



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 18-153

Issued: 08 November 2018

Note: This Proposed Airworthiness Directive (PAD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name:

THALES AVS FRANCE SAS

Type/Model designation(s):

GPS/SBAS Receiver Topstar 200 LPV units

Effective Date: [TBD - standard: 14 days after AD issue date]

TCDS Number(s): EASA.21O.10047210

Foreign AD: Not applicable

Supersedure: None

ATA 34 – Navigation – Global Navigation Satellite System – Operational Limitations

Manufacturer(s):

Thales AVS France SAS (Thales), formerly Thales Avionics SAS

Applicability:

Thales Global Positioning System/Space Based Augmentation Systems (GPS/SBAS) receivers, Topstar 200 LPV, identified by Part Number (P/N) C17149HA01 and P/N C17149JA02, using SBAS and having Localizer Performance with Vertical guidance (LPV).

These receivers are known to be installed on, but not limited to, ATR 42-500 (in a configuration commercially known as '600 version') and ATR 72- 212A (600 version) aeroplanes, and Sikorsky S-76D helicopters.

Definitions:

For the purpose of this AD, the following definitions apply:

The TR: Temporary revision (TR) of the Aircraft Flight Manual (AFM), Rotorcraft Flight Manual (RFM), or Supplement (AFMS, RFMS), as applicable, of the affected aircraft. The TR should be provided by the design approval (type certificate) holder of the affected aircraft, or the design



change approval (supplemental type certificate) holder of the modification through which the Topstar 200 LPV GPS/SBAS receiver was installed, as applicable.

Reason:

It has been determined that, in SBAS areas, in specific conditions of the GPS satellite constellation in line of sight to the aircraft, the Thales Topstar 200 LPV GPS/SBAS receiver may provide an erroneous position on its outputs, which may not be detected by the integrity check. Depending on the aircraft installation, this error may not be noticed by the flight crew.

This condition, if not corrected, could possibly compromise the safety margins when the receiver is used for LPV and/or RNP-AR (Required Navigation Performance – Authorization Required) operations.

Prompted by these findings, Thales has informed the respective aircraft manufacturers.

For the reasons described above, this AD requires removal from the navigation database of LPV procedures listed in Appendix 1 of this AD and all RNP-AR procedures in SBAS areas. This AD also requires amendment of the AFM, RFM, AFMS, or RFMS, as applicable, of the affected aircraft.

This AD is considered as an interim action and further AD action will follow.

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

Use of Navigation Database:

- (1) Within 30 days after the effective date of this AD, update the navigation database where all RNP-AR procedures within SBAS areas and LPV procedures as listed in Appendix 1 of this AD have been removed and, thereafter, use only a regularly updated navigation database where the above-mentioned procedures are removed.

Flight Manual Update:

- (2) Within 30 days after the effective date of this AD, amend the AFM or RFM or RFMS of the aircraft by inserting the TR, containing instructions to reset the GPS receivers before each flight, inform all flight crew and, thereafter, operate the aircraft accordingly.

Ref. Publications:

None.

Remarks:

1. This Proposed AD will be closed for consultation on 06 December 2018.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred



on a product, part or appliance not affected by this PAD, can be reported to the [EU aviation safety reporting system](#).

4. For any question concerning the technical content of the requirements in this PAD, or for information related to Thales GPS receiver and Navigation Database, please contact:
Thales AVS France SAS, E-mail: continued.airworthiness@thalesgroup.com.



Appendix 1 – LPV Procedures to be removed

The LPV procedures listed below must be removed from LIDO FMGL3-1806-FASDB ATR and JEPPESEN FMALL-CYCLE-1811 FMS database.

Code	Airport Name	Country	Code	Airport Name	Country
CYRB	Resolute Bay	Canada	EPSY	Olsztyn/Mazury	Poland
CYUX	Hall Beach		EPWA	Warsaw/Chopin	
EEKE	Kuressaare	Estonia	EPWR	Wroclaw/Strachowice	
EFJO	Joensuu	Finland	EPPL	Lublinek	
EICK	Cork	Ireland	ESNO	Ornskoldsvik	Sweden
ENAN	Andoya/Andenes	Norway	ESUD	Storuman	
ENDU	Bardufoss		ESNX	Arvidsjaur	Hungary
ENEV	Harstad-Narvik/Evenes		LHBP	Budapest/Liszt Ferenc	
ENKR	Kirkenes/Hoybuktmoen		LKKU	Kunovice	Czech Republic
ENLK	Leknes		LKMT	Ostrava/Mosnov	Austria
ENSG	Sogndal/Haukasen		LOWW	Vienna/Schwechat	
ENSH	Svolvaer/Helle		LPPR	Porto/Francisco sa Carneiro	Portugal
ENSK	Stokmarknes/Skagen		LPPT	Lisbon	
EPBY	Bydgoszcz/Szwedero	Poland	LRCL	Cluj Napoca/Avram Iancu	Romania
EPGD	Gdansk/Lech Walesa		LZIB	Bratislava/M.R.Stefanik	Slovakia
EPKK	Krakow/Balice		LZKZ	Kosice	
EPKT	Katowice/Pyrzowice		LZPP	Piestany	
EPLB	Lublin		LZTT	Poprad/Tatry	
EPMO	Warsaw/Modlin		LZZI	Zilina	
EPRZ	Rzeszow/Jasionka				

