

## **IBAC Technical Report Summary**

**Subject: NAT Operations and Air Traffic Management**

**Meeting: North Atlantic (NAT) Communications, Navigation and Surveillance Group 12<sup>th</sup> (CNSG/12)**

**IBAC File:**

**Reported by: Jerry Mettes**

*Summary:* The CNSG/12 was held from 23 to 27 March 2015 in Paris, France.

The CNSG noted that in response to a Boeing presentation at AEEC DLK concerning CPDLC delayed message delivery, CSPs agreed to consider message timeout options: one for setting individual message expiration and a second fixed timeout (5 minutes seemed appropriate). Boeing will coordinate with AEEC DLK.

Portugal and Iceland stated compliance to safety requirements of DO306/ED122 is expected by 2016. CNSG noted that further clarification of SRs is expected from SG214/WG78 that will require a reassessment of NAT compliance.

CNSG noted that an ICAO State letter will be issued to establish an inter-regional task force to assess minimum technically feasible ADS-C reporting interval.

The CNSG OPS/AIR subgroup provided a proposed amendment to NAT DOC 007 to provide guidance to flight crews on verification of RNP capability for PBN operations.

CNSG noted that the OPS/AIR subgroup had reviewed and provided comments to NAT Operations Bulletin RLatSM Special Emphasis Items (SEI) for flight crew verification of full coordinates of the active route.

CNSG reviewed NAT ATMG SEI revisions for flight crew guidance regarding ATC detected lateral deviations. The group felt that further refinements are needed and will communicate suggestions to the NAT ATMG.

NAT OPS/AIR presented a survey of avionics manufacturers regarding the capability to enter offsets in 0.1 NM increments (micro-SLOP). The group noted that not all manufacturers provide this capability.

NAT OPS/AIR noted that ICAO and State documents are the source material for aeronautical charts issued by commercial providers. To enhance coordination OPS/AIR recommended that the NAT DMO ensure providers are included on the distribution list for all NAT Doc 007 amendments.

NAT OPS/AIR provided an initial assessment of RNP 4 approval status. The group agreed to provide this information to NAT IMG together with the regular CNSG equipage and usage report.

CNSG reviewed an update to the NAT template for RNP 4 approvals and recommended that ICAO publish the updated RNP 4 job aid to assist States in the approval process.

CNSG noted the report from the NAT SPG Symposium on restructuring the NAT SOG and IMG contributory groups. The group agreed that the functions of the CNSG, and the OPS/AIR and ACSG subgroups, need special consideration in any restructuring. The Secretary will bring this to the attention of the IMG.

CNSG noted an update from the FAA PARC CWG on SATVOICE activities and challenges, including ensuring the availability of short codes or PSTN numbers and their provision in AIPs and on aeronautical charts. To resolve some of the challenges with SATVOICE, the PARC CWG proposed an amendment to Doc 7030 to require inclusion of the ICAO address (24 bit) in the filed flight plan.

CNSG noted the Aircraft Locating and Emergency Response Tracking (ALERT) service, a global aircraft tracking solution using ADS-B. The Coordination Centre at Shannon Aeradio, Ireland, will offer the ALERT emergency response service free of charge to all authorized organizations.

CNSG noted CPDLC and ADS-C performance reports by the NAT ANSPs. All reports agreed that aggregated 95% criterion of the ADS-C Required Surveillance Performance (RSP) 180 and CPDLC Required Communication Performance (RCP) 240 requirement was met. However, some individual aircraft/operators do not meet the RSP 180 performance. Follow up with these aircraft/operators will be through the DLMA.

CNSG noted current ADS-C and CPDLC usage levels recorded by NAT ANSPs, including a comparison of the observed usage of ADS-C and CPDLC with the filed ICAO flight plan. RNP 4 and ADS-B equipage levels as filed in the flight plan were also provided.

Aircraft operators should ensure that the filed ICAO flight plan codes agree with the approved datalink capability on the aircraft.

Canada notified the CNSG that the Gander Oceanic Flight Data Processor will not provide CPDLC to aircraft unless CPDLC is noted in the flight plan. (This does not apply to Gander domestic.)

Canada reviewed the effects of applying different UPΔ time filters on different media on the Pilot Operational Response Time (PORT) performance values and proposed that, in order to achieve more accurate PORT, a filter of 12 seconds be applied to remove the network retries. At the next meeting, the performance with the new 12 second filter will be compared with the current method of measuring PORT to determine future actions.

CNSG reviewed abnormal terminations of ADS-C connections in the NAT. There appear to be remaining issues with some operators initiating terminations of ADS-C connections without coordination with ATC. The Group agreed to further analysis of abnormal ADS-C terminations and follow-up with appropriate operators and air-space users.

CNSG noted changes to the Reykjavik Flight Data Processing System (FDPS) for data link use north of 82 degrees North and a new version of the document Reykjavik Data Link Oceanic Clearance Delivery (OCD) Crew Procedures. As of 5 March 2015, FANS CPDLC and ADS-C services are terminated at 82 North if the aircraft has flight planned only INMARSAT data link. A free text CPDLC message is automatically sent to the aircraft 30 minutes before reaching 82 North (or as soon as Reykjavik becomes the CDA if less than 30 minutes).

CNSG noted an update by INMARSAT on the transition of the EMEA (I4F2) Classic Aero and SBB services to Alphasat on 24 March 2015. Since Alphasat offers a 'shaped' coverage to fit between the AsiaPac and AMER satellites, the location of the Classic AES handover positions between satellites may alter. With the transition to Alphasat, the coverage over Greenland may be further reduced. However, the FANS 1/A over SBB performance analysis and charts presented suggested that the coverage was stable in the areas south of 82 N.

CNSG noted that in November 2012, the PARC CWG initiated a project to evaluate FANS 1/A over Swift Broadband (SBB) with initial trials by Hawaiian Airlines. Operators that fly in the NAT Region may also participate in the operational evaluation. The FAA has established policy and criteria for certification of aircraft being equipped with FANS 1/A over SBB.

CNSG noted updates by Iridium on the constellation status, Iridium NEXT launch and service evolution, and on the status of the ATS Safety Voice Service.

The ACSG subgroup presented the total amount and distribution of HF, VHF, and SATCOM contacts for all Aeradio for 2014. The group noted that some aircraft did not establish voice contact with Shanwick Radio while transiting the Shanwick OCA. ACSG will provide further reports at following CNSG meetings.

CNSG reviewed an update to NAT Doc 003 (HF management guidance material) and recommended its approval by the NAT IMG.

CNSG noted recommendations that ICAO Doc 9869 (PBCS Manual), Doc 10038 (Satellite Voice Operations Manual (SVOM)), and Doc 10037 (GOLD Manual) be published as soon as possible.

CNSG noted requirements proposed by ICAO Separation and Airspace Safety Panel for 23 NM lateral separation and 5-minute longitudinal separation: RNP 2 or 4, RCP 240, and RSP 180.

CNSG reviewed its work program and proposed modifications for future work including: providing oversight of the technical aspects of the GOLD, PBCS, and SVOM and optimizing NAT air/ground communications.

The next meeting of the NAT CNSG will be held on 5-9 October 2015 in Washington D.C, the United States. CNSG/14 will be convened in the last week of March 2016 in Paris, France.

**Implication for Business Aviation:**

**Note.** Operators should ensure that the filed flight plan codes agree with the approved datalink capability on the aircraft.

**Note.** Gander Oceanic CTA requires that CPDLC be included in the filed flight plan before CPDLC service will be provided.

**Note.** Operators should note revised datalink operation with INMARSAT in the Reykjavik CTA north of 82 degrees North.

**Note.** Authorization is required for PBN operations. The proper codes need to be included in the filed flight plan. The air crew should verify that the RNP4/RNP2 value needed for separation is set in the aircraft Flight Management Computer (FMC) when entering the ICAO NAT Region.

**Note.** Operators are encouraged to let ATSUs control ADS-C contract termination. Before manually terminating ADS-C, operators should coordinate with ATSUs.

**Note.** Operators should note the requirements for voice contact when transiting Oceanic Control Areas. (Refer to GOLD Second Edition Appendix E.7.3 Flight crew procedures.)

**Decisions Required:**

To make decisions on the timely acquisition of equipment, degree of training and certification required to meet the requirements to efficiently continue accessing airspace.

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