CPWG27 SINGAPORE ANSP UPDATE, ISAVIA

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Reykjavik Area Control Centre
SB-ADSB
- Implemented March 28th 2019 within Gander and Shanwick
- Implementation within BIRD CTA, south of 70N – fall 2020
- No plans – to implement north of 70N

Contingency procedures
- Revised contingency procedures implemented in NAT region March 28th 2019.
- *NAT OPS Bulletin 2018_005, Special Procedures For In-Flight Contingencies*
PBCS, implemented March 28th 2018

- Implementation successful
- Equipment rate increasing
- Data link outages monitored
- Data link availability through Satellite service providers (Inmarsat, Iridium)
Percentage of all flightplans that are PBCS

- PBCS/FPL 10 day average: 44%
- PBCS/FPL: 44%
FPL DATALINK AND PBCS PER DAY

FPL DATALINK and PBCS counts per 24h

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NAT REGION INITIATIVES

/ NAT Data Link Mandate (NAT-DLM)
/ Flights equipped with and prepared to operate FANS 1/A (or equivalent) CPDLC and ADS-C data link systems will be permitted to flight plan to enter the NAT DLM airspace.
/ Phase 2C – January 30th 2020 for aircraft F290 – F410 (inclusive) throughout the NAT region, excluding airspace north of 80° North.
Operation without an assigned fixed speed (OWAFS) is a NAT project to support aircraft’s FMC ability to apply flexible speed.

- Due to technical design of the ACARS Clearance (CLX) message and NAT ANSP application of longitudinal separation using the Mach number technique, nearly all oceanic clearances issued to turbojet aircraft in the NAT Region include an assigned Mach.

- The requirement to issue an assigned fixed Mach to all flights has now been removed from NAT SUPPs (ICAO Doc7030).

- All aircraft, regardless of FANS equipage, will be eligible for the application of OWAFS in both ATS surveillance and non-surveillance airspace.

- OWAFS is expected to be implemented within BIRD CTA December 2019.
INMARSAT SATELLITE NETWORK IN THE NAT REGION
DATA LINK AVAILABILITY

/ Aircraft should be able to communicate with any of the three satellites.
   — Therefore, if an aircraft is communicating via an Inmarsat satellite that experiences a service outage, the aircraft should quickly be able to establish a connection with another Inmarsat satellite that is within view.

/ In case of I-3 outage, coverage to the north is reduced to approximately 76°N.

/ I-3 (Laurentides) will be out of service December 2021.
DATA LINK AVAILABILITY

At NAT SPG/55 in June 2019 – a conclusion made to invite Inmarsat to consider the current and future NAT data link service availability issues, in particular due to the imminent decommissioning of the existing I-3 satellite; and plan for necessary measures to ensure compliance with Performance-based Communication and Surveillance (PBCS) requirements and satellite coverage redundancy over the NAT.
In a reply letter sent to ICAO Paris office, Inmarsat expressed their commitment to meeting ICAO PBCS requirements and improve their high performance under PBCS.

Their satellites availability have exceeded annual availability requirements of 99.9% and they plan to continue to provide redundant satellite coverage in the NAT.

Their new I-6 fleet will enter commercial service in 2020 and 2021, before the last I-3 will be decommissioned.
FANS DATA LINK SERVICE

FANS 1/A ADS-C and CPDLC service is provided in the Reykjavik CTA (i.e. BIRD FIR and BGGL FIR above F195) as follows:

- In the whole airspace for aircraft that file Iridium (J7) and/or HF (J2) data link capability in Item 10a of the ICAO FPL.
- South of 82°N for aircraft that file Inmarsat (J5) data link capability in Item 10a of the ICAO FPL.

The FANS data link log-on address for the Reykjavik CTA is BIRD.
For correct functioning of FANS data link the aircraft identification entered into the avionics must be precisely the same as that contained in the filed flight plan. This should be confirmed by the flight crew prior to log-on.

When a CPDLC aircraft is operating in an airspace beyond the range of VHF voice communications, and CPDLC is available:

- CPDLC will be the primary means of communication, and
- Voice will be used as the alternative means of communication (for example, third party HF or SATCOM voice).
- Aircraft that are equipped with both Inmarsat (J5) and Iridium (J7) data link capability shall use Iridium when north of 80N.