European Commission Adopts CPDLC Mandate

Adoption of data link communications moved forward as the European Commission accepted Link 2000+ Programme’s proposed Data Link Services Implementing Rule (DLS IR) on January 16, 2009.

The DLS IR states that aircraft with a certificate of airworthiness first issued on or after January 1, 2011 operating GAT/IFR in European Airspace must be equipped with data link capabilities by January 1, 2011. Aircraft with airworthiness certificates issued before January 1, 2011 must be equipped by February 5, 2015. The IR includes exemptions for certain aircraft, such as those already equipped with other data link services (i.e. FANS 1/A). The first phase of the IR applies to air traffic operating above FL 285.

The EUROCONTROL Link 2000+ Programme provides enroute Controller Pilot Data Link Communication (CPDLC) services, which allow for the direct exchange of text-based messages between a controller and a pilot.

The CPDLC messages automates routine tasks that can take up to 50% of a controller’s time. Messages include standard ATC clearances “ACL” (e.g. “Climb to level 350”) or “AMC” (e.g. microphone check). It also enables communication in case of blocked frequencies.

Data link services are intended to augment ATC voice communications and provide additional air traffic control capacity in high density ATC environments. Find out more about the CPDLC mandate by visiting: www.eurocontrol.int/link2000/.

Universal currently offers the UniLink® Communication Management Unit for air-to-ground data link capabilities. Look for more from Universal later this year on how to meet CPDLC mandate.

New Product News

Universal Avionics Launches Revamped Website | www.uasc.com

The debut of Universal Avionics’ newly redesigned website is scheduled for May 1, 2009. A number of improvements to enhance the overall visitors’ experience have been made, including interactive design elements and user-friendly navigation.

Highlights include:

• Sections dedicated to Business, Transport (Airline or Regional), Government and Rotorcraft aircraft types
• 360 degree product views
• Improved, comprehensive search capability
• The Universal Flyer newsletter archive
• “At-a-glance” news tabs on homepage

Mark your calendar for May 1 to check out the new site.

Notice to DTU-100 Operators: ZIP Drive Obsolescence

Universal Avionics was recently notified that Zip drive manufacturer iomega® has ceased production of the Zip® disk drive units used in our DTU-100 products, forcing the end of this product line.

Universal will continue to provide databases available on Zip® disks to DTU-100 customers and will continue to provide warranty service for the DTU-100. Note that out-of-warranty repairs requiring the replacement of the Zip® drive will no longer be supported.

The Solid State Data Transfer Unit (SSDTU), released last year, replaces the DTU-100. The SSDTU is capable of interfacing with a variety of products, including those previously supported by the DTU-100.
RNP SAAAR vs RNAV (GPS) LPV
How to Decide Which is Best for Your Flight Operations

Among the crop of new instrument approach procedures being defined by the FAA, RNP SAAAR and RNAV (GPS) LPV have both received a lot of media attention lately. Both types of procedures – Required Navigation Performance (RNP) Special Aircraft and Aircrew Authorization Required (SAAAR) and RNAV (GPS) LPV Wide Area Augmentation System (WAAS) – are important elements in the FAA’s transition to a performance-based National Airspace System. In addition, both provide significant benefits to operators. But outfitting your aircraft to fly these procedures is costly, so which one is best for you?

Cost
Obtaining RNP SAAAR approval involves significant overhead. Operators must obtain approval to fly an RNP SAAAR procedure through a complex process similar to that used for ILS Cat II/III procedures. Authorization includes an aircraft qualification and an operator qualification, and will include specific training and navigation database requirements.

In most cases, equipping an aircraft with RNAV (GPS) LPV capability is substantially more cost effective than RNP SAAAR. While an aircraft equipage qualification (i.e. WAAS GPS receiver) is required, no special operational approval is required.

Availability
RNP SAAAR authorization is effective only for a specific runway procedure and the approval process must be repeated for each approach. Approach procedures with LPV are more widely distributed and available in the U.S. Worldwide support for Satellite-based Augmentation Systems (SBAS) is growing and will provide seamless worldwide coverage. It is easier to obtain approval for these operations and are better suited for wider range of business, corporate and transport aircraft.

Statistics
Universal Avionics researched navigation data to find the following (as of January 15, 2009):

- Number of runways with RNAV (GPS) approaches containing an LPV minimum (decision height): 1,445
- Number of runways with an RNAV (RNP) requiring SAAAR: 90
- Of the 1,445 runways with an LPV minimum, those that are to non-ILS runways: 832
- Number of RNP approaches to non-ILS runways: 16
- Approaches with LPV with a Decision Height (DH) less than 250': 73
- RNP approaches with a DH less than 250': 0
- Of the 90 RNP SAAAR procedures published, 78 of those approaches are to runways that also have an RNAV (GPS) approach containing an LPV with a lower minimum

Summary
Availability is limited and the approval process is complex and costly for RNP SAAAR procedures. They are commonly sought after by airline and cargo operators that require certain “curved” approaches into a particular airport. The most effective application is in areas with terrain obstacles.

Approach procedures with LPV are more widely distributed and available in the U.S. Worldwide support for Satellite-based Augmentation Systems (SBAS) is growing and will provide seamless worldwide coverage. It is easier to obtain approval for these operations and are better suited for wider range of business, corporate and transport aircraft.

Software and Hardware Updates

**EFI-890R**
SCN 1017.7 approved 1/29/09.
This minor change adds alternate display formats, software updates for Garmin WAAS interface, allows Vision-1® display simultaneously on left and right PFD, changes MLSA depiction plus other improvements.

**MFD**
SCN 1011.5.1 approved 2/6/09.
This minor change supports RDR-4000 weather radar, RDR-4B Windshear mode and Primus 700A/701A SAR radar interface.

**FMS**
SCN 802.6/902.6 approved 12/12/08. Minor change addresses memory corruption issues during crossfill operations.
SCN 802.7/902.7 expected April.
Minor change addresses VNAV issue and other minor changes.

**CVFDR**
SCN 2000.0.0 expected May.
This major TSO / STC project introduces the CVFDR product line. The CVFDR is a cockpit voice, flight and data recorder with optional internal Recorder Independent Power Supply (RIPS) capability.

High Ranks for Universal’s Product Support

Congratulations to the Universal Avionics Product Support team for their stellar performance in ProPilot’s 2009 Annual Product Support Survey. Universal ranked just a few tenths of a point shy of first place.


*Excerpt from ProPilot Jan 2009 Issue*
Is SSDTU operation different from the DTU-100?

Operators of the SSDTU enjoy the same functionality as the DTU-100 with the added convenience of using USB flash drives or SD cards.

However, one difference exists when loading databases into the FMS, TAWS and Vision-1®. All data must be in a special folder named “uasc” on the USB drive or SD card.

Navigation database (navdata) customers downloading data from UniNet must create a folder named “uasc” on the USB flash drive or SD card, and then put the data files in that folder. The “uasc” folder should be deleted before copying or unzipping new navdata into the folder.

Customers receiving their databases via mail receive a USB flash drive pre-loaded with the database files in a “uasc” folder.

Why do I need this “uasc” folder?

The FMS looks in the “uasc” folder when any disk operation command is initiated. It will ignore all other data on the USB flash drive or SD card. For instance, when loading a database the FMS will only load the data in the “uasc” folder. Similarly, if a blank USB flash drive or SD card is inserted into the SSDTU, it will automatically create a “uasc” folder on the memory device. This ensures that downloads such as flight data recording files are recorded to the “uasc” folder.

Does this “uasc” folder apply to other types of data loads besides navdata?

Yes. Company data, pilot-defined data or any other “Universal Avionics” data must be in the “uasc” folder on the USB flash drive or SD card.

Does this mean I can keep other data on my USB stick?

Yes. Files and folders on your USB flash drive or SD card will not be affected by any FMS operation. For instance, the “Format Disk” operation erases all data on a Zip® or floppy disks, but will only erase the data in the “uasc” folder on your USB flash drive or SD card.

Do I need to format my USB flash drive or SD card?

No. Zip® and floppy disks used with older DTUs needed to be formatted, or erased, to ensure that only “Universal Avionics” data is on the disk. Any other data on the disk could cause a problem when loading FMS data into the unit. Because the FMS only reads data from the “uasc” folder when using the SSDTU, other types of files and folders on the USB flash drive or SD card do not affect FMS data loads and downloads.

Can I combine Universal Avionics data in the “uasc” folder?

No. You can’t mix navdata, company data or anything else in the “uasc” folder. If you want to load both navdata and company data, you’ll need two USB drives.

Instructions for downloading navdata can be found on our website: www.uasc.com.

Service Bulletins and Letters

<table>
<thead>
<tr>
<th>SB/SL No.</th>
<th>Release Date</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB3283</td>
<td>12/10/08</td>
<td>Install of SCN 1016.0.4 in the RCU</td>
</tr>
<tr>
<td>SB3306</td>
<td>1/8/09</td>
<td>Installation of Mod 3 in the UNS-1Ew, -1Espw, -1Fw, -1Lw FMS/MMMS and LP/LPV Monitor</td>
</tr>
<tr>
<td>SB3303</td>
<td>1/13/09</td>
<td>Introduction of the SSDTU P/N 1408-00-X and the Portable SSDTU P/N 1409-00-2</td>
</tr>
<tr>
<td>SB3309</td>
<td>1/21/09</td>
<td>Introduction of the WAAS (SBAS) GPS/Sirius Antenna P/N 10709</td>
</tr>
<tr>
<td>SB3305</td>
<td>1/20/09</td>
<td>Installation of SCN 802.6/902.6 in the UNS-1E, -1C+, -1Esp, -1Csp+, -1F, -1D+, -1L and -1K+ FMS/MMMS</td>
</tr>
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<table>
<thead>
<tr>
<th>SB/SL No.</th>
<th>Release Date</th>
<th>Title</th>
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<tr>
<td>SB3307</td>
<td>1/29/09</td>
<td>ALERT: Erroneous FMS Operation During A Holding Pattern Course Reversal Approach Transition</td>
</tr>
<tr>
<td>SL2816</td>
<td>2/10/09</td>
<td>Obsolescence of the DTU-100 and Portable DTU-100</td>
</tr>
<tr>
<td>SB3316</td>
<td>2/6/09</td>
<td>Installation of SCN 1017.0.7 in EFI-890R PFD/ND System</td>
</tr>
<tr>
<td>SL2815</td>
<td>2/25/09</td>
<td>Installation Considerations for Universal’s WAAS (SBAS) FMS</td>
</tr>
<tr>
<td>SB3333</td>
<td>2/25/09</td>
<td>Installation of SCN 1011.5.1 in the MFD-640</td>
</tr>
</tbody>
</table>

All Service Bulletins and Letters are available at: www.uasc.com.
Value of Universal Avionics Equipment...Defined

Universal Avionics’ EFI-890R Flat Panel Glass Displays were recently included in the “Add-on” option list in the Aircraft Bluebook Price Digest compiled by AC-U-KWIK and published by Penton Business Media, Inc.

Used as a reference and assessment tool when valuing aircraft, Aircraft Bluebook is the most renowned resource used by brokers and owners when evaluating the value of an aircraft.

While an array of Universal Avionics FMSs are currently in the list of optional equipment for many aircraft types, the addition of the EFI-890R is new to the 2009 edition of Aircraft Bluebook.

Customers have always known aircraft with Universal equipment onboard have considerable value, and now we have the data to prove it.

A few examples:

- A UNS-1L FMS and 3-panel EFI-890R adds $1,133,000 to the average retail value of a 1992 Learjet 35A
- A UNS-1F FMS and 5-panel EFI-890R adds $1,342,000 to the average retail value of a 2000 Dassault Falcon 50EX
- A UNS-1E FMS and 4-panel EFI-890R adds $1,0170,000 to the average retail value of a 1998 Bombardier Challenger CL-600

How much will the value of your aircraft increase with an EFI-890R?