

Taking flight: AgustaWestland

01 THE CHALLENGE

AgustaWestland (now Leonardo) set Critical Software the challenge of developing a ground-based suite of tools as part of a next-generation, state-of-the-art Health & Usage Monitoring System (HUMS). The system was required for the AW101 medium-lift, super-helicopter, used for both military and civilian purposes. The ground-based tools were needed to enable full and efficient exploitation of all captured data.

02 THE SOLUTION

Critical Software designed and developed an open-standards, 'run-anywhere' HUMS software solution based on Web 2.0 technologies. The innovative new system was designed to be modular and flexible, with an inbuilt capacity for cost-effective future modifications.

The system integrated a unique web-based user interface, as well as the ability to support and accommodate different maintenance management systems, database systems, aircraft variants, time zones and languages.

03 THE RESULTS

The new system has had a significant impact on operational performance, reducing the time required for debriefing by up to 300%. This has significantly reduced the demand on pilots after flights, allowing for greater operational efficiency and performance. Not only that, but there has also been a marked improvement in mission deployment time and costs too.

The system has also allowed for simultaneous aircraft processing to take place, with access granted to multiple users both internally and externally. This has resulted in productivity gains across a number of related processes.

Due to its future-proofed design, the software solution has enabled further evolutions and modifications to be undertaken in a timely and cost-effective manner too.

04 THE CLIENT



ABOUT CRITICAL SOFTWARE

Critical Software provides systems and software services for safety, mission and business-critical applications. We work closely with our clients, helping them to meet the most demanding standards for performance and reliability.

We were founded in 1998, with NASA our very first client. Today, we work across many international industries and have offices across the globe.

criticalsoftware.com
info@criticalsoftware.com

