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Notice to Operators of Isle of Man Registered Aircraft.

Changes to NAT MNPS Airspace and Approvals.

1. Background
From 4 February 2016 the airspace previously designated as North Atlantic Minimum Navigation Performance Specification (NAT MNPS) Airspace, but excluding the Shannon Oceanic Transition Area (SOTA) and Brest Oceanic Transition Area (BOTA) areas, was re-designated as NAT HLA (North Atlantic High Level Airspace). This NAT HLA has been expanded to include the airspace of the BØDO Oceanic FIR (FL285 to FL420, inclusive).

2. Area of applicability
The NAT HLA airspace is the volume of airspace between FL285 and FL420 within the Oceanic Control Areas of Shanwick with the exception of the BOTA and the SOTA, New York Oceanic East, Gander Oceanic, Reykjavik, Santa Maria, Bodø Oceanic excluding the area west of 60°W and south of 38°30’N. See Figure 1 below.

Figure 1.
3: **NAT HLA Information**

NAT Doc 007 is updated to reflect the changes to MNPS (HLA).

3.1. **NAT HLA requirements and developments**

NAT MNPS approvals issued by the Isle of Man Aircraft Registry (IOMAR) prior to 1 January 2017 will continue to be valid for NAT HLA operations for the duration of the approval’s validity.

From 1 January 2017 the IOMAR will no longer issue approvals for NAT MNPS Airspace; these will be replaced with NAT HLA (MNPS) approvals subject to the aircraft meeting the certification standards, the operator having the required procedures in place and flight crew suitably trained. Operators must hold an approval to operate in NAT HLA (MNPS) issued by the State of Registry in accordance with the current Isle of Man Air Navigation Order, specifically: Part 12 Article 65, Minimum navigation performance; Article 66, Height keeping performance; Article 67, Area navigation and required navigation performance.

NAT HLA (MNPS) approval requires:

- HF (there are some exceptions)
- RNP4 or RNP10 (this is a new additional ICAO requirement)
- Aircrew must be HLA trained

*Note: Having an existing RNP4 or RNP10 approval from the IOMAR is not sufficient to obtain HLA approval.*

3.2 **Additional Requirements - Reduced Lateral Separation Minimum (RLatSM) Trials**

3.2.1 In Feb 2015, the ongoing NAT Data Link Mandate (DLM) implementation commenced Phase 2A. The DLM mandates the use of FANS 1/A Controller Pilot Data Link Communications (CPDLC) and the use of aircraft provided surveillance using ADS(C) between FL 350 and FL 390 across the whole of the NAT Organised Track System.

3.2.2 In Nov 2015, Phase 1 of the Reduced Lateral Separation Minima (RLatSM) trials commenced. The trial builds on the DLM by introducing ½ degree tracks in the NAT Organised Track System (OTS) between FL 350 -390 (inclusive) to give greater capacity. The introduction of ½ degree track spacing requires operators to have a Required Navigation Performance 4 (RNP4) navigation approval that supports 25nm minima separations. Therefore only those operators/aircraft eligible for RLatSM operations will be allowed to operate on designated RLatSM tracks between FL 350-390 (inclusive).

3.2.3 Phase 2 of the RLatSM trial has been delayed. It is expected that no less than 2 months notification of commencement of the start of phase 2 will be provided to National Aviation Authorities by ICAO.

3.2.4 The following information should be inserted into the specified flight plan fields:

- Field 10a – Satcom capability J5 for Inmarsat, J7 for Iridium, X for HLA Approval.
- Field 10b – Surveillance capability D1 for ADS-C
- Field 18 – RNP4 (PBN/L1)

3.2.5 The following flight crew training is required:

- Pilot Training on Map and Flight Management Computer (FMC) Displays of ½ degree and Whole Degree waypoints.
- Loading of ½ degree Waypoints into the FMC using ARINC 424 identifiers and/or manual entry of full latitude and longitude coordinates.
- Pilot procedures for verifying Waypoint Degrees and Minutes inserted into Aircraft Navigation Systems.
- Pilot Track and Distance checks.
- Pilot Action when notified by ATC of possible deviation from Cleared Track.
- Policy for Operational Airborne Collision Avoidance System II version 7 (ACAS II).
- Pilot In-flight contingency procedures and weather deviation procedures in reduced lateral separation.
4. Frequency Asked Questions

To assist operators, the Isle of Man Aircraft Registry has put together a selection of FAQ’s:-

- **Do I need NAT HLA (MNPS) approval if I already have an MNPS approval?**

  If your MNPS approval was issued prior to 1 January 2017 it will remain valid for the period of its validity. From 1 January 2017 the IOMAR will no longer issue approvals for MNPS; these will be replaced with NAT HLA (MNPS) approvals subject to the aircraft meeting the applicable certification standards, the operator having the required procedures in place and the flight crew suitably trained for NAT HLA (MNPS), RNP 10 and/or RNP 4 operations.

- **Does my current MNPS approval restrict operation in NAT HLA?**

  No, there are no restrictions on operations in MNPS airspace for existing MNPS approved operators. However, to be able to use the RLatSM portion of the NAT HLA and take part in the trial (see 3.2 of this information notice) ADS-C, CPDLC and RNP 4 approval will be required.

- **Does my MNPS initial/recurrent training need to be revised or do I need to carry out NAT HLA training?**

  Existing MNPS training will cover NAT HLA but the introduction of RLatSM will require further training as detailed in 3.2.5 of this information notice. However it remains the aircraft operators’ responsibility to ensure flight crew are suitably trained for the airspace in which they intend to operate.

- **If the aircraft is not RNP 4 or RNP 10 certificated, will that prevent me from applying for a NAT HLA approval?**

  From January 2017 all new NAT HLA (MNPS) applications to the IOMAR can only be approved for operators whose aircraft meet the MNPS in addition to RNP4 or RNP10 standards.

- **The AFM makes no reference to NAT HLA only MNPS and RNP 4 and/or RNP 10. Will this affect the MNPS operating manual and the MNPS checklist I was issued with by the Isle of Man Aircraft Registry?**

  No. It is accepted that most AFM’s and other documentation refers to MNPS and not HLA. The basic requirements for MNPS are transferred to HLA and reference may continue to be made to MNPS even on some new approvals.

- **What will happen when my existing 3 year MNPS approval needs renewing?**

  To renew your MNPS approval, your aircraft must be RNP 4 and/or RNP 10 capable. After 31 December 2019 aircraft which do not meet the RNP4 and/or RNP10 criteria cannot operate in NAT HLA (MNPS) Airspace.

Further information can be found at:
- ICAO NAT Ops Bulletin 2016_001
- ICAO NAT Doc 007
- https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afs/afs400/afs470/media/nat.pdf