## ROCKWELL COLLINS FLIGHT INFORMATION MANAGEMENT SYSTEM (FIMS)

## Real-time information management in the cockpit.





## Your access to the battlespace just went airborne.



At Rockwell Collins, we leverage our vast global avionics experience to expand the pilot's communication stream, integrating formerly ground-based-only options. With our Flight Information Management System you can add powerful, versatile capability to your flight deck while keeping costs at a minimum.

- Securely connect aircrews with AOC, TACC and other network participants inside and outside the battle theater
- ➤ Correlate data from disparate systems into relevant information for use by the warfighter while conducting combat flight operations
- Provide capabilities for time-sensitive information sharing and decision aids

The result: enhanced situational awareness, tactical information exchange and dynamic command and control applications.

Real-time positions of threat and friendly forces on a digital moving map that marks geographic and political borders. Up-to-the-minute graphical and text-based weather data. Access to still images and streaming video. Secure, net-enabled chat and email. Until now, only ground-based data management systems offered such options for the exchange of vital battlespace information.

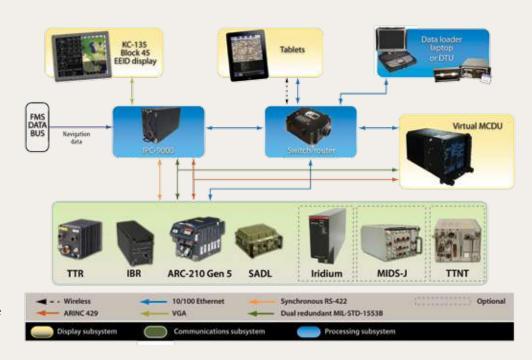


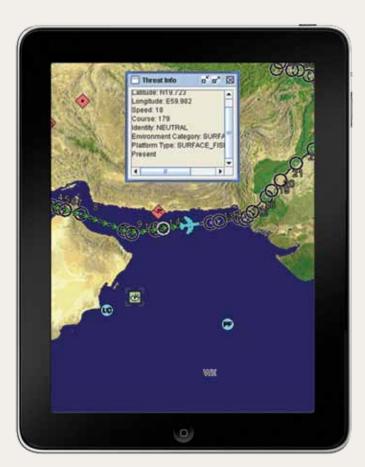
## Open architecture. Open possibilities.

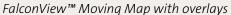
Your hardware options are highly flexible with the Rockwell Collins FIMS. Its open architecture lets you weave your current components into the system or gain the advantages of our innovative new Real-Time Information Into the Cockpit (RTIC) products.

Start with the display component. For example, you can use an iPad®, tablet, Toughbook™ or aircraft display capable of receiving a video input.

You'll add a display with processing and interfacing capabilities that enable aircrews to make more certain, streamlined decisions. Cursor control for quick access functions, aircraft data can be overlaid on fixed or moving maps, mission assignment overlays, controlling unit overlays, selectable channel canned response and text chat overlays. Track detail overlays with target hooking, bearing and range to hooked target.









Common tactical picture

### Flight information management system capabilities

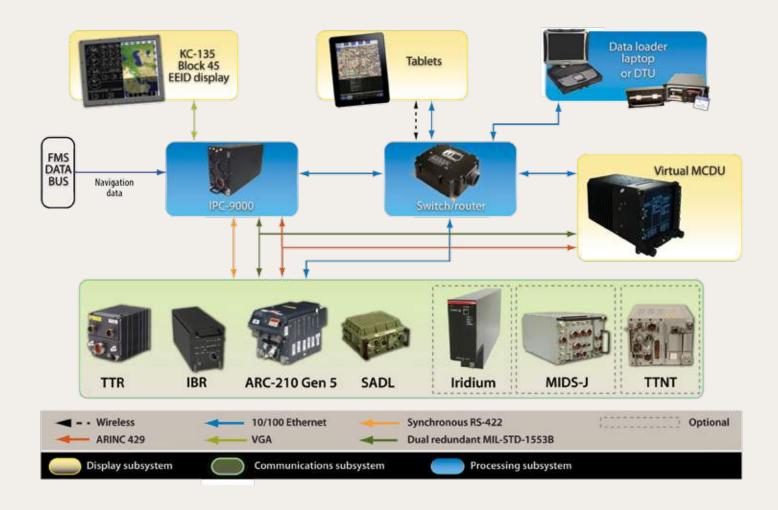
| Situational awareness capability   | Benefits   | Applications   | Platform data link integration capabilities   |
|--|--|--|---|
| Display digital moving maps with obstacle, navaids, tactical, weather, auto-reroute, and ownship position with tactical overlays | Aircrews can monitor their position while en route or during arrival and departure operations, as well as view obstacles, geographical and political border locations. | FalconView moving map,<br>Airborne E-STAR, OpenEdge<br>application software  | GPS/INS   |
| Improved situational<br>awareness, improved joint<br>interoperability, dynamic C2<br>and planning and execution                  | Aircrews can access video over IP, text-based web content, and threat and friendly data. Provides dynamic and predictive battlespace management.                       | Common picture, collaboration,<br>mission specific, file and imagery<br>exchange, gateway, logistics,<br>weapons management, and<br>enterprise service access (SIPR, NIPR)                 | ARC-210 Warrior radio, ARC-210 variants,<br>SADL, Link 16 (MIDS-LVT, MIDS JTR), UHF<br>data link,WDL, HF Messenger and SATCOM,<br>IBR, ROBE/ ROBEII – in the future – JTRS with<br>EFB HW and platform military data buses<br>(Ethernet, ARINC 429, MIL-STD-1553) |
| Display graphical and text-<br>based weather information   | Aircrews can access international real-time graphical and text-based weather information from WSI, Universal Weather or Air Force weather sources.                     | FalconView overlays, image viewer  | SATCOM, HF Messenger, ARC-210 Warrior radio, UHF data link and IBR  |
| Display aeronautical charts  | Automatic or manual selection<br>and display of approach<br>and departure plates.<br>Paperless operations.   | Off-the-shelf applications that provide NGA/DOD approach plate/ charts, FAA approach plate/charts, electronic checklists, image viewer, weight and balance calculator and document viewer. | EFB hardware, platform Flight Management<br>System (FMS) access   |





ePubs Nav charts

Utilize one or all of these radios, through the IPC-9000 processor with any one of these apps and present it on any one of these displays:



# Plug and play with legacy hardware and a fresh set of apps

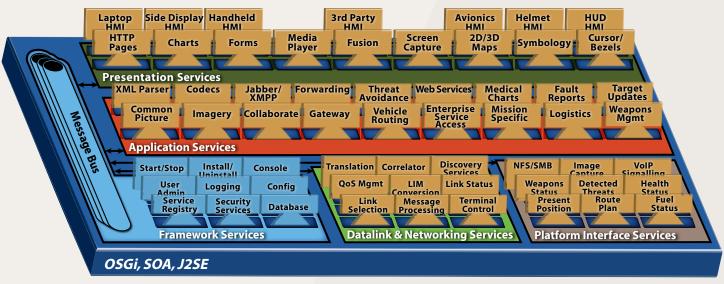
Four main elements make up the Rockwell Collins RTIC system: display, TDL processor, software application set and radio/data link terminal.

At the system's core is our OpenEdge™ software. Think of it as an app store for your flight deck. OpenEdge offers more than 100 different application choices. Hand pick your system capabilities to fit platform parameters, changing missions and crew needs. Easily integrate emerging technologies, including new communication links.

Because OpenEdge uses a true open architecture approach, it works with a wide range of portable or installed display and communications equipment, whether from Rockwell Collins or another supplier. The system's plug-and-play design can incorporate legacy global network and communication infrastructure, giving your link-centric platforms net-centric operational capabilities.

OpenEdge applications give pilots a richer, real-time, interactive view of the battlespace, enabling them to rapidly share crucial knowledge from a variety of sources so they have the right information at the right time to make the right decisions.

## Raise your tactical effectiveness through OpenEdge apps.



Note: Partial set of services, displays and radios shown

# OpenEdge components available to create net-enablement applications using a common operating environment

#### For real-time situational awareness

**Common picture** – gives users a common picture from which to work so they can effectively and efficiently conduct their mission

**Electronic Flight Bag** – EFB allows convenient viewing of navigation charts, flight manuals, checklists, mission briefing data, approach plates and airport diagrams

**Imagery** – enables the user to transmit and receive still images and streaming video providing a more complete shared awareness among users

### For improved joint interoperability

**TM** collaboration – enables electronic discussion at the tactical edge through IM/Chat, file transfer, email, Web conferencing, video conferencing and VoIP

**Mission specific** – provides the user with specific NCO capabilities for mission completion

### IPC-9000 capabilities

- Link 16 Participation in LOS Link 16 networks and BLOS Link 16 networks using JREAP-A
- IBR Receipt of BLOS intelligence data over the Intelligence Broadcast Receiver (IBR)
- RWR Receipt of threat information from the onboard Radar Warning Receiver (RWR)
- > Correlation Correlation of the multiple data feeds
- Reroute Automatic route replanning for threat avoidance (installed growth)
- Video output Video output of correlated situational awareness picture to flight deck displays

### Dynamic C2, planning and execution

**Battle command** – allows dynamic and predictive battlespace management

**Vehicle re-routing** – allows auto-route replanning based on threats, weather and obstacles

**Enterprise service** – enables access to SIPRNet and NIPRNet servers

**Logistics** – provides user with real-time information of fuel status, cargo tracking, and maintenance data

**Countermeasure management** – Dynamic and interactive management of countermeasure sensors integrated with the mission system

### Building trust every day.

Rockwell Collins delivers smart communication and aviation electronic solutions to customers worldwide. Backed by a global network of service and support, we stand committed to putting technology and practical innovation to work for you whenever and wherever you need us. In this way, working together, we build trust. Every day.

### For more information, contact:

Rockwell Collins 400 Collins Road NE Cedar Rapids, Iowa 52498 +1.800.321.2223 +1.319.295.5100 fax: +1.319.378.1172

email: learnmore@rockwellcollins.com www.rockwellcollins.com

