

Safety Bulletin

3 MARCH 2016

Deviations around weather

Due to significant weather events in Australian airspace, in the 30 days from 7 December 2015 there were 22 safety reports submitted about aircraft deviating off route without a clearance, deviating off route by further than the clearance issued or reporting back on route when they were not.

Every request for weather deviation is treated with importance by the receiving controller. In order to provide a clearance, assessment of separation with conflicting traffic is required as well as, in many cases, coordination with another controller. The coordination can be complicated when using HF to relay air traffic control (ATC) communications or when close to the boundary with a foreign Air Navigation Service Provider.

Pilots are requested to notify ATC of any requirement to deviate from route with as much notice as possible. If a clearance cannot be obtained in time, and a deviation is imperative to the safety of the aircraft, then pilots must follow the procedures detailed in AIP ENR 1.1-39 or when in Oceanic Control Area, those detailed in ENR 2.2-3.

In Australian Flight Information Regions, all airspace above FL245 is Class A, with separation predicated on aircraft operating along the centreline of their cleared route or in accordance with strategic lateral offset procedures (SLOP) in Oceanic Control Area. Improvements in aircraft navigation accuracy, increasing traffic levels and the requirement to improve operating efficiency has, over time, led to a reduction in the separation standards required between aircraft in non-radar airspace.

Deviation from route, for even a small distance, must be conducted only after having received an ATC clearance to do so, except in an emergency.

When a clearance for a weather deviation is provided, the extent of the deviation is recorded by ATC and separation with other aircraft or active restricted areas is based on the cleared route plus the deviation. If an additional weather deviation is required, this must be communicated to ATC at the earliest opportunity to allow further assessment of possible conflicts. A change in flight level may need to be coordinated and actioned prior to facilitating further lateral deviation from route.

Pilots should report when clear of weather or when back on route, depending on the nature of ATC's report request. These reports cancel the clearance to divert around weather and further deviations from route will require a new clearance.

When communicating with ATC by Controller Pilot Data Link Communications (CPDLC) it is imperative that the 'BACK ON ROUTE' message is not downlinked until either:

- the aircraft has re-joined its previously cleared route
- or
- the aircraft has requested and has been cleared direct to a subsequent waypoint and is proceeding direct to that waypoint.

Downlinking 'BACK ON ROUTE' before the aircraft is actually established on the cleared route may result in ATC applying incorrect separation tolerances to the aircraft based upon an assumption the aircraft is back on route, as the off-track information is automatically removed from the aircraft label.

Further information

ICAO Annex 2 Para 3.6.2 - Adherence to Flight Plan

ICAO Doc 4444 Para 15.2.3 – Weather Deviation Procedures

[AIP ENR 1.1 Para 19.7 – Deviation from Track](#)

[AIP ENR 2.2 – Operations in Oceanic Controlled Airspace](#)

[AIP GEN 3.4 Para 6.7 – Reporting Back on Route by CPDLC](#)

[AIC AIRAC H11/15 28 May 2015 – Weather Deviations and Reporting Back on Route](#)

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