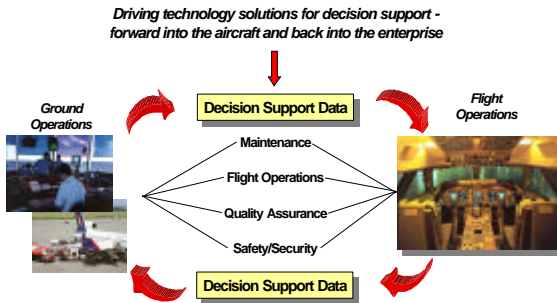


## Corporate Backgrounder

Aircraft Data Fusion (ADF) develops decision support technology solutions for the aviation and airline industries. ADF's end-to-end tools integrate the aircraft with



the enterprise and deliver mission critical information, dramatically reducing delays, cutting costs and improving safety. ADF products and services encompass three areas:

- ❑ Decision support technology and product solutions
- ❑ Enterprise system integration to support its solutions
- ❑ Professional services to establish a blueprint for success

### ***Business Solutions that Fly***

The business focus of Aircraft Data Fusion is the interaction between the mission-critical data flowing in and out of the cockpit, and the flight and ground operations personnel who, on a daily basis, must make sound decisions in real time. ADF sees the aircraft itself as a fully integrated mobile node on the enterprise network.

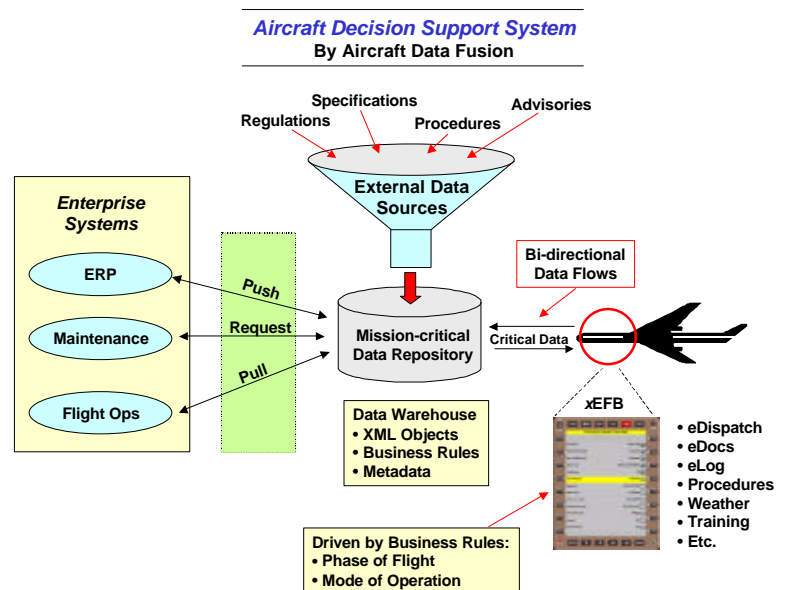
The airline industry has recently suffered a series of devastating setbacks. In the wake of deep cutbacks and soaring operating costs, the industry continues to wrestle with ways to operate profitably.

However, workforce reductions and other traditional cost-cutting measures cannot be made endlessly without compromising safe and efficient functioning of airline operations. Fortunately, technologies now exist that can significantly speed the flow of mission-critical data, streamline communications, and improve responsiveness, in order to reduce delays that cost airlines millions of dollars.

### ***Aircraft Decision Support Systems***

Founded in May 2001, ADF is dedicated to providing an end-to-end Aircraft Decision Support System (ADSS) that integrates mission-critical data from both flight operations and ground operations via a unified data repository. ADF's principals are airline industry veterans who bring decades of experience to bear on the challenges of information overload and the timely use of critical data.

The effectiveness of even rudimentary decision-support tools is well documented. A 1997 Northwest Airlines study found that pilots were 39% safer through the use of decision-support systems, and that overall flight operation was more efficient. Decision



support systems can ensure that both flight and ground personnel have the information necessary to choose the correct path each time and to maintain situational awareness, despite potential distractions.

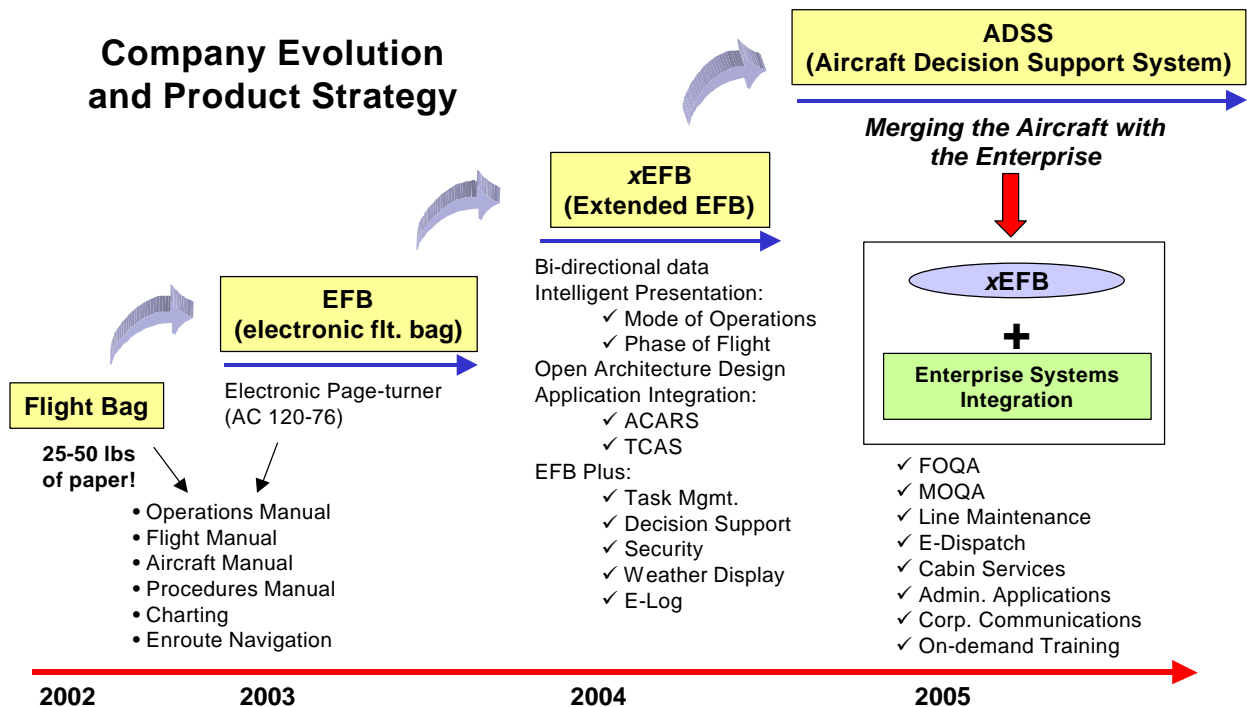
Aircraft Data Fusion addresses these issues through technologies that focus on the management, delivery and use of mission critical operations information, and its two-way integration between the enterprise and the plane. The ADSS acts as a technology facilitator for both aircraft and external system enhancements. Benefits are achieved from:

- ❑ Reduced infrastructure
- ❑ Reduced cycle times
- ❑ Increased productivity
- ❑ Real time access to mission critical information
- ❑ Improved task management and decision support tools
- ❑ Distance learning applications
- ❑ System integration

**Extending the Electronic Flight Bag**

ADF’s approach represents a significant evolution of the “electronic flight bag” (EFB), widely seen as the digital replacement for the 25-50 pound bags of paper manuals and documents pilots are required to carry on board each flight. As currently defined by FAA Advisory Circular (AC) 120-76, the EFB provides a mechanism for viewing flight manuals, checklists and charts on an aircraft system, laptop PC, or hand-held device. However, the EFB as currently defined does nothing to ensure compliance with procedures, maintain situational awareness, promote safe aircraft operations, nor help eliminate the possibility of human error.

ADF takes the EFB concept to the next step with the xEFB™, an extended EFB platform that builds on AC 120-76, with tools for task management and decision support. The xEFB is more than a device for displaying online manuals – it is a bi-directional data medium, exchanging aircraft-related content and enterprise data with a ground-based repository.



The xEFB software intelligently filters a myriad of operational information based on a combination of mode of operation (i.e. normal, non-normal or emergency) and phase of flight. This intelligent filtering enables flight deck personnel to zero in on relevant documentation, policies, procedures and charts. Once a crew begins a normal, non-normal or emergency task, all of the necessary and related information is hyper-linked together and presented in a meaningful context, providing both flight crews and ground crews with a comprehensive and complete task management and decision support tool.

- ADF xEFB**
- Driven by Business Rules
  - Decision Support based on:
    - "Phase of Flight"
    - "Mode of Operation"
  - Bi-directional data flows linking the aircraft to the enterprise
  - Custom fit for applications:
    - Flight Ops procedures
    - Documents
    - eMaintenance Log
    - Weather
    - Training
    - More...

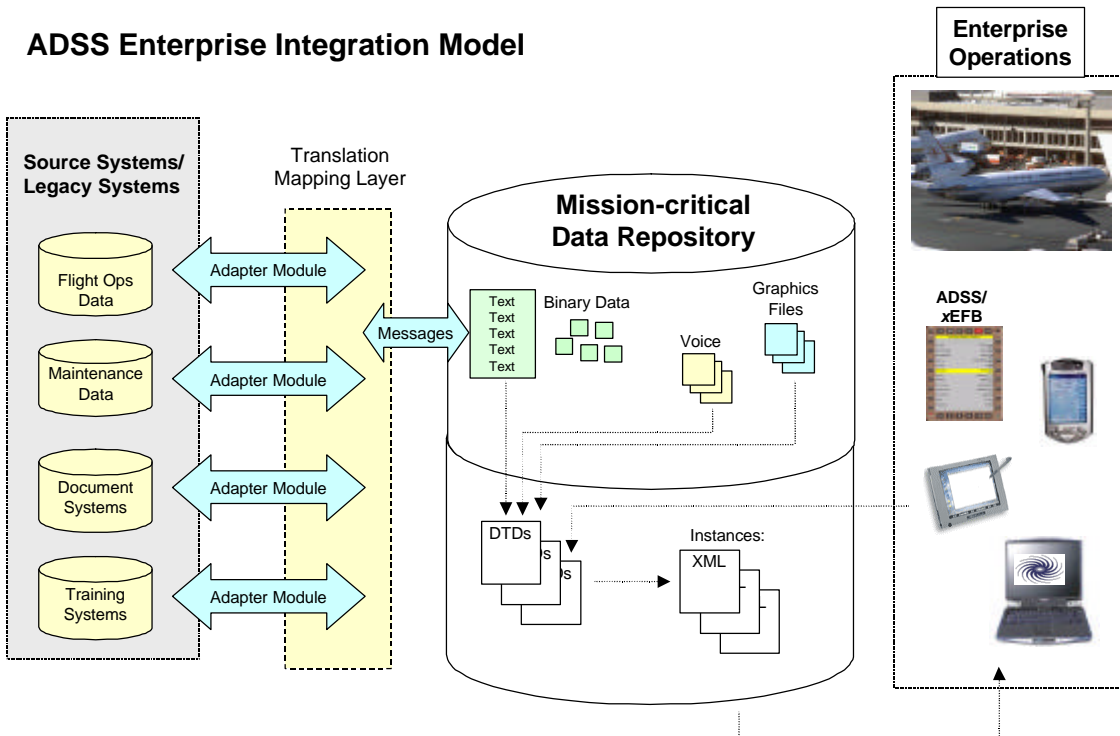


will be accomplished using data translation "adapter" modules that provide a seamless interface between the ADSS Data Repository and the customer's enterprise systems. Using these adapters to manage communications obviates the need to modify legacy system programs and data structures, reducing the cost of implementation and eliminating cross-system interference.

**Enterprise Integration**

The ADSS is intended to integrate over time with a carrier's key operating systems. This

**ADSS Enterprise Integration Model**



ADF provides a structured implementation methodology to ensure a rapid and successful transition to the new decision support environment. This includes such services as:

- ❑ Project Management
- ❑ System Testing/User Validation
- ❑ Policy/Procedure Revision
- ❑ Problem Resolution
- ❑ User Training
- ❑ Certification/Approval Assistance

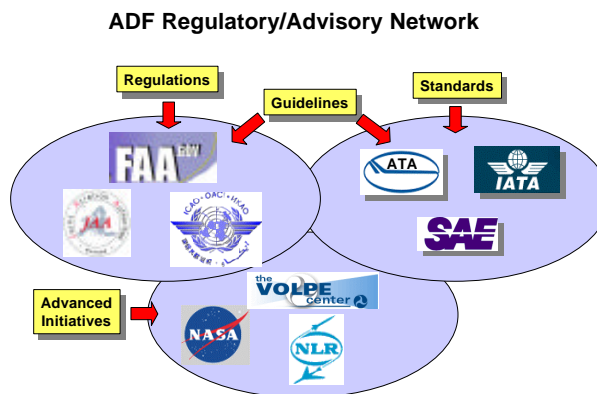
**Professional Services**

It is not enough to know what information may potentially be needed — it is essential to identify when it is likely to be of most value. ADF brings decades of industry line experience to bear while evaluating client business operations, processes and data flows looking for opportunities to improve effectiveness and reduction of operational costs. Working with a network of key business partners, ADF develops solutions for airports, aircraft manufacturers, and aviation organizations in the following areas:

- ❑ Operations review
- ❑ Process / workflow review
- ❑ Data modeling and content design
- ❑ Technical publications and content management
- ❑ Manufacturing systems integration
- ❑ Flight Operations Support
- ❑ Service and Maintenance Support
- ❑ Language Translation

Duane Edelman, has for 35 years been an active contributor to the evolution of standards for operations and safety through his association with organizations such as the FAA, ATA, SAE and NASA. He has assumed leadership roles in the evolution and implementation of forward-looking initiatives that are defining the future of aviation. His focus is on how mission-critical data is collected, circulated and used to support profitable airline and airport operations. He possesses a thorough

understanding of the processes involved in the development, publication and enforcement of industry guidelines. In addition, Mr. Edelman has a detailed knowledge of the workings of both industry associations and regulatory agencies.



**Profitability, Efficiency, Responsiveness**

Aircraft Data Fusion is a direct outgrowth of the vision of its principals of the potential for integrated decision support systems. They have had first-hand experience and knowledge of how lack of timely data for decision-making can result in millions of dollars lost to unnecessary delays, inefficient processes, or outdated, paper-intensive communications. ADF's in-depth knowledge of airline operations combined with its vision of the profound effects of decision-support technologies can significantly transform both your operations, and your bottom line. Let us show you how.

**Aircraft Data Fusion**

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