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INTRODUCTION OF A TRIAL OF A 5 MINUTE ALONG TRACK LONGITUDINAL SEPARATION IN THE SHANWICK OCA**1 Introduction**

1.1 The current longitudinal separation minimum applied in North Atlantic (NAT) airspace, for MNPS approved aircraft pairs on the same track, is 15 minutes which may be reduced to 10 minutes using the Mach number technique.

1.2 As part of a programme to improve service provision in NAT airspace, on **25 May 2010**, a trial of a 5 minute along track longitudinal separation minimum will commence in the Shanwick OCA. Flight data processing limitations will delay Gander ACC participation until late 2010, the exact date for which will be indicated via AIC or NOTAM. The application of such a minimum is intended to aid the provision of optimum vertical profiles for those aircraft suitably equipped and is predicated on the use of ADS-C periodic reports which will provide ATC with increased confidence in aircraft position reports and estimates. Initially, the trial will only involve eastbound aircraft.

2 Qualification to participate in the Trial and subsequent full implementation

2.1 Operators will be required to have an ADS-C log-on with Shanwick, possess MNPS approval and utilise CPDLC communications. Only aircraft pairs meeting these requirements will be considered by controllers to be candidates for the application of the 5 minute longitudinal separation minimum.

2.2 Operators do not need to apply to be part of the trial. As long as they meet the qualifications in paragraph above, they could end up being participants in the trial.

3 Safety Considerations

3.1 A full safety evaluation has been completed in order to go ahead with the trial and the target level of safety used to measure risk is comparable with that used for the introduction of RVSM into the NAT and meets ICAO requirements.

3.2 While the trial will be transparent to participants pilots should take note of the following:

- a. In North Atlantic airspace, longitudinal separation is maintained by reference to time. A reduction in longitudinal separation has been demonstrated to be safe subject to certain conditions being met. One of these is that the ADS-C reports used to pass position information to the controller are time-stamped using the same reference; that is GPS time. While there is no reason for crews to attempt to alter this time reference, crews need to be made aware of the potential hazard of doing so. Therefore, crews must report any failure of GPS, and ensure that the published requirements for time checking before entry into Oceanic airspace are adhered to (see Paragraph 8.2.1 of the North Atlantic MNPS Airspace Operations Manual, Edition 2009);
- b. Crews should report a failure or malfunction of the aircraft's ADS-C or CPDLC equipment to ATC as soon as it becomes apparent;
- c. Crews are required to fly the ATC cleared Mach number. Except in an emergency or contingency situation, no alteration to the cleared Mach number is allowable without first having received clearance from ATC;
- d. Because the minimum longitudinal separation is 5 minutes, crews can expect to see TCAS returns of aircraft at the same level and on the same track, potentially as close as 40 NM; and,
- e. There will be no changes to the applicable strategic lateral offset procedure (SLOP) and crews should take appropriate offset action as necessary.

4 Trial Period

4.1 The trial will initially run for 12 months after which time a review will take place and its cessation will be notified by NOTAM, after which a decision will be made whether to implement a 5 minute longitudinal separation on a permanent, operational basis.

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