

Proven solutions for the efficient repair and overhaul of military aircraft components.

ABOUT US

At Aerospace Maintenance Solutions, LLC (AMS), we understand it takes more than technical competence to support our customers in their missions to effectively maintain critical aircraft components for their fleets. It takes finding solutions to the additional challenges they face, including lead times, cost, quality, logistics, regulations, long-term sustainment, and other factors impacting their aircraft. Our competencies in these areas are built on a foundation of proven repair, overhaul, and testing processes spanning decades. These processes resulted in returning to service a multitude of military aircraft components for the U.S. Air Force (USAF), other branches of the U.S. military, NATO forces, and other military allies on different continents.

AMS provides military aircraft end users with cost savings solutions by repairing and overhauling many types of aircraft components once considered to be throw-away items. We use the AS9110 "design of repair processes" to gain repair capabilities on components needed by our customers. All new processes at AMS are validated and approved through the AS9110 engineering and design program "first article inspection." Some of these items have no commercially available technical data, while other items may be "sole sourced" to an OEM, or no longer supported at all. AMS services enable the maintenance, repair, and testing required for returning aircraft items to service, thereby effectively fulfilling current and on-going military aircraft sustainment needs.

AMS creates comprehensive engineering and support programs for the aircraft components we service, which include schematics, parts breakdowns, and test procedures to support their ongoing operation. When needed, we identify new replacement parts for legacy aircraft components.



AMS is investing significant resources into its facility to increase MRO capabilities and equipment needed to support the U.S. military, military allies, and aviation operations that support the public safety (e.g., U.S. Border Patrol, search and rescue, firefighting, and emergency medical services.)

AMS's long-term plans include advancing our entrepreneurial culture of high performance and high quality at a time when results and accountability to customers and taxpayers are more important than ever. Our culture's emphasis on entrepreneurship includes valuing new ideas, and the change and growth that follow from implementation of new ideas. We also value flexibility, which we see as necessary to support creativity throughout our organization, including the areas of research and development (R&D).

AMS incorporates a lean, agile structure, to help respond quickly to customer requirements and be cost competitive with OEMs in terms of repair and overhaul services as well as R&D. A devoted staff has helped maintain our extensive history with Lockheed Martin, USAF, and other long-time customers who have been with us since the start of the company. Some MRO capabilities developed for AMS customers are unique, or nearly unique, to AMS.

OUR MISSION

Supporting combat ready aircraft for U.S. military needed to protect the homeland and deter adversaries from aggression through readiness and preparedness. Aircraft we support for the U.S. military includes C-130, CH-47, F-5, F-15, F-16, F/A-18, S-70, UH-1, and UH-60. These platforms represent thousands of aircraft.

Supporting a global network of alliances and joint force military partnerships with repair and overhaul services to sustain fleets of fighters, helicopters, and transports that are the backbone of global security. Support of allied aircraft includes air militaries in Bahrain, Belgium, Brazil, Canada, Chile, Denmark, Greece, Indonesia, Israel, Jordan, Kenya, Morocco, Netherlands, Oman, Poland, Romania, Singapore, Thailand, Turkey, United Arab Emirates, and other countries allied with the U.S. military.

Consistently delivering on technical performance mandates and Quality requirements with affordability and speed to support customers.

Understanding that each ally and customer is unique, so we can address their unique combination of requirements in ways that enable them to accomplish their goals.

Supporting U.S. Border Patrol and the U.S. Department of Homeland Security.

Supporting police, fire, DEA, search-and-rescue, emergency medical services, and public safety operations with repair and overhaul services that match the quality and performance we provide to the U.S. military.



OUR FACILITY

All AMS operations occur within our 21,000 square-foot building in Solon, Ohio. Our measurement equipment is traceable to NIST.

The facility includes many diagnostic tools, calibrated measurement devices, and OEM tests sets. Three-phase power is used for simulating power conditions on the aircraft. A highpower, solid-state frequency converter consists of one 62.5 kVA, 3-phase AC power source. It offers reliable voltage and frequency conversion as well as power monitoring for facilities power and/ or AC power test applications. Input AC power is rectified to DC by a special input power supply section. The **Instrument Shop** is comprised of air data test sets, universal indicator test panels, a vacuum oven, gyroscopic rotor balancers (angle position indicators), transformer ratio simulators, waveform signal generators, tachometers (synchro resolver simulators), and specialized simulators. These and other tools are used to repair and overhaul radio magnetic indicators, horizontal situation indicators, Azimuth indicators, radar indicators, airspeed indicators, air data indicators, Mach number indicators, air data transducers, pitot and static sensors, flight control panels, switching and control panels, altimeters and other components.



The **Mechanical Shop** at the facility provides multiple testing enclosures along with a generator test stand capable of operating to 12,000 RPM at a 100-KVA load. A designated hydraulic test bench provides pressure for pumps, steering units, power flap drives, actuators, servos, and other hydraulic components up to 6,000 PSI at flow rates up to 10 GPM. A higher capacity hydraulic test bench tests pressures up to 10,000 PSI at flows up to 50 GPM. A manual static pressure pump is used to provide up to 12,000 PSI for pressure proof testing. We repair and test many mechanical and electro-mechanical canopy actuators used on fighter jets as well as tail rotor actuators on helicopters. Our Universal Linear Test Bench uses load cells, pneumatic cylinders, and precise measurement tools to measure force, linear distance, degrees of rotation, and travel time of actuators.



The **Electrical and Electronics Shop** has several workstations equipped with dedicated measurement and testing devices. AMS services many types of electronic components with a multitude of frequency, voltage, and current requirements, including bus switching units, generator control units, power switching equipment, flight control electronics, control panels, relays, voltage regulators, controllers, amplifiers, circuit card assemblies and other components.

For power control, power generation, and power supply components, AMS has dynamic Generator Control Unit test

stands. AC and DC load banks test generators under full load capacity and various speed conditions.

A two-axis Rate Table simulates flight conditions for testing, troubleshooting, and repairing gyros and accelerometers. The Rate Table tests horizontal and vertical rates from 0-860 degrees per second, +/- 10Gs of acceleration.

AMS facilities include environmental testing stations that can accommodate temperatures from -320 F to + 400F.



OUR QUALITY

AMS ISO9001 and AS9110 certifications define our work scope as "Design, Maintenance, Repair, and Overhaul of Instrumentation, Electrical/ Electronic System Components, and Mechanical Accessories for the Defense and Commercial Aircraft Industries."

At AMS, the quality of our work is largely the result of a mature quality system and an FAA-approved training program. Our technicians maintain on-going training in technical, regulatory, and human factors topics. Technical training includes IPC-7711/7721 and JSTD 001, Test Equipment Operation, Aircraft Article Familiarization, and Regulatory Agency Fundamentals. Additional training focuses on human factors in aviation maintenance (e.g., event investigation, documentation, human factors training, shift/task turnover, and fatigue management). We cross train our technicians to broaden our support services. Technicians work independently in some circumstances and function as teams under other conditions.

Using diagnostic tools and calibrated measurement devices, we perform regular "health checks" on our equipment to verify functionality.

AMS employees are committed to continuous improvement. We monitor delivery times and quality levels of our services. Integrity is crucial to every aspect of our business.







Aerospace Maintenance Solutions, LLC 29401 Ambina Drive, Solon, OH 44139

Telephone: 440-729-7703 Fax: 440-729-7704 Website: http://aerospacellc.com

AMS is ANAB accredited, ITAR compliant, and registered through the DDTC for Export compliance. We are certified to be compliant with FAA AC 00-56A, a voluntary industry distributor accreditation. FAA Air Agency Certificate #OKQR412Y. CAGE code: 449T3.