Summary of Discussion of the
Twenty First Meeting of the
Informal South Pacific Air Traffic Services Co-ordinating Group
(ISPACG/21)

Auckland, New Zealand
6-8 March 2007

1   Background

1.1   The twenty first meeting of the Informal South Pacific Air Traffic Services Co-ordinating Group (ISPACG) was hosted by Airways New Zealand (Airways) and held at the Heritage Auckland, New Zealand from Tuesday 6 to Thursday 8 March 2007.

1.2   Mr Geoff deBazin, Operations Manager, Oceanic, Airways New Zealand and Mr David Maynard, Support Manager, International Airspace and Procedures, Oakland ARTCC of the Federal Aviation Authority (FAA) served as Co-chairs of the meeting. Joanne Kendall, Administration Manager, Auckland, Airways New Zealand provided secretariat services for the meeting.

1.3   The meeting was attended by participants representing South Pacific Air Traffic Service Providers (ATSP), International Civil Aviation Organization (ICAO), International Air Transport Association (IATA), International Federation of Air Line Pilots' Associations (IFALPA), regulatory authorities, airlines, communications service providers, airline and equipment manufacturers, as well as military personnel. A list of participants is included in Appendix C to this report.

1.4   Geoff deBazin opened the meeting by welcoming everyone to Auckland. He was pleased to see so many representatives attending the meeting, in particular first time delegates from Papua New Guinea and for a second year delegates from Chile. Due to the current political situation it was unfortunate that there was unable to be representation from Fiji.

Geoff advised the meeting that during the night Paul Radford, Manager Oceanic Systems Development for Airways had been admitted to hospital. He would keep the meeting posted on Paul's condition and had conveyed the groups thoughts to Paul and his wife, Wendy.

An invitation was extended to all the ISPACG delegates inviting them to join Airways New Zealand and Air New Zealand who were co-hosting a cocktail function on Prince's Wharf that evening.

1.5   David Maynard thanked everyone for their attendance and noted that the ISPACG family was growing. He hoped the meeting would be fruitful and encouraged everyone to participate fully during the next 2½ days so as to achieve the best outcomes for the group.

1.6   The meeting reviewed and accepted the proposed Agenda (WP-01) tabled by the Co-chairs.

Agenda Item 1	Review and approve Agenda
Agenda Item 2	Updates from ATS Providers
Agenda Item 3	Review relevant work conducted since the last meeting
Agenda Item 4	Review progress on Open Action Items
Agenda Item 5	Identify future work programs
Agenda Item 6	Review and establish terms of reference for working groups/task forces

Agenda Item 7   Other business

Geoff deBazin remarked that the Agenda was extensive and that items would need to be prioritized, however he stressed the importance for everyone to express their views.

1.7   All documentation relating to ISPACG/21 can be found at http://www.airways.co.nz/ispacg21/ including copies of the 27 working papers and 20 information papers.

Working Paper	Title	Presented By
WP-01	Agenda	Co-Chairs
WP-02	Datalink Guidance Material	ICAO
WP-03	UAL870 16Jan07	United Airlines
WP-04	Truncation of Flight Plans by ATSUs	Airservices
WP-05	Australian ADS-B Update	Airservices
WP-06	ZOA Weather Deviation	FAA
WP-07	10Min Longitudinal Separation without Mandatory MNT	FAA
WP-08	ATS Route Realignment	FAA
WP-09	South Pacific DARP Procedures	FAA
WP-10	Implementation of UPRs in the South Pacific	FAA
WP-11	ISPACG Planning Team Report	ISPACG/PT
WP-12	Status on Funding for Continuation of CRA Activities	FAA
WP-13	Outcome of IOAC Performance Measurement Workshop	FAA
WP-14	Review of ISPACG/20 Open Action Items	Co-Chairs
WP-15	Sydney Flow Management	Airservices
WP-16	SPR Standards For Datalink	FAA
WP-17	Application of Strategic Lateral Offset Procedures (SLOP)	FAA
WP-18	Strategic Laterally Offset Tracks	Airbus
WP-19	RNP	CAA NZ
WP-20	Optimum Arrival Trial AA April 2007	Airways
WP-21	Transfer of 50NM Separation Between Multiple ATSUs	Airservices
WP-22	AIDC Performance Monitoring	Airservices
WP-23	Use of J for A380-800 in ICAO Flight Plan Field 9	Airways
WP-24	DARP Feedback Reporting Process	IATA
WP-25	Variation in True Airspeed	Airways
WP-26	Update to Capacity Enhancement Table	Airservices
WP-27	Use of ADS-C Met Data by Bureau of Meteorology	Airservices

Information Paper	Title	Presented By
IP-01	APANPIRG/17 Update	ICAO
IP-02	Amendment 44 to Annex 11	ICAO
IP-03	Flight Plan Study Group	ICAO
IP-04	Regional Approach to Contingency Plan	ICAO
IP-05	Guidance On A380-800 Wake Vortex Aspects	ICAO
IP-06	Amendment Proposals To Incorporate RCP	ICAO
IP-07	AIDC Review Task Force Meeting	ICAO
IP-08	Implementation of 30/30	Airservices
IP-09	Oakland FIR 30/30 Trial Anomalies	FAA
IP-10	Oakland FIR 30/30 Trial Characteristics	FAA
IP-11	ISPACG Inputs to ICAO Flight Plan Study Group	FAA
IP-12	ATS Datalink Gateways	FAA

IP-13	"Rule of 11" Implementation in Auckland Oceanic	Airways
IP-14	Reduction of HF Congestion	Airways
IP-15	Funding of Safety Monitoring	ICAO
IP-16	Manual On Performance Based Navigation	ICAO
IP-17	A Guide for Implementing DARP	Airways
IP-18	Implementation of AIDC with Oakland	Airservices
IP-19	ADS-C Oceanic ITP	FAA
IP-20	ZOA 30/30 Expansion	FAA

2   Updates from Air Traffic Service Providers (ATSP)

2.1   Airservices Australia (ASA)

Adam Watkin from Brisbane Centre gave an overview of the past year, commencing with a brief description of the ASA restructure which will see the company split into 3 groups: Upper Airspace Services (UAS), formerly Oceanic; East Coast Services; and Regional Services. AIDC has been completed with Oakland and AIDC performance monitoring continues. Increased gates are giving more flexibility for YMML – KLAX UPRs and additional UPRs are under discussion. "Full" implementation of ADS-B has been delayed – currently there are 6 ground stations with an additional 6 coming on line in the 3rd quarter of 2007. Poor Data Link performance was experienced during 2006, however improvements were seen towards the end of the year. This in part was due to several new operators and aircraft types.

2.2   Federal Aviation Authority (FAA)

David Maynard from Oakland Centre advised that blanket approval for DARPing between the Auckland and Oakland FIRs had been given and that the ISPACG Planning Team are actively working to expand the capability to Tahiti and Nadi FIRs, as well as implementing it through Brisbane. Oakland are unable to use reduced separation standards within the Honolulu Control Facility Boundary - work is in progress but could take a further 6 months to complete. There are no restrictions on UPRs through the South Pacific, Oakland 30/30 trials are progressing well and a reciprocal agreement has been made with Auckland for AIDC status. Oakland RFE trials have commenced and seen average savings of 16 minutes and 4600lbs of fuel on 16 flights sampled between LAX-HKG. Oceanic Tailored Arrivals are also being trialed into San Francisco from Honolulu on United Airlines – this is being done in a non busy environment and trials are going well form all perspectives. The Anchorage transition to Ocean21 occurred on 1 March 2007 in ZAN Sectors 10 and 11 - use of Ocean21 in Sectors 9, 68 and 69 is pending an Airspace Review. The FAA withdrew services from Kwajalein Tower some time ago, however in late 2006 the US Army reopened the Tower and are currently undertaking a cost analysis study with the view to opening approach control.

2.3   Civil Aviation of Tahiti (SEAC)

Jean-Pierre Faubladier head of ANS in Tahiti gave the meeting an update on the implementation of TIARE. The contractor is THALES ATM and contract notification is expected in March 2007 with preliminary contractor visits to define the parameters of the project, etc occurring between March-October 2007. Delivery, implementation, training and safety studies should occur throughout 2008 with commissioning scheduled for December 2008 when it is envisaged that Tahiti will be on the same playing field as its neighbouring FIRs. Training should be completed by mid 2009 and ADS-B development by the end of 2009.

2.4   Direccion General de Aeronautica Civil de Chile (DGAC Chile)

Jose Carrasco, Head of the Oceanic Control Centre, gave a brief history from 2004 as an AMS communications centre, controlled by sectors of the Santiago Center (Airspace Class E), to 2005 and being an Oceanic HF dedicated sector of the Santiago Center (Airspace Class

"A"), to 1 January 2007 when it became an Oceanic Control Centre with administrative independence and the ability to develop its own technologies and LOAs. There are 9 ATCs and 3 Informatics Engineers who have a close collaboration with users and partners.. There are 3 HFs and no airways (free flights). In 2007 Chile plan to continue developing software, put in place new LOAs as an ACC, make CPDLC operational (free text), develop tools to match Tahiti and New Zealand to get electronics messages, and to become an active member of ISPACG.

2.5 **Airways New Zealand (Airways)**
Allan London, Oceanic Customer Services Specialist, advised that in the past year 4 software upgrades had occurred with added controller HMI. AIDC 2.0 was now in place with Oakland and Santiago and the LOA with Santiago would be finalised later this week. He noted that the only FIR Airways didn't have AIDC with was Melbourne. The Rule of 11 had been extended and a blanket agreement for DARP flights between Oakland and Auckland entered into. On 15 February 2007 RNav procedures into Auckland changed as a fuel saving measure for airlines. ATOP training was recently completed in Anchorage for the FAA Oceanic implementation transition and Airways have been chairing the ISPACG HF Working Group for HF congestion in South Pacific.

2.6 **Civil Aviation Authority Papua New Guinea (CAA PNG)**
Tars Bola, Manager (ATS Operations), conveyed his pleasure at once again being involved with ISPACG – the last time PNG attended an ISPACG meeting was 12-13 years ago and he hoped that PNG would participate more actively in the Group from now on. Tars reported that PNG were involved in a capability project with Airways who were assisting with upskilling PNG ATCs in upper airspace management – there are 7 ATC units in PNG, with the main one being in Port Moresby. A major airspace resectorisation project was currently underway and they were working with ASA on an ADS-B and AIS Publication system.

3 **Review Relevant Work Conducted Since The Last Meeting**

3.1 **Report on relevant outcomes from APANPIRG/17 (ICAO)**
ICAO highlighted the Conclusions and Decisions from the Report of APANPIRG/17 (August 2006), noting that APANPIRG/17 had raised a total of 55 new Conclusions and Decisions for regional action. Relevant matters from APANPIRG/17 were discussed by the meeting (ref. IP-01) with special thanks for the significant contributions made by Adam Watkin, Paul Radford and Bob Hansen for work done with the AIDC Task Force.

3.2 **Amendment 44 to Annex 11 (ICAO)**
ICAO referred the participants to the information contained in ICAO State Letter Ref.: AN 13/13.1-06/32 – Adoption of Amendment 44 to Annex 11 (effective November 2006), highlighting the new and revised standards, as well as guidance material, on the concept of acceptable level of safety. The recommended practice that air traffic control units be equipped with devices that record background communication and the aural environment at air traffic controller work stations was also highlighted.

3.3 **RCP Amendment (ICAO)**
ICAO provided a status update on amendments to enable Required Communication Performance (RCP). ICAO State Letter SP 52/4-06/41 – Recommendations of the first meeting of the Operational Data Link Panel (OPLINK/1) included proposed amendments to Annexes 2, 4, 6, 10, 11, 15, the PANS-ABC (Doc 8400) and the PANS-ATM (Doc 4444) to enable RCP has been issued for comments.

3.4 **Datalink Guidance Material (ICAO)**

In recognising the lack of suitable guidance material in relation to the procurement, deployment and implementation of integrated data link systems (including AFN, ADS, CPDLC and AIDC), the APANPIRG Regional Airspace Safety Monitoring Advisory Group (RASMAG) had commenced work towards drafting suitable regional guidance material in this respect.

ICAO provided a copy of the draft *Asia/Pacific Guidance Material for ADS/CPDLC/AIDC Ground Systems Procurement and Implementation* to the meeting for review. Any feedback should be provided to the ICAO Regional Office by the end of April 2007 to enable incorporation during the next RASMAG meeting in June.

3.5   **Performance Based Navigation Manual (ICAO)**
In order to address the lack of global harmonization resulting from the differing required navigation performance (RNP) and area navigation (RNAV) naming conventions and proliferation of navigation specifications, ICAO, with the assistance of the RNP Special Operational Requirements Study Group (RNPSORSG), commenced work to ensure a common global understanding of RNP/RNAV and the relationship between RNP and RNAV system functionality.

The RNPSORSG agreed on the need to specify future applications of performance based navigation **without** a requirement for on-board performance monitoring and alerting, to be designated as **RNAV**, and applications **with** a requirement for on-board performance monitoring and alerting, to be designated as **RNP**, as follows:
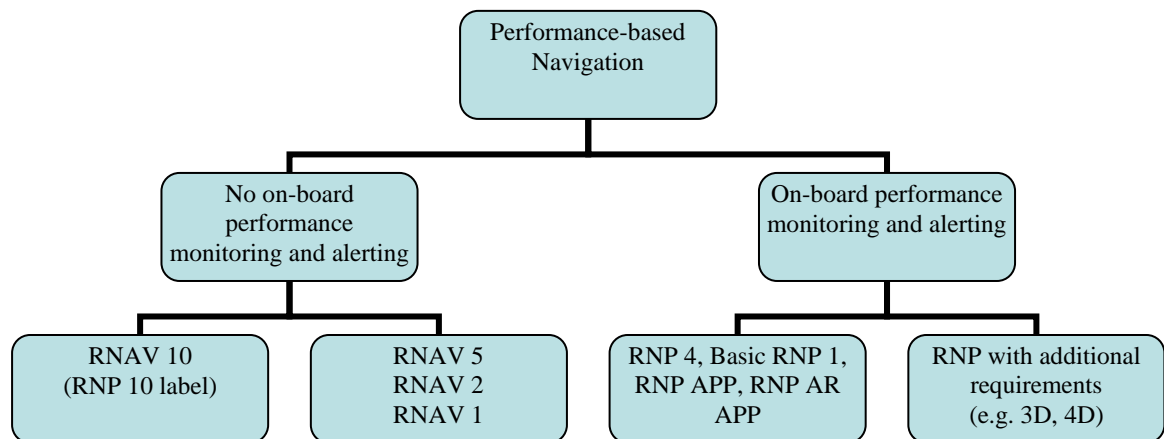
As well as the harmonized navigation specifications, some new navigation specifications were developed for terminal area and approach applications. Work was complete on navigation specifications for RNAV 10 (RNP 10), RNP 4, RNAV 5, RNAV 1, Basic RNP 1, RNP Approach and RNP AR Approach.

A copy of the *PBN Manual Working Draft 4.1* (250+ pages) that had been prepared by RNPSORG was made available to the meeting for review. ICAO PBN Workshops have tentatively been planned for the Asia/Pacific region from 10-14 September 2007 at the Regional Office (Bangkok) and 17-21 September 2007 in New Delhi, India. Invitation letters would be issued in due course and States were urged to participate in the workshops.

3.6   **UAL870 16 January 2007 (United)**
On 16 January 2007 a United Airlines Boeing 747-400 operating as UAL870 from Sydney to San Francisco declared a Mayday via CPDLC in the vicinity of Nuku Alofa. The B747-400 was operating within the Auckland Oceanic airspace when a forward cargo fire warning alert was received. The flight crew took appropriate action to extinguish the alert by activating the

cargo fire suppression (firing the bottles). After co-ordinating with company dispatch and maintenance via sitcom voice, a decision was made to divert to Pago Pago, however unknown to the company the flight crew had initiated a CPDLC message to Auckland which was a Mayday position report. All datalink and Satvoice communication was lost shortly thereafter and the flight landed at Faleolo – not Pago Pago after further discussion with Auckland via HF. The issue being that there was no communication between ATC and United Operations until after the aircraft had landed.

ICAO and CAA NZ referred the meeting to Annex 11, Section 5.5, Information to the Operator. 5.5.1 states "When an area control or a flight information centre decides that an aircraft is in the uncertainty or the alert phase, it shall, when practicable, advise the operator prior to notifying the rescue coordination centre." 5.5.2 states "All information notified to the rescue coordination centre by an area control or a flight information centre shall, whenever practicable, also be communicated, without delay, to the operator."

IATA offered to assist ATSUs with generic contact details but reminded the meeting that the information is only useful if it is kept up to date. IATA undertook to take this matter via the RCG as a safety issue that needs addressing rather than a procedure and will keep the meeting updated. ICAO will in turn ensure that the information is sent out to the various ATSUs.

Boeing have reviewed datalink emergency procedures in the NAT for emergency indication/activation and concluded that the language in the FOM does not cover this situation. The recommendation from the meeting is for a Boeing to work with the NAT and raise an RFC with IPACG at the May 2007 meeting in Anchorage.

3.7 Weather Deviations (FAA)

FAA reported that they have looked in depth at data recordings and other gathered information and discovered that a large number of lateral deviation event reports were received by the Ocean21 system and in some cases could not be described as other than an aircraft maneuvering off track without having requested a deviation, or that a deviation report had been sent before receiving a clearance from the ATC.

ICAO Doc 4444, Par 15.2.3.2.1 states that the pilot should notify ATC and request clearance to deviate from track, advising, when possible, the extent of the deviation expected. If unable to comply with the ATC Clearance, "advise ATC of intentions and execute the procedures detailed in para 15.2.3.3."

The Ocean21 System processing is that upon the initiation of an AFN Connection, Ocean21 will establish the following ADS Contracts: Periodic Contract (PRR, Earth Ref, Met, Air Ref.) and Event Contract (Waypoint Change, Lateral Deviation).

The meeting was advised that there is very little trouble getting weather deviation clearances and that the captain has the authority to deviate if seen as necessary. However the crews need to be reminded to call for clearance first, then deviate if necessary, and file appropriate paperwork..

3.8 10 Minute Longitudinal Separation without Mandatory MNT (FAA)

On 27 January 2006 Oakland Center received approval from ICAO to apply 10 minutes longitudinal separation without mandatory Mach Number assignments. In a continuing effort to harmonize global ATM, ANSPs are invited to consider implementing 10-minute longitudinal separation without the mandatory assignment of MNT.

The FAA are currently doing a Safety Analysis which should be completed by the end of 2007. Airways advised of their intention to go through due process in the Auckland FIR in the near future. ASA have been doing this for approximately 10 years with RNP10 aircraft. PNG and

Tahiti agreed that it was something they could look at in the future. ICAO advised the meeting that they would be prepared to support the Group with this work and an Action Item was generated to look at other ways it could be implemented for other ANSPs.

3.9 Report on FIT/14 Meeting (FIT Chair)

The FIT/14 meeting took place 5-6 March prior to ISPACG/21 commencing and generally operators and ATSUs appear happy with the way things have progressed throughout the year. A number of upgrades had been conducted by SITA and Imarsat, with AIRINC to follow suit later in the year. It was noted however that over the last 10 years most of the bandwidth has been consumed and we are now in a position where this needs to be monitored closely and managed accordingly.

Each of the Stakeholders gave a brief overview of the past year, followed by systems performance and problem reports being discussed. Mike Meza, Director – Aviation Services, Iridium Satellite LLC, gave a presentation about the Iridium system. GES backup issues, SATVOICE trials and FOM RFCs were discussed by the meeting. At the close of the meeting 6 Action Items were classified as "Open".

3.10 Report on ISPACG Planning Team Activities (Kevin Chamness, FAA)

The ISPACG Planning Team was commissioned at ISPACG/20 to prioritize and develop action plans for multiple issues that were felt not to be being actively being addressed by the full ISPACG. The Planning Team met for the first time in August 2006 where its Terms of Reference were ratified, prioritisations developed and delegated to various members of the group and action plans created. The group has subsequently met via telephone conference several times to update the status of their delegated items. Ian Varcoe, Air New Zealand, and Andrew Tiede, ICAO, both thanked ISPACG for initiating the Planning Team and for the work they had done thus far.

3.11 DARP Feedback Reporting Process (IATA)

With the expansion of Dynamic Airborne Re-routing Procedures (DARP) within the Pacific, there needs to be an associated feedback reporting system formalised between the Airlines and ATSUs to quantify and document all benefits and detriments arising from DARP Operations. Considerable co-ordination work is already under way to implement AIDC between the Pacific ATM Centres however for such a programme to succeed, in addition to the AOC documentation, there needs to be an associated application of timeliness and record keeping to readily quantify the benefits of DARP introduction.

A generic DARP Performance Reporting form was tabled and the meeting concluded that the Comments column be removed and a column indicating Fuel Savings be added. The form can be sent to ICAO and ATSUs as a means of gathering data for consolidation. Everyone agreed that there are savings to be had no matter how small, regardless of the direction being flown, and the time of the year. ANSPs have the capability via the flight plan dispatcher to access this information, and all airlines, not just those attending ISPACG, need to be made aware of the form and its importance.

3.12 Implementing DARP – A Guide For Pilots, AOCs and ATSUs (Airways)

Airways has been tasked by the ISPACG Planning Team to create a training briefing for AOCs and pilots that outlines the DARP procedures. The draft paper presented as guidance material describes the process to follow when an airborne aircraft requests DARP or diversion

and its adoption will allow pilots, AOCs and ATSUs to follow a set procedure using correct message sets. The meeting was invited to review, adopt and promulgate the procedures (ref IP-17 ATT).

4   Review Progress on Open Action Items

4.1   The meeting reviewed and revised the ISPACG/20 Open Action Items as per WP-14 (see Appendix A).

AI 16-1   Funding for Continuation of Central Reporting Agency (CRA) Activities
(Ref IP-15)
ICAO updated the meeting in relation to the highlights of the first meeting of the Regional Airspace Safety Monitoring Committees Task Force (RASMC/TF/1), held in February 2007, and called for by APANPIRG/17 to address regional issues in regard to the funding of safety monitoring activities. The following actions arose from RASMC/TF/1 and are to be reported back on at the next RASMC/TF meeting in June 2007:

Action 1   Prepare and Implement Cost Sharing Agreements
Action 2   Develop and Provide a Generic Agreement
Action 3   Investigate Options for Payments to Third Parties
Action 4   Facilitate Support for the CRA Service
Action 5   Prepare and Implement Cost Sharing Agreements

The CRA Japan noted for the ISPACG/21 meeting that for IPACG FIT, FAA and JCAB have shared the FIT CRA responsibility since February 2001. The FAA provides funding for CRA activities for Oakland and Anchorage FIRs and that FAA contracts with Boeing for this activity. JCAB contracts with ATCA Japan to prepare funding for CRA activities in Fukuoka FIR. That is to say FAA and JCAB share the role of IPACG FIT CRA in providing funds for their own FIRs. FAA CRA, Boeing and JCAB CRA and ATCA Japan work together and report back to IPACG FIT in a combined document.

RASMC/TF/1 Conclusion 17/48 − Funding of Pacific RMA & CRA
In recognizing that the United States/FAA was the current service provider of CRA and RMA services for the Pacific Region (with the exception of CRA services for Japan), it was acknowledged that:
a)   FAA would remain the interim service provider for the Pacific Region until more formal arrangements have been made, and
b)   Pacific States using these FAA services commit to reimburse the FAA for those CRA and RMA services rendered effective 30 June 2007.
Note: The FAA will be formally notifying each of these individual states that if reimbursement agreements are not in place by 30 June 2007, these services are at risk of being suspended.

(Ref WP-12) The FAA presented a paper outlining the status on funding for continuation of Central Reporting Agency (CRA) Activities. The paper concluded that a multi-lateral cost sharing arrangement for CRA activities was desirable, but recognized that Boeing was unable to administratively accommodate a large number of individual agreements and required a collective approach. The FAA proposed to fund half ($40,000) of the CRA funding requirement in 2007, and accepted an action to "investigate whether it could facilitate, collect and consolidate fees on behalf of all participating States of the Asia Pacific Region to support the CRA service provided by Boeing, and for the United States to report on the matter to RASMAG/7 prior to June 2007."

The meeting was asked to review and consider the recommendations of the RASMC/TF, and be prepared to adopt the approach to cost sharing of CRA activities pending the outcome of the RASMAG/7 in June.

AI 16-4   ATM Contingency Plans (Ref IP-04/ATT)
ICAO reported on the outcome of ICAO Special Implementation Project (SIP) – Contingency Plan approved by the ICAO Council for 2006 pursuant to APANPIRG Conclusion 16/15. The draft National ATM Contingency Plans of Jakarta and Ujung Pandang FIRs, which were prepared as a result of the 2006 ICAO Special Implementation Project, were adopted by APANPIRG/17 Conclusion 17/11 as a model for Asia/Pacific States in the preparation of national ATM contingency plans. David Moore, ICAO, is heading up the Special Implementation Project and the template created for Indonesia will be one that everyone in the region can use.

Airways reported that in a catastrophic event the Oceanic Centre had a contingency platform in Christchurch which would take approximately 6 hours to have fully operational – the interim would be to move to a TIBA situation, however a specific plan to manage that 6 hour interim period is currently under consideration. The domestic contingency was currently being moved from Ohakea to Auckland into a completely stand alone building with separate facilities at the Operations Centre site. The OCS Simulator is also being moved into the MTCC Building which and will be available as an operational platform should a localized event take the main and reserve platforms out of operation. Emergency Plans for Air Operations in the Tahiti and Fiji FIRs in the event of them suffering a natural disaster have been implemented. Geoff deBazin informed the meeting that contingency documentation should be completed by the end of 2007.

Airservices noted that they are unable to receive 100% of all flights in the NZ FIR however they are attempting to provide a better service than TIBA. Brisbane and Melbourne operate a two centre policy with a limited service being available within 48 hours, and normal service within 72 hours.

Domestically the FAAs contingency is referred to as 'ATC0' and in a catastrophic event would take 24 hours to be 70% operational. ATC0 table top exercises are undertaken and airspace diversement plans would be to surrounding centres. FAA are working proactively to ensure plans are in place and are effective. The creation of one emergency ATC site is being closely looked at because of the Ocean21 centre requirement to have one contingency centre.

AI 16-6   Review Need for Regional Implementation of 2nm Strategic Lateral Offset Procedures (SLOP) (Ref WP-18)
Airbus reported that very accurate navigation systems and widespread GPS use has improved aviation safety, but has also increased the risk of head-on collisions, because aircraft now navigate extremely accurately, two such collisions appear to have occurred within 11 years, resulting in the loss of three airliners. Existing recommended procedural track offset safety mitigations are not working, and are unlikely to work in the future. It is recommended that the charts and AIPs be amended so as to laterally offset opposite-direction tracks, so as to dependably mitigate this risk.

Capitan Stu Julian, IFALPA, is attending the IFALPA conference in Dubrovnik next week and the feeling is that this will become IFALPA policy by end of month. Brad Cornell, Boeing, indicated that Airbus had asked Boeing to support the proposal and that he would be recommending Boeing review their procedures. Steve Kelly, Air NZ, suggest putting SLOP on charts and asking Jepperson to also include them. Andrew Tiede, ICAO, said AIP Supplements and other current documentation are not as effective as enroute charts which is where they need to be for crew. David Oliver, Qantas, support Airbus and agreed with Geoff

deBazin to include in AIPs, not supplements. Kevin Chamness, FAA, said there needs to be standardisation across all ANSPs and will present a paper on information sharing and that ISPACG standardize approach. David Maynard, FAA, recommended all States to add to AIPs where appropriate and for ISPACG/PT2 to discuss how this should be applied and where it should be documented within ICAO documentation.

(Ref WP-17)
FAA provided information on the application of Strategic Lateral Offset Procedures (SLOP) within US-controlled oceanic airspace stating that the FAA is currently in the process of correlating published SLOP information to ensure harmonized application throughout US-controlled oceanic/international airspace, and is interested in other States' application of SLOP - particularly in relation to oceanic over flight of radar-covered airspace. The meeting was asked to pay particular attention to procedures described in ICAO Doc 4444, Chapter 15; Procedures Related to Emergencies, Communications Failure and Contingencies and in Annex 2, Chapter 3, and questioned the need to suggest an amendment to Annex 2, para 3.6.2.1.1.

ICAO advised that the amendment process requires a formal proposal, then review. If contentious it is forwarded to all parties for further discussion. Doc4444 needs to come from ISPACG States not the members proposing the amendment. Mention in PANS Ops may also be appropriate. There should not be a problem adding a note to Annex 2 on behalf of the ISPACG States in an effort to progress this item, however ICAO advised that it should be done sooner rather than later and not to leave this action until the next ISPACG meeting. It was agreed that the meeting hand this action item over to the Planning Team to draft a proposal, with guidance from ICAO, and forward their recommendations to ISPACG members via email for comment.

AI 16-7   Aircraft Loss of Communications Procedures
ICAO advised the meeting that the amendment proposal (APAC 03/10) in relation to lost communication procedures in the oceanic airspace had been approved and a State Letter had been transmitted to this effect, enabling use of the procedure. Doc 7030 would be updated in due course. The meeting recognized that this was a long-standing issue and appreciated the effort by all and deemed this Action Item be closed.

AI 16-8   Implementation of 30/30 (Ref IP-08)
As a means to provide an indication of the frequency of usage of 30/30 Airservices developed a methodology which involved analyzing ADS-C data and determining the frequency of the uplinking of ADS-C periodic contracts with a reduced ADS-C reporting rate. ADS-C reports received while this reporting rate was in effect were plotted. The use of the 30/30 separation minima is still not very common (7 occurrences during December 2006, and 8 during January 2007) however, data indicates that in the Tasman/Coral Sea airspaces, the primary use of this separation standard is for the application of longitudinal separation. A number of occurrences of 30NM lateral separation or "climb throughs" have also been observed.

(Ref IP-09, IP-10)
As part of the operational trial the FAA has formed a 30/30 Scrutiny Group to evaluate the performance of the various components of the system supporting the reduced separation minima. Three operators participating in the operational-trial are ANZ, QFA, and UAL who account for approximately 23 flights per day in OC3 airspace. The principle city pairs for these operators include: Los Angeles/San Francisco (KLAX/KSFO) to/from Sydney/(YSSY), Brisbane/(YBBN), Melbourne/(YMML), and KLAX/KSFO to/from Auckland/ (NZAA), Christchurch/(NZCH).

The outstanding concern is the continuity of service with the Perth GES station. United asked if Yamaguchi was a reasonable alternative to Perth and asked that SITA not shut this off until the

Perth station is working properly. SITA are looking at co-ordinating fixes with other scheduled work in the 2nd ¼ of 2007. The FAA will then review putting procedures back on line. Perth could be used for climbs and decents – it will still provide benefits although not to the same extent. Bob Tegeder, FAA, reiterated that this was not just a problem for ATC. When data link is lost while doing weather deviations it becomes a safety problem.

Airways reported that staff are required to make a brief log entry when using the 30/30 standard. This is approximately 3-5 entries per month and although not high they appear to be used in the North East airspace rather than other areas of the New Zealand FIR.

AI 16-13   Application of "Rule of 11" in Oceanic Airspace (Ref IP-13)

Airways has utilized the "Rule of 11" for some years using "radar" as the source to confirm the time interval over the common point but has looked to expand use of the procedure as detailed in ICAO DOC 4444 and 7030 to areas outside radar coverage. Over the last two years the occurrences of aircrew failing to revise their estimates have decreased and, as a consequence, on 31st August 2006 the "Rule of 11" expansion was implemented to allow controllers to apply this separation standard between aircraft crossing the same waypoint outside radar coverage.

AI 17-1a   Implementation of 50nm Lateral Separation in RNP Airspace

Tahiti reported its plans to implement 50NM lateral separation in Sept 2006 had encountered problems and not yet been implemented. Implementation is due 1 May 2007 pending safety studies, or alternatively the end of 2008.

AI 17-1b   Implementation of 50nm Longitudinal Separation in RNP Airspace

(Ref WP-21)

Airservices identified some of the implementation issues and felt that they provided a starting point for further discussion, rather than the adoption of 'final procedures'. Airservices felt that two distinct scenarios need to be considered:
1.   Aircraft transferring from an ADS-C environment to a voice surveillance environment; and,
2.   Aircraft transferring from a voice surveillance environment to an ADS-C environment.

The meeting is invited to note the pending implementation of RNP airspace within the Port Moresby FIR; and discuss the draft proposed procedures for the transfer of 50RNAV in order to develop procedures that can be implemented and used operationally.

AI 17-2   User Preferred Routes (Ref WP-10)

FAA advised that although initial trials indicate savings can be achieved, it is yet to be determined that a total UPR environment in the Central East Pacific will maintain the efficiency levels afforded by the current ATS route structure. A study has been commissioned to determine the feasibility of changing the current CEP ATS Route structure into some sort of Flexible Route system which would allow airspace operators to take advantage of changing upper wind patterns yet still maintain the current CEP efficiency levels. Initial data from this study should be available in October 2007.

Airservices reported that full expansion of UPRs with the airspace to the east of Australia has been delayed until a Flight Plan Conflict Function (FPCF) is introduced in Version 52 of the Eurocat software.

AI 17-5   ADS-B Implementation (Ref WP-05)

Airservices reported that final project implementation has been delayed due to problems experienced by the communication service provider in installing the necessary hardware to permit duplicated (independent) data paths between the ADS-B site and the air traffic service centres. The delay has resulted in a revision to the ground station implementation schedule, the analysis of refresher training needs for controllers, and may result in a revision of the transition strategy outlined in the ADS-B Implementation Phase Safety Case.

In December 2006, following a feasibility study, Airservices CEO approved a project to install a replacement NDB, ADS-B ground station and VHF receiver/transmitter on Lord Howe Island.

(Ref IP-19)

Kevin Chamness reported that the FAA are conducting a concept analysis for an Oceanic In-Trail Climb/Descent Procedures (ITP). ADS-C ITP will have a smaller longitudinal separation minima (e.g. 10-15 nm) than standard oceanic rules with aircraft at intermediate flight levels and will be a controller initiated procedure with the ATC responsible for ensuring separation with all aircraft, assisted by Ocean21 conflict probe.

Moving forward the concept analysis and initial procedures need to be completed, followed by estimates for Controller workload effect on ADS-C ITP and Oceanic benefits in ZOA, ZAN, and ZNY. A safety assessment and hazard analysis must then be completed before seeking ICAO approval and developing a plan for ADS-C ITP implementation. Progress on these matters will be tracked by the ISPACG/PT and reported on at the next meeting.
A new action Item, 21-2 ADS-C In Trail Procedures, was opened

AI 17-6   Oceanic Safety Performance Requirements (SPR) Standards for Datalink
(Ref WP-16)

Tom Kraft, FAA, advised the meeting that the final review and consultation (FRAC) of the Oceanic SPR Standard started on 12 February 2007. He invited the meeting to review the Standard against the criteria provided in the FANS Operations Manual (FOM) and submit comments to RTCA SC-189/EUROCAE WG-53 by 6 April 2007. Approval and publication would follow the satisfactory resolution of all comments at its meeting 10-13 April 2007 with a view to publishing around May 2007.

The meeting was also invited to consider the Oceanic SPR Standard within the terms of reference for the ISPACG Data Link Working Group, and its relevance to the FOM and the data collection criteria for the FANS Interoperability Team (FIT).

AI 17-9   Pre Departure Clearances (PDC)

Kevin Bethwaite, Airways, spoke on the operational concept of Automated Pre Departure Clearances (PDC) i.e. the delivery of standard clearances for departing aircraft via data link *in lieu of* full ATC clearance via RTF, to reduce RTF congestion at key airports and for suitably equipped aircraft, specified airlines/operators on departures from Auckland, Wellington, Christchurch. PDC criteria is automatically generated by SkyLine and sent via AFTN to airline host computer on selected routing. Software should be ready in the 3rd or 4th quarter of 2007.

The benefit of PDC reduces: the potential for communication errors between a pilot and controller; channel load (RTF congestion); ground delays; pilot flight deck workload; and controller workload.

The constraints of PDC are: a reduction of voice-induced situational awareness for pilots; and reduced dialogue flexibility in the case of non-routine communication.

AI 17-11   AIDC (Ref WP-04)
Since AIDC had been implemented a number of instances of flight plans not being truncated correctly had been reported. Airservices reminded the meeting of the importance of ensuring that flight plans are truncated correctly to prevent the potential for downstream ATSUs to hold erroneous flight plan information. ATSUs were also asked to ensure that appropriate procedures exist for dealing with the truncation of flight plans and that appropriate staff training is conducted to ensure that controllers and assistants have the required knowledge and understanding to deal with the truncation of flight plans.

(Ref IP-07)
ICAO informed the meeting that the ATS Interfacility Data Communication Review Task Force Meeting (AIDC/TF) was held during February 2007 and had been convened under the terms of APANPIRG/17 primarily for the purpose of updating the Asia/Pacific Regional Interface Control Document for ATS Interfacility Ground/Ground Data Communications (AIDC ICD). The AIDC/TF expressed their thanks for the mature and comprehensive nature of the presentations from ISPACG – their assistance had been invaluable in preparing the draft Asia/Pacific ICD Version 3 - a copy of which was provided to the meeting for review. Andrew Tiede, FAA, asked that any feedback be given to him as quickly as possible, and prior to June 2007, to ensure the provision of a final Version 3 document to APANPIRG/18 in early September 2007 for adoption as updated regional guidance material.

(Ref WP-22)
Airservices reported that whilst no formal AIDC monitoring programme had yet been implemented, some ad hoc statistical analysis had been conducted. Several observations from the analysis were made and the meeting was asked to consider the filtering of "rogue messages", individual monitoring of performance for each ATSU, and the inclusion of LRMS as an "unsuccessful delivery" for possible inclusion in any future update to the "Guidance Material for End-to-End Safety and Performance Monitoring of Air Traffic Service (ATS) Data link systems in the Asia Pacific Region" document. It was agreed that Andrew Tiede, ICAO, would present these findings to RASMAG on behalf of Airservices in June 2007.

AI 17-12   Monitor Terminal Procedures (Ref WP-15)
Airservices provided an overview of the Pre Tactical Flow (PTF) trials during September 2006 that involved arrivals into Sydney between 0600-0700 local. The purpose of the trial was to minimise holding and/or extended vectoring during the arrival phase and absorb any required delays in the enroute phase of flight by issuing an RTA (Required Time of Arrival) to the aircraft. Even though local weather conditions at Sydney resulted in a lower landing rate than anticipated savings of 60,000kg of fuel were made during the two week trials along with average cruise time absorption for aircraft of 8-12 minutes. The new sequencing tool "ALOFT" (ATM Long-Range Optimal Flow Tool) will operate during the non-daylight savings period commencing 24 March 2007 and is expected to result in further savings to the airline industry. Adam Watkin, Airservices, undertook to ensure airline operators had contact details for those running the trials so that further discussion could take place on concerns about holding patterns, Trans Tasman arrivals, etc.

(Ref WP-20)
Kevin Bethwaite, Airways, reported that focus over the last two years had switched to fuel burn from the historic runway capacity and online performance drivers. Following good results from within Oceanic Airways are now looking to improve in the terminal area and are about to embark on Optimum Arrival Trials NZAA which would involve Air NZ and Qantas 747 datalink capable flights. A NOTAM would be issued stating the intent to afford priority, with operational instructions issued to ATC staff and pilots, as well as a new temp map for use on radar to depict the tracks being flown. He confirmed that much data had already been

collected on fuel burn in the arrival phase and that this would be compared with the same during trials. Records concerning flight nav accuracy both adhering to track and meeting ETAs over all points would also be kept, along with the trial effects on other traffic. Airways will be seeking feedback from pilots and controllers alike and welcomed the opportunity to data share information with Craig Roberts, Thales Australia, who are developing trials into Melbourne.

Geoff deBazin confirmed the need to monitor terminal procedures – it is a long and complicated path the group are heading down which will have significant change and benefits to all parties concerned. Good consultation processes need to be put in place and communication lines need to be open for everyone to contribute.

AI 18-1 ATS Data Link Gateways (Ref IP-12)

Tom Kraft, FAA, reported work has progressed within RTCA SC-189/EUROCAE WG-53 and that the ISPACG Datalink Working Group have been co-ordinating with the ICAO ATN Accommodation Drafting Group (ADG). The final review of the FANS 1/A – ATN Interoperability Standard has been completed with the initial release of this standard planned for approval and publication by RTCA/EUROCAE in April/May 2007. The standard includes an interoperability solution for an ATN-based ground system to provide continental data link services to FANS 1/A aircraft. It was agreed that this Action Item be closed and that future updates be provided to ISPACG via the Data Link Working Group.

AI 19-1 Flight Plan Issues (Ref IP-03)

Andrew Tiede, ICAO, reported on the Fourth Meeting of the Flight Plan Study Group (FPLSG/4), held at ICAO Headquarters in Montreal, November 2006. Seven members and nine advisers from seven States (Australia, Canada, France, Japan, Singapore, United Kingdom and United States) and two international organizations (Eurocontrol, IBAC) attended the meeting.

In order to support the realisation of the Global ATM Operational Concept, as described in Doc 9854, FPLSG/4 agreed to develop a concept document for the future flight planning system noting the importance that the future flight plan fit into the aeronautical information management system, and provide information on trajectory intent to support the notion of user preferred trajectories as envisaged in the ATM operational concept. A proposal that individual flight plans be filed for each aircraft in a formation and that global interoperability and seamlessness, as envisaged by the ATM operational concept, be emphasized. The first full draft of the concept document will be prepared for consideration by the next FPLSG meeting 23 April 2007.

Concern was raised by Airservices as to the extent of the changes being made and their effect on AIDC, to which it was suggested Adam Watkin speak urgently to Ken Erinburg from Australia for Adam to take the lead and forward the discussion outcomes to ISPACG ANSPs so that they in turn can follow up via the FAA, The meeting also asked for Andrew Tiede to relay their concerns to ICAO and the FPL Study Group.

Gene Cameron, United Airlines, advised that he is the only airline representative in the FPLSG and that he is happy to take any concerns forward on behalf of ISPACG members. It was agreed that Adam Watkin for Airservices, and Steve Kelly for Air NZ, feed any issues they have to Gene, and for them all to stay in the loop on progress and outcomes.

(Ref IP-11)
The meeting was reminded that during the ISPACG/20 the FAA provided an overview of activities and plans of the ICAO Flight Plan Study Group (FPLSG). ISPACG participants were then requested to review ICAO Doc 9858, Global Air Traffic Operational Concept, and

to identify inputs for the FPLSG. Thus far, no inputs have been received by the US member of the FPLSG. Geoff deBazin agreed that ISPACG had had the opportunity to have input into this forum and that as a group they had not treated the situation ideally.

ICAO noted that neither ISPACG nor IATA were terribly well represented at the FPLSG meetings and encouraged everyone at ISPACG/21 to be aware of the FPLSG and the intended changes, stating that documentation would only be changed once so there was an urgency and need to ensure the changes were right for all parties concerned.

AI 19-3   Letter of Agreement

Chile requested continued participation with ISPACG and asked for the meeting's endorsement for them to become a full member of ISPACG. This was agreed to by the meeting and a Letter of Agreement will be drafted for circulation and signature of the various parties concerned.

AI 19-7   HF Pre-flight and Selcal Checks

The meeting agreed to close this Action Item and merge with AI 20-4, Reduction of HF Congestion).

AI 20-1   Civil Military

Grant Wearing, RNZAF, Liaison & Co-operation, Mike Underwood, RNZAF, Standards ???, and Simon Rouke RNZN joined the meeting to discuss civil military co-ordination matters.

Len Wicks, CAA NZ, commenced discussions by requesting adequate notice of military operations, excluding acts of war, be given to ANSPs. With today's technology aircraft are not always flying fixed routes so it is essential that the appropriate positioning for military exercises is passed on ATSUs and that the 90 day promulgation period, which can be reduced in emergency situations, is adhered to. He referred to a recent event whereby only 1 days notice was given of live firing in the middle of the Trans Tasman route system and advice was sent to the Australian NOTAM adviser, but not to CAA or Airways New Zealand. It is important that such information is sent via the NZ CAA, not Brisbane Centre, who in turn send out a standard format notice to the ANSPs.

Simon Rouke, Royal NZ Navy, replied by saying on the whole New Zealand ships must do live firing in promulgated areas. The most likely situation for high sea firing is when a defect or improvement is needed and the ship is required to be operationally ready at all possible times. Guidance for firing outside designated areas is the same for both New Zealand and Australia i.e. 24m from land and 10NM for any published air route. The RNZN would prefer that in promulgated and gazetted areas NOTAMs are issued, although they are aware that approved military training areas are not exclusive to the Navy. The RNZN expect civilian aircraft to stay clear of an active military area however on the high sea it is the Navy's responsibility to hold fire until flights have passed.

Discussion took place around the specific nature of NOTAMs and how best for ATSUs to treat military areas. CAA NZs preference would be for Airways to treat is area as protected airspace. The RNZN undertook to produce a procedure covering these situations that will be clear to both ships and aircraft alike.

Geoff deBazin thanked the RNZAF and RNZN for their contribution to the meeting and was pleased with the relationship that exists between ATSUs and the forces. He said co-operation between both was important so as to avoid disruption to either party and the service they provided. He was sure that from this discussion everyone has gained a better understanding of each parties responsibilities and that there will be significant benefits that will flow on from this and ongoing discussions.

AI 20-2   Review of ATS Route Catalogue by States (Ref WP-08)

The FAA's ATS Route Realignment Proposal illustrated that ATS routes around Hawaii and Northwest of Guam could provide average savings in excess of 20NM. Oakland Center will work with adjacent ANSPs to develop an action plan, co-ordinating proposed changes with ICAO, while ensuring no adverse effects are caused by the ATS Route changes.

Changes to the Honolulu airspace and CEP current waypoints tied to Honolulu boundary changes have meant additional work which needs to go through the SMS process. Therefore no fixed implementation date has been set.

AI 20-3   Resolve Oakland Problems with AFN Logon

David Maynard of the FAA reminded the meeting of a number of joint papers presented at the Honolulu FIT meeting which indicated numerous aircraft logging onto the Oakland system while they were still on the ground. This is causing issues with the automation system and running up additional charges. He proposed that an RFC for the FOM be prepared advising that airlines not log on until they reach 10,000 feet. The meeting was in agreement with this noting that consistency was the desirable outcome.

AI 20-4   Identify Methods to Reduce HF Congestion (Ref IP-14)

The ISPACG/HF Working Group, consisting of representatives from ARINC, Airports Fiji, Airservices and Airways, met in July 2006 - Tahiti have since joined the group. As a way to address variations in the level and standard of service provided to airline operators all members entered into a Memorandum of Understanding (MOU) effective 8 March 2007. A customer survey will be generated for airlines in June 2007 and the results will provide information for a baseline and enabling the group to set up Key Performance Indicators (KPIs) which can be developed and included into the MOU.

The question was asked if Annex 10 states that HF preflight and SELCAL checks 'should' or 'shall' be done. Andrew Tiede, ICAO, suggested that any changes to the Annex be by way of a Supplement, rather than an Amendment. He will discuss this further with Allan London, Airways, while David Maynard will speak to AIRINC on the subject.

AI 20-5   Address Problems with SATCOM

SATCOM is a top priority for the airlines however in Paul Radford's absence Airways undertook to have this paper forwarded to the group by 1 April 2007. It was agreed to keep the Action Item alive and for Paul Radford to report back at the next meeting.

AI 20-6   Establish Planning Team to Address Future Work

The meeting agreed that this should no longer be an Open Action Item but a Standing Report to which the ISPACG Planning Team prioritize and develop action plans for multiple issues that are not actively being addressed by the full ISPACG (Ref WP-11).

AI 20-7   Investigate Internet ISPACG Forum or Interactive Bulletin Pagee

Although agreed to be a good concept as a medium for communication the Yahoo site that FAA established is only used sporadically and not always for its intended purpose. It was agreed that the FAA close the internet forum page and in turn this Action Item.

AI 20-8   Add "Review Relevant Route Requirements in Asia/Pacific ATS Route Catalogue" and "Civil Military Co-ordination" as Standing Action Items

This has been completed (Ref AI 20-1 and AI 20-2). Item closed.

AI 20-9   Recommend ICAO Asia Pacific Office Reconvene AIDC Task Force

This has been completed (Ref AI 17-11). Item closed.

5   Identify Future Work Programmes

5.1   **Review and Update Capacity Enhancements Table**
Airservices provided the meeting with an updated Capacity Enhancements Table (Ref WP-26) while the meeting agreed that the Co-chairs could update the remainder of the table off line on behalf of the group.

5.2   **Outcome of 2006 IOAC Performance Workshops**
(Ref WP-13) Kevin Chamness, FAA, gave a summation of the two day Performance Metrics Workshop from the 2006 IOAC Conference and outlined the proposed next steps for the development of performance metrics for ISPACG and other regional groups. The principle outcomes to measure efficiency by are:

Efficiency - *Perfect Trajectory vs. Actual Flown Trajectory*
Predictability - *Filed trajectory vs. Actual Flown Trajectory*
Operations Cost - *Oceanic service provision costs and investments*
Safety Trends- *relevant to oceanic airspace*

The meeting agreed Kevin's proposal to draft a predictability metric for the South Pacific which he will present to ISPACG/22.

5.3   **Guidance on A380 Wake Vortex** (Ref IP-05)
ICAO presented guidance to States in regard to the horizontal and vertical wake turbulence spacing criteria for the A380-800. This guidance was developed by an ad hoc group of experts under the auspices of the FAA, Eurocontrol, the Joint Aviation Authorities (JAA) and the manufacturer and was promulgated via ICAO State letter Ref: T3/4.4-AP099/06 (ATM) transmitted on 10 October 2006.

(Ref WP-23)
Airways intention is to modify its Oceanic Control System (OCS) and Domestic system (Skyline) to enable them to accept any Flight Plans filed with the letter "J" for a wake turbulence designator in the ICAO flight plan. The "J" designator will not be used for any purpose in the OCS; the software change will be done simply to avoid manual processing. This work will be completed in time to be available for the software release scheduled in conjunction with the 7 June 2007 AIRAC date.

Adam Watkin, Airservices, voiced concern about the changes, stating that the likes of Brisbane and Nadi can't accept 'J' in their systems and to his knowledge no such changes have been planned. FAA similarly noted that upgrades to their system had not been discussed, while Tahiti advised it was something they would look at in 2008 when their new system came on line. Geoff deBazin urged consideration on this topic and advised that Airways would co-ordinate with the various ANSPs.

Andrew Tiede, ICAO, said it appeared that ICAO had made a unilateral decision without the consideration of others. He undertook to check this with ICAO Head Quarters and report back to the group.

5.4   **RNP Discussion** (Ref WP-19)
Len Wicks, CAA NZ, reported that the Protected Airspace Concept was recently discussed by the ICAO Separation and Airspace Safety Panel (SASP) and it was apparent that there are inconsistencies in the ICAO Doc 4444 references supporting this concept, which form the basis of automated conflict probe ATM systems used in the Pacific.

A draft definition of the protected airspace concept for consideration by SASP was tabled for the meeting. As were suggested draft PANS ATM amendments which take in to account the application of protected airspace by automated ATM systems, and the differences between procedural route systems and automated ATM systems. ISPACG participants were invited to comment on the proposed draft amendments in WP-19 noting the yellow highlighted areas of recommended change. Comments should be forwarded to Len Wicks, CAA NZ, within four weeks so that he can present them to the next SASP.

5.5 **Variation in Speed** (Ref WP-25)
In light of the reduced longitudinal separation standards currently employed in the South Pacific Airways New Zealand proposed that the maximum variation that aircrew can employ without advising ATC, be reduced. Over the last decade the use of CPDLC and ADS has allowed a significant reduction in the longitudinal separation standards applied between aircraft on the same track, with frequent use now made of both the 50nm and 30nm longitudinal standard. During the same time period the variation in speed that pilots are permitted to undertake without advising ATC, has not reduced in proportion and has remained at 5 %.

Following discussions it was obvious that there was a significant difference of understanding when it came to how information was used by operators and ATC. Geoff deBazin suggested that all parties go back and look closely at the documentation so as to gain a better understanding of its intention. ISPACG/PT2 would take this up and a team would be developed to investigate the documentation, progress the issue report to ISPACG/22. He also asked that ICAO clarify the wording in Annex 2 and to advise whether or not this was a region specific condition and how best to progress any change.

6 **Review and Establish Terms of Reference for Working Groups/Task Forces**
There were no new Working Groups or Task Forces.

7 **Other Business**

7.1 **Use of ADS-C Meteorological Data by the Bureau of Meteorology** (Ref WP-27)
Adam Watkin, Airservices, on behalf of the ISPACG/PT, reported that the increasingly widespread use of ADS-C has the potential to provide meteorological offices with continually updated wind and temperature information from a wide variety of locations. This could result in an improvement to the wind and trajectory modeling, with corresponding improvements to the wind information used by airlines and ATSUs. He advised that until recently, TAAATS was not able to request meteorological data in ADS contracts, however this functionality was now available, and the capability to forward such information to the Bureau of Meteorology was also expected to be available in the near future. Many of the benefits to airlines will

result from improvements to the forecasting ability of Met agencies, with more accurate weather forecasts and improved products and diagnostics meaning improved flight operations, improved safety and operational cost savings.

From the findings above the Planning Team will progress this as an action item and report further at ISPACG/22.

7.2 **Honolulu Volmet**

David Maynard, FAA, reported that Honolulu Flight Service were having hardware problems and that the HF Volmet was working at reduced power therefore reduced coverage. It would take between 4-6 months to correct the problem and he wanted to assure the meeting that the FAA were aware of the impact this was having on operators.

Airline operators confirmed they all relied on information from volmet and that there were still numerous older planes in operation that continued to use volmet. ICAO confirmed that there were no plans to dispose of Volmet and that in fact an extra station was proposed for Japan. AIRINC confirmed that they could supply the information to the FAA, however there would be a charge for this, which could in turn speed up the equipment fix in Honolulu.

It was requested David Maynard take this as an Action Item to the next OWG.

8 **Closing**

8.1 SEAC Tahiti were happy to announce they will host FIT/15 and ISPACG/22 in Tahiti at the end of February, or beginning of March 2008.

8.2 Closing remarks from David Maynard focused on the adoption of the Planning Team and the important work that had been done to facilitate work throughout the year. He thanked the ISPACG members for their open and robust discussion over the past 3 days and Airways NZ for hosting ISPACG/21.

Geoff deBazin also thanked everyone for their attendance and participation, particularly ICAO and IATA for their contribution. He felt that ISPACG continued to make significant progress because it is well established, its members interact well and speak their mind – long may it continue.

Appendices:
A   Open Action Items
B   Updated Capacity Enhancement Table
C   Participant List