

ROCKWELL COLLINS PRO LINE 21™ AVIONICS SYSTEM

## Innovative flight deck technology for the Hawker 750 and 900XP



*Achieve a new level of situational awareness and operational efficiency. With Pro Line 21™, superior information comes standard.*

With Pro Line 21, your focus is where it needs to be – on flying the aircraft. Our fully integrated flight deck for the Hawker 750 and 900XP significantly enhances crew situational awareness, providing superior operational efficiency and built-in growth capability to meet evolving airspace and regulatory requirements.

**Rockwell  
Collins**

Building trust every day

## Smart avionics for your Hawker 750 and 900XP



*Large 10 x 8-inch adaptive flight displays combine with the Rockwell Collins FMS-6000 flight management system and our Integrated Flight Information System to enhance flight deck information management without adding workload.*

Combining the latest technology sensors, processing and displays in an integrated package that is smaller, lighter and more capable than traditional avionics, the Pro Line 21 suite for the Hawker 750 and 900XP is a true breakthrough in flight deck efficiency and pilot workload reduction. All primary flight, navigation, weather, traffic, terrain, engine and aircraft system data are graphically presented for easy scanning and integration.

Our FMS-6000 flight management system supports aircraft performance management from takeoff to touchdown. The AMLCD control display units provide pilot control of the FMS and CNS sensors. For reversionary purposes, the CDU provides an independent backup display of engine data; including N1, ITT, N2, fuel flow, oil pressure, oil temperature and fuel quantity.

The Pro Line 21 system also includes an advanced flight control system with a fail-passive autopilot. An integrated maintenance and diagnostic computer (MDC) provides access to avionics and aircraft system status and fault history. The MDC also provides electronic checklists covering normal, abnormal and emergency operations.



### STANDARD HAWKER 750 and 900XP FLIGHT DECK

- › Four 10 x 8-inch LCD displays
- › Dual FMS-6000 with coupled VNAV and performance
- › Single Integrated Flight Information System (IFIS) with electronic charts
- › Fail-passive autopilot
- › Dual Pro Line 21 communication and navigation radios
- › Single Automatic Direction Finder (ADF)
- › TCAS-4000 (TCAS II)
- › Engine Indication System (EIS)
- › Maintenance Diagnostic System (MDS)
- › Electronic checklist
- › Solid-state turbulence detection weather radar

# Achieve a new level of situational awareness and operational efficiency

In business aviation, the Hawker brand is synonymous with reliability and value. From the beginning, Rockwell Collins has been there, evolving and growing with the airframe culminating in the Pro Line 21 avionics system. Working side-by-side with Hawker Beechcraft Corporation, we continue to advance innovative flight deck functionality for the Hawker 750 and 900XP as technology and the global airspace evolve.

## Flight information that keeps pilots a step ahead

With Pro Line 21 and our IFIS, you have enhanced situational awareness enabling your flight crew to make better decisions. Electronic charts with ownship position during approach and taxi and enhanced maps are available at a moments notice, and optional graphical weather capabilities provide rapid access to strategic weather information for the route of flight. Now, information that would otherwise only be shown on multiple sources – or even in printed books – is intuitively presented on your aircraft's large active matrix liquid crystal Multifunction Displays (MFDs). Chartlink™, a patented Rockwell Collins feature, reduces pilot workload by integrating the flight management system (FMS) and electronic charts to automatically sequence relevant charts for the flight plan. You have the option to include a second IFIS providing system redundancy to support operations without paper terminal charts.



### Enhanced map overlays

Enhanced map overlays simplify routine tasks, such as establishing visual contact with the airport, by displaying aircraft position relative to water features and geopolitical boundaries on the MFD map. High- and low-altitude airway overlays eliminate the need to continually refer to paper charts; in response to Air Traffic Control changes, you can locate new airway assignments faster and easier than ever before. With enhanced map overlays, you also know your aircraft's exact position as it relates to restricted airspace and have the information needed to make informed decisions when flight plan deviations may be necessary due to weather or traffic.



### Graphical weather

Pilots have a powerful new tool to help them make more strategic decisions about their flight plans. By combining optional strategic weather information provided by IFIS with the baseline airborne turbulence-detection weather radar, you can look at the big weather picture prior to each flight and during the flight as weather develops. As a result, you can choose the most comfortable and efficient flight path around hazardous weather. XM satellite broadcast weather as well as interactive request/reply weather are available.

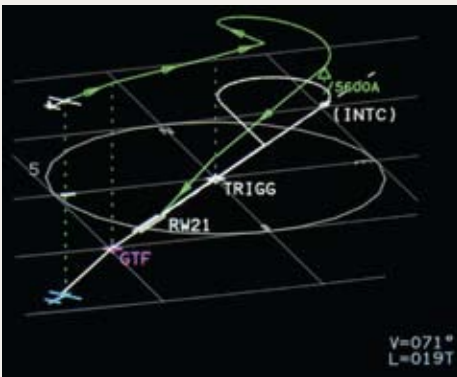


### Electronic charting

IFIS replaces heavy and bulky printed charts with large-format, high-resolution electronic charts. Now, critical departure, arrival, approach and airport information is instantly available to the flight crew. Peace of mind on the airport surface is enhanced with a clear, easy-to-interpret display of all runways and taxiways.



## Advanced flight management made simple



Teamed with the Rockwell Collins GPS-4000S SBAS-enabled Global Positioning System receiver, the FMS-6000 synchronizes operation of all lateral and vertical flight plans, supports time/fuel planning and automatically flies en route, terminal and approach procedures (as well as providing missed-approach guidance), while offering graphical map and electronic chart support, automatic FMS-to-ILS transfers, and steering/pitch commands to the autopilot.

Full-profile, coupled or advisory VNAV capability offers complete lateral and vertical navigation programming and automation for all phases of flight. This VNAV tracking capability ensures that altitude and speed constraints are met at waypoints or step-down fixes, speed limits at altitudes are honored, and the vertical flight profile, as specified by the pilot, is followed precisely.

3-D flight planning map is available as an option. Pilots can view their intended flight path, including waypoints and altitude constraints, in an easy-to-interpret 3-D map that is in a pilot-adjustable perspective.



### Performance database

The Rockwell Collins FMS-6000 provides advanced flight planning, multisensor navigation and flight management capabilities specifically tailored to the Hawker 750 and 900XP. The standard performance database, keyed to aircraft flight manual parameters, makes automatic Vspeeds and other calculations available.

The Hawker 750 and 900XP performance databases enable automatic calculation of vital takeoff and landing performance data – including Vspeeds, weight limits and runway length requirements – based on the aircraft's flight manual parameters. Together, these features help streamline and simplify flight deck performance while enhancing safety of flight.



## Enhance your Hawker 750 or 900XP even more

### Options available

#### Second IFIS

This option adds a second File Server Unit (FSU) to complement the standard IFIS FSU. On a four-display flight deck, the dual FSU configuration provides redundancy to support operations without paper charts. Each FSU independently displays electronic charts on each MFD.

#### 3-D Flight Plan Map

3-D Flight Plan Map is an innovative three-dimensional graphical representation of the FMS flight plan and performance-predicted flight path. Real-time display of the aircraft's present position both laterally and vertically with respect to the 3-D flight plan improves situational awareness. Pilots can easily adjust the viewing angle via a manual control, and can plan collaboratively for departures and arrivals by using the "MFD Advance" key on the CDU for a three-dimensional preview of the flight plan.

#### XM Broadcast Graphical Weather (Continental U.S.)

The broadcast graphical weather system provides the capability to display U.S. graphical and textual weather information on the MFD(s). Available weather information includes:

- ▶ NEXRAD (1 NM resolution)
- ▶ Echo tops and movement
- ▶ Graphical and textual METARs
- ▶ Graphical and textual SIGMETs
- ▶ Textual AIRMETs and TAFs



### Interactive Request/Reply Graphical Weather

This option provides the capability to receive graphical weather information for display on the MFD(s), and reduces crew workload by digitally transferring mission information between the aircraft, information service providers and air traffic control. Available weather graphics include:

- › NEXRAD images (Continental United States, 7 NM resolution)
- › NEXRAD with tops/movement (Continental United States)
- › Icing
- › Winds/temps
- › Turbulence
- › Weather depiction

Pilots manage the data link information using the FMS CDU. Other capabilities include textual weather, FMS flight plan uplink, aircraft operational communications, text messaging and air traffic services functions including taxi, pre-departure and oceanic clearances, ATIS, NOTAMS and TWIP.

### HF Communications System – Single or Dual (single system is standard on 900XP)

The HF-9000 transceiver enables long-range communications in remote and oceanic locations. A dual installation provides redundancy for enhanced dispatch capability.

### Second Automatic Direction Finder

A second automatic direction finder (ADF) receiver can be added which offers redundancy while enabling the flight crew to cross-check navigational information.

## Global service and support from a trusted source.

Life cycle service solutions you can count on. From initial delivery and throughout your Hawker 750 or 900XP life cycle, we are here with comprehensive service and support solutions. Backed by our worldwide support network, we offer customized solutions from options that include performance-based maintenance and repairs, engineered solutions, rental exchange, training and simulation solutions, all backed by the best turnaround times in the industry. Rockwell Collins delivers reliable solutions, anywhere, anytime – every time.

## Building trust every day.

Rockwell Collins delivers smart communication and aviation electronics 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.

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