Introducing ARINC’s eEnabled Aircraft Solutions

ARINC’s eEnabled Aircraft Solutions are a modular, end-to-end solution set of open-source-based capabilities and functionalities that help airlines achieve the next level of aircraft operational efficiencies. The next generation of aircraft operations and support capabilities are data intensive. As part of attaining these capabilities, aircraft become “connected,” i.e., “eEnabled.” By their very nature and the information management mission they support these aircraft need to communicate with other organizational elements to gain the many operational and business efficiencies involved in airline operations. The capabilities provided by this solution set can support all airlines, whether operating new or existing legacy aircraft or ground systems; a flexible and economic path to grow capabilities as technical or business needs require.

ARINC’s EFB Application Suite

Program Manager
• Designed to manage all applications easily on the EFB
• Able to integrate third party applications/data

DocViewer
• Specifically designed push feature supports the movement of document views between EFBs (e.g., Co-pilot to Pilot)
• PDF, XML, HTML formats compatible, JPEG and Word formats extensible

ChartViewer
• Allows different types of eChart formats to be viewed
• Real-time updates through different communication media
**History of ARINC's eEnabled Aircraft**

The eEnabled Aircraft of today and the future is the next step in the evolution of datalink communications that began more than 30 years ago. In 1978, ARINC collaborated with Piedmont Airlines to introduce ACARS and proved it to be a viable communications technology. Today, ACARS remains integral to airline operations and ARINC provides this service to nearly 200 airlines and over 5,000 aircrafts.

ARINC is repeating history by introducing its suite of eEnabled Aircraft solutions to serve the needs of eEnabled aircrafts. ARINC’s eEnabled Aircraft Solutions provides airlines complete flexibility to integrate an eEnabled end-to-end solution that is tailored to different airline needs for their entire fleet.

Any aircraft that is equipped with datalink technology can be referred to as “eEnabled”. Today, eEnabled aircraft are commonly referred to as the latest generation aircraft such as the Airbus A380 or the Boeing 787. ARINC is focusing its eEnabled solutions on these aircraft but also for airlines that are either contemplating, or in the process of upgrading their existing fleet aircraft communication systems with newer communication technologies. These technologies include: Class 1, 2, and 3 electronic flight bags (EFBs), “Gatelink” (WiFi or 3G/4G), Satellite services such as INMARSAT Swift Broadband, Iridium, and others. Also, as a part of ARINC's eEnabled Aircraft solutions, ARINC will work with airlines to develop and implement an end-to-end solution which enables an airline to integrate legacy communications services such as VHF, HF, and SATCOM ACARS to better serve eEnabled aircraft.

ARINC’s eEnabled Aircraft Solutions leverages on ARINC’s core competencies as an airline communication product and service provider. ARINC’s eEnabled Aircraft Solutions give airlines complete flexibility to choose the communication media for any application based on communication cost, priority, and other factors.

The solution is able to:

- Connect eEnabled aircraft with their company IT infrastructures
- Manage the efficient and reliable delivery of information between eEnabled aircraft and airline IT infrastructures
- Provide a business-driven approach focused on maximizing the value of existing and emerging eEnabled technologies through implementing complete end-to-end information management solutions
- Focus on the entire air-ground eEnabled solution to maximize the value of applications and information through solution engineering of best-fit:
  - Aircraft communications systems
  - Aircraft/ground communication links
  - Cabin applications
  - Ground based information management systems
  - Flight operations support

ARINC’s eEnabled Aircraft suite of solutions are customizable and tailored to meet a range of airline needs, from full service international airlines to regional, domestic as well as low cost airlines. ARINC offers a vast range of eEnabled Aircraft solutions to meet a wide range of needs such as:

- Class 1 to Class 3B (for example, tablets such as iPads to fully integrated EFBs)
- Cabin applications, application integration, and support services
- Value added connectivity – high/low speed bandwidth and content delivery management
- Data communications management
- Pre-sales consulting
- Technical support
- On-going operational support
AeroSync™ Communication Management Scenario:
New Chart/Document Update

Cabin Applications

EFBs can also be used for cabin applications such as:
- Credit Card Authorization
- Priority Passenger Services
- Maintenance Services for Cabin

Only basic programming skills are required, and the work of communicating with the aircraft is handled by ARINC.
Reduce Costs and Increase Operational Efficiency with eEnabled Aircraft Solutions

eEnabled Aircraft Solutions provide benefits across multiple organizations within an airline such as: flight operations, cabin services, engineering, maintenance, and safety. The following are just some of the many possible benefits:

• Operational effectiveness will be enhanced as there will be more time to plan ahead for cabin services. With the introduction of paperless operations, there will be a decrease in the number of deferrals and operational efficiency will be improved as well.

• Cost savings are achieved through fewer delays due to technical issues, lower paper management costs, and a reduction in the manpower needed to service aircrafts. Cabin crew service is also improved through fewer delays and an increase in customer satisfaction.

Certification and Aircraft Integration

ARINC has been in the aircraft integration business since 1956, conducting aircraft maintenance, modifications and integration services worldwide. ARINC’s eEnabled Aircraft Solutions include supplemental type certification (STC), aircraft integration and installation support. In many instances, ARINC is the systems/solution integrator and will work with third party engineering and aircraft installation partners to provide a complete solution tailored to an airline’s need.

Leveraging Global Communications Prowess for a Superior Product

ARINC is a trusted global leader in aircraft communications technologies. This includes proven worldwide VHF, HF, and Satellite data networks used by thousands of aircraft daily. ARINC has also been a pioneer in implementing broadband wireless (WiFi) networks in dozens of airports. We recognize how EFB technology can enable new applications over both current and future communication links. With ARINC as an integrator, your EFB program will be able to leverage both existing communications and be compatible with new technologies, resulting in greater benefits for your operations.

ARINC’s preferred approach for developing customer solutions in this area includes working collaboratively with customers; identifying complete, end-to-end approaches to the tasks/ problems being addressed; meeting business case thresholds; and, importantly, providing the appropriate system and management elements needed to flexibly implement the solution. This means a modular, open-source-based approach that can seamlessly integrate the level of end-to-end solution set capabilities required to achieve the level of operational and business efficiencies expected. The eEnabled Aircraft suite of solutions from ARINC provides such an approach.