

MISSIONS BEGIN ON THE GROUND

*By Sandra Kadded. Marketing & Communication Manager
– Aviation, ATEQ Aviation*

Behind Every Successful Mission

Every military aircraft represents a major national investment, but its true value lies in its ability to perform whenever required. Whether supporting national defence, humanitarian assistance or expeditionary operations, aircraft must remain safe, reliable and immediately available for deployment.

While public attention naturally focuses on aircraft in flight, operational readiness begins long before take-off. Maintenance teams depend on specialised ground support test equipment to verify that critical aircraft systems are functioning correctly before every mission.

Accurate and repeatable testing reduces unnecessary downtime, improves fleet availability and helps ensure aircraft are ready whenever operational demands arise.

These responsibilities are becoming increasingly complex. Modern military aircraft incorporate sophisticated technologies, operational tempos continue to increase, and maintenance is often conducted in demanding environments ranging from remote forward operating bases to naval vessels at sea. In this environment, dependable ground support equipment has become an indispensable element of military aviation.

Meeting the Demands of Defence Aviation

Military maintenance presents unique challenges that differ significantly from those faced in commercial aviation. Defence aircraft may need to deploy with little warning, requiring technicians to complete inspections rapidly while maintaining stringent military standards and preserving airworthiness.

Test equipment must also operate reliably under harsh conditions, including vibration, humidity, temperature extremes and confined maintenance spaces. These challenges are even greater aboard aircraft carriers and other naval platforms, where equipment must deliver consistent performance despite limited space and demanding maritime conditions.

To meet these requirements, maintenance personnel need portable, highly accurate testing systems capable of supporting multiple aircraft types while maintaining efficiency without compromising precision.

Engineering for Mission Readiness

With more than 18 years of experience in aviation ground support equipment, ATEQ Aviation develops precision testing solutions for military and civil operators, maintenance organisations, OEMs and armed forces around the world.

As part of the wider ATEQ Group, the aviation division specialises in precision measurement, testing and quali-

ty-control technologies that support flight-critical maintenance activities. Its expertise includes air data testing, avionics diagnostics, battery charging and analysis, as well as customised solutions developed for specialised defence applications.

A key strength of the company is its ability to adapt proven technologies to meet the unique operational requirements of military customers while maintaining consistent testing standards across diverse aircraft fleets.

Supporting the Full Maintenance Cycle

Modern military maintenance depends on versatile equipment capable of supporting multiple aircraft systems from a single platform.

ATEQ Aviation's ADSE series enables technicians to verify pitot-static systems, cabin pressure, angle-of-attack systems and air data instruments with high precision. Multi-channel capability allows several pressure tests to be completed simultaneously, improving maintenance efficiency and operational flexibility. The systems are supported by an extensive range of pitot-static adapters compatible with more than 400 aircraft types, including numerous military platforms.

The company's T-RX avionics testing platform provides comprehensive verification, calibration and troubleshooting capabilities for a wide range of electronic aircraft systems. Designed for maintenance organisations, OEMs and aircraft-on-ground (AOG) teams, the portable system enables broad diagnostic capability from a single platform.

Battery reliability is another essential aspect of military aircraft maintenance. ATEQ Aviation's Battery Charger Analyser (BCA) has been adapted for specialist naval operations, including aircraft carriers, where three-phase functionality and ruggedised construction enable reliable operation in compact, high-vibration environments. The programme demonstrates the company's ability to customise established technologies for highly specialised defence applications.

Supporting Defence Maintenance Worldwide

Maintaining military aircraft requires far more than advanced airframes and sophisticated onboard systems.

As defence aviation continues to evolve, reliable ground support test equipment will remain a fundamental component of operational readiness. By combining engineering expertise with adaptable testing solutions for a wide range of aircraft and operating environments, ATEQ Aviation continues to help defence organisations improve maintenance efficiency, minimise downtime and maximise fleet availability. 

For more information visit: www.ateqsa.co.za



FROM FLIGHT LINE
TO FRONT LINE.

**ONE TESTER.
EVERY PLATFORM.**

- ➔ Military Aircraft
- ➔ Drones & UAV Systems
- ➔ Missiles & Guided Systems
- ➔ Avionics & Components



T-RX
AVIONIC TESTER



ADSE 743
DUAL PRESSURE
BENCH



ADSE 650
PITOT-STATIC
TEST SET



BCA
BATTERY TEST

ATEQ Aviation equips defence operators and maintenance units with portable and workshop instruments to verify the integrity of avionics, pitot-static, bonding and power systems across manned aircraft, unmanned platforms, guided systems and component-level testing.

ENGINEERING BENEFITS

- Certified accuracy for airworthiness and defence compliance: RVSM, ISO 17025
- Rugged, portable instruments
- One platform, multiple test regimes from quick diagnostics to full validation



ATEQ SOUTH AFRICA (PTY) LTD

Manor Place 9 - 299 Kruger Avenue - Lyttelton Manor Centurion
South Africa - 0157 - T.: +27 83 271 6848 - drikus@ateqsa.co.za - ateqsa.co.za

