

## Human Performance Tools - AMPOS

Achieving effective implementation of Human Factors recommendations is extremely difficult for organisations and there are very few examples of successful change.

AMPOS has provided a unique case study in demonstrating in how to overcome the most serious organisational barriers to implementing Human Factors solutions

AMPOS (Aircraft Maintenance Procedures Optimization System) is built on the identification of cases where the reporter identifies the possibility of some action to improve maintenance operations, procedures and processes, in relation to the goals of enhanced safety, reliability and efficiency.

AMPOS is not simply a system for gathering information – it is essentially a continuous improvement process. Thus the core functionality of the system concerns the transformation of the inputs into a process of change. This process is cumulative and provides guidance for action and review of the effectiveness of that action. It also provides the possibility of an overview of the ‘health’ or effectiveness of the system as a self-regulating optimization process.

### Stages of Operation

**A Methodology** for analysing, and managing cases where technical and operational systems can be improved – design, documentation, procedures, operations resources, etc.

- This is organised in discrete stages – initiation, classification, analysis, recommendations, review and overview of cases, by type and status

**An IT system** which supports the processing and exchange of data

- Interfaces and databases linked to existing data exchange system within maintenance organisation and to manufacturer. (Airbus)
- A proposed ‘Smart Engine’ to search existing operations databases (VisAer) for anomalous patterns
- This IT system is available to all users on the LAN.

**An Organisational System** for managing and coordinating the processing of cases

- Team of coordinators at key locations in the maintenance organisation and manufacturer
- Supporting the implementation of AMPOS are two further products:

**A Training Programme (STAMINA)**

- Management/coordinator training programme and case processing workshops
- Core human factors training programme
- Training trainers programme
- Supervisory/Front line management training

**A Management Framework** – the HCM (Human Centered Management) guide, which was developed as part of the ADAMS project.

- This provides a framework for understanding the role of continuous improvement in organisations
- AMPOS is been developed as part of a suite of tools for human factor knowledge management throughout the organisation and is part of a programme to integrate Human factors in all the organisational processes from planning and supply chains to quality and safety.

Both FLS Aerospace and Airbus has piloted the introduction of the AMPOS Continuous Improvement System.