Safety Message

The risk of incorrect altimeter settings

Issued: 2023-06

In May 2022, an Airbus A320 approaching Paris Charles de Gaulle airport was given an incorrect altimeter pressure setting, which caused the barometric altimeters on board to indicate that the aircraft was nearly 300 feet higher above the ground than it actually was.

The crew were unaware of the problem and didn't see the runway because of bad weather. They carried out what they believed was a normal go around and never realised that they came within six feet of hitting the ground. The altimeter indicated around 300' at the time.

Incorrect barometric altimeter setting 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 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 **do not** detect an incorrect barometric altimeter setting.

The links below will take you to a Safety Awareness Video and a Safety Notice and are provided here with the kind permission of the United Kingdom CAA.

Safety awareness video - The risk of incorrect altimeter settings - YouTube

Safety notice 2023/003