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Civil Aviation Authority

NATS Ltd
UK Aeronautical Information Service
Heathrow House
Bath Road
Hounslow, Middlesex TW5 9AT
URL: http://www.ais.org.uk
Phone: 020-8750 3779 (Editorial)
Phone: 0870-8871410 (Distribution - Tangent Direct)
Phone: 01292-692527 (Content - NATS/Procedures and Developments)

INTRODUCTION OF A TRIAL OF A 5 MINUTE ALONG TRACK LONGITUDINAL SEPARATION IN THE SHANWICK OCA (COMMENCING 30 MARCH 2011).

1 Introduction

1.1 The current longitudinal separation minimum applied in North Atlantic (NAT) Airspace, for MNPS approved aircraft pairs following 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 **30 March 2011**, a trial of a 5 minute, separation minimum will commence, between aircraft which are following the same track, irrespective of whether they are East or Westbound. The application of this minimum is intended to aid the provision of optimum vertical profiles for suitably equipped aircraft, and is based on the use of ADS-C periodic reports which will provide ATC with increased confidence in aircraft position reports and estimates.

2 Qualification to participate in the Trial and subsequent full implementation

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

2.2 Operators do not have to apply to be part of the trial. As long as they meet the qualifications detailed above they may be 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 target levels of safety used to measure risk are comparable with that used for the introduction of RVSM into the NAT, and meet 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 ATC 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 8.2.2. of the NAT Doc 007, Guidance concerning Air Navigation in and above the North Atlantic MNPS Airspace - Edition 2010);

b. Crews must 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 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 a decision will be made whether to implement a 5 minute longitudinal separation on a permanent, operational basis.

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