

IBAC Technical Report Summary

Subject: North Atlantic Procedures

Meeting: North Atlantic Implementation Management Group

IBAC File: ICAO PIRGs

Reported by: David Stohr

Summary:

The NAT IMG/24th meeting was held in Prestwick Scotland from May 3rd through May 6th 2004. David Stohr, the IBAC IMG member, attended the meeting. The following items of discussion are of importance to business aviation:

- a.) It was reported that the Strategic Lateral Offset Procedure (SLOP) is to be implemented on June 10th.
- b.) It was reported to the group that Europe would be implementing Precision RNAV (PRNAV) and RNP 1 airspace not later than November of 2004.
- c.) The IMG received a report indicating that SATCOM was an accepted means of communication according to Air Navigation Conference 10. They were also informed that INMARSAT is fully compliant with the ICAO Standards and Recommended Practices (SARPS). The group agreed to continue work towards the acceptance of SATCOM as an approved means of communication in the North Atlantic.
- d.) The IMG will recommend to the SPG at its meeting in June that the offset used in Document 7030 Contingency procedures be changed from 30 miles to 20 miles.
- e.) The IMG acknowledged that the HF Regression Task Force had held its first meeting and that it was working on developing a road map for a way forward in determining a future communication infrastructure within the NAT.
- f.) The group agreed that initial work should be undertaken to provide a way forward in changing current separation standards to reduced separations based on the use of RNP 4, Automatic Dependent Surveillance C (ADS-C) and Controller/Pilot Data Link Communications (CPDLC).
- g.) The IMG previously indicated that FANS 1/A or FANS equivalent equipment would be the accepted standard for ADS and CPDLC equipment to be used in the NAT. Any equipment used by Business Aircraft for ADS or CPDLC must meet the Minimum Operational Performance Specification (MOPS) requirement to be used in the NAT.

h.) It was agreed that the MNPS Operations Manual needed updating and the group approved a means of funding the work.

A more detailed report is attached.

Implication for Business Aviation:

1. Aircraft operators must be aware of the procedures to be utilized when exercising Strategic Lateral Offset Procedures.
2. There may be future relief on the requirement for redundancy of HF communications while operating in the NAT based on the use of SATCOM.
3. Aircraft operators need to monitor changes in the NAT with regard to CNS/ATM issues. Any equipment that is developed and ultimately installed in aircraft will have to be either SARPS compliant or meet the Minimum Operational Performance Specifications.
4. Operators must monitor NOTAMS and/or Aeronautical Information Circulars to stay abreast of the changes occurring in the NAT, specifically the proposed changes to the Document 7030 Contingency procedures.
5. Operators must be made aware to periodically check the NAT PCO website at www.NAT-PCO.org for updated documentation applying to the NAT.

Decisions Required:

None at this time.

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a.) It was reported that SLOP would be implemented in the whole of the NAT effective on June 10, 2004. The amendment to the Document 7030 Regional Supplementary Procedures establishing SLOP is completed and approved. Operators can find the information in individual country Aeronautical Information Circulars or NOTAMS.

b.) It was reported at the meeting that Europe would be implementing PRNAV/RNP-1. Aircraft wishing to use the PRNAV/RNP-1 procedures will have to be approved by their states of registry. Participation is voluntary and operators will still be able use the conventional procedures published for the airports. All PRNAV/RNP-1 designated procedures will be newly designed. Being able to utilize the new procedures will lead to a more efficient operation in the departure and arrival segments.

c.) Based on the fact that SATCOM was accepted as a means of communication by the 10th Air Navigation Conference and that INMARSAT equipment is fully SARPS compliant the group agreed that SATCOM voice could be used for routine ATS purposes. However, before recommendations could be made to the SPG for the routine use of SATCOM voice it would be necessary for the ongoing trials to provide solutions to all concerns especially those associated with security and cost recovery. It was pointed out that the ongoing tests had been expanded into all of the NAT and that there was to be an expansion for inclusion of uplink capabilities as well. Finally, the group agreed that if it can be demonstrated that SATCOM voice can meet the requirements to provide routine ATS, it could recommend to States that MEL relief on communications requirements be granted.

d.) It was recommended that a change in the current Document 7030 Contingency procedures with regard to offset be forwarded to the SPG for approval. Currently the procedure calls for the utilization of a 30 mile offset. The new procedure will call for a 20 mile offset. This change is being driven by the events of September 11, 2001. On that day the NAT was populated

with aircraft in the westbound flow. Aircraft still east of the 30 degree west line of longitude had to turn around and return to Europe. Because pilots may choose to turn either left or right to offset from their cleared route of flight there were instances where aircraft did not have sufficient horizontal separation after having followed the current published procedure.

e.) The HF regression task force established by IMG 21 held its first meeting in Paris in February of this year. The task force decided to publish a road map to provide a way forward in determining future communication needs within the NAT. The road map would be based on the following assumptions:

- a) Data link will be the mandated communications medium for ATS purposes in the NAT Region by 2015. There may however be a requirement for residual voice communications capability (HF, SATCOM or Very High Frequency (VHF)) beyond 2015.
- b) By 2010, the vast majority of NAT Region operators will have data link capability.
- c) The Required Communications Performance concept will be used to determine the NAT Region redundancy requirements. Voice communications will not be mandated for backup purposes.
- d) No increase in current HF voice capacity requirements in the NAT Region, for ATS purposes, is anticipated because of the migration to data link applications.
- e) A decline in HF voice capacity requirements in the NAT Region is unlikely before 2006.

f.) The group was presented with a proposal by IATA for the SPG to investigate the feasibility of reducing longitudinal separation between aircraft to 30 miles from the current 80+ miles. The reduced separation would be based on the use of ADS-C, CPDLC and RNP 4. If this initial work generated a positive response it was agreed that the IMG work program should be amended. It was further agreed that the initial work should be carried out by Canada, The United Kingdom and IATA with consideration given to the work that has already been accomplished by The United States in the Pacific Region.

g.) IMG 22 agreed that for the interim, until fully Aeronautical Telecommunications Network (ATN) equipment is available, FANS1/A or FANS equivalent equipment is the requirement for ADS and CPDLC. As business aircraft and avionics manufacturers work toward producing the ADS and CPDLC equipment it must meet the RTCA MOPS. The group felt that an assessment of the avionics would be required before being used operationally in the NAT.

h.) The group endorsed the need to update the current 9th edition of the NAT MNPS Operations Manual. ICAO indicated that it lacked the manpower and the money to contract for anyone to carry out this function. A plan was proposed to take money from existing funds for the RVSM program to hire a contractor to update the document, which was approved. The new document will be available in electronic format only with availability through the NAT-PCO web site. Also, the document will be organized as an original and will be put on a revision cycle with changes being produced after the SPG meeting each year. The document will be complete with a list of effective pages.