

Ogma occupies a total area of 400,000 sq.m of which 140,000 sq.m are covered, comprising 11 maintenance hangars (2 of them sized 130x70x18 m), modern manufacturing facilities, a large, well equipped engine overhaul division (with 6 engine test cells) and extensive back shops. Its 3,000 m (10.600 ft) runway and control tower are equipped for around the clock operations by prior permission and facilities may also be accessed from a river pier.

LOCATION

OGMA - Indústria Aeronáutica de Portugal, S.A. is located at Alverca on the west bank of the river Tagus, about 15 Km north of the main International Airport of Lisbon, close to A1 and A9 highways and adjacent to Alverca railway station.

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OGMA
 Aviation Services

DEFENSE AVIATION
 Turning every action into success

DEFENSE AVIATION

As a service provider in the aeronautical Maintenance, Repair and Overhaul (MRO) field, OGMA has extensive experience in defense aviation and specializes in the following military aircraft: Lockheed Martin C-130 / L-100 Hercules, P-3 Orion / L-188 Electra, F-16 Fighting Falcon, EADS CASA C-212 Aviocar, AW EH101, Eurocopter Puma and Alouette, and Dassault-Breguet / Dornier Alpha Jet.

With over 35 years of experience in heavy maintenance of all C-130 / L-100 Hercules and P-3 Orion / L-188 Electra models, our technical capability has been recognized by our many customers, including worldwide Air Forces.

We now also offer life extension programs for the F-16 Fighting Falcon and are currently the only company in the world to carry out three major upgrade programs simultaneously: MLU, Falcon Up and Falcon STAR. The capability to carry out heavy maintenance and updates on the EADS CASA C-212 Aviocar, the Dassault-Breguet / Dornier Alpha Jet, the EH101 and the PUMA, completes our profile.

OGMA is also able to offer the general overhaul of respective components and accessories.

TRANSPORT AIRCRAFT

LOCKHEED MARTIN C-130 / L-100 Hercules

We have been a Lockheed Martin Authorized Service Center for the C-130 Hercules since 1982. During this time we have carried out more than 400 inspections and all types of repairs.

CAPABILITIES

- ▶ **Fleet Management:** Program Management; Engineering; Maintenance and Logistics Support for C-130 / L-100 Hercules fleets
- ▶ **Scheduled Maintenance:** PDM; Structural Inspections and Line Maintenance; SMP 515-C (Lockheed Martin) and Technical Orders (USAF); Technical Instructions (SBS, TCTOs, AD); Sets of Electronic Job Letters
- ▶ **Major Repairs / Emergency Repairs:** Replacement of Rainbow Fittings; Replacement of Sloping Longerons; Replacement of Engine's Truss Mount; Replacement of Main Landing Gear Beam
- ▶ **Aircraft Painting:** Depainting; Sanding; Sealing; Painting according to client specifications; Lettering
- ▶ **Engine Support:** In-house capability for T-56 / 501D engine; for the 54H60 series propellers and for the QEC (Repair, Overhaul, Modification and Test)
- ▶ **Accessories and Components:** Total capability for Repair and Overhaul of all types of accessories including mechanical; fuel; hydraulic; pneumatic; electric; electronic and avionic components

- ▶ **Interior Refurbishment**
- ▶ **Training:** General Course on the C-130 / L-100 aircraft using Computer Based Training (CBT); cockpit; fuel; electric; hydraulic; pneumatic; avionic systems; engine; APU; propeller; engine run-up
- ▶ **Field Work (AOG Team)**
- ▶ **Engineering & Logistics support worldwide**
- ▶ **Fuselage Stretching:** Lengthening the fuselage to C-130-30 / L-100-30 dimensions by inserting two new sections
- ▶ **Engineering Services:**
 - Cockpit Avionic Updates – Support for tactical transport missions
 - Implementation of CNS / ATM (GATM) (FAA and EASA) requirements
 - Auto-Protection Systems
 - Management of Obsolescence
 - Fleet Configuration Control
- ▶ **Individually prepared programs for complete recovery of aircraft to flight status after having been immobilized for prolonged periods of time**

LOCKHEED MARTIN P-3 Orion

We have been a Lockheed Martin Authorized Service Center for the P-3 Orion since 1982.

CAPABILITIES

- ▶ **Scheduled Maintenance:** 3rd level Maintenance (SDLM); PDM; Intermediate Inspections (MTI); Special Inspections (SCI); Structural Inspections; Line Maintenance; Technical Instructions (AFB, AFC, TD, AD)
- ▶ **Large Repairs / Emergency Repairs:** Wing Spar Cap Repairs; Landing Platform Structure Repairs; Detection of Anomalies; Nacelle Repairs (Bird strike); Truss Rib Jackpad Repairs of the main gear. Corrosion Repairs are a speciality
- ▶ **Special Programs:** Replacement of Kapton wiring; Life Extension Programs (LECIIP)
- ▶ **Aircraft Painting:** Depainting; Sanding; Sealing; Painting according to Client specifications; Lettering
- ▶ **Structural life extension (SSI)**
- ▶ **Rewiring**
- ▶ **Avionics Update + Modernization**
- ▶ **Mission System Update + Modernization**
- ▶ **Auto-Protection Systems Update**
- ▶ **Engine:** Total in-house capability for T-56 / 501D engine and for the 54H60 series propellers.

ACCESSORIES AND COMPONENTS

- ▶ **Total capability for Repair and Overhaul of landing gear and all types of accessories, including mechanical, fuel, hydraulic, pneumatic, electric, electronic and avionic components**
- ▶ **Field Work (AOG) Team**
- ▶ **Engineering & Logistics Support worldwide**

EADS CASA C-212 Aviocar

We have extensive experience of the maintenance of EADS CASA Aviocar C-212 (Series 100, 200 and 300) including engines and accessories. Having been dedicated to the maintenance of this type of aircraft for many years we have also carried out major modifications to the original configuration of Portuguese Air Force fleet as well as to a significant number of aircraft belonging to other clients.

SERVICES

- ▶ **Periodic Inspections**
- ▶ **Structural Repairs**
- ▶ **Corrosion Treatment and Control**
- ▶ **Updates**
- ▶ **Aircraft Painting**

FIGHTER AND TRAINER

LOCKHEED MARTIN F-16

As one of the principal companies in the world to carry out Lockheed Martin F-16 Fighting Falcon aircraft life extension programs, we currently have F-16 MLU + Falcon Up + Falcon Star programs underway for the Portuguese Air Force.

We are the only company world-wide to carry out the three programs simultaneously. These modernization programs involve structural, electrical and mechanical modifications aimed at further improving aircraft effectiveness and prolonging its life.

CAPABILITIES

- ▶ **Mid Life Upgrades (MLU)**
- ▶ **Falcon Up**
- ▶ **Falcon Star**

DASSAULT/DORNIER Alpha Jet

We provide a heavy maintenance service for the Alpha Jet subsonic advanced fighter-bomber / trainer and we are the maintenance service provider for the Portuguese Air Force fleet, having technicians available to provide technical assistance to aircraft from other fleets.

SERVICES

- ▶ **2PE Inspections (1000 flight hours) and 3rd Level Inspections (DI) at 10 years or 2000 flight hours**
- ▶ **Modifications to improve aircraft operability and reliability**
 - Installation of an Auto-Protection System, with missile warning equipment and chaff/flare countermeasures
 - Replacement of 1st generation gyroscopic platforms for ring laser gyro inertial platforms for navigation and weapon systems
 - Updating of engine instrumentation
 - Anodizing of components susceptible to corrosion
 - Wing and cell structure Repair and Reinforcement
 - Overhaul & Repair of components and landing gear

