
Turnback Procedures in the NAT

North Atlantic (NAT) Diversion Update

The latest edition of NAT Document 007 – North Atlantic Operations and Airspace Manual (v.2017-1) contains a subtle modification to the NAT contingency procedures in Chapter 13 – Special Procedures for In-Flight Contingencies. The changes have been underlined and italicized below for ease of reading:

13.3.5 Before commencing any diversion across the flow of adjacent traffic *or before initiating any turn-back (180°)*, aircraft should, *while subsequently maintaining a same direction* 15 NM offset track, expedite climb above or descent below the vast majority of NAT traffic (i.e. to a level above FL410 or below FL280), and then maintain a flight level which differs from those normally used: by 1000 ft if above FL410, or by 500 ft if below FL410. However, if the pilot is unable or unwilling to carry out a major climb or descent, then any diversion *or turn-back manoeuvre* should be carried out at a level 500 ft different from those in use within the NAT HLA, until a new ATC clearance is obtained.

With the advent of Reduced Lateral Separation Minima (RLatSM) in the NAT, spacing between adjacent parallel aircraft and operating at the same altitude may be reduced to as low as 23 NM (instead of the previous 60 NM). Initiation of the turn-back (180) contingency procedure may result in the aircraft crossing the adjacent track at least twice during certain wind conditions.

Utilization of in-flight broadcast procedures, illumination of all aircraft lighting and close monitoring of ACAS should all contribute to minimizing the potential for an unexpected crossing of flight paths. However, the workload for the flight experiencing the in-flight contingency may be very high.

As a result of this reduced spacing environment, when executing an in-flight contingency procedure – consideration should be given to maintaining the “normal” 15 NM offset track **AND** maintaining course in the “original” same direction of flight until: (1) outside of the vast majority of NAT traffic altitudes (below FL280 or above FL410) and/or (2) receiving a “new” ATC clearance reflecting the contingency nature of the flight.

Flight crews should always be aware of their position relative to their Oceanic Critical Point when making the decision to implement contingency procedures.