

Twenty Seventh Meeting of the Informal South Pacific ATS Co-ordinating Group (ISPACG/27)

# FANS Interoperability Team Meeting (FIT/20) Meeting Report

# Auckland, New Zealand 26-27 February 2013

Introductions were made by Brad Cornell and Geoff Hounsell, followed by self-introductions of the meeting attendees.

## Feedback from the Operators

In general operators were happy with FANS operations over the last year with no major issues raised. The price of fuel continues to be the largest contributor to airline operating costs. One operator has increased their use of Dynamic Airborne Reroute Procedures (DARP) allowing all eligible flights in the region to use the procedure. Other operators are not yet taking full advantage of the procedure due to company dispatch and flight planning constraints. One operator has implemented a fuel savings threshold of 200kg before initiating a DARP. Two new operators in the region were welcomed by the group. Both operators indicated they were interested in DARP and anticipated using the procedure in the near future.

One operator indicated they would like to see expanded use of ADS-B In Trail Climb Procedures (ITP) in addition to ADS-C Climb Descent Procedures (CDP). Other operators favored the use of CDP due to the cost of retrofitting aircraft to support ITP.

## Feedback from Datalink Service Providers

SITA reported that the Perth migration to the new INMARSAT Ground Earth Station (GES) hardware for the I-3's would be happening at 0300 UTC on February 26. SITA informed the group there was a possibility of up to a 1 hour outage during the transition. There was some discussion within the team as to whether individual NOTAMs were issued by ANSPs. SITA also reported that they will roll out Iridium voice safety services in the coming months and will be working directly with operators.

ARINC Radio attended the meeting and no specific issues were raised. ARINC will transition to the new INMARSAT GES hardware in Perth at a later date. More details on the transition to the new GES hardware were provided by INMARSAT in a separate presentation.

## Feedback from Air Navigation Service Providers (ANSPs)

All ANSPs in the region had spent a considerable amount of time and resources last year supporting implementation of the 2012 flight plan changes. Three of the ANSPs in the region are now supporting monthly monitoring data outlined in appendix D of the Global Operational Data Link Document (GOLD). Other ANSPs are working to provide monitoring data per the GOLD appendix D format. ANSPs were concerned about the availability of the Iridium network due the number of outage notifications in the past year. The ISPACG will send a letter to the ICAO Asia Pacific regional office alerting them to the issue of Iridium network availability. One ANSP in the region had been experiencing a large number of logon rejections in recent months and urged operators to review and follow flight plan filing and logon procedures documented in the GOLD.



## FIT 19 Action Item Review

ISPACG planning team to develop plans for the use of AIDC for managing ADS-C contracts and automatic handoffs and coordinate this plan with other regions for potential addition to the GOLD

#### Close. Included in AIDC version 3

Action: ISPACG is encouraged to accept FOI as a viable means for conducting ATS communications, and that FOI aircraft are eligible for CPDLC and ADS-C operations in the region.

Closed. However the ISPACG will be sending a letter to the ICAO regional office expressing concerns with availability of the Iridium network based on outage notifications experienced over the last year.

Action: Airbus to coordinate this effort with appropriate industry groups to revise DO-258A and create a FANS-1/A CPDLC version 2 if changes to the message set are made.

#### Closed (no version change was required)

Action: SITA to look into modifying their FANS routing logic to cope with the situation that avionics do not always send media advisory downlinks as described in AEEC- ARINC 620 and report back to the ISPACG planning team.

*Closed.* SITA updated the group on resolution of an uplink routing issue that was the subject of a FIT/19 Working Paper. SITA are evaluating a remedy and are planning to implement a fix later this year, possibly during the Northern summer.

Action: SITA to provide an update at the next ISPACG: Enable SATVOICE services over MTSAT for ANSPs.

Closed. MTSAT ground-to-air voice service will be implemented later this year.

Action: Airbus and Gulfstream to review the proposal by SITA that avionics systems be modified to provide a SATCOM Established (ES) media advisory when established and report back to the ISPACG planning team.

Closed. No changes to aircraft avionics were required due to the network changes being implemented by

SITA.

Action: The FAA also suggested that the DO-258A, and appropriate ARINC standards be reviewed and possibly revised to clarify any potential specification ambiguity or deficiency with respect to media advisory messages.

Closed. No changes to ARINC standards were proposed.

Action: Operators in the region are strongly encouraged to register on the CRA website and to start reporting problems. It was noted that operators cannot expect the benefits they are requesting and pushing for if they themselves do not participate in the corrective action and continuous improvement process.

Closed – 32 Operators now registered including USAF Air Mobility Command, US Navy, and one GLF-5 operator. 9 Operators reported problems via website in 2012.

ISPACG will send a letter to the ICAO regional office recommending all ANSPs require operators to register with the FIT problem reporting website as a requirement of their operational approval. Action: ISPACG planning Team to review stakeholder support for the FANS1/A continuous improvement process in the region and investigate ways to improve participation.



## Closed (Similar to the previous action)

Action: ISPACG planning Team to review Inmarsat and CSP feedback following the October 2011 outage of the Inmarsat 3F3 satellite and determine if ISPACG should seek clarification of lessons learned from the CSP's and Inmarsat.

Closed – Observed performance in 2012 has improved and Inmarsat are making improvements in GES hardware.

Action: Iridium to review use of the term "degraded performance" and seek to further clarify its meaning in regard to the classification of reported outages with respect to voice and data link services.

Closed. Outage notifications and system availability continues to be an issue. A separate letter will be sent from ISPACG to the ICAO regional office highlighting the regions concerns with Iridium availability.

Action: SATVOICE Taskforce secretariat committed to working with IATA to help address their concerns.

#### Closed. SATVOICE guidance material is now available from ICAO

Action: IATA members to review the latest version of the SATVOICE guidance material and discuss their concerns with the secretariat.

#### Closed

IATA recommended that a summary of the SATVOICE guidance material be provided to help operators better understand the intent of the GM as there are still some concerns within IATA on the use of SATVOICE. IATA was encouraged to read the section 2.1 "GENERAL" of the SATVOICE guidance material which addresses many of the concerns raised by IATA. All ANSPs in the region indicated they are planning to support SATCOM voice for routine communications. The ISPACG planning team will add SATCOM voice to the Pacific FIR Seamless Airspace spreadsheet to track progress.

Airbus informed the team that regional support for SATCOM voice for routine communications is important to allow removal of a HF radio. They are planning to offer the A350 with one HF system with an option for a second HF transceiver.

Action: All ANSP and Airline stakeholders need to review current DARP procedures in light of the identified interoperability issues and determine if adequate mitigations exist to enable the continuation of DARP.

Closed – Discussed in planning team 14 reference PR 1030GS, (Airways working paper #11). Fixes to known aircraft related problems will be available 3<sup>rd</sup> quarter 2013.

Action: ISPACG planning team to develop a framework for validating GOLD performance data.

Closed – Included in the next GOLD update in appendix D.

Action: ISPACG to recommend to ICAO that there is no restriction in the use of the ADS-B ITP procedure because of standardized free text use and ISPACG has no issues with the use of free text in the manner proposed.



Closed . Oakland is the only ANSP in the region that currently supports ITP. Fiji has indicated they will also support ITP however they were not able to attend the meeting and provide status. Oakland also has plans to automate CDP procedures.

Copies of the working papers, information papers and presentations are available by clicking on the links below.

## FIT/20 Working Papers

- FIT20 WP-01 Agenda
- FIT20 WP-02 Airbus ADS-C Status
- FIT20 WP-03 Problem Reporting
- FIT20 WP-03 Att1 De-identified PRs 14Feb13
- FIT20 WP-03 Att2 Problem Report Briefing
- FIT20 WP-04 Invalid ADS-C Data
- FIT20 WP-05 YBBB Data Link Performance
- FIT20 WP-06 US Data Link Peformance
- FIT20 WP-06 Att.A US Data Link Peformance
- FIT20 WP-07 FANS Performance NZZO

#### FIT/20 Information Papers

- FIT20 IP-01 Airbus A380 FANS Ops
- FIT20 IP-02 NZZO HFDL Performance
- FIT20 IP-03 Inmarsat Monitoring
- FIT20 IP-04 GOLD Appendix D Changes

## FIT/20 Presentations

- FIT20 P-1 GOLD
- FIT20 P-2 PARC-CWG
- FIT20 P-3 FANS-1A-over-Iridium
- FIT20 P-4 FANS Performance NZZO
- FIT20 P-5 PBCS
- FIT20 P-6 Inmarsat Aviation Safety Services Update

## INMARSAT Ground Earth Station updates (GES)

INMARSAT is in the process of consolidating the four existing GESs into two locations in Perth (Australia) and Burum (Netherlands). This consolidation also changes the business arrangements and INMARSAT will now own and operated the sites instead of third party service providers. The new GES hardware and interconnects are identical to what is currently used on the existing I4 network. These changes are designed to provide additional redundancy and availability when compared to previous generation GES hardware. The new hardware will also provide improved performance monitoring, trouble shooting, service notification capability and general fault reporting tools. The transition for SITA customers using the Perth GES happened in real time while INMARSAT were briefing the team. Although a service outage of up to an hour was planned the transition took much less time with many operators only seeing a few minutes of service interruption. This change was seen as a major commitment by INMARSAT to provide the necessary performance and availability to achieve RCP 240 and RSP 180 requirements outlined in appendix D of the Global Operational Data Link Document (GOLD).



## System Performance Monitoring

Three ANSPs in the region are now providing performance monitoring data in the format described in appendix D of the GOLD. The remaining ANSPs indicated they intend to provide performance data in the future and target dates will be tracked in the ISPACG planning team Pacific FIR Seamless Airspace spreadsheet. The data showed that all three ANSPs are meeting the 95% performance criteria for RCP 240 and RSP 180. The data also showed that some operators are meeting the 99.9 % performance criteria. There was discussion regarding whether 99.9 % performance criteria was actually required or if that target is setting the bar too high for the needs of the airspace. The group was reminded the 99.9 % criteria was established for airspace efficiency and would not affect separation standards being applied if it is not achieved. The group decided the 99.9 % performance criteria is currently being achieved by some operators and should remain as the goal. Further monitoring by operator / airframe type will show where further improvements can be made and provides a process for continuous quality improvement.

The FIT recommended the ISPACG planning team establish a regional performance report. The regional performance report would combine individual ANSP monitoring data to show aggregate system performance and availability achieved for the region.

## Any other Business - Unnecessary HF voice communications

The group had an ad hoc discussion regarding the amount of HF chatter from datalink-equipped aircraft. SELCAL checks and HF position reports at the boundary were identified as examples of unnecessary HF voice communications. There was much discussion on the requirement for HF SELCAL checks. Although there were many opinions expressed by operators and ANSPs the result of the discussion was that requirements for HF SELCAL checks could not be standardized for a variety of reasons. Requirements for HF SELCAL checks will vary by ANSP and will be documented in individual Aeronautical Information Publications (AIPs). It was also recommended that ANSPs follow up with individual operators regarding unnecessary HF voice communications such as voice position reports while using CPDLC and ADS-C.

Prior to closing FIT/20, a request was made that new participants please register with the CRA website.