

# Safety Information Bulletin

## Operations – ATM/ANS

**SIB No.: 2023-03R1****Issued: 22 October 2025****Subject: Incorrect Barometric Altimeter Setting****Revision:**

This SIB revises EASA SIB 2023-03 dated 09 March 2023.

**Ref. Publications:**

- Commission Regulation (EU) [965/2012](#) of 05 October 2012
- Commission Implementing Regulation (EU) [2017/373](#) of 01 March 2017
- Commission Implementing Regulation (EU) No [923/2012](#) of 26 September 2012
- Bureau d'enquêtes et d'analyses pour la sécurité de l'aviation civile (BEA) Final Report [BEA2022-0219](#) dated 11 July 2024

**Applicability:**

Aircraft operators and Air Navigation Service Providers.

**Description:**

Serious incidents have highlighted a concern on the effects of incorrect barometric altimeter settings when operating below the transition level. Operating with an incorrect altimeter setting could result in insufficient clearance with terrain and obstacles, or a loss of separation with other traffic, which may potentially lead to CFIT (refer to the acronyms list in Appendix 1 of this SIB) or mid-air collision.

Procedures relying on the use of barometric altimetry have been used for many years and have considerably improved safety by offering vertical guidance to runways, which were previously served with 2D instrument approach procedures or even visual approach procedures.

Incorrect barometric altimeter setting, however, could severely affect the safety margins protecting a variety of approach procedures that are based on the use of barometric altimetry for vertical navigation (e.g. RNP APCH to LNAV/VNAV minima, RNP AR APCH), or that are flown using the CDFA technique that rely on a BARO-VNAV equipment onboard to compute the vertical profile and to provide vertical guidance along the descent (e.g., NDB, VOR, LOC). In addition, it is highlighted that when using barometric altimetry for vertical navigation, altitude/distance cross checks in the Standard Operating Procedures do not detect an incorrect barometric altimeter setting.

Although vertical guidance provided in the Final Approach Segment by ILS, SBAS or GBAS is not directly affected by incorrect barometric settings, barometric setting remains relevant for other

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This is information only. Recommendations are not mandatory.



phases of the approach (e.g. initial, intermediate and missed approach segments, and the go-around decision).

Setting the correct barometric values involves several steps that may be subject to errors, including the following: the determination of the local barometric pressure by the meteorological service provider, the broadcasting of the local QNH (or QFE) through ATIS (where available), the radio transmission of the local QNH (or QFE) by Air Traffic Services to the flight crew, and, finally, the altimeter setting by the flight crew from 1013.2 hPa / 29.92 inHg to QNH (or QFE).

Since the publication of the original issue of this SIB, additional incidents have been reported in which incorrect altimeter setting has been identified as a contributory or causal factor. Consequently, this SIB is revised to further clarify the recommendations to ANSPs and aircraft operators.

At this time, the safety concern described in this SIB does not warrant the issuance of a Safety Directive (SD) under Commission Regulation (EU) [965/2012](#), Annex II, ARO.GEN.135 nor under Commission Implementing Regulation (EU) [2017/373](#), Annex II, ATM/ANS.AR.A.025.

### Recommendations:

Aircraft operators and ANSPs are reminded of the importance of ensuring that the correct barometric altimeter setting is provided and entered in the aircraft's systems.

To prevent the risk of incorrect barometric setting and mitigate its potential consequences, the following practices are recommended:

To ANSPs:

- Ensure that a directed transmission containing QNH has been provided to each arriving aircraft at least once, and a correct readback has been received.

In this regard, assess, and document, whether providing aircraft with a further QNH when cleared for approach, or at first contact with the tower, would be an appropriate mitigation to the referenced risk.

- Implement tools, where available within the existing technology and systems, to utilise the downlinked barometric pressure settings from Mode S EHS equipped aircraft to enable timely identification of aircraft operating with incorrect altimeter setting.

To aircraft operators:

- Develop procedures to support pilots in checking the consistency of the QNH (or QFE) with previous settings and other available sources (e.g. ATIS).
- Assess the effectiveness of those already implemented procedures, and assess new procedures, e.g. pre-select altimeters based on latest information (e.g. ATIS), during the approach briefing. When this is not feasible, consider alternative systems to obtain/record QNH information during the approach briefing phase.
- Ensure that the latest available software version and the latest terrain and obstacle database are loaded in the TAWS.

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- Investigate methods to identify incorrect altimeter setting with the FDM Programme.

In addition, ANSPs and aircraft operators are reminded of the obligations on the use of standard phraseology (ref. Commission Implementing Regulation (EU) No. [923/2012](#)) and on reporting of occurrences (ref. Regulation (EU) No. [376/2014](#)).

**Contact(s):**

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

E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).

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**Appendix 1 – Acronyms list**

2D instrument approach	Two-dimensional instrument approach operation means an instrument approach operation using lateral navigation guidance only
ANSP	Air Navigation Service Providers
ATIS	Automatic Terminal Information Service
BARO-VNAV	Barometric Vertical Navigation
CDFA	Continuous Descent Final Approach
CFIT	Controlled Flight Into Terrain
FDM	Flight Data Monitoring
GBAS	Ground Based Augmentation System
ILS	Instrument Landing System
LNAV	Lateral Navigation
LOC	Localiser
LPV	Localiser Performance with Vertical Guidance
Mode S EHS	Mode S Enhanced Surveillance
NDB	Non-Directional Beacon
QFE	Pressure at airfield elevation
QNH	Pressure reduced to mean sea level
RNP APCH	Required Navigation Performance Approach
RNP AR APCH	Required Navigation Performance "Authorization Required" Approach
SBAS	Satellite Based Augmentation System
TAWS	Terrain Awareness Warning System
VNAV	Vertical Navigation
VOR	VHF Omnidirectional Radio Range

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