

HUMS

Health and Usage Monitoring System (HUMS) connects with smart aircraft to archive and analyze data recorded during flights. Maintenance personnel get what they need to quickly restore safety and shorten inter-flights slots. Relying on big data, HUMS computes accurate metrics triggering condition-based or life-limited maintenance. It helps detect, isolate and quickly fix faults. Sogitec HUMS systems are deployed and operated worldwide in the most demanding environments.

HUMS is the key to anyone willing to take full advantage of airborne electronic systems aiming at implementing sharp predictive maintenance. It mitigates the risk of unexpected events jeopardizing planned aircraft operations as well.



Key Features

A GROUND SEGMENT IN CLOSE RELATION WITH AIRCRAFT

HUMS allows accurate post-flight analysis of safe/unsafe conditions by leveraging the data collected by airborne systems. It implements its extensive library of math/statistical algorithms, from structural fatigue (e.g. caused by a hard landing) to minor, hidden systems faults, however complex the aircraft architecture is .

ALSO CONNECTED TO DOWNSTREAM INFORMATION SYSTEMS

HUMS is a next generation system playing a vital role in the "digital pipeline" of flight data. Should you have implemented maintenance management or Enterprise Resource Planning solutions, HUMS will continuously feed them with the data that matters for improved operations. HUMS can also be interfaced with dynamic technical documentation and virtual maintenance trainers.

AND A FRAMEWORK OF APPLICATIONS

HUMS hosts partners' fine-tuned logics to monitor and diagnose data from a number of sensors implemented into their subsystems.

Specifications

USER EXPERIENCE

User-friendly interface Touch/Desktop versions Flight dashboard

AIRCRAFT SYSTEM TROUBLESHOOTING

Fault detection

Troubleshooting guidance through root cause identification

Return of experience accommodation Contextualized and dynamic technical documentation

PREDICTIVE MAINTENANCE

Auto-computation of condition-based maintenance triggers

Transfer of such metrics to due list system Non-linear structure fatigue monitoring

AIRCRAFT PROGRAMS

Dassault Aviation Rafale (all versions) Safran M88

USAGE

Mandatory after each flight Tolerant to back office or network unavailability Data analytics

ADMINISTRATION

Customized rights and privileges Database import-export features

PLATFORMS

Windows, Touch Screen
12+ inches displays, networked
Oracle database server

SOGITEC DIGITAL PIPELINE encompasses CBT, VMT, HUMS & FIELD (Touch, Builder, Card, Booster, API).

