



Safety Information Bulletin

Airworthiness

SIB No.: 2016-05R2

Issued: 22 April 2016

Subject: Mode S Enhanced Surveillance - Incorrect Downlinked Barometric Pressure Setting (BPS)

Reason for revision: This SIB revises and replaces EASA SIB 2016-05R1, dated 18 March 2016, to extend the applicability and to include recommendation for aeroplanes having any of the affected transponders installed by means of Supplementary Type Certificate (STC).

Ref. Publications:

Airbus Flight Crew Operating Manual (FCOM) Standard Operating Procedure (SOP) CLIMB

Applicability:

Airbus A300, A300-600, A300-600ST and A310 (hereafter collectively referred to as "WB") aeroplanes, Airbus A318, A319, A320 and A321 (hereafter collectively referred to as "SA") aeroplanes, and Airbus A330 and A340 (hereafter collectively referred to as "LR") aeroplanes, equipped with any of the transponders listed below, compatible with Secondary Surveillance Radar (SSR) Mode S Enhanced Surveillance:

- ACSS XS-950, Part Number (P/N) 7517800-10005, installed in accordance with:
 - WB: Airbus modification (mod) 12591, or Service Bulletin (SB) A310-34-2198, or SB A300-34-6161.
 - SA: Airbus mod 31818, or SB A320-34-1260, or SB A320-34-1342 or SB A320-34-1383.
 - LR: Airbus mod 50300, or SB A330-34-3140, or SB A330-34-3212, or SB A340-34-4147 or SB A340-34-4190, or SB A340-34-5039.
 - Modification not designed by Airbus (e.g. STC).
- Collins TPR-901, P/N 822-1338-021, installed in accordance with:
 - WB: Airbus mod 12589, or SB A300-34-0174, or SB A310-34-2192, or SB A300-34-6147.
 - SA: Airbus mod 32477, or SB A320-34-1265, or SB A320-34-1364 or SB A320-34-1537.
 - LR: Airbus mod 50301, or SB-A330 34-3135, or SB A340-34-4123, or SB A340-34-4262, or SB A340-34-5019.
 - Modification not designed by Airbus (e.g. STC).
- Honeywell TRA-67A, P/N 066-01127-1402, installed in accordance with:
 - WB: Airbus mod 12582, or SB A310-34-2177, or SB A300-34-6146.
 - SA: Airbus mod 31802, or SB A320-34-1259.
 - LR: mod 50288, or SB A330-34-3134, or SB A340-34-4125, or SB A340-34-5014.
 - Modification not designed by Airbus (e.g. STC).

This is information only. Recommendations are not mandatory.



Description:

When climbing through the transition altitude, the flight crews are required to set standard pressure setting of 1013 hPa (STD). This is normally achieved by ‘pulling’ the control knob marked ‘STD’ on the altimeter for WB aeroplanes or on the Flight Control Unit (FCU) for SA/LR aeroplanes. It was established that due to a design error, the previous value of barometric pressure setting (BPS) selected before application of the STD continues to be downlinked to the ground via the SSR Mode S transponder. Correct BPS is required by the ground based safety net systems to provide early warning of a potential deviation of the aircraft from the ATC cleared level.

For SA/LR and A300-600ST aeroplanes, this design error is further described in a Note in the Airbus FCOM SOP CLIMB when one of the above transponders is installed. For A300, A300-600 and A310 aeroplanes, a temporary revision of the Airbus FCOM SOP CLIMB will be published September 2016 to address this.

Note 1: The aircraft altitude downlinked to the ground, and broadcast to other aircraft, is not affected because this value is always referenced to standard barometric pressure setting of 1013 hPa.

For SA/LR aeroplanes, the following equipments are known to be not affected by the described design deficiency:

- ACSS XS-950, P/N 7517800-10100, installed in accordance with:
 - SA: Airbus mod 150306, or SB A320-34-1466.
 - LR: Airbus mod 58459, or SB A330-34-3251, or SB A340-34-4283, or SB A340-34-5111.
 - Any other EASA approved modification
- ACSS XS-950, P/N 7517800-12401, installed in accordance with:
 - SA: Airbus mod 155999.
 - LR: Airbus mod 203379.
 - Any other EASA approved modification
- Collins TPR-901, P/N 822-1338-225, installed in accordance with:
 - SA: Airbus mod 155998.
 - LR: Airbus mod 203689.
 - Any other EASA approved modification
- Honeywell TRA-67A, P/N 066-01127-xxxx (where “xxxx” is a number still to be defined), installed in accordance with:
 - SA: Airbus mod planned to be certified in August 2016.
 - LR: Airbus mod planned to be certified in August 2016.
 - Any other EASA approved modification

The downlinked BPS is also correct on A318, A319, A320 and A321 aeroplanes having T3CAS installed (T3CAS ACSS P/N 900-5000-1000 and subsequent P/Ns).

This is information only. Recommendations are not mandatory.



At this time, the safety concern described in this SIB is not considered to be an unsafe condition that would warrant Airworthiness Directive (AD) action under Regulation (EU) [748/2012](#), Part 21.A.3B.

Recommendation(s):

Unless otherwise specified by the STC holder:

For those ATC Centres who notify the crew that they have received an incorrect barometric pressure setting value, or where crews are aware that a particular ATC Centre is using this data, EASA recommends the flight crews to manually select a BPS of 1013 hPa when climbing through the transition altitude before 'pulling' the control marked 'STD' on the altimeter for WB aeroplanes or on the FCU for SA/LR aeroplanes. This will have the effect of transmitting, and continuing to transmit, a BPS setting of 1013 hPa to the ATC.

Note 2: For A300-600ST, this recommendation has already been introduced in the Airbus FCOM SOP CLIMB.

This operation does not affect the downlinking of BPS when descending through the transition altitude, where normal operation requires the crew to push the control marked 'STD' on the FCU and enter the QNH/QFE as appropriate.

Contact(s):

For further information contact the EASA Safety Information Section, Certification Directorate.

E-mail: ADs@easa.europa.eu.

For further information regarding the operating procedure described in this SIB, please contact Airbus via e-mail:

For LR aeroplanes: airworthiness.a330-a340@airbus.com;

For WB aeroplanes: continued.airworthiness-wb.external@airbus.com;

For SA aeroplanes: account.airworth-eas@airbus.com.

This is information only. Recommendations are not mandatory.

