EASA Safety Information Bulletin

SIB No.: **2009-06**
Issued: **20 May 2009**

Subject: **Rockwell-Collins GPS Receiver – Date Rollover Anomaly.**

Ref. Publications:

Rockwell Collins Service Information Letters:
GNLU-910/910A SIL 08-1 [523-0817133-001000]
GLU-920 SIL 08-1 [523-0816685-001000]
GLU-920 SIL 08-2 [523-0817135-001000]
GLU-925 SIL 08-2 [523-0817136-001000]
GNLU-930 SIL 08-1 [523-0816695-001000]
GPS-4000( )-08-1 [523-0817051-001000]

Rockwell-Collins Service Bulletins:
GLU-920-34-25 Revision 2 [523-0816584-201000]
GLU-920-34-26 Revision 1 [523-0816585-101000]
GLU-920-34-27 [523-0817076-001000]
GLU-925-34-4 Revision 2 [523-0816586-201000]
GLU-925-34-5 [523-0817169-001000]
GNLU-930-34-2 [523-0816638-001000]
GPS-4X00( )-34-9 Revision 1 [523-0816637-101000]

Description:

Rockwell-Collins has informed EASA of a software anomaly in certain Multi-Mode Receivers (MMR) as listed in the applicability section below. From 20 to 21 June, 2009 transition at 00:00 GMT, this anomaly may cause the MMR to compute a date that is 512 weeks or approximately 19.5 years in the past, except where the MMR is:

- Powered during the 00:00 GMT transition from 20 to 21 June 2009, and
- Provided with the correct date by an on-board source, such as a Flight management System or flight deck clock.

Note: On many aircraft carrying a third MMR, this MMR is used to provide ILS/VOR data only and is not connected to a GPS antenna. If this is the case, the GPS date will not be updated.

<u>The anomaly does not affect position, integrity and time of day data provided by the MMR.</u>

The anomaly may affect the following functions:

- FANS/CPDLC – The ATC Datalink function will be unavailable.
- FMS – NAV Database Out of Date messages.
- BITE – The fault history in equipment may have an incorrect date.
- Maintenance, condition monitoring systems – Possible loss of data due to incorrect date-stamp.
- ACARS – Incorrect date.
- Flight Deck Clocks – May synchronize with the MMR date and display an incorrect date.
- FDR/CVR – Incorrect date-stamp.

EASA strongly recommends operators of the affected aircraft to take the following actions:

- Contact Rockwell-Collins to establish a modification program.
- Carefully evaluate information provided by the manufacturer of their aircraft and comply with their recommendations.
- Develop mitigation plans for the loss of capability to perform FANS/CPDLC operations.
- Develop mitigation plans for fault detection and correction, maintenance scheduling and aircraft condition monitoring.

Applicability:

Multi-Mode Receivers, models GNLU-910, GNLU-910A, GLU-920, GLU-925, GNLU-930, GPS-4000A and GPS-4000S.

These units are known to be installed on, but not limited to, Boeing 737, 747, 757, 767 and 777 series aeroplanes, Airbus A300-600, A310, A320, A330, A340 and A380 series aeroplanes and Bombardier Inc. (formerly Canadair) CL-600 series aeroplanes. See the referenced Rockwell Collins Service Bulletins for specific applicability information.

Contacts:

For further information contact the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA; E-mail: ADs@easa.europa.eu.

Copies of the service publications referenced in this SIB may be obtained upon request from Rockwell-Collins Inc.,
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