# FINAL REPORT

# of the

# NINETEENTH MEETING

# of the

# INFORMAL SOUTH PACIFIC AIR TRAFFIC SERVICES CO-ORDINATING GROUP (ISPACG/19)

Brisbane, Australia 1 – 3 March 2005

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# INFORMAL SOUTH PACIFIC AIR TRAFFIC SERVICES CO-ORDINATING GROUP (ISPACG)

#### PURPOSE

To promote a cost effective South Pacific Air Traffic Services (ATS) aviation environment that is responsive to change, meets the needs of the aviation industry, is economically sustainable, and maintains or enhances present levels of safety.

### PRINCIPLES

In the conduct of the activities of the ISPACG, the forum will apply the following principles:

- 1. Promote an ATS system that is responsive to and meets the needs of our customers.
- 2. Ensure that the introduction of new technology and procedures maintains or enhances the present levels of safety.
- 3. Harmonise ATS practices and procedures consistent with regional and global activity.
- 4. Undertake activities and provide outputs that are cost effective and efficient for both customers and service providers.
- 5. Promote advantages in new technology where benefits can be derived.
- 6. Achieve a cooperative customer/service provider environment.

#### **PRIMARY OBJECTIVE**

To implement an Air Traffic Management (ATM) concept of operations that includes an evolutionary development of individual user/airline defined optimum routes with the ability to perform multiple user defined reroutes anywhere in the region.

# **BACKGROUND OF THE MEETING**

### 1. PLACE AND DURATION

1.1 The Nineteenth Meeting of the Informal South Pacific Air Traffic Services Co-ordinating Group (ISPACG) was hosted by Airservices Australia and held at the Marriott Hotel Brisbane, Australia from 1-3 March, 2005.

### 2. ATTENDANCE

- 2.1 The meeting was attended by participants representing South Pacific Air Traffic Service Providers (ATSP) and regulatory authorities, airlines, International Civil Aviation Organisation (ICAO), the International Air Transport Association (IATA), International Federation of Air Line Pilots' Associations (IFALPA), International Federation of Air Traffic Controllers' Associations (IFATCA), international aviation organisations, representatives from communications service providers, and airline/equipment manufacturers.
- 2.2 A list of participants is included as part of this report.

### 3. OFFICERS AND SECRETARIAT

- 3.1 **Ron Rigney** of Airservices Australia chaired the meeting, with **Leslie McCormick** of the Federal Aviation Administration, and **Geoff de Bazin** of Airways New Zealand serving as co-chairs.
- 3.2 **Donna Willis** assisted by **Rob Wilson** of Airservices Australia provided secretariat support services to the meeting.

# **ACCOMPLISHMENTS OF THE MEETING**

- The meeting reviewed the successful implementation of the 30NM lateral and 30NM longitudinal (30/30) separation (based on RNP4) across the Brisbane Eastern Oceanic airspace, Auckland Oceanic, Nadi, and Nauru FIRs on 20 January 2005.
- The meeting updated the table of CNS/ATM technologies and enhancements.
- Noted the finalisation of a contingency plan between Port Moresby and Brisbane Centre.
- Agreement was reached on the regional implementation of lateral offset procedures. The FAA had implemented the procedures on 20 January 2005, and Australia, Fiji and New Zealand will implement on 17 March 2005.
- The issue of Central Reporting Agency (CRA) funding was reopened and the ISPACG cochairs agreed to jointly develop a plan for funding arrangements to take effect after 30 September 2005.
- The co-chairs gave an undertaking to obtain and review the materials from the ICAO Flight Plan Study Group and develop a position to forward to ICAO.
- Regional draft guidance material for end-to-end performance monitoring of ATS datalink systems in the Asia Pacific region was presented to the meeting for review and comment.
- A draft Letter of Agreement was developed for the continuation of the ISPACG through 2008.
- An ad-hoc working group reviewed total loss of communications, individual loss of communications, weather deviations and turn back procedures which resulted in an undertaking by the FAA to conduct a data analysis and provide a recommendation for revised turn back procedures.
- ISPACG endorsed NASA's development of the ADS-B in-trail procedure.

## **SUMMARY OF THE MEETING**

#### 1. OPENING REMARKS AND ADMINISTRATION

- 1.1 The meeting was opened by Roger Hope, Brisbane Centre Manager (Airservices Australia) who welcomed the participants and reflected on the significant achievements of ISPACG in recent years. Following his opening remarks, he handed over to the co-chairs of ISPACG, Geoff de Bazin, Operations Manager, Oceanic, Airways New Zealand (Airways), Leslie McCormick of the Federal Aviation Administration, and Ron Rigney of Airservices Australia, who chaired the meeting.
- 1.2 **Leslie McCormick** thanked Airservices Australia for hosting the meeting and expressed appreciation to the ICAO Regional Director for sending a representative.
- 1.3 **Geoff de Bazin** noted that this was his first ISPACG and looked forward to continuing the outstanding contribution of his predecessor, Mark Goodall. Geoff acknowledged the depth of aviation expertise gathered at the meeting.

#### 1.4 Adoption of the Agenda

The meeting adopted the following Agenda for the meeting:

Agenda Item 1: Opening Remarks

Agenda Item 2: Administrative arrangements

- Agenda Item 3: Review relevant work conducted since the last meeting
- Agenda Item 4: Identify future work programs
- <u>Agenda Item 5:</u> Review and establish terms of reference for working groups/task forces based on work programs

Agenda Item 6: Other business

Agenda Item 7: Strategic Planning

Agenda Item 8: Arrangements for next meeting

#### 1.5 **Documentation**

The meeting considered **20** Working Papers and **29** Information Papers which were posted on the Airservices Australia website at the following address:

https://www.airservicesaustralia.com/customer/ispacg/

User ID ISPACG19 Password ISPACG19BN

### 2. WORK PROGRAM

2.1 The meeting reviewed the ISPACG/18 Open Action Items, and agreed to close two Items (17-7; 17-13) and raise 7 new Action Items (19-1 to 19-7). The revised list of Open Actions is shown at **Appendix A**.

#### 2.2 Action Item 16-1: Central Reporting Agency

The Eighteenth Meeting of ISPACG had previously closed this Action Item, on the basis that the "APANPIRG Regional Airspace Safety Monitoring Advisory Group (RASMAG) had been established and will meet in April 2004. Funding issues will be addressed by this group".

- 2.3 However RASMAG/1 (26 30 April 2004) did not report on the "*funding issues*" and consequently the FAA requested that this action item be reopened for consideration by ISPACG/19.
- 2.4 **Leslie McCormick, FAA,** informed the meeting that in early 2004 the FAA Air Traffic Services and the Office of Research & Acquisition had reorganized into a new Air Traffic Organization (ATO). As the ATO was more "business-focussed" than before, it was inevitable that questions were being raised regarding the FAA's continued funding of the CRA activities which had been provided by Boeing since the beginning of FANS-1/A Interoperability/Implementation Team (FIT) and CRA activities in the South Pacific.
- 2.5 The FAA called on the meeting to consider the ongoing requirement for CRA services and if a continuation of CRA services was required, to initiate action to arrange for an alternative funding method to relieve the FAA from single-handedly funding these services for the entire South Pacific Region.
- 2.6 The meeting was informed that the existing funding arrangements provided by the FAA to Boeing for CRA services would remain in place until 30 September 2005.
- 2.7 **Andrew Tiede, ICAO Regional Office,** reminded the meeting of the requirements of Annex 11 in terms of systematic and appropriate ATS safety management programmes to ensure that safety is maintained in the provision of ATS, including data link services, required navigation performance (RNP) and related separation minima.
- 2.8 **Toby Farmer, CAA New Zealand,** drew the attention of the meeting to the work currently being undertaken by Regional Airspace Safety Monitoring Advisory Group (RASMAG) in the development of *Guidance Material for end-to-end Safety and Performance Monitoring of ATS Data Link Systems in the Asia/Pacific Region.* The guidance material was intended to provide a set of working principles for ATS data link system performance monitoring that would be applied by all States implementing these systems, as well as providing detailed guidance on the requirements for establishing and operating a FIT and CRA. It was intended that this guidance material would help promote a standardized approach for monitoring the performance of ATS data link systems within the Region.
- 2.9 The meeting noted the relevant section of the Guidance Material, under the heading of "Establishment and Operation of an Interoperability Team and CRA"

"Recognizing the safety oversight responsibilities necessary to support the implementation and continued safe use of ATS Datalink systems, the following standards apply to any organization intending to fill the role of an interoperability team:

- a) The organization must receive authority to act as an interoperability team as the result of a decision by a State, a group of States or a regional planning group, or by regional agreement.
- *b)* States should appoint a CRA that has the required tools and personnel with the technical skills and experience to carry out the CRA functions.
- c) States should ensure that the CRA is adequately funded to carry out its required functions."
- 2.10 **Ron Rigney, Airservices,** concluded that in view of the ICAO safety requirements, there was an ongoing need for FIT/CRA performance monitoring activities within ISPACG and sought advice as to whether individual ATSPs within the region could undertake some of the CRA activity.
- 2.11 **Craig Roberts, Airservices,** expressed the view that whilst most ATSPs could set up spreadsheets and collect data on an individual basis, the key CRA functionalities could not be undertaken on an ATSP by ATSP basis, because the CRA must have dedicated staff and adequate tools to undertake the work required. In this regard, Craig referred to the ICAO Draft *Guidance Material for Data Link Systems*, highlighting the functions of the CRA, which were:
  - a) To develop and administer problem report processes.
  - b) To maintain a database of problem reports.
  - *c)* To process monthly end-to-end system performance reports from air traffic service providers.
  - *d)* To coordinate and test the implementation of new procedures resulting from ATS datalink systems for a given region.
  - e) To administer and monitor an informal end-to-end configuration process.
  - f) To manage data confidentiality agreements as required.
  - g) To identify trends.
  - *h)* To provide regular reports to the interoperability team.
- 2.12 **David Oliver, Qantas,** summarized the discussions and concluded that the FIT/CRA activities must be continued and that Boeing should continue to provide the CRA services for ISPACG. This brought the focus of the meeting back to finding an equitable solution for the continued funding of CRA activities, where it was suggested that perhaps ISPACG could look to IATA for a possible funding mechanism, noting the work that had recently been undertaken between IATA and Boeing to set up a CRA for the Bay of Bengal.
- 2.13 **Neil Jonasson, IATA,** expressed the view that while safety monitoring was a State responsibility, an equitable CRA funding scheme could possibly be facilitated under a User Charges scheme. Alternatively, CRA funding could be provided from the combined financial contributions of the States and/or ATSPs involved. There was a risk however, that some ATSPs would automatically pass-on those CRA fees to the airlines in the form of increased Air Navigation Charges. In examining the options for CRA funding mechanisms, it would be necessary to prove the costs involved are above and beyond the presently collected Air Navigation Charges, i.e. the CRA is a new cost.
- 2.14 **Geoff de Bazin,** on behalf of **Airways New Zealand**, expressed his appreciation to the FAA for the many years of financial support to the CRA and noted that the view of the meeting was clearly in support of Boeing providing continued CRA services to the FIT. The question over funding had to be addressed now and Airways New Zealand would be prepared to make some funds available. Further, it was suggested that the ISPACG Co-Chairs, IATA, ATSPs

and other Organisations work together to develop a plan for the continued funding of the CRA beyond 30 September 2005.

- 2.15 **Ron Rigney, Airservices,** informed the meeting that the issue of CRA funding was also on the agenda for consideration by the next meeting of the FIT-Bay of Bengal (BOB), which would convene in Bangkok on 18 22 April 2005. As Ron was also going to attend the same meeting, he gave an undertaking to report back to the ISPACG Co-Chairs on the outcomes of discussions at FIT-BOB.
- 2.16 **The ISPACG Co-Chairs** concluded the discussions on this matter with the following action items:
  - a) Determine the cost of Boeing's continuing provision of FIT/CRA services for the South Pacific (Leslie McCormick);
  - b) Contact Stakeholders to ascertain their level of support to the FIT/CRA (ISPACG Co-Chairs);
  - c) Consult with ICAO to develop a plan for funding arrangements to be in place after 30 September 2005 (**ISPACG Co-Chairs**); and
  - d) Report on the outcome to ISPACG/20.

## 2.17 Action Item 16-2: Strategic Planning

See Appendix B, Updated Capacity Enhancement Table (Standing Action Item)

### 2.18 Action Item 16-4: ATM Contingency Plans

**Richard Stevens, Airservices,** advised the group that contingency arrangements with Papua New Guinea had been implemented.

2.19 **Geoff de Bazin, Airways,** advised that discussions were continuing between Airways New Zealand and Airservices Australia in relation to the development of a contingency plan for Auckland and Brisbane Centres.

#### 2.20 <u>Action Item 16-5: FIT Report</u> See paragraph 3.0 - FIT Report and Recommendations (Standing Action Item)

## 2.21 Action Item 16-6: Regional Lateral Offset Procedures

**David Maynard, FAA,** confirmed that the FAA had implemented the lateral offset procedures on AIRAC date 20 January 2005, in accordance with the ICAO Regional Implementation Plan.

- 2.22 The meeting was informed that Australia, Fiji and New Zealand had agreed to implement the lateral offset procedures on AIRAC date 17 March 2005.
- 2.23 Aric Oh, Singapore Airlines, suggested that the procedure should be implemented in remote airspace, in addition to oceanic airspace and sought clarification in respect to non-radar airspace, as to whether there should be a distinction made between "radar controlled airspace" and "radar monitored airspace".

## 2.24 Action Item 16-7: Aircraft Loss of Communications Procedures

**Hideo Watanabe, MLIT, Japan,** provided the meeting with a summary of discussions from IPACG/22, in relation to Japan's proposal for amendment of Regional Supplementary Procedures – Doc 7030, concerning "*ATC contingency procedures to be used during failure of Datalink in oceanic control airspace*".

- 2.25 Allan London, Airways, also provided the meeting of details of a review currently being undertaken by Airways New Zealand into loss of communication procedures for short haul flights where a level change is not necessarily required.
- 2.26 Ann Moore, FAA, provided details on the status of North Atlantic (NAT) oceanic airspace turnback procedures and also referred the meeting to ICAO State Letter AN 13/1.8-04/73 (30 July 2004), regarding proposed amendments to Annex 2 (Chapters 3.6.5.2 and 3.6.5.2.3 *Communication failure*) and PANS-ATM (Chapter 15.2 *Special Procedures for In-Flight Contingencies in Oceanic Airspace;* and Chapter 15.3 *Air-Ground Communications Failure*).
- 2.27 **Leslie McCormick, FAA,** informed the meeting that the United States had responded to a number of questions from the ICAO HQ in relation to the proposed amendment to the Regional Supplementary Procedures Doc 7030 for communications failure and was awaiting advice/approval from ICAO.
- 2.28 **Andrew Tiede, ICAO,** was asked to follow-up on the status of the proposed amendment APAC-S 03/10-MID/ASIA/PAC RAC and to confirm applicability to all of the Pacific Region. (ISPACG and IPACG).
- 2.29 The meeting also recognised that as there were a number of broader contingency issues associated with loss of communication procedures, an ad-hoc working group should be established to review these procedures and to report back to ISPACG/19. The procedures to be reviewed by the ad-hoc working group included:
  - a) Total loss of communications;
  - b) Individual loss of communications;
  - c) Turnback; and
  - d) Weather deviations.
- 2.30 The working group subsequently reported on the outcomes of its review and a new Action Item was established as: **19-5 Analysis of Contingency Procedures.**

#### 2.31 Action Item 16-8 Implementation of 30/30

**Steve Kemp, Airservices,** informed the meeting that 30/30 reduced separation (based on RNP4) was implemented in the oceanic airspace across the Tasman Sea, east of Australia, and in the New Zealand, Fiji, Nauru and Honiara FIRs on 20 January 2005.

- 2.32 **Jovilisi Vatu, Strategic Air Services, Fiji,** informed the meeting that although Australia and New Zealand had originally intended to implement 30/30 across the Tasman Sea, the area of operation had been expanded to include the whole of the Nadi Flight Information Region (FIR), as a result of Fiji's ongoing participation in the ISPACG 30/30 Working Group activities.
- 2.33 Andrew Tiede, ICAO, congratulated the 30/30 Working Group on its efforts and expressed the view that ICAO was generally satisfied with the outcomes of this group and commented that success was in due in large part to the collaborative efforts of the States, operators and organisations involved.
- 2.34 In regard to the 30/30 safety assessment, the meeting was reminded that the 30/30 safety assessment was a dynamic document which would require an ongoing annual review to update the assessment and to check for new and emerging risks. Copies of the Safety

Assessment Report (January 2005) were presented to the meeting and additional electronic copies are available upon request by email to <u>steve.kemp@airservicesaustralia.com</u>

- 2.35 **Zahid Munawar, CAA New Zealand,** provided the meeting with information regarding the New Zealand Advisory Circular which detailed the requirements for gaining operational approval. Although a relatively small number of aircraft currently had RNP4 approvals in place, the numbers were expected to grow quickly.
- 2.36 **Ian Varcoe, Air New Zealand,** drew the attention of the meeting to the requirements of the Automatic Dependent Surveillance (ADS) reporting rate for the provision of 30/30 separation. The South Pacific States and ATSPs had agreed that the 14 minute ADS reporting rate would only be set and applied when aircraft were being separated from each other using 30/30 standards. Where 30/30 separation standards were not being applied, then the reporting rates should be reset to the default settings, so as to reduce the data link service charges.
- 2.37 **Ann Moore, FAA,** confirmed that the FAA would be looking to implement 30/30 in the South Pacific portion of the Oakland FIR by the end of 2005 and would seek to build on the work undertaken by the ISPACG 30/30 Working Group.

### 2.38 Action Item 16-13: Application of "Rule of 11" in Oceanic Airspace

Allan London, Airways, advised that the procedure was currently used in New Zealand under radar only. However a risk assessment for application outside of radar coverage has been completed.

2.39 Adam Watkin, Airservices, confirmed that Australia had been using the procedure with limited application for some years and that criteria for its use would be expanded under proposed changes to the Australian Manual of Air Traffic Services.

## 2.40 Action Item 17-1: RNP Airspace

**Eric Chambroy, DNA, France,** informed the meeting that Version 4 of Visualisions des Vols Océaniques (VIVO) was currently being installed in the Tahiti Area Control Center (ACC), with live testing expected to commence by mid-June 2005. Version 4 will include several enhancements, including ADS-C and Cleared Level Adherence Monitoring.

- 2.41 The upgraded VIVO system will significantly reduce the requirement for routine Controller Pilot Data Link Communication (CPDLC) reports over waypoints for FANS-1/A flights using ADS-C and will permit the introduction of 50/50 reduced separation standards (based on RNP10). The target date for implementation is September 2005 and associated airspace changes will be published by Aeronautical Information Publication (AIP) amendment.
- 2.42 **Greg Atkins, Airways,** provided an update on plans by Airways New Zealand for the introduction of RNP within the domestic airspace. A multi-disciplined project team was established during 2004 to progress the RNP plan, which aims to "*Develop a new national route structure that utilises RNP design criteria and procedures within domestic airspace, including enroute segments, SIDs, STARs, Approaches and Departures.*" The meeting was informed that the project is scheduled for completion in March 2007, however a review is underway to see if this can be brought forward.
- 2.43 **Robert Hansen, FAA,** provided a status update on the Oakland Air Route Traffic Control Center (ARTCC) use of the ADS based 50NM longitudinal separation standard. On 30 June 2004, Oakland ARTCC began operational use of its new oceanic automation system, Ocean21, on a limited basis in the southeastern portion of the FIR. The Ocean21 system has

ADS capabilities which allow for the application of the 50NM longitudinal separation between appropriately equipped aircraft. Oakland ARTCC is scheduled to fully transition to the Ocean21 system in June 2005 and this will facilitate the application of the 50NM longitudinal separation standard throughout the entire Oakland FIR.

Note: See also comments made under Action Item 17-12: Terminal Procedures

#### 2.44 Action Item 17-2: UPRs

**Greg McDonald, Airservices**, confirmed that that Tasman User Preferred Route (UPR) project had been deferred due to a requirement to have a conflict detection tool installed on the Australian TAAATS system. The conflict detection tool is currently undergoing research & development and will be available as part of future scheduled upgrades to TAAATS.

- 2.45 However, Airservices Australia had responded to industry requests for Flex Tracks to be provided from Singapore to Brisbane, Melbourne and Sydney and the Australian Organised track Structure (AUSOTS) was currently being developed, using the FAA's DOTS+ system tool. The target date for the commencement of AUSOTS trials is the second quarter of 2005 and it is expected that once implemented, other city pairs between Asia and Australasia will be eligible for Flex Track operations, ahead of the widespread implementation of UPRs at a later date.
- 2.46 <u>Action Item 17-5: Automatic Dependent Surveillance Broadcast (ADS-B)</u> Greg Dunstone, Airservices, provided the meeting with an update on the ADS-B implementation program in Australia. There are three parts to this plan, which comprise the Burnett Basin Operational Trial; the ADS-B Upper Airspace Project (UAP); and the ADS-BN Lower Airspace Project (LAP).
- 2.47 The Burnett Basin Operational Trial is expected to continue during 2005 and will conclude with the commissioning of the UAP. The LAP is intended to provide even greater ADS-B coverage in areas currently not served by radar, as well as replacing the current enroute network of secondary surveillance radars at the end of their service life in 2009. Primary and secondary surveillance radar will be retained in the terminal areas for the foreseeable future.
- 2.48 The meeting was also advised that the Australian Regulator the Civil Aviation Safety Authority (CASA) had approved the use of a 5 NM minimum horizontal separation distance between ADS-B equipped aircraft. Further information on the Australian ADS-B Project is available at: <u>www.airservicesaustralia.com/adsb</u>
- 2.49 **Lindsay Norrish, SITA,** presented the meeting with details of a recently established strategic partnership between Airservices Australia and SITA to provide ADS-B services in the Asia Pacific region. Under the proposed service delivery model, Airservices Australia and SITA would combine resources to facilitate the regional deployment of ADS-B, including the sharing of ADS-B data across FIR and State boundaries in a timely and cost-effective manner.

#### 2.50 Action Item 17-6: Oceanic Safety Performance Standards

**Tom Kraft, FAA,** reported on the progress of RTCA Special Committee (SC) 189/Eurocae Working Group (WG) 53's work in relation to the Oceanic Safety and Performance (SPR) Standard. The meeting was informed that the Oceanic SPR Standard is now progressing and together with the FANS 1/A-Aeronautical Telecommunications Network (ATN) Interoperability Standard, is expected to be available by January 2006. *(See also comments under Action Item 18-1).* 

#### 2.51 Action Item 17-7: Unlawful Interference

**Ann Moore, FAA,** provided an overview of US procedures concerning civil aircraft that are subject to unlawful interference and emphasised that while certain procedures were not available to the general public, Pilots and controllers had a common understanding of established procedures.

2.52 **Ron Rigney, Airservices**, referred to the Action Pending under Action Item 17-7, viz. *"Prepare table for each state to complete with publicly available unlawful interference codes"* and suggested that in hindsight, it was not in the best interests of aviation security to have these details collated into one ISPACG document. Accordingly, the meeting agreed to close this item.

#### 2.53 <u>Action Item 17-8: Reduced Vertical Separation Minimum (RVSM) Traffic Movement</u> <u>Sample</u>

**Brian Colamosca, FAA,** provided the meeting with specifications for a traffic movement sample to be collected over the period 1 - 30 April 2005. The Traffic Movement Sample will be used in support the Pacific Approvals Registry and Monitoring Organization (PARMO) annual examination of the State Reduced Vertical Separation Minimum (RVSM) approval status of operators and aircraft using Pacific FIRs where RVSM has been implemented.

2.54 Each Pacific ATS provider is requested to submit its traffic movement sample for the period 1 – 30 April 2005 to the PARMO by e-mail, not later than **21 May 2005**. The PARMO e-mail address is <u>aparmo@faa.gov</u>. A spreadsheet providing the recommended format is available for download from the PARMO web page at <u>http://www.tc.faa.gov/acb300/parmo</u>.

#### 2.55 Action Item 17-9: Pre Departure Clearances

**Greg Atkins, Airways,** reported that Airways New Zealand had initiated a business case study to look into the introduction of datalinking departure clearances to aircraft. The study is expected to be completed in April 2005 and will focus on Auckland, Wellington and Christchurch International Airports to prove the business case. If accepted, implementation would occur during 2006.

#### 2.56 Action Item 17-11: ATS Interfacility Datalink Communications (AIDC)

**Jovilisi Vatu, Strategic Air Services, Fiji,** advised the meeting that Fiji is currently conducting two-way tests with Auckland and had partially implemented one-way (inbound to Nadi) with Brisbane. There are still one or two issues to be resolved, including ICAO Secondary Surveillance Radar (SSR) code allocation procedures and near-boundary operations.

2.57 **Jean-Pierre Carle, SEAC, Tahiti,** provided the meeting with a progress report on AIDC implementation in the Tahiti FIR. A new version of Tahiti's FDPS is expected to be operational during May 2005, which will facilitate the introduction of a number of AIDC enhancements, including ABI messages from June 2005. AIDC version 2 is also expected to be available on a trials basis in the Tahiti FIR as from June 2005, subject to agreement with the adjoining FIRs.

#### 2.58 Action Item 17-12: Terminal Procedures

**Jean-Pierre Carle, SEAC, Tahiti,** announced plans for the introduction of an RNAV Runway 22 Non-Precision Approach based on Global Navigation Satellite Systems (GNSS), at Tahiti Faa'a by the end of 2005, subject to a satisfactory safety case.

2.59 **Craig Roberts, Airservices,** on behalf of Boeing, Qantas Airways, and the Air Traffic Alliance (EADS/Thales/Airbus), provided the meeting with a report on "Tailored Arrivals –

Phase One", which was conducted in Australian domestic airspace between April and September 2004.

2.60 **The ISPACG Co-Chairs** acknowledged the contributions made by the ATSPs through the inclusion of terminal procedures specialists in the ISPACG meeting and requested that these arrangements be continued into ISPACG/20 and beyond. This would ensure that the operating benefits gained through enhanced oceanic procedures are integrated into streamlined terminal control procedures, on a "Gate-to-Gate" basis.

### 2.61 Action Item 18-1: ATS Data Link Gateways

**Tom Kraft, FAA,** reported on the formation of a working group to assist in the development of geographically seamless data communications. The meeting was informed that work had commenced to produce a FANS-1/A-ATN Interoperability Standard and that roadmaps are being developed for Required Communication Performance (RCP) – which is due for completion in September 2005 – and RNP, which is planned for completion in December 2005. (*Refer also to Action Item 17.6: Oceanic Safety Performance Standards*)

#### 2.62 Action Item 19-1: Flight Plan Issues

**Steve Kemp, Airservices,** flagged the issue of designating RNP values on the ATS Flight Plan, during the review discussions on the implementation of 30/30 reduced separation standards (based on RNP4) in the South Pacific. As an example, the Australian AIP required operators to file the ATS Flight Plan for RNP4 operations with the following annotations:

- a) "J", "R" and "Z" in Field 10, Equipment;
- b) "D" in Field 10, Surveillance Equipment; and
- c) "NAV/RNP4" in Field 18.
- 2.63 The meeting recognized that it was becoming increasingly difficult for international operators to accommodate the various designators on the ATS Flight Plan, due to space limitations within Fields 10 and 18. Several of the international operators gave examples of where different regions had varying requirements for the entry of data under Fields 10 and 18.
- 2.64 **Gene Cameron, United Airlines,** provided the meeting with an overview of the work currently being undertaken by the ICAO Flight Plan Study Group (FPLSG). The work of the FPLSG is expected to be completed by the 2<sup>nd</sup> quarter of 2006. The objective of the FPLSG is to:

"Revise the ICAO flight plan provisions, including the ICAO flight plan form and associated operating practices, so that they meet the future needs of aircraft with advanced capabilities and automated ATM systems while taking into account compatibility with existing systems."

- 2.65 **Andrew Tiede, ICAO,** referred to proposed changes to the naming protocols for RNP (e.g. CRNAV) and gave an undertaking to provide the ISPACG Co-Chairs with details on the work currently being undertaken by the ICAO FPLSG.
- 2.66 **The ISPACG Co-Chairs** agreed to establish a small task force to review the materials from the FPLSG and to develop a position which would be subsequently conveyed to ICAO.

#### 2.67 <u>Action Item 19-2: Draft Guidance Material for End-to-End Performance Monitoring</u> of ATS Data Link Systems in the Asia/Pacific Region Toby Farmer CAA New Zealand presented the meeting with copies of the Draft Guidance

**Toby Farmer, CAA New Zealand,** presented the meeting with copies of the *Draft Guidance Material for End-to-End Safety and Performance Monitoring of Air Traffic Service (ATS)*  *Data Link Systems in the Asia/Pacific Region*, as developed by the Second Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/2).

2.68 The meeting was invited to review the draft guidance material and provide comments to **Toby Farmer, CAA New Zealand, or Leslie McCormick, FAA,** by 30 April 2005.

### 2.69 Action Item 19-3: ISPACG Letter of Agreement

**Ron Rigney, Airservices,** provided the meeting with a proposed amendment to the ISPACG Letter of Agreement (LOA), which had expired on 31 December 2003. The proposed changes to the LOA are limited to include some minor editorial amendments, revised validity dates (14 April 2005 to 31 March 2008) and new Signatories. The parties to the revised LOA include the United States Federal Aviation Administration; Airservices Australia; Airways New Zealand Ltd; the Civil Aviation Authority of Papua New Guinea; Airports Fiji Ltd; and Le Service d'Etat de l'Aviation Civile en Polynésie Française. The parties involved were requested to review the proposed draft amendments and to coordinate with Ron Rigney who would arrange for the finalization of the amended LOA.

### 2.70 Action Item 19-4: High Frequency (HF) Regression Activities

**Ann Moore, FAA,** provided the meeting with information on initiatives currently being undertaken in the North Atlantic Region to evaluate current data link capabilities to determine how existing and near term data link capabilities can reduce the reliance on HF voice for pilot/controller communications. ISPACG was invited to consider the need to address the changing communications environment in the Pacific Region.

### 2.71 Action Item 19-5: Analysis of Contingency Procedures

**David Maynard, FAA,** chaired the ad-hoc working group established by ISPACG/19 to review the various procedures for total loss of communications, individual loss of communications, weather deviations and turnback procedures.

- 2.72 The outcomes of the review conducted by the ad-hoc working group were as follows:
  - 1) Loss of Communications Contingency Procedure
    - (a) The WG recommended that ICAO adopt the IPACG/ISPACG proposals as provided to ICAO HQ by the United States in April 2004.
    - (b) The WG reviewed WP/24 to ISPACG/18 (24 February 2004) and noted section 4.1 of the proposed amendment to Doc 7030/4 (Serial No. APAC-S 03/10-MID/ASIA/PAC RAC) referred only to the Naha and Tokyo FIRs. Verification required to ensure that the procedure applies to the Asia/Pacific region and not just the Naha/Tokyo FIRs.
    - (c) The WG noted that a change to Annex 2 is also required to make this a global procedure.
  - 2) Basic Contingency Procedure
    - (a) Part of the procedure requires a 90 degree turn to a 25NM offset. The WG recommended changing this offset to 10NM. This would make the offset common to the weather deviation and loss of communication procedures.
  - 3) Turn Back Procedure

- (a) The current published turnback procedures for the North Pacific require aircrews to offset 25NM laterally and 500 feet vertically. A 25NM lateral offset is inappropriate for use when aircraft may be separated laterally by 30NM.
- (b) Some operators and ATSPs have expressed a desire to standardize turnback procedures globally if practical.
- (c) North Atlantic ATS providers and airspace users are considering changing their turn back lateral offsets from 30NM to 25NM, while ICAO HQ has recently issued guidance to laterally offset 15NM.
- (d) The WG disagreed with ICAO's proposal for a 15NM offset and recommended a study of a 10NM/20NM offset with the possibility of assigning a value based on RNP type.
- (e) The WG recommended that the current procedure to climb/descend +/-500ft be kept.
- 4) Weather Deviation Contingency
  - (a) The WG reviewed the procedures and no changes were recommended.
- 5) Data Link Failure
  - (a) The WG reviewed the procedures and recommended agreement with ISPACG/19 WP/06 (ATC Contingency Procedures to be used during failure of Datalink in oceanic control airspace), as presented by the FAA and JCAB.
- 2.73 **David Maynard, FAA,** concluded the report of the ad-hoc working group by advising that the FAA had agreed to undertake an analysis of the various contingency procedures and would report back to ISPACG and the ICAO Regional Office on the outcomes of this analysis.
- 2.74 **Andrew Tiede, ICAO,** agreed to convey the outcomes of the working group and the FAA analysis to the ICAO Regional Office and Headquarters.

#### 2.75 Action Item 19-6: In-trail procedure based on ADS-B

**Tom Graff, NASA,** delivered a presentation on a proposed in-trail climb/descent procedure based on ADS-B, which may replace the present in-trail climb/descent procedures based on Traffic Alert and Collision Avoidance Systems (TCAS) and Airborne Collision Avoidance Systems (ACAS).

- 2.76 **Bob Peake, Airservices**, expressed interest in trialling the NASA developed ADS-B in-trail climb/descent procedure in Australian continental airspace, provided that a suitable aircraft could be identified for the purposes of a trial. Further expansion to oceanic airspace would be considered based on the outcome of those trials.
- 2.77 **Ann Moore, FAA,** offered to provide ISPACG/20 with an update based on future discussions in other regions, particularly the North Atlantic.

## 3. FIT/12 REPORT

3.1 **Brad Cornell, Boeing ATM,** presented the report of the 12<sup>th</sup> meeting of the FANS-1/A Interoperability Team (FIT/12), which was held on 28 February – 1 March 2005.

3.2 The FIT/12 meeting reviewed the Open Action items from FIT/11 and noted those items that had since been closed – as per the following list:

	Action	Assignee	Status
1.	Resolve provision of performance monitoring data for Nadi Center.		Closed (Nadi working with ASA to provide monitoring data)
2.	Provide a white paper summarizing issues relating to use of MTSAT (voice, passenger, etc.) to IPACG/JCAB.	Boeing, ANZ, ISPACG Secretariat	Closed
3.	Provide white paper addressing MTSAT issues raised by AI #2.	JCAB	Closed
4.	Follow up on ARINC "bad avionics" listing	ARINC, CRA	Closed
5.	Send e-mail to ATSUs detailing the performance monitoring data that is needed each month	Airservices	Closed
6.	Close the PRs listed in the minutes.	CRA	Closed
7.	Schedule another transfer failure monitoring program	CRA, ANZ	Open
8.	Propose RFC on procedure for CLB/DES TO REACH BY	Airservices	Open
9.	Editorialize on L or R in Airservices RFC	Boeing	Closed
10.	Work HFDL RFC by e-mail for this FOM update (in time for IPACG)		Open – need inputs from the ATSUs
11.	Review the data on transfer failures (WP/04) and determine appropriate action	Nadi Center	Open. Still an issue. Will be covered by new AI for this meeting.
12.	Draft RFC for military-specific messages	USAF	Open. USAF would like specific chapter in FOM.

#### 3.3 New Action Items that arose during FIT/12 included:

No.	Action	Assignee
1	Determine what monitoring capability can be provided using	SITA
	AMOS tool to ensure that lost messages are detected.	
2	Set up a new transfer study	CRA
3	Resolve source of HF frequencies issued at transfer, to	Oakland Center
	ensure that correct frequencies are used.	
4	Consult with operators to determine appropriate content for	CRA
	a periodic newsletter to be provided to operators and	
	controllers, highlighting issues that have been resolved.	
5	Provide service advisories for system outages and planned	ARINC
	maintenance.	
6	Determine how the "DESCEND TO REACH" uplink was	Boeing
	displayed on the flight deck.	
7	Run a bench test using uplink 83 to verify proper loading of	Boeing/Airways

No.	Action	Assignee
	route clearances.	
8	Determine whether preflight HF SELCAL checks are	Oakland Center
	necessary in Oakland airspace for CPDLC airplanes.	
9	Propose solution to the erroneous ADS lateral event report	Boeing
	issue for Boeing airplanes.	

3.4 **RTCA DO-258A/EUROCAE ED-100A Version Number Roll** – The FIT considered the proposed changes to the FANS-1/A Interoperability document, RTCA DO-258A/EUROCAE ED-100A. Based on discussions during and after the meeting, the following revised recommendation was conveyed:

"ISPACG requests SC-189/WG-53 to review DO-258A/ED-100A to ensure that current FANS 1/A aircraft can still be shown to comply with DO-258A/ED-100A. Changes are recommended in Section 1 of the FANS1/A Interoperability Standard to clarify that implementers will be able to adapt the standard to meet their specific needs and still be able to demonstrate compliance with DO-258A. For example, some implementers may choose to adapt the standard to not include the message latency timer, but still need to be able to demonstrate compliance to the standard".

### 4. **OTHER BUSINESS**

- 4.1 **Eric Chambroy, DNA, France,** provided the meeting with an overview of Tahiti's strategic planning, which will include short-term system upgrades and the acquisition of a new ATM system in the longer term. Other enhancements will include SSR radar; ADS-B; VHF extended coverage and reduced separation standards.
- 4.2 **Randy Park, FAA,** provided the meeting with an update on the implementation of the Advanced Technologies and Oceanic Procedures (ATOP) Ocean21 system for Anchorage, New York and Oakland Centers. ATOP Build 1 was accepted for initial daily use at Oakland Center in June 2004 and this has enabled the introduction of 50/50 reduced separation on a limited basis. ATOP Build 2 is scheduled for implementation into Oakland Center during mid-2005 and once implemented, will support the implementation of 30/30 reduced separation standards.
- 4.3 **Paul Reidy-Crofts, Airservices,** presented the meeting with a Report on the 4<sup>th</sup> Informal Indian Ocean ATS Coordination Group Meeting (IIOACG4), which was held in Mauritius during December 2004. Airservices Australia will liaise with the FIT/CRA to ensure that the FIT Newsletter is distributed to ATS providers and airline operators within the Indian Ocean region.
- 4.4 **David Ford, FAA,** referred to the International Oceanic Airspace Conference (IOAC), which is to be hosted by the Irish Aviation Authority in Shannon, Ireland, from 16 18 May 2005. Based on past practice, the host role for the 2006 IOAC would fall to the FAA. However, as the FAA Air Traffic Organization evolves into a more business and performance-based organization, the value of continuing the IOAC in its current format must be questioned. Accordingly, delegates to ISPACG/19 were invited to comment on the value of continuing with the current IOAC forum and to make suggestions for consideration by the FAA in deciding whether to host an IOAC in 2006.
- 4.5 **Michael Ostapiej, ARINC,** provided the meeting with a system overview of the High Frequency Data Link (HFDL) system, equipage, traffic and performance information,

together with related ATC activities. The meeting was also invited to refer to additional information provided in WP/07 to IPACG/22.

- 4.6 **Kathleen Kearns, SITA,** presented information on the Satellite AIRCOM Voice service, including recent enhancements to Ground to Air calling, to satisfy ATS requirements and Satellite Voice Status in the North Atlantic.
- 4.7 Allan Storm, USAF Flight Standards Agency, provided an overview on plans currently under development within the US Department of Defense (DOD) for DOD and allied aircraft to transparently navigate and operate in both domestic and international airspace in full compliance with international and local requirements using Global Positioning System (GPS) Precise Positioning Service (PPS) equipment in addition to current sensors. The challenge for DOD is to develop and implement a comprehensive approach for meeting or exceeding all civilian requirements for operating in both domestic and international airspace.
- 4.8 **Andrew Tiede, ICAO,** presented the new ICAO provisions requiring operational staff involved in international operations to demonstrate a minimum level of language proficiency by 5 March 2008. The attention of the meeting was drawn to ICAO Doc 9835 – *Manual on the Implementation of the ICAO Language Proficiency Requirements.*
- 4.9 The meeting was informed that a substantial amount of work needed to be undertaken by States in the preparation and application of language testing instruments in order to assess the ability of pilots, radio operators and air traffic controllers to meet the provisions of Annexes 1, 6, 10 and 11, relating to language proficiency requirements.

## 5. STRATEGIC PLANNING

5.1 The Capacity Enhancements Table was updated by the meeting. Refer **Appendix B**.

#### 6. CLOSING

- 7.1 Closing remarks were made by each of the co-chairs, noting the work of the group and the outcomes that had been reached during the meeting. Particular thanks were expressed to Airservices Australia for hosting the meeting and also to Brisbane Centre for hosting a Welcome Reception and dinner during the course of the conference.
- 7.2 The Federal Aviation Administration will tentatively host the next meetings of FIT/13 and ISPACG/20 at the Renaissance Ilikai Waikiki Hotel, Honolulu, Hawaii USA as per the following schedule:
  - a) Joint IPACG/ISPACG FANS Interoperability Team Meeting, Wednesday, 25 January thru Friday, 27 January 2005; and
  - b) ISPACG/20 Plenary Meeting, Monday 30 January thru Wednesday, 1 February 2006.

PAPER	AGENDA Item	TITLE	PRESENTED BY
WP/01	-	Proposed Agenda and Working Program	Co-Chairs
WP/02 Open Action Items - ISPACG/18		Open Action Items - ISPACG/18	Co-Chairs

## **MEETING DOCUMENTATION**

PAPER	AGENDA Item	TITLE	PRESENTED BY
WP/03	3	30/30 Work Group report on implementation across the Tasman	Airservices Australia
WP/04	3	Draft guidance material for end-to-end safety and performance monitoring of Air Traffic Service (ATS) Datalink systems in the Asia/Pacific region	CAA NZ
WP/05	6	Funding of ISPACG FANS interoperability team and Central Reporting Agency services	FAA
WP/06	6	ATC Contingency Procedures to be used during failure of Datalink in oceanic control airspace	FAA and JCAB
WP/07	3	Loss of Communications Procedures - New Zealand	Airways NZ
WP/08		Revised Capacity Enhancement Table	Fiji
WP/09	6	HF Pre-flight and SELCAL checks	Airways NZ
WP/10	6	Pre-Flight SELCAL Checks For Flights Using CPDLC/ADS	QANTAS
WP/11	3	High Frequency (HF) Regression in Pacific Oceanic Airspace	FAA
WP/12	6	Future planning for the 2006 international oceanic airspace conference	FAA
WP/13	4	30NM Lateral/30NM Longitudinal Separation Throughout the Pacific	FAA
WP/14	7	United States Updates To The Capacity Enhancement Table	FAA
WP/15	4	Oceanic In-Trail Climb And In-Trail Descent Using ACAS/TCAS & Potential ADS-B In-Trail Procedure	FAA & NASA
WP/16	3	Specification for a Traffic Movement Sample to Support Examination of the Status of Operators and Aircraft Using Pacific Airspace Where Reduced Vertical Separation Minimum (RVSM) Is Applied	PARMO
WP/17	3	Implementation of AIDC between Brisbane and Nadi	Airservices Australia
WP/18	3	Update on ADS-B implementation	Airservices Australia
WP/19	3	Unlawful interference	Airservices Australia
WP/20	6	Update of ISPACG LOA	Co-Chairs
IP/01		List of Working and Information Papers	Secretariat
IP/02	4	Tailored Arrivals - Phase One Report	Airservices Australia, Air Traffic Alliance, Boeing, Qantas Airways
IP/03	4	Domestic RNP - New Zealand	Airways NZ
IP/04	4	Datalink Based Departure Clearance - New Zealand	Airways NZ
IP/05	6	Language Proficiency	ICAO
IP/06	8	ISPACG20	FAA
IP/07	3	Application of ADS Based 50NM Longitudinal Separation in the Oakland FIR	FAA
IP/08	3	Update on Performance Data Accessibility in the Eurocat 2000X	Fiji
IP/09	3	Update on AIDC Messaging between adjacent FIRs	Fiji

PAPER	AGENDA Item	TITLE	PRESENTED BY
IP/10	3	Report on the Implementation of RNP4 (30/30) in the NADI FIR	Fiji
IP/11	6	Australian Organised Track Structure AUSOTS	Airservices Australia
IP/12		High Frequency Data Link Status Update	ARINC
IP/13		Publishing of Contact Instructions	Airways NZ
IP/14	6	Discrepancies in Doc 7030 - Regional Supplementary Procedures	CAA NZ
IP/15	4	Use Of Global Positioning System Precise Positioning Service In Domestic And International Airspace	USAF
IP/16	3	Advanced Technologies and Oceanic Procedures (ATOP) Status	FAA
IP/17	3	Strategic Lateral Offset In Oakland And Anchorage Oceanic FIRS	FAA
IP/18	3	US Procedures on Unlawful Interference	FAA
IP/19	3	Strategic plan (Tahiti)	France
IP/20	3	Progress on transpacific operations	France
IP/21	3	Non Precision Approach GNSS based (Polynésie)	France
IP/22	3	Surveillance implementation programme for Tahiti FIR	France
IP/23	3	Progress on AIDC implementation	France
IP/24	4	Optimising ADS-B Implementation - A Regional Service	Airservices Australia & SITA
IP/25		Report on the 4 <sup>th</sup> Informal Indian Ocean ATS Coordination Group Meeting	Airservices Australia
IP/26	3	North Atlantic Turnback Procedures For Possible Implementation In Pacific Oceanic Airspace	FAA
IP/27	3	Air Traffic Services Data Link Gateways	FAA
IP/28	3	SITA Enhanced Ground to Air Satellite Voice Service and Satellite Voice Status in the North Atlantic	SITA
IP/29	3	RTCA DO-258A/EUROCAE ED-100A Version Number Roll	ISPACG
IP29A	3	RTCA DO-258A/EUROCAE ED-100 <sup>a</sup> Version Number Roll - Revision 1	ISPACG

# PARTICIPANT LIST

NAME	TITLE	COMPANY	ADDRESS	CONTACTS
Adam Watkin	Air Traffic Controller	Airservices Australia	Locked Bag 747	Tel: 61 7 3866-3421
			Eagle Farm	Fax: 61 7 3866 3257
			Queensland 4009	Email: <u>adam.watkin@airservicesaustralia.com</u>
A 11 T 1			Australia PO Box 53-093	T 1 00 075 0100
Allan London	Customer Service Specialist	Airways New Zealand	Auckland International	Tel: 09 275 3109 Fax: 09 275 3106
	Specialist		Airport	Email: londona@airways.co.nz
			Auckland	Ellian. <u>Iondona@an.ways.co.nz</u>
			New Zealand	
Allan Storm	Civil/Military	Air Force Flight	1535 Command Dr., Suite	Tel: 240 857 2146
	Aviation Issues	Standards Agency	D/E	Fax: 240 857 3194
			Andrews AFB, MD 20762	Email: <u>allan.storm@andrews.af.mil</u>
			USA	
Andrew Fleming	General Manager	Airservices Australia	GPO Box 367	Tel: 02 6268 4603
			Canberra ACT 2601	Fax: 02 6268 4747
			Australia	Email: andrew.fleming@airservicesaustralia.com
Andrew Tiede	Regional Officer,	ICAO	252/1 Vibhavadi Rangsit Rd	Tel: 66 2 537 8189
	Air Traffic Management		Chatuchak Banalaala 10000	Fax: 66 2 537 8199 Email: atiede@bangkok.icao.int
	Management		Bangkok 10900 Thailand	Email: <u>atiede@bangkok.icao.int</u>
Ann Moore	Manager,	FAA	FAA/ATO-E Oceanic	Tel: +1 202 267 9375
	Oceanic/International		800 Independence Ave	Fax: +1 202 267 5110
	Air Traffic		Room 634 SW	Email: ann.moore@faa.gov
	Standards/Procedures		Washington DC 20591	
			USA	
Antoine Martin	Operational	SCTA	Orly Sud - BP 155	Tel: 33 1 6957 7227
	Requirements		94541 ORLY Aerogare Cedex	Fax: 33 1 6957 7363
	Specialist		France	Email: antoine.martin@aviation-civile.gouv.fr
Aric Oh	Deputy Chief Pilot	Singapore Airlines	SIA Training Centre (4-C	Tel: 65 6540 3694
	(Technical) - Flight	Limited	720 Upper Changi Road East	Fax: 65 6542 9564
Bill Wilson	Operations	CAANZ	Singapore 486852	Email: <u>aric.oh@singaporeair.com.sq</u> Tel:
Bill wilson		CAA NZ		Fax:
				Email:
Bob Peake	Manager, Technology	Airservices Australia	GPO Box 387	Tel: 61 2 6268 4362
	Development		Canberra ACT 2601	Fax: 61 2 6268 5709
	1		Australia	Email: bob.peake@airservicesaustralia.com
Brad Cornell	Engineer	Boeing ATM, Boeing	12015 Purple Pennant	Tel: 1 425 280 5603
		Commercial Airplanes	Lake Stevens Wa 98258	Fax: 1 425 294 3558
			USA	Email: <u>bradley.d.cornell@boeing.com</u>
Brian Colamosca	Manager, Separation	US Federal Aviation	FAA Technical Centre	Tel: +1 609 485 6603
	Standards Group	Administration	Atlantic City, New Jersey	Fax: +1 609 485
			08405	Email: <u>brian.colamosca@faa.gov</u>
Christophe Cassiau-	Flight Test Support	Airbus	USA Rond Point Maurice Bellonte	Tel: 33 5 6211 0525
Haurie	Engineer	Alfous	Toulouse/ 31 707 Cedex	Fax: 33 5 6193 2934
Haune	Linginicei		France	Email: christophe.cassiau-haurie@airbus.com
Craig Roberts	Operational Specialist	NOSI, Airservices	Building 4, Tower Road	Tel: 61 3 9339 2285
chang recounts	operational operation	Australia	Tullamarine, Victoria 3093	Fax:
			Australia	Email: craig.j.roberts@airservicesaustralia.com
David Anderson	Manager Research &	Airservices Australia	GPO Box 387	Tel: 61 2 6268 4820
	Analysis		Canberra ACT 2601	Fax: 61 2 6268 4039
			Australia	Email: david.anderson@airservicesaustralia.com
David Ford	Director, Oceanic	Federal Aviation	600 Independence Avenue,	Tel: 202 385 8433
	&Offshore Services	Administration	SW, 3 <sup>rd</sup> Floor West	Fax: 202 493 4509
			Washington DC 20591	Email: <u>David.Ford@faa.gov</u>
David Marmand	Support Managar	Federal Aviation	USA 5125 Central Ave	Tel: 510-745-3543
David Maynard	Support Manager, International	Administration,	Fremont	Tel: 510-745-3543 Fax: 510-745-3628
	Procedures	Oakland ARTCC	California 94536	Email: david.maynard@faa.gov
	inocuales		USA	Linan. <u>davidinaynatu@taa.g0v</u>
David Oliver	General Manager	QANTAS	QANTAS Centre QCC/3,	Tel: 612 9691 1158
	Flight Technical		Bourke Rd	Fax: 612 9691 1615
			Mascot	Email: doliver@qantas.com.au
			Sydney NSW 2020	
		1	Australia	

NAME	TITLE	COMPANY	ADDRESS	CONTACTS
Eric Chambroy	Head of ATM	DNA (Air Navigation	50 rue Henry Farman	Tel: 33 1 5809 4743
	Systems Division	Directorate)	75 720 Paris cedex 15 France	Fax: 33 1 5809 3609 Email: Eric.chambroy@aviation-civile.gouv.fr
Eugene Cameron	Manager Global	United Airlines	PO Box 576	Tel: 530 878-8791
Eugene Cumeron	Support - Flight	Clinted Attilles	Applegate	Fax: 530 878-8791
	Despatch		California 95703	Email: Gene.cameron@ual.com
	_		USA	
Geoff deBazin	Operations Manager,	Airways New Zealand	PO Box 53-093	Tel: 09 256 8072
	Oceanic		Auckland International	Fax: 09 275 3106
			Airport Auckland	Email: geoff.debazin@airways.co.nz
			New Zealand	
Geoff Ross	Air Traffic Controller	Airservices Australia	Locked Bag 747	Tel: 61 7 3866 3421
		1 moor views 1 mooraina	Eagle Farm QLD 4009	Fax: 61 7 3866 3257
			Australia	Email: geoffrey.k.ross@airservicesaustralia.com
Geoff Whitely	Operations Manager	Airservices Australia	PO Box 1093	Tel: 61 3 9235 7378
			Tullamarine VIC 3043	Fax: 61 3 9235 2744
<u>a 1 a 1 11</u>			Australia	Email: geoff.whitely@airservicesaustralia.com
Gordon Sandell	Associate Technical Fellow	The Boeing Company	PO Box 3707 Mail code 02- 98	Tel: 425-294-0349
	Fellow		Seattle WA 98124	Fax: Email: gordon.r.sandell@boeing.com
			USA	Linan. gordon.r.sanden@boenig.com
Graham Rennie	Manager Flight	Qantas Airways	Qantas Centre, Building C/2	Tel: 612 9691 1157
	Dispatch		Mascot 2020	Fax: 612 9691 1385
	_		Australia	Email: grennie@qantas.com.au
Graham Secker	Systems Development	Airways New Zealand	PO Box 53-093	Tel: 09 275 8077
	Specialist		Auckland International	Fax: 09 275 3106
			Airport	Email: graham.secker@airways.co.nz
			Auckland New Zealand	
Greg Atkins	Service Improvement	Airways New Zealand	PO Box 14-131	Tel: 64 3 3581500
oreg Atkins	Manager	All ways New Zealallu	Christchurch	Fax: 64 3 358 2790
			New Zealand	Email: greg.atkins@airways.co.nz
Greg Dunstone	Senior Engineering	Airservices Australia	GPO Box 387	Tel: 61 2 6268 4286
-	Specialist		Canberra ACT 2601	Fax: 61 2 6268 5709
			Australia	Email: greg.dunstone@airservicesaustralia.com
Greg McDonald	Project Manager	Airservices Australia	PO Box 1093	Tel: 61 3 9339 2516
			Tullamarine VIC 3043	Fax: 61 3 9339 2442
Hideo Watanabe	Special Assistant to	Ministry of Land,	Australia 2-1-3 kasumigaseki	Email: greg.mcdonald@airservicesaustralia.com Tel: 81 3 5253 8742
Thueo wataliabe	the Director	Infrastructure and Transport	chiyodaku	Fax: 81 3 5253 1663
			Tokyo 100-8918	Email: watanabe-h2pt@mlit.go.jp
		1	Japan	<u></u>
Hisham El-Ansary	A/Chief Executive	Airservices Australia	GPO Box 367	Tel: 61 2 6268 4212
	Officer		Canberra ACT 2601	Fax: 61 2 6268 5685
			Australia	Email: hisham.lansary@airservicesaustralia.com
Ian Varcoe	Manager Airline	Air New Zealand	Private Bag 92007	Tel: 09 256 3328
	Technical Support		Auckland 1040 New Zealand	Fax: 09 256 3935 Email: ian.varcoe@airnz.co.nz
Isei Tuganinilau	Air Traffic	CAA Fiji	Civil Aviation Authority of	Tel: 67 21555
Tudreu	Management	Churriji	the Fiji Islands	Fax: 67 21500
	Inspector		Private Mail Bag	Email: atmi@caaf.org.fj
	-		Nadi Airport	
			Fiji Islands	
Jason Harfield	Head Air Traffic	Airservices Australia	GPO Box 367	Tel: 61 2 6268 4601
	Controller		Canberra ACT 2601	Fax: 61 2 6268 4848
Jean-Pierre Carle	CNS ATM Managar	SEAC Tahiti	Australia BP6011 FAA'A	Email: jason.harfield@airservicesaustralia.com Tel: 689 861 148
Jean-Fierre Carle	CNS-ATM Manager	SEAC TAILU	Airport 98702 FAA'A	Fax: 689 861 049
			French Polynesia	Email: CARLE_Jean-pierre@seac.pf
Jeffrey Tilley	ARTCC Controller	NATCA/AFATCA	34243 Perry Rd	Tel: 510 745 3857
		Union City Fax: 510		
			CA 94587	Email: <u>President@zoanatca.com</u>
			USA	
John Koelling	Head, Projects &	NASA	894 Big Ben Court	Tel: 757 864 2232
	Advanced Concepts		Newport News VA 23608	Fax: 757 864 8858
Lotoma D-t-1	Branch	Aimonto Elli I d 1	USA AEL Drivata Mail Dag	Email: John.H.Koelling@nasa.gov
Jotame Ratabua	ATM System	Airports Fiji Ltd	AFL Private Mail Bag	Tel: 679 672 4603 Fax: 679 672 5151
	Specialist		Nadi Airport Nadi	Fax: 679 672 5151 Email: jotamer@afl.com.fj

NAME	TITLE	COMPANY	ADDRESS	CONTACTS
Jovilisi Vatu	Manager Operations	Strategic Air Services	PO Box 9863	Tel: 679 672 5777
		Ltd	Nadi Airport	Fax: 679 672 4600
Voron Starts	Ducina M	CIT A	Fiji Islands Level 11 Underwood House	Email: <u>atmproject@afl.com.fj</u>
Karen Stephenson	Business Manager ATS	SITA	27 Pitt Street	Tel: 61 2 9240 1427 Fax: 61 2 9247 9330
	AIS		Sydney NSW 2000	Email: karen.stephenson@sita.aero
			Australia	
Kathleen Kearns	Manager, AIRCOM	SITA	PMB 210	Tel: 703 339 8965
	CNS Services, North		8094 Rolling Road	Fax: 703 339 8966
	America		Springfield, Virginia 22153	Email: <u>Kathleen.Kearns@sita.aero</u>
<u> </u>			USA Dist M 1D	T 1 (70 (72 1 (02
Kelepi Dainaki		Airports Fiji Ltd	Private Mail Bag Nadi Airport	Tel: 679 673 1623 Fax: 679 672 2492
			Nadi	Email: kelepid@afl.com.fj
			Fiji	Email: <u>kelepid curiconnij</u>
Kenneth Date	TMA Specialist	Airservices Australia	PO Box 211	Tel: 61 2 9556 6623
	-		Mascot NSW 1460	Fax: 61 2 9556 6624
			Australia	Email: <u>kenneth.date@airservicesaustralia.com</u>
Kenneth Jones	Manager, NASA	NASA Langley	NAA Langley Research	Tel: 757 864 5013
	Enhanced Oceanic	Research Organization	Centre	Fax: 757 864 8858
	Operations Project		Mail Stop 156A Hampton Virginia 23681	Email: <u>Kenneth.M.Jones@nasa.gov</u>
			USA	
Leslie McCormick	Acting Manager, ATO	Federal Aviation	800 Independence Avenue	Tel: 202-385 8082
Losite meconilier	Operations Planning	Administration	SW	Fax: 920 273 2882
	International		Washington DC 20591	Email: Leslie.McCormick@faa.gov
	Operations & ATM		USA	
	Services			
Lindsay Norrish		SITA		Tel:
				Fax:
Mark Goodall	Manager Oceanic	Airways New Zealand	PO Box 53-093	Email:Lindsay.norrish@sita.aeroTel:09 256 8717
Mark Goodan	Business	Allways new Zealand	Auckland International	Fax: 09 275 3106
	Dusiness		Airport	Email: goodallm@airways.co.nz
			Auckland	
			New Zealand	
Mark McCloy	Brisbane Tower	Airservices Australia	Locked Bag 747	Tel: 61 7 3866 3513
	Specialist		Eagle Farm	Fax: 61 7 3866 3502
			Queensland 4009	Email: <u>mark.mccloy@airservicesaustralia.com</u>
Moult Shanhaud	Captain B767	Air New Zealand	Australia Private Bag 92007	Tel: 64 9 256 4731
Mark Shepherd	Captain B707	All New Zealand	Auckland 1040	Fax: 64 9 256 4626
			New Zealand	Email: mark.shepherd@airnz.co.nz
Matthew Bouttell	Navigation Analyst	QANTAS		Tel: 02 9691 1034
		-		Fax: 02 9691 1385
				Email: <u>mbouttell@qantas.com.au</u>
Michael Ostapiej	Director, Pacific	ARINC	6011 Industrial Way	Tel: 925 294 8400
	Region		Livermore	Fax: 925 294 9597
			California 94551	Email: <u>mostapie@arinc.com</u>
Michel Jamard	Flight Crew Training	Air Tahiti Nui	USA BP 1673-98713 Papeete	Tel: 689 866135
michel Jamalu	Manager		Tahiti	Fax: 898 866072
			French Polynesia	Email: mjamard@airtahitinui.pf
Murali Katari	Management Pilot	Singapore Airlines Ltd	SIA Training Centre,	Tel: 6548 1677
	(Special Duties) -		720 Upper Changi Road East	Fax: 6490 0601
	Technical		(846852)	Email: Murali Katari@singaporeair.com.sg
			Singapore	
Neil F Jonasson	Assistant Director -	International Air	77 Robinson Road	Tel: 65 6239-7262
	Safety, Operations & Infrastructure -	Transport Association	#05-00 SIA Building	Fax: 65 6536-6267 Email: neil.jonassonne@iata.org
	Asia/Pacific		Singapore 068896 Singapore	Email: <u>neil.jonassonne@iata.org</u>
Patrick Reichert	Asia/Pacific Acting Chief Manager	SEAC Tahiti	BP 6011 FAA'A Aeroport	Tel: 689 86 1041
- anier referent	riceing Ciner Manager		98702 FAA'A	Fax: 689 86 1049
			French Polynesia	Email: Patrick-Reichert@seac.pf
Paul Carroll	Terminal Control	Airservices Australia	PO Box 211	Tel: 61 2 9556 6750
	Service Manager		Mascot NSW 1460	Fax: 61 2 9556 6646
	1	1	Australia	Email: paul.carroll@airservicesaustralia.com

NAME	TITLE	COMPANY	ADDRESS	CONTACTS
Paul Radford	System Development Manager Oceanic	Airways New Zealand	PO Box 53-093 Auckland International Airport Auckland New Zealand	Tel: 64 9 256 8078   Fax: 64 9 275 3106   Email: paul.radford@airways.co.nz
Paul Reidy-Crofts	Air Traffic Controller	Airservices Australia	PO Box 1093 Tullamarine Vic 3043 Australia	Tel:61 3 9235 7400Fax:61 3 9235 2744Email:paul.reidy- crofts@airservicesaustralia.com
Peter Evans	Manager National Operational Support and Improvements	Airservices Australia	PO Box 1093 Tullamarine VIC 3043 Australia	Tel:   61 3 9339 2401     Fax:   61 3 9339 2442     Email:   peter.evans@airservicesaustralia.com
Randall Park	Air Traffic Manager	Oakland ARTCC FAA	5125 Central Avenue Fremont, CA 94536 USA	Tel:   510 745 3301     Fax:   510 745 3538     Email:   randy.park@faa.gov
Reed Sladen	Automatic Manager - Oakland ARTCC	FAA	5125 Central Avenue Fremont California 94536 USA	Tel:   510-745-3328     Fax:   510-745-3826     Email:   reed.b.sladen@faa.gov
Richard Stevens	Operations Manager, Atlantis	Airservices Australia	Locked Bag 747 Eagle Farm Queensland 4009 Australia	Tel:   61 7 3866 3366     Fax:   61 7 3866 3257     Email: <u>richard.stevens@airservicesaustralia.com</u>
Robert Hansen	Automation Specialist	FAA Oakland ARTCC	5125 Central Avenue Fremont California 94536 USA	Tel:   510-745-3836     Fax:   510-745-3826     Email:   bob.hansen@faa.gov
Robert L Miller Jr.	Director Airspace Analysis and Modelling	CSSI Inc./FAA	400 Virginia Ave SW, Suite 210 Washington DC 20024 USA	Tel: +1 202 484 3359   Fax: +1 202 863 2398   Email: rmiller@cssiinc.com
Ron Rigney	ATM International Liaison Manager	Airservices Australia	Locked Bag 747 Eagle Farm Queensland 4009 Australia	Tel: 61 7 3866 3487 Fax: 61 7 3866 3402 Email: <u>ron.rigney@airservicesaustralia.com</u>
Stefan Jerga	Manager Commercial Strategy	Airservices Australia	25 Constitution Ave Canberra ACT 2600 Australia	Tel:02 6268 4428Fax:02 6268 5688Email:stefan.jerga@airsericesaustralia.com
Steve Kelly	Navigation Services Manager	Air New Zealand	AKL47 Private Bag 92007 Auckland New Zealand	Tel:   64 9 256 3438     Fax:   649 256 3059     Email:   steve.kelly@airnz.co.nz
Steve Kemp	Manager ATS Assurance	Airservices Australia	GPO Box 367 Canberra ACT 2621 AUSTRALIA	Tel:   61 2 6268 4564     Fax:   61 2 6268 5695     Email:   steve.kemp@airservicesaustralia.com
Stu Julian	Regional Vice President - South Pacific	IFALPA	12 Chiania Place Howick Auckland 1705 New Zealand	Tel:   64 27 277 4572     Fax:   64 9 534 9126     Email:   stu.julian@xtra.co.nz
Stuart Brades	Air Traffic Controller	Airservices Australia	PO Box 1093 Tullamarine VIC 3043 Australia	Tel:61 3 9235 7400Fax:61 3 9235 2744Email:Stuart.brades@airservicesaustralia.com
Suzie Ness		Boeing Commercial Airplanes - FIT CRA	PO Box 3707, M/C 07-25 Seattle WA 98124 USA	Tel:   425 266 9823     Fax:   425 294 1075     Email:   suzie.ness@boeing.com
Sylvain Laviolette	Customer Support Account Manager	SITA	770 Sherbrooke St W, Suite 1500 Montreal Quebec H3A 1G1 Canada	Tel: 1 514 982 3524   Fax: 1 514 982 3597   Email: sylvain.laviolette@sita.aero
Toby Farmer	Aeronautical Services Officer (Telecommunications)	Civil Aviation Authority of NZ	PO Box 31-441 Lower Hutt 6315 Wellington New Zealand	Tel: 64 4 560-9454 Fax: 64 4 569 2024 Email:

NAME	TITLE	COMPANY	ADDRESS		CONTACTS
Toby Gursanscky	IFALPA Representative to ISPACG	IFALPA	34 Peronne Avenue Clontarf NSW 2093 Australia	Tel: Fax: Email:	61 2 994 87 532 gursanscky@bigpond.com
Tom Kraft	Chief Scientific & Technical Advisor for Aeronautical Communications	FAA - Regulation & Certification	1601 Lind Ave SW Renton, WA 98055-4056 USA	Tel: Fax: Email:	1 425 917-6580 1 425 917 6590 <u>Tom.Kraft@faa.gov</u>
Warren Jones	Principal Researcher	CASA	GPO Box 2005 Canberra ACT 2601 Australia	Tel: Fax: Email:	61 2 6217 1743 61 2 6217 1700 warren.jones@casa.gov.au
Yoshiro Nakatsuji	Director	Air Traffic Control Association Japan	K-1, 1-6-6 Haneda Airport Ota-ku Tokyo 144-0041, Japan	Tel: Fax: Email:	81 3 3747 1685 81 3 3747 0856 <u>naka@atcaj.or.jp</u>
Zahid Munawar	Airworthiness Engineer	CAA of New Zealand	PO Box 31441 Lower Hutt New Zealand	Tel: Fax: Email:	0064 4 5609523 0064 4 5609452 <u>munawarz@caa.govt.nz</u>