

# Trial implementation of RLatSM in the ICAO NAT Region

## Introduction

Advancements in aircraft avionics and air traffic management flight data processing systems have driven analysis of whether the lateral separation standard in the current North Atlantic (NAT) minimum navigation performance specification (MNPS) airspace can be reduced to increase the number of tracks available and therefore increase capacity at optimum flight levels.

On or soon after 5 February 2015, Gander, Shanwick and Reykjavik area control centres (ACCs) will commence participation in the trial of a 25 nautical mile (NM) reduced lateral separation minimum (RLatSM) in portions of the Gander, Shanwick and Reykjavik oceanic control areas.

## Background

Track spacing for MNPS approved aircraft is currently one degree of latitude, which equates nominally to 60 NM. The proposed change will reduce lateral separation for aircraft operating at the flight levels and tracks associated with the NAT Region Data Link Mandate (NAT SOG Conclusion 46/2 refers) airspace, which can be practically achieved by establishing tracks which are spaced by 1/2 degree of latitude. This track spacing initiative will be referred to as Reduced Lateral Separation Minimum (RLatSM).

RLatSM will be implemented using a phased approach, the first of which will introduce 1/2 degree spacing between the two core tracks of the NAT organized track structure (OTS) from FL350 to FL 390 inclusive. At yet to be determined dates, Phase 2 will expand the implementation throughout the entire NAT OTS and Phase 3 will encompass the entire ICAO NAT Region, including the converging and intersecting track situations.

## Operator Eligibility and Participation

Operators do not need to apply to be part of the trial and will be eligible to flight plan RLatSM tracks provided the flights are:

- a) MNPS approved
- b) RNP4 approved
- c) ADS-C and CPDLC equipped and, where applicable, authorized; and
- d) the required CNS systems are operational

Flight crews must report any failure or malfunction of GPS, ADS-C or CPDLC equipment to air traffic control (ATC) as soon as it becomes apparent.

## Flight Planning

ATS systems use Field 10 (Equipment) and Field 18 (Other Information) of the standard ICAO flight plan to identify and aircraft's data link and navigation capabilities. The operator should insert the following items into the ICAO flight plan for FANS 1/A or equivalent aircraft:

- a) Field 10a (Radio communication, navigation and approach aid equipment and capabilities);
  - insert "J5" to indicate CPDLC FANS 1/A SATCOM (Inmarsat) and/or "J7" to indicate CPDLC FANS 1/A SATCOM (Iridium) data link equipment; and
  - insert "X" to indicate MNPS operational approval;
- b) Field 10b (Surveillance equipment and capabilities)
  - insert "D1" to indicate ADS with FANS 1/A capabilities.

## c) Field 18 (Other Information)

- insert the characters “PBN/” followed by “L1” for RNP4.

### Further Information

The current, updated versions of the Draft NAT RLatSM Plan and associated documents are provided on the [ICAO EUR/NAT website](#), via the links to EUR & NAT Documents >>NAT Documents>> Planning documents supporting separation reductions, which can be also be accessed by clicking [here](#).

For further information, please contact:

Doug Dillon  
Manager ACC Operations, Gander Area Control Centre  
NAV Canada  
P.O. Box 328  
Gander, NL  
A1V 1W7

Direct line: 709-651-5223

Email: [dillond@navcanada.ca](mailto:dillond@navcanada.ca)