Industry Update – FANS 1/A

Future Air Navigation System (FANS) is a concept that was developed by the International Civil Aviation Organization (ICAO) in partnership with Boeing, Airbus, Honeywell and others in the air transport industry to allow more aircraft to safely and efficiently utilize a given volume of airspace. Today FANS is used primarily in the oceanic regions taking advantage of both satellite communication and satellite navigation to effectively create a virtual radar environment for safe passage of aircraft.

FANS plays a key role in supporting many of the evolving CNS/ATM (Communication, Navigation, Surveillance / Air Traffic Management) strategies and mandates – an evolution that has been underway for more than ten years. Today, FANS-1 is the standard used on Boeing aircraft while the Airbus standard is known as FANS-A. Both are considered first generation FANS data link architectures. Second generation data link will be discussed under the FANS Evolution paragraph.

The first FANS routes made their debut in the Pacific in early 1996 and were originally flown by three airlines with the Boeing 747-400. These B-747 FANS 1/A equipped aircraft use Global Positioning System (GPS) satellites and Inertial Reference Systems (IRS) to fix their position and an on-board Honeywell Flight Management System (FMS) to manage the navigation solution and flow of information. The position of the aircraft is then transmitted through a communications router and sent to Air Traffic Control (ATC) via either VHF or SATCOM. The FANS 1/A standard mandates the use of INMARSAT SATCOM when out of VHF range. This Communication (VHF or SATCOM), Navigation (GPS / FMS) and automatic dependent Surveillance (ADS-C) concept enables ATC to create a clear picture of the traffic in a given block of oceanic airspace much in the same manner as ground-based radar does today over land.

FANS 1/A routes have expanded quickly from the first North America - South Pacific routes in 1996. Today there are over 34 Flight Information Regions (FIRs) and Upper Information Regions (UIRs) around the globe supporting ATC surveillance (ADS-C) and Controller Pilot Data Link Communication (CPDLC), providing FANS 1/A coverage worldwide. This expanded coverage gives airliners and long-range business jets the option to select direct routes over many of the highly traveled oceanic regions (Atlantic and Pacific) and utilize FANS 1/A procedures globally. Polar routes have also been established that maintain FANS 1/A continuity when out of radar coverage. When comparing the differences of today’s traditional voice reporting system to FANS 1/A, the obvious advantage is being able to place more aircraft in the same airspace and do it safely. The uncertainties of voice reporting and the delay associated with HF radio require the air traffic controller to allow a tremendous amount of airspace between each airplane, typically 100 nm laterally and 120 nm longitudinally. With
FANS 1/A and the recent Required Navigation Performance (RNP) guidelines, air traffic controllers can safely and significantly reduce those separation distances and allow more flexibility for the FANS 1/A-equipped aircraft.

Benefits to Business Jets:
With the exception of a small number of Boeing Business Jets (BBJs), the business jet community as a whole has not taken advantage of the growing FANS 1/A infrastructure. The super long range business jet aircraft, predominantly the Gulfstream's, Falcons and Bombardier family, will soon certify a FANS 1/A system and have most of the avionics hardware (such as SATCOM, GPS and FMS) already onboard. The business case to install FANS 1/A systems on these long range jets is currently being made around a set of benefits and paybacks. The airlines have reaped these benefits for many years and business jets are benefactors of the pioneers of the early FANS 1/A routes. The benefits offered by FANS 1/A include reduced fuel burn and flight time through more efficient routing and increased payload capability for takeoff-weight-limited flights. When FANS 1/A is implemented on business jets, operators will be able to take advantage of several needed improvements:
- Reduced separation between airplanes
- More efficient route changes
- Satellite communication – no more HF voice reports
- No altitude loss when crossing tracks
- More direct routings
- Reduced user charges for using the FANS 1/A infrastructure

Reduced Separation Between Airplanes
In non-FANS procedural airplane separation, errors in navigation and potential errors in voice communication between the flight crew and air traffic control are considered when determining the necessary airspace separation between airplanes. The uncertainties of traditional voice position reporting and the delay associated with high-frequency relayed voice communications (10 to 20 minutes to make a high-frequency voice position report) require the air traffic controller, in the pre-RNP / FANS era, to allow a tremendous amount of airspace between each airplane – typically 100 nm laterally and 120 nm longitudinally. This computes to 48,000 square miles of airspace to protect an airplane and means that airplanes often operate at less-than-optimum altitude and speeds.

In contrast, through a satellite data link, airplanes equipped with FANS 1/A can transmit automatic surveillance reports with actual position and intent information at least every one to five minutes. The position is based on the highly accurate Global Positioning System (GPS). Digital data communication between the flight crew and the air traffic controller drastically reduces the possibility of error and allows greatly reduced airplane separations. The combination of improvements in the communication, navigation and surveillance allows authorities to reduce required separation distances between airplanes, which in turn allow airplanes to fly at their optimum altitude and burn less fuel.

More Efficient Route Changes
Oceanic operations currently are based on weather data that is up to twelve hours old. By using the satellite data link, the latest weather from a variety of weather services is transmitted to the airplane while enroute. Flight crews can then use this data to develop optimized flight plans or those plans can be generated on the ground and transmitted to the airplane. Such dynamic re-routing may allow airlines and business jets to consider reducing discretionary fuel, which further reduces fuel burn or allows increased payload.

Satellite Communication
Satellite communication provides a much more reliable link to the ground than current high frequency (HF) radio, which is susceptible to noise and interference. SATCOM reduces the response time to a few minutes for an airplane requesting a step climb to a new, optimum altitude to reduce fuel burn. Response time can vary from 20 to 60 minutes based on the existing separation distances required. Through SATCOM, the flight crew no longer has to rely on the HF radio. Communication is efficient, silent and automatic.

No Altitude Loss When Crossing Tracks
To avoid potential conflict, an airplane that is approaching crossing tracks must be separated by altitude from any traffic on another track. As a result, one of the two airplanes can be forced to operate as much as 4,000 feet below optimum altitude. But if the air traffic controller has timely surveillance data via FANS from both airplanes, including projected intent, and the airplanes are able to control their speeds so that they reach crossing points at a given time, then altitude separation becomes much less frequent.

More Direct Routings
In many cases, current air traffic routings are compromised to take advantage of existing navigation aids and radar coverage resulting in less-than-optimum routings. DARP (Dynamic Aircraft Route Planning) and User Preferred Routings are available for FANS equipped airplanes. Taking advantage of space-based communication, navigation and surveillance (CNS) allows more direct (e.g. shorter) routes. With FANS onboard, operators can benefit from reduced fuel burn and flight time as well as increased payload capacity for takeoff-weight-limited flights. As a result, costs associated with crew and engine maintenance can be reduced allowing operators to reinvest the money savings elsewhere.

Reduced User Charges for Using the FANS Infrastructure
Some ANSPs (Air Navigation Service Providers) that currently charge for using HF flight-following services will offer a reduced rate for FANS / CPDLC services due to improved handling efficiencies on the ground.
Industry Update – FANS 1/A
from cover story

FANS Evolution
Data link requirements for ATC are evolving for enroute and terminal airspace over land. The required architectures will be based on the new ATN (Aeronautical Telecommunications Network) protocol. ATN will augment the slower FANS-over-ACARS network in use today. New, higher speed data link (Protected Mode Controller Pilot Data Link Communication – PM CPDLC) is currently being tested over the continent of Europe with CMUs running the ATN protocol and communicating via higher speed VDL Mode 2 transceivers. This trial program, called Link 2000+, has over 200 pioneers and early adopters and is showing remarkable success. PM CPDLC will use the CMU-based ATN protocol which will provide a faster, more reliable data link. This will speed up messaging as well as add more data capacity. Currently, there are 80 downlink and 180 uplink messages with FANS 1/A. PM CPDLC will support growth in this area, if needed.

When Link 2000+ completes all of its objectives, mandates for PM CPDLC are planned as early as January 2011 for new aircraft in blocks of airspace at or above FL285 over the continent of Europe. In-service aircraft will have until February 2015 to equip with PM CPDLC for operation in Europe. Currently EASA is offering FANS 1/A-equipped airframes lifetime exemptions from PM CPDLC if equipped with FANS 1/A and operationally approved on or before January 2014. This is a major benefit for business aircraft operators to equip with FANS 1/A today (or before January 2014) in addition to the operational benefits of FANS 1/A as mentioned above.

Summary
The benefits of FANS 1/A are clear. The three airlines that pioneered the use of FANS beginning in 1996 have paved the way for over 35 carriers flying 1,000 FANS-equipped aircraft today. The fuel savings, added payload, time enroute reduction and maintenance cost savings clearly make a case for payback of the FANS 1/A-equipage. With this proven savings model, business jets are assured of the same benefits as the airlines. To make the equipage of FANS 1/A even more attractive, most of (if not all) the hardware is already onboard. The ideal candidate long range business jet will have the FMS, GPS, CMU / DMU, SATCOM and VHF Data Radio installed today. Only FMS software (and possibly DMU software) will need to be upgraded. Other aircraft may need to add a DMU or CMU and/or upgrade their existing CDU. CPDLC will continue to evolve to support higher system capacity beyond 2010. PM CPDLC is on the horizon and carries mandates in Europe starting in 2011. By equipping with FANS 1/A solution today (or before January 2014), in-service aircraft will be exempt from these PM CPDLC mandates.

www.flywhatsnext.com

Pilot Corner - Non WGS-84 Country Procedures

Procedures for Countries That Are Not WGS-84 Compliant
The International Civil Aviation Organization (ICAO) specifies the World Geodetic System 1984 (WGS-84) or equivalent as the geodetic reference datum standard for air navigation latitude/longitude coordinates. This is the same standard that is used by all Honeywell Flight Management Systems (FMS).

The WGS-84 Status Report is based on information in the Aeronautical Information Publication (AIP) or equivalent publication of each country. However, many countries either may not publish information on compliance or will include only international airport and airspace information in their AIP. In addition, the coordinates associated with domestic and military airports and airspace may not be WGS-84 compliant. Countries that are non-compliant (as of March 2009) include: Nicaragua, Swaziland, Honduras, Russia, and China. In addition, there are several countries that are partially compliant or unknown.

When operating in countries that do not use WGS-84 (Russia, China, etc.), pilots should exercise caution because the surveyed lat/lon of the airport and other navigation database references are not consistent with positions provided by the WGS-84 based GPS. The use of local radio aids (VOR/DME) stored in the navigation database will be consistent with the surveyed locations.

On most aircraft, the pilot can manually deselect the GPS prior to the approach so the system has time to acquire ground-based NAVAIDS and triangulate position in time for the arrival procedure. Procedures vary somewhat based on the avionics system and FMS software version. If the GPS is deselected, an RNAV GPS approach should not be activated. The examples below assume a non-localizer based, short range nav approach (VOR or NDB).

Aircraft with Epic avionics or FMS v6.1 (NZ2000 & FMZ)
When GPS position begins to degrade, the FMS reverts to the other installed navigation sensors based on theoretical accuracy of the sensors. If the FMS is not using GPS to calculate position (because it has reverted or been deselected), the estimated position uncertainty (EPU) will start to rise because ground-based NAVAIDS and IRS have lower accuracy than the GPS. When using the FMS to fly a non-localizer based approach, the default RNP value is set to RNP 0.3 and because the EPU will likely climb above 0.3, the ‘UNABLE RNP’ scratch pad message and a DEGRADE (DGRD) annunciator on the Primary Flight Display may be displayed. In this case, the required APPROACH (APP) annunciator will not appear when the aircraft is two miles from the final approach fix and the FMS would be unusable for the procedure.

To keep the error messages from being displayed, and to get the APP annunciator to illuminate, the pilot should manually set the Approach RNP on the RNP SET page to 0.8. The pilot can still use the FMS for the approach (the FMS will be auto-tuning the continued on page 4
VOR/DME) and should continue to back up the approach with raw data such as a bearing pointer overlay or the non-flying pilot’s course pointer set to VOR.

Aircraft with NZ2000 or FMZ Versions 6.0 and Earlier
When GPS position degrades in these aircraft (or if GPS is deselected), the FMS will revert based on a prescribed order (i.e., DME/DME, VOR/DME then IRS). For these aircraft, it is not possible to manually set RNP and the FMS does not use RNP functionality so the “UNABLE RNP” message will not appear. The pilot can continue to use the FMS for navigation, but they should also monitor the underlying NAVAID (i.e., VOR or NDB) during enroute and terminal procedures.

Aircraft with Apex Avionics
Since the Apex FMS cannot auto-tune NAVAIDS for navigation (and the GPS will be unreliable), those operators will have to fly using the raw data method (course pointer set to VOR1/2, LOC1/2 or bearing pointer overlay for NDB).

Summary
Pilots of all aircraft can elect to fly the approaches in ‘green needles’ or raw data where the course pointer is coupled to the short range nav source and the flight director is not receiving lateral guidance from the FMS. In this case, it is not necessary to manually set RNP, and although the ‘UNABLE RNP’ message will appear on Epic aircraft, the approach can be continued. Pilots should always defer to the manufacturer’s Aircraft Flight Manual (AFM) and any limitations or procedures regarding GPS sensor(s) selection and FMS operation.

Prior to departure, the pilot should check the WGS-84 Status Report to verify the airport of entry or other landing airports. Note the EGPWS functionality will not be affected and should not be disabled. Click the link below to view the status of country compliance.

http://www.jeppesen.com/company/publications/wgs-84.jsp

Nav Database (DB) Frequently Asked Questions:

**Question:** When will the FMS automatically sequence to a new Nav Database cycle?

**Answer:** The FMS will automatically sequence to a new Nav Database cycle at 0901Z on the date the Nav Database cycle becomes effective. This will not occur if you are in the air. The Nav Database cycle can only be changed while on the ground.

If the system is powered up at 0901Z of the effective date of a new Nav Database cycle, the new Nav Database cycle will change from amber to green. This indicates the current Nav Database cycle is the next to Line Select Key 2 Right, but the Active Nav Database is still next to Line Select Key 1 Right.
The current Nav Database cycle can be made the active Nav Database cycle by selecting the Line Select Key 2 Right. If the current Nav Database has not been selected as the Active Nav Database, the system will automatically select the current Nav Database cycle at power up.

Reminder: Depending on the location, the Nav Database cycle date may not agree with the current local date.

Note: Most FMSs are configured so the time displayed on the NAV IDENT page is synchronized with the GPS date and time.

Primus Apex® Build 6 Update


WAAS, also called SBAS (Satellite Based Augmentation System), provides differential GPS correction for improved lateral and vertical accuracy to give you accuracy comparable to an ILS Category 1 (precision approach) system. The space-based augmentation system (SBAS) is the implementation of a ground sensor-generated correction signal transmitted to an SBAS-equipped GPS receiver by way of a geo-synchronous satellite. This brings GPS approach availability to 100%, as there is no RAIM consideration requirement. This offers minimums typically lower than LNAV/VNAV GPS approaches, and is compatible with EGNOS (Europe) and other SBAS systems.

Use of LPV approaches capitalizes on the inherent accuracy of the WAAS signal, and will result in lower approach minimums which enable the FAA plan to make these vertical approaches at airports where there are no instrument landing systems. There are currently more than 2000 LPV published approaches in the U.S.

As previously stated, “You speak, and Honeywell listens.” Watch for news on the 2010 release of Primus Apex Build 7.0, featuring FMS Version 7.1.2 in an upcoming edition of Direct-To!

Among the system improvements we have added in Build 6.2:

- A new Flight Guidance Panel (FGP) which incorporates a VNAV button for future coupled VNAV functionality
- Added METAR and TAF products to the XM Weather functionality which are accessible by direct selection of an airport on the Map
- New FMS software Version 7.1 which includes:
  - Improved Direct-To operation
  - Improved ILS Auto Preview functionality
  - Improved On-Ground operation of PRAIM
  - LOC Autotune at 30 nm from destination or 70 nm direct distance (whichever is further) when approach is activated
  - Improved Radius to Fix Legs calculations to reduce unnecessary maneuvers, and improve the guidance and sequencing for heading to altitude (VA) and heading to intercept (VI) leg combinations by using ground speed to compute the turning point onto the course
  - Circling Approach flight profile will now fly the aircraft to a minimum descent altitude using a continuous descent path instead of the old dive and drive method. Straight in approaches with circling minima can be activated and flown.
- WAAS/LPV (Wide Area Augmentation and Localizer Performance with Vertical Guidance) now active
- Coupled VGP – vertical glide path for non-localizer approaches to DAs
Direct-To Recovery SIL

Honeywell Issues Important Primus Epic FMS Service Information Letters for Agusta AW-139, Cessna Sovereign, Gulfstream G450/G550, Hawker 4000, Pilatus PC-12 NG and Dassault F900/F2000 EASy

Honeywell issues important Primus Epic/Apex FMS Pilot Guides which provide a procedure for using the Direct-To Recovery (DTR) feature. The purpose of the DTR feature is to allow insertion of previously sequenced waypoints. This feature was designed to be used when rejoining airways due to air traffic controller (ATC) reroutes.

Honeywell has discovered a software anomaly in which the FMS software will not properly recover a previous leg in the flight plan while using DTR. The anomaly flight scenario requires a sequence of events that are unlikely to be used in flight, such as using the DTR feature to reinsert an approach into the flight plan after a direct-to was performed. Honeywell advises all pilots to follow the applicable pilot guide or OEM flight manual when creating or modifying flight plans including arrivals and approaches. Honeywell also recommends not using the DTR feature until a software fix has been implemented.

Please contact your OEM for more information regarding possible AFM/RFM limitations due to this issue.

Honeywell recommends that all pilots review the applicable SIL’s referenced below:

<table>
<thead>
<tr>
<th>SIL Publication Number:</th>
<th>D201001000021</th>
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<tbody>
<tr>
<td>Aircraft</td>
<td>Top Level Operational Software</td>
</tr>
<tr>
<td>Agusta AW-139</td>
<td>Phase 3, Phase 4 and Phase 5</td>
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<tr>
<td>Cessna Sovereign</td>
<td>Phase 3, Phase 4 and Phase 5</td>
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<tr>
<td>Gulfstream</td>
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<td>350/450/500/500</td>
<td>Load 19.X</td>
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<td>Hawker 4000</td>
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<tr>
<td>Pilatus PC-12 NG</td>
<td>Top Level Operational Software</td>
</tr>
<tr>
<td>Dassault F900/F2000/F7X EASy</td>
<td>All</td>
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</table>

If you have any questions regarding these SIL’s, please contact the Honeywell Technical Operations Center (TOC) at 1-800-601-3099 (U.S./Canada) or 1-602-365-3099 (Int’l) or send an email to aerotechsupport@honeywell.com.

To download a copy of these SIL’s please visit: www.honeywell.com/myaerospace

Tracking Your Flight Takes on a Whole New Appearance!

We invite you to experience our improved flight following tool that is faster, more accurate and easier to use. The new Google Map graphical interface makes it simple for users on the ground to track your flight, spot turbulence and view weather patterns that may cause flight delays.

The new feature includes:
- Point and click datalink communications to your fleet
- Access to historical uplink and downlink messages, and position reports
- Worldwide airport and VHF station locator
- Customized screens
- Views in Spherical 3D mode

The Global Data Center (GDC) team will continue to support the existing flight following interface for one month. After May 14th, 2010, we’ll decommission the tool and transition all customers to the new interface.

Note: Internet Explorer 6 users will need to upgrade to Internet Explorer 8 or Firefox to take advantage of this new capability.

If you have any questions, suggestions or comments, please contact the GDC team at 1-888-634-3330 or 425-885-8100 or email gfo@mygdc.com.
Improving Your Online Experience; MyAerospace Portal Enhancements

Honeywell Aerospace launched new features to the MyAerospace website, delivering a faster, more flexible web experience to our customers.

The online ordering functionality provides customers:

- Customer-specific pricing
- Real-time status on availability of parts
- Advanced search capabilities on different part types: Purchase (new, refurbished and special program), Exchange, Rental and Repair
- Online Technical Assistance and Troubleshooting Checklists
- Online placement of orders for:
  - SPEX
  - Avionics Aftermarket Services
  - Wheels & Brakes
  - Mechanical Parts

Visit the website at www.MyAerospace.com to see all the latest portal improvements.

Honeywell Introduces Runway Analysis – Aircraft Performance Data

Honeywell’s Global Data Center (GDC) introduces Runway Analysis to its suite of pilot service offerings. Runway analysis provides aircraft performance data that maximize efficiencies and deliver reliable information that helps improve flight safety.

Runway Analysis facilitates the determination of the maximum allowable takeoff and landing weights, based on critical engine failure, for specific airport/runway conditions and various airplane configurations. In addition, Runway Analysis provides detailed information on how much fuel to load, which runways can be used and what obstacle clearances can be met. Most importantly, it’s better to know how much fuel to load in advance due to potential added costs of offloading fuel if weight limits are reached.

This new pre-flight service is an integrated part of the GDC’s flight planning system and supports a full range of aircraft platforms. Through the service, operators will also have access to more than 16,400 runway ends and more than 5,700 airports world-wide. Operators can begin using the service on March 24, 2010 by accessing www.mygdc.com.

Honeywell’s Global Data Center (GDC) is the premier provider of flight support services for business aviation. Services include:

- Comprehensive flight planning
- Cabin communication & data connectivity
- Datalink (Satellite & VHF)
- Database services
- Aviation and passenger weather services including Uplink Weather
- In-flight television and news services
- Air Traffic Services (PDC, D-ATIS, Oceanic Clearances, etc.)
- Flight Sentinel™ services
- International Trip Planning

The GDC delivers the right mix of flight support solutions and subscription services to meet your unique operational requirements and aircraft needs. As a participant in the FAA’s Collaborative Decision Making (CDM) program, our Flight Sentinel™ service utilizes airline-style flight management techniques to enhance flight safety and reduce air traffic delays.
Technical Operations Center (TOC)

Frequently Ask Questions

**Question:** I have an NZ-2000 FMS. How long should the Smart Perf be operated before turning the function OFF?

**Answer:** Approximately 10 flight hours or until performance calculations are satisfactory. Honeywell advises to save the ACDB to either a floppy disc or USB device after satisfactory performance calculations are obtained. The ACDB can then be loaded without requiring the learning function to be turned back ON.

**Question:** When the aircraft is at the new maximum takeoff weight of 92,500 lbs., we do not get the max takeoff warning labels…missing the Vspeeds on the Perf Init pages.

**Answer:** A change introduced by SB700-1A11-1-008 allows use of a new ACDB that does not restrict takeoff weights at or below 90,000 lbs. The AFM will be revised for the new MTOW of 92,500 lbs. If the takeoff weight is greater than 40,823 kg (90,000 lbs.), the crew must manually compute the TOLD data using AFM Chapter 6. This limitation applies to the XRS IAC software version and will be lifted with GEX Batch 3 incorporation.

**Question:** The customer is changing the battery in the NZ-2000. Will he lose the NavDB?

**Answer:** No. He will not lose the NavDB, but he will lose the custom database and aircraft database.

**Question:** Some approach procedures do not match the paper charts. Why?

**Answer:** Our The NZ-2000 database contains some special instrument procedures which require written authorization from your Principal Operations Inspector or Flight Standards District Office prior to use. Special charts are required in all cases and additional aircrew training and specific aircraft performance may be required. A current list of special approached can be obtained from honeywellaes.com. As well as the special procedures that are included in the navigation database, FMS software versions NZ6.0 and Primus Epic 7.0 and prior do not support circling approaches. If your FMS software version does not support circling approaches, they will not be available for selection into the flight plan.

**To contact the TOC,** call 1-800-601-3099 or +1-602-365-3099 or email: aerotechsupport@honeywell.com.

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**Pilot Training & Operational Support**

Honeywell’s Customer & Product Support organization employs a group of experienced pilots dedicated to supporting fielded aircraft and providing training for the avionics and FMS installed during production or retrofit. Pilots are aircraft manufacturer focused and can be contacted via email or phone for operational-type questions.

**Pilot Support Contact Information:**

**Bruce Colby, Lead Pilot**
Type ratings - ERJ170/190, GV, SA227, AW-139/AB-139 & B737
Bruce supports Agusta, Embraer & Gulfstream
Email: bruce.colby@honeywell.com
Phone: (602) 436-6003

**Steve Hammack, Lead Pilot**
Steve supports Pilatus, Viking & HAIG
Email: stephen.hammack@honeywell.com
Phone: (602) 436-2489

**Jeff Holt, Lead Pilot**
Type ratings – LR-JET, EMB145 & B737
Jeff supports CDS/R (Epic retrofit aircraft)
Email: jeff.holt2@honeywell.com
Phone: (817) 564-3436

**Pam Mannon, Lead Pilot**
Type ratings – EMB145, CE680, BBD700 & H4000
Pam supports Bombardier, Cessna, Dassault, & Hawker Beech
Email: pamela.mannon@honeywell.com
Phone: (913) 961-1901

**Roger Moore, Senior Pilot**
Type ratings – LR-JET, A320, A330, B777 & DC-9/MD-80
Rogers supports Airbus & Boeing
Email: roger.moore@honeywell.com
Phone: (602) 436-1528

For field support, or to find your local Honeywell representative, consult the Business & General Aviation Customer Support and Aftermarket Sales Directory
For FMS questions, email: talkfms@honeywell.com
Go Direct Services™

Special Aircraft and Aircrew Authorization Required (SAAAR) is the FAA’s note on RNAV (RNP) approach charts reminding an operator that the procedure requires special equipage, training, maintenance, navigation database validation, and authorization to fly the approach. Realizing that RNP authorization is not a simple task, Honeywell received a consultancy designation from the FAA and launched Go Direct Services. Go Direct works with your flight department to develop the paperwork for an RNP application and will coordinate with the local, regional, and national levels of the FAA to manage the operational approval.

Go Direct is also offering several services to aid operators in obtaining Data Link approvals (ADS-C and CPDLC) to utilize FANS 1/A capabilities. Similar to our RNP services, Go Direct works with your flight department to develop a FANS 1/A application and will coordinate the process with all levels of the FAA.

For more information on adding these authorizations to your flight department, contact Kimberly Ten Pas Bell at 425 614-5495 or email kimberly.tenpasbell@honeywell.com.

Upcoming FMS Seminars and Briefings

Training Events and Seminars Coming to a City Near You!

Training includes Honeywell Operators Conferences as well as full day FMS and Weather Radar Seminars co-hosted by CAE. These seminars are primarily for pilots, but maintenance personnel and technicians are encouraged to attend as operational tips, new products and upgrades are covered. Additional information such as registration and agendas can be found using the ‘Quick Links’ at: www.honeywelltraining.com

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<th>Date</th>
<th>Description</th>
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<td>FMS v6.1/v7.1 software/hardware update briefing (all aircraft)</td>
<td>Geneva, Switzerland</td>
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<td>May 6</td>
<td>FMS v6.1/v7.1 software/hardware update briefing (all aircraft)</td>
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<td>FMS v6.1/v7.1 software/hardware update briefing (all aircraft)</td>
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<tr>
<td>June 28</td>
<td>FMS v6.1/v7.1 software/hardware update briefing (all aircraft)</td>
<td>Hong Kong</td>
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Interested in attending a seminar? Contact Pam Mannon at (913) 961-1901 or pamela.mannon@honeywell.com.