

FANS Interoperability Team Meeting (FIT/21)

Papeete, Tahiti 4-5 March 2014

FIT/21 Report

Introductions were made by Brad Cornell, followed by self-introductions of the meeting attendees. A special thank you was made to SEAC/PF for all their hard work hosting the meeting in such a lovely location.

Feedback from the Operators

United Airlines

UAL reported that getting ADS-B ITP established has been challenging. They've used the procedure in Oakland and recently with Fiji and Air Services Australia. The ITP equipped 747-400s will be moving from South Pacific to North Pacific routes in mid March. UAL will be putting 777-200ERs on South Pacific routes however they are not equipped with ITP functionality. UAL encouraged ANSPs to support ADS-C CDP as the procedure can provide similar benefits using FANS-equipped aircraft. UAL advised they will coordinate with NAT ANSPs to conduct ITP trials. UAL plans to start using DARP (Dynamic Airborne Reroute Procedure) procedures in the near future. UAL reported they recognize the value of DARP, and are working with dispatchers to promote the procedure.

Air New Zealand

ANZ reported that the South Pacific has been stable for them for the last year. They have filed fewer PRs, which is a good indicator. ANZ still experience some failed transfers with Fiji. ANZ made daily use of User Preferred Routes (UPRs) on southbound pacific routes. In addition to UPRs ANZ makes use of the DARP procedure on a large percentage of flights to further optimize the route once airborne. ANZ made a request that ANSPs look into reducing the time DARP requests can be made before the boundary as the current procedure is somewhat restrictive. ANZ will receive their first 787-9 later this year. ANZ commented they continue to have had good luck with the Pacific 1 TA into San Francisco, but Catalina 1 TA into Las Angeles as currently defined provides no benefit. ANZ thanked Oakland center for their persistence in trying to keep the Catalina 1 TA viable and asked that they encourage those responsible for the So Cal Metroplex project to include TAs in their work.



Agenda item 2 – Feedback from ANSPs

Airways New Zealand

Airways provided an update of operations over the last year. Other status will be covered under working papers submitted by Airways. They have experienced issues with VHF transitions which are addressed in a CRA working paper.

Air Services Australia

Air Services reported a relatively stable year. They have discovered a few bugs in their ground automation and are addressing them when discovered. Adam noted connection issues with the B787s and A380s. Air Services has some concerns regarding unloadable route clearances. Feedback from ANZ is that routeclearance loading seems to be working in other regions. ANZ reported very few route loading failures in Oakland center. Airbus and Boeing took an action item to provide Air Services with additional information how aircraft deal with duplicate waypoint resolution processing.

DGAC Chile

During the first quarter (1Q) of 2014, Chile will implement RNP/RNAV-10 in the upper airspace of Isla de Pascua FIR, reducing to 50/50 lateral and longitudinal separation between UPR routes. In the second quarter (2Q) of 2014, AIDC trials between Isla de Pascua FIR, Tahiti and Auckland FIR will be implemented. With ADS-C system in full operation mode, DGAC Chile could start during the third quarter (3Q) of 2014 trial period to implement DARP reroutes with Auckland and Tahiti Oceanic FIRs. Also refer to the DGAC presentation on the website.

Papua New Guinea

PNG are in the final stages of selecting new FANS capable ground automation systems. PNG deferred their status report to ISPACG/28. The PNG presentation is available on the ISPACG website.

French Polynesia

SEAC/PF will be implementing AIDC with DGAC Chile (as noted in DGAC Chile's presentation). This will facilitate use of a 50/50 separation standard. Adapting the ground automation to support AIDC has been a challenging project.

FAA Oakland - Refer to Oakland's presentation

Oakland center reported that the software to support CDP and ITP is targeted to be available in January, 2016. They are investigating moving that up by 6 months. ANA has started DARPing in the North Pacific region. Most DARP requests are approved when requested. Of those that are not approved, most are due to the flight crews "not following the rules", such as requesting a DARP too close to the boundary. Oakland center referred the group to some IPACG papers



presented by ANA which address the savings associated with DARP. FANS-equipped traffic is at 60 percent. Flights between the West Coast and Hawaii drag that number down. For flights into the South Pacific, the percentage of FANS-equipped aircraft is around 85%. ANZ are the biggest users of DARP. Oakland center also indicated increased numbers of RNP 4 operations increasing the opportunities to apply 30/30 separations which increase operational benefits. Oakland center's presentation is available on the ISPACG website.

Airports Limited Fiji were unable to attend.

Agenda item 3 – Feedback from CSPs

ARINC had no comments.

SITA were unable to attend.

Tom Kraft provided an INMARSAT presentation given the previous week's PARC meeting. The presentation provides schedules and timelines for INMARSATs L band and Ka band services. The presentation is available on the ISPACG website.

The FAA provided an update to the group on the FAA's Space-based ADS-B Surveillance program. Refer to the FAA presentation available on the ISPACG website.

Working Papers

The following working papers were reviewed during the meeting.

| WP-01 | Agenda |
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| WP-02 | HFDL Usage and Performance in NZZO |
| WP-03 | ISPACG CRA Website |
| WP-04 | Iridium FANS1/A Performance as Observed in NZZO |
| WP-05 | Performance Based Communications and Surveillance (PBCS) |
| WP-06 | Problem Report Briefing |
| WP-06 | ATT.A De-Identified Problem Reports 20Feb14 |
| WP-07 | Suggested VHF Region Definition Changes to Improve ACARS Performance |
| WP-08 | NZZO FANS1/A Performance |

Problem Reporting

The CRA and Airbus provided problem report briefings. Both presentations are provided on the ISPACG website.

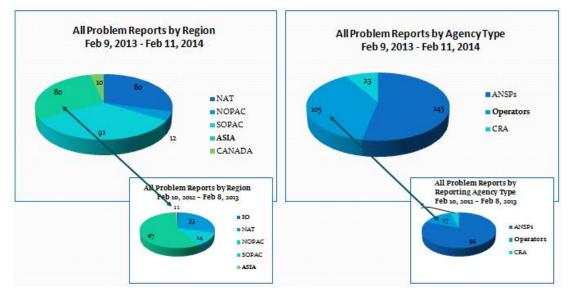
Per the CRA and Airbus briefing, a number of PRs can be closed. Among these are PR 1328, several PRs which are duplicates of PR 1506, and 3 which are duplicates of PR 1515. The CRA will refer to the Airbus briefing for additional closures. With regards to RP 1317 and its



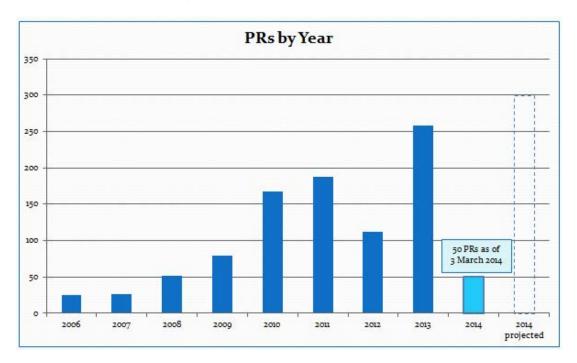
duplicates, an action was assigned to ARINC to determine if a change can be made to not acknowledge HF downlinks from non-contracted airplanes.

It was noted that the CRA received 273 problem reports between FIT 20 and FIT 21. The CRA has received 50 problem reports already this year and are projecting ~300 problem reports between FIT 21 and FIT 22.

Problem reporting metrics.



Growth in Number of PRs per Year





System Performance Monitoring

Oakland center, Airways New Zealand, and Airservices Australia all provided system performance monitoring data as defined in the ICAO GOLD document. In general ANSPs providing system performance data are meeting both RCP 240 and RSP 180 for CPDLC and ADS-C respectively. With a goal of improving overall system performance these ANSPs have developed advanced monitoring filters. These enhanced filters allow comparisons between specific FIRs, airframe type, media type, regional specific areas, transitions between different media types etc... As a result of this detailed monitoring the additional information is available to improve performance of operations not meeting RCP 240 and RSP 180.

Action Items

Airbus and Boeing took an action item to provide Air Services with additional information how aircraft deal with duplicate waypoint resolution processing.

ARINC to determine if a change can be made to not acknowledge HF downlinks

PR1343 SN - Tom Kraft will coordinate with military to resolve this PR

PR1381 SN – CRA revise the slide the FAA did not truncate the uplink

PR1250 – CPDLC soft reset issue, Airbus will check if a DR1 be sent if the crew manually disconnect CPDLC.