Summary Minutes of the Twenty Fifth Meeting of the Informal South Pacific ATS Coordinating Group (ISPACG/25)

Honolulu, Hawaii, USA
24-25 March 2011

The twenty fifth meeting of the Informal South Pacific Air Traffic Services Coordinating Group (ISPACG/25) was hosted by the Federal Aviation Administration (FAA) at the Waikiki Edition Hotel, Honolulu, from Thursday 24th to Friday 25th March, 2011.

John Mineo, Manager of Offshore and Oceanic, FAA, and Blair Cowles, Operations Manager, Oceanic, Airways New Zealand (Airways NZ) served as Co-chairs of the meeting. Braks Etta, Air Traffic Organization (ATO), FAA provided secretariat services for the meeting.

The meeting was attended by participants representing South Pacific Air Navigation Service Providers (ANSP), International Air Transport Association (IATA), International Federation of Air Line Pilots' Association (IFALPA), Air Traffic Control Association Japan (CRASA), regulatory authorities, airlines, airline and equipment manufacturers, US Air Force (USAF), and communications service providers. A list of participants is included in Appendix C to this report.

1. Opening Remarks

1.1. On behalf of the Co-chairs and ISPACG, Blair Cowles thanked the FAA for hosting ISPACG/25, in such a beautiful setting.

1.2. Blair Cowles extended condolences, on behalf of the meeting, to the Japanese delegation on the tragic events from the recent earthquake, tsunami and nuclear situation in Japan.

1.3. Hiroyuki Nakano, Special Assistant to the Director, ATC Division, Civil Aviation Bureau, Japan (JCAB) thanked the meeting for its kind words and support. He stated that Japan had never before experienced a tragedy of such magnitude, with the number of dead and missing increasing each day. Hiroyuki Nakano also expressed gratitude that no JCAB or their families lost their lives in the tragedy.

1.4. David S. Burkholder, Director (A), ATO International Office, FAA, announced there would be an FAA hosted ISPACG reception later that evening and thanked Mr. Bill Lang, Vice President ATM for Adacel, for sponsoring the event.

1.5. The meeting was invited to review the draft Agenda and was accepted by all as the final Agenda (WP-01 v.1).

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Refer to http://www.airways.co.nz/ispacg/ispacg25/draft.asp, ISPACG/25
Documentation, Appendix C, Participant List.

2. Updates from Air Navigation Service Providers (ANSPs)

2.1. Airservices Australia (ASA)
Adam Watkin, Air Traffic Controller from Brisbane Centre advised the following:
- Implementation of the flight plan conflict function in TAAATS is planned for the third quarter of 2011 (ref. IP-09).
- A new CPDLC Editor was incorporated into TAAATS software in April 2010.
- Proposed expansion of the use of DARPs to include flights between YSSY/YBBN and KLAX/KSFO.
- ADS-B has been mandated for implementation in Australian Airspace by December 2013.

2.2. Service d'Etat de l'Aviation Civile en Polynesie Francaise (SEAC-PF)
Eric Lieutaud, Head of Technical Department, reported that AIDC is operational with the FAA and Airways NZ. He stated that Tahiti will change its radios and telephones for fully integrated system, planned to be operational in 2012. He reported that there are not sufficient aircraft to get ADS-B information and will attempt to have the operators equip with ADS-B.

2.3. Federal Aviation Administration (FAA)
Dennis Addison, Manager, Oceanic Airspace & Procedures, Oakland Center was able to present the following updates:
- Dynamic Airborne Reroute Procedures (DARPs) are underutilized.
- UPR use is expanding rapidly - Track K UPR trials are planned to start on 5 May 2011; KAL Cross Track UPRs; PACOTS Track 1 paper trials show significant savings.
- KSFO Oceanic Tailored Arrivals – 33% of aircraft receive a full Tailored Arrival; minor changes made to profile.
- KLAX Tailored Arrival Development – 17% of aircraft receive a full Tailored Arrival; disappointing, stopped on March 10 but will return in the near future.
- ADS Distance Based Separation – Fukuoka ADS 30/30 cross boundary to begin in May 2011.
- ADS-C – use is slowly rising as more planes are equipping.
- Improved Aircraft Equipage in the Oakland FIR – 83% of vertical clearance requests are approved.
- Mach Speed Variation Study – FAA continues to work the issues coming out of the SASP and ICAO Air Navigation Commission.
- Pacific Island Airports – working on procedures to reduce delays.

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2.4. **PNG Air Services Limited (ASL PNG)**
Gabriel Salayau, General Manager, ATM, highlighted accomplishments as follows:
- Organization restructure has been completed.
- New ATM system is expected to be operational in 2014/2015 and will be AIDC-compliant.
- Strategic & Business Plans Review – Completed.
- CAR Part 171 & 172 Certification – extended by 3 and 2 years respectively.
- ATC PC Simulator – Commissioned & Certified by CASA.
- En-Route Radar Training – ongoing.
- Extension of En-Route Radar Services continues.
- Trials & Implementation of User Preferred Route (UPRs) in Port Moresby FIR under consideration.
- Installation of EMG GENSETs at Tokua & Mount Hagen, to be followed by other PNGASL manned units including remote sites.
- VHF/HF Improvements – Analysis completed & awaiting Report.
- Establishment of Safety Management System continues as a priority.

2.5. **Airways New Zealand**
Paul Radford, Manager, Oceanic Systems, presented the following updates:
- UPR – working coordination of a potential ASPIRE flight from Auckland to San Francisco on 19 May to coincide with the kick-off of the ASPIRE Daily City Pair between the two cities.
- FANS1/A – performance of the system overall is improving.
- AIDC – no major changes since the ISPACG/24. There is full AIDC with Nadi and Oakland.

2.6. **DGAC Chile**
Juan Carlos Rojas, Head of Air Traffic Services Sub-department presented the following update:
- Working to implement RNP-10 in oceanic ACC.
- Working to improve the reliability of CPDLC and ADS systems because HF is very poor.
- Implementing 50/50; moving to RNP 4.

2.7. **Civil Aviation Bureau, Japan (JCAB)**
Hiroyuki Nakano, Special Assistant to the Director, ATC Division, presented the following updates (ref. IP-01):
- Haneda Approach Control airspace (ACA) and Narita ACA were integrated into one ACA, called Tokyo Approach Area in January 2010.
- The fourth runway began operations at Haneda Airport in October 2010.
- Simultaneous departures from parallel runways is planned in October 2011 at Narita International Airport.
- A new sector at Tokyo ACC for efficiently handling arrival traffic from Trans-Siberia and North America is planned.

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2.8. **Airports Fiji Limited**
Pauga Kini presented the following update:
- Automation upgrade completed in May 2010.
- Approach and Towers planned to be on Aurora (common FDP) in May 2011.
- Implementing a MLAT/ADS-B solution - MLAT limited to Nadi airport; SAT by May 2011 and online by the fourth quarter of 2013.
- UPR for non-FANS 1/A equipment – planned.
- DARPS – further testing with Oakland and tests with Brisbane and Auckland.

Refer to http://www.airways.co.nz/ispacg/ispacg25/presentations.asp for presentations that were tabled by ANSPs.

3. Review Relevant Work Conducted Since ISPACG/24

3.1. **Report on ISPACG Planning Team (PT10) Activities**
Adam Watkins, PT Chair (acting) and Air Traffic Controller from Brisbane Centre, Airservices Australia, presented the recent activities of the Planning Team with a brief overview and background given. There were no new items of business.

Additional group activities were also presented:
- Data Link working group report
- ADS-Climb Descent Procedure (CDP)
- AIDC Implementation
- AIDC Monitoring
- DARP Expansion
- Data Link SPR Safety Requirement Monitoring
- En Route Speed Variation Concerns
- ICAO Flight Plan Modifications
- GOLD – Global Operational Data Link Manual
- HFDL Trials
- Wind and Trajectory Modelling
- SatCom Voice
- Shared Performance Metrics
- SLOP Documentation
- ASPIRE Daily Flight
- SSR Code Allocation
- UPR expansion
- ADS-B In Trail Procedures (ITP)
- Global ICD
- Enhance Service Provision
- RNP-4 Approval of Aircraft
- User feedback on ANSP enhancements

All action items that the Planning Team recommended be closed were accepted as such by the meeting.

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Refer to http://www.airways.co.nz/ispacg/ispacg25/presentations.asp to view
ISPACG/PT10 Summary of Discussion.

3.2. **Report on FIT/18**
Brad Cornell, FIT Chair and Boeing Facilities Representative, gave a summary of
FIT/18 report:

- Participation in UPRs and DARPs continue to be important in light of escalating
  fuel prices.
- The observed performance of FANS 1/A aircraft and network availability in the
  region has improved over the previous period. Improvements by ANSPs to their
  automation systems over the past year are anticipated to provide additional
  benefits to operators, including the expansion of UPR and DARP.
- The FIT recommended that ISPACG support the development of a performance-
  based framework for communications and surveillance within the region.
- SATCOM voice for air traffic services communication (SVGM) is targeted for
  December 2011; The PT recommended that ISPACG endorses and actively
  participates as required to ensure any regional specific requirements are
  addressed.
- There are a number of interoperability issues relating to route downlinks and the
  PT recommended that manufacturers should be encouraged to fix those avionics
  systems that exhibit these deficiencies.
- Data indicates that aircraft in the Pacific using either the AOR-W or AOR-E
  satellite have exhibited worse performance than other satellites.
- Iridium reported that it planned to replenish its existing satellite constellation
  with the new constellation being fully operational in 2017.

Refer to http://www.airways.co.nz/ispacg/ispacg25/fit18.asp for the FIT/18
Meeting Report and other related documentation.

3.3. **Report on HF Working Group Activities**
Allan London, Airways NZ Oceanic Customer Specialist, presented details of the
HF Working Group activities including:

- High Frequency Management Guidance Manual refer to
  http://www.airways.co.nz/ispacg/ispacg25/presentations.asp
- Revised Memorandum of Understanding – KPIs for service delivery have been
  implemented.
- Survey 2009 – results being analysed in due course.

4. Review Open Action Items
The meeting reviewed the ISPACG/24 Open Action Items. Refer to
http://www.airways.co.nz/ispacg/ispacg25/draft.asp, ISPACG/25 Documentation,
Appendix A for updated 'status' and 'actions pending'.

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AI 16-4   ATM Contingency Plans
Reference: No papers presented.
Discussion: There were no discussions on this.

AI 16-6   Regional Implementation of 2NM Strategic Lateral Offset Procedures (SLOP)
Reference: No papers presented.
Discussion: Gabriel Salayau GM ATM, PNG Air Services Ltd advised that the procedures are not in the AIP yet.

AI 16-8   Implementation of 30/30
Reference: IP-02: Status of 30 NM Lateral and 30 NM Longitudinal (30/30) Separation in Oakland Oceanic Control Area (CTA)
Presented: Bob Tegeder (FAA)
Discussion: Representative of the FAA advised that the application of 30/30 and D50 separation to proximate pairs of aircraft that are both eligible for either procedure has been implemented throughout the Oakland Oceanic CTA. Published ATS routes and other tracks continue to be laterally separated by a minimum of 50 NM. Expanded application of 30/30 including the operation of 30 NM route structure within the Oakland CTA was not recommended.

AI 17-1a   Implementation of 50NM Lateral Separation in RNP Airspace
Reference: No papers presented.
Discussion: Eric Lieutaud, SEAC-PF reported that Tahiti plans to implement 50/50 in 2012.

AI 17-1b   Implementation of 50NM Longitudinal Separation in RNP Airspace
Reference: No papers presented.
Discussion: Gabriel Salayau, PNG ASL advised PNG plans to implement 50/50 in June 2011.

AI 17-2   UPRs
Reference: WP-05: Implementation of UPRs between ML-AA
Presented: Adam Watkin (ASA)
Discussion: Representative of the ASA advised of the upcoming expansion of UPRs in the Tasman Sea to permit UPRs between the Melbourne-Auckland city pairs. The estimated implementation date is 19 May 2011.

Reference: IP-05: User Preferred Route (UPR) Update
Presented: Dennis Addison (FAA)
Discussion: The use of UPRs in the Pacific Region over the past ten years has been providing ecological and economic advantages:
   - North America - South Pacific estimated annual savings: 9.61 kilograms (kg) of fuel burn and 30.36 million kg of carbon dioxide (CO_2) emissions.

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- Asia - Oceania estimated annual savings: 3.98 kg of fuel burn and 12.45 million kg of CO_2 emissions.
- North America - Russian Trans East estimated annual savings: 1.09 million kg of fuel burn and 3.41 million kg of CO_2 emissions.
- Asia - Hawaii estimated annual savings: 2.88 million kg of fuel burn and 9.1 million kg of CO_2 emissions.
- PACOTS Track 14/15 - no savings metrics.
- PACOTS H/I operational UPR trial.
- PACOTS K operational UPR trial.
- PACOTS Track 1 paper UPR trial: completed – potential estimated annual savings:10 million kg of fuel burn.
- PACOTS Track 3 paper UPR trials: ongoing - potential estimated annual savings:3.5 million kg of fuel burn.

The meeting discussed the restrictions on UPRs to Sydney, including 0600 curfew, demand on airport due to too many aircraft for sequencing, and the requirement by ALOFT for operator notification at 45-mile and 200-mile fixes. The ASA representative was unaware of these restrictions and would provide this feedback to Sydney. The meeting tabled this topic for discussion at ISPACG/26.

AI 17-5   ADS-B Implementation
Reference: WP-02: Australian ADS-B Update
Presented: Adam Watkin (ASA)
Discussion: Working paper presented as updates, the continued provision of ATS surveillance services between identified aircraft across Australia, the commencement of ADS-B sharing with Indonesia in February 2011, and the deployment of the Lord Howe Island ADS-B site.

Reference: IP-04: Federal Aviation Administration Surveillance and Broadcast Services Program Update
Presented: Ken Jones (FAA)
Discussion: The update indicated:
- The final rule to mandate ADS-B Out was issued May 2010.
- Mandate for all aircraft to be ADS-B out equipped by 2020; the FAA expects most operators to equip by 2015.
- In September 2010, the FAA gave the go-ahead for ADS-B ground infrastructure deployment.
- As of February 2011, 300 ground stations are operational.
- National deployment is expected to be completed by 2013, with nearly 800 ground stations.
- ADS-B surveillance is now available over the Gulf of Mexico for both low and high altitude aircraft and at the Houston ARTCC; ADS-B is being used to separate aircraft tracked by radar and ADS-B.
- A formal report on strategies for implementing ADS-B In is expected by September 2011.

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Reference: WP-04: ADS-B In-Trial Procedures (ITP) Operational Flight Trial Project Overview
Presented: Ken Jones (FAA)
Discussion: Reported on the development of the ADS-B ITP and the proposed operational trial scheduled to begin in the summer.
- ADS-B ITP operational trials are planned for summer 2011 and are anticipated to be conducted for one year.
- The operational trial has been adopted as an initiative within the ASPIRE program.

The meeting discussed the need for use of Mach speeds; that operational trials are limited to the South Pacific and may be expanded later; and the limitation of the trials to aircraft with ADS-C and RNP-10, thereby giving advantage to equipped aircraft.

AI 17-11   AIDC
Reference: IP-10: AIDC Update
Presented: Adam Watkin (ASA)
Discussion: Updates included:
- Continuation of AIDC trial with Makassar.
- Use of AIDC to support voiceless coordination between YBBB and YMMM.
- Expansion of the use of coordination (CDN) messaging.

AI 17-12   Terminal Procedures
Reference: IP-06: Tailored Arrivals Update
Presented: Dennis Addison (FAA)
Discussion: In July 2010, the TA into KSFO was modified slightly to provide the pilot with an easier to read display. The Catalina 1 Tailored Arrival was temporarily suspended, but will be available for use by the end of March.

Reference: No paper presented.
Presented: Hiroyuki Nakano (JCAB)
Discussion: JCAB advised that they have revised AIC Japan 011/11 and it will be effective as at 7 April 2011. They have expanded the participating aircraft from domestic A/L to all A/L with FMS equipped.
1. Participating aircraft: FMS equipped aircraft with ETA Kansai INTL airport between 1400UTC and 2200UTC.
3. Routes applicable to operational trial for CDA: Those arrival routes for Kansai INTL airport via KARIN, KAZRA or EVERT and join TOMO Arrival (when RWY24 in use), or via KARIN, KAZRA or EVERT and GATES (when RWY06 in use).
8. Suspension or cancellation of CDA: ATC may suspend or cancel CDA due to traffic conditions even after CDA is cleared. Alternate instructions will be issued when CDA is suspended or canceled.

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Reference: IP-03: Pacific Island Delay Mitigation
Presented: Dennis Addison (FAA)
Discussion: Aircraft flying to a number of popular island destinations have separation and departure and arrival delays. It is envisioned that ADS-B surveillance and separation procedures at the airports would be a good alternative for reduction of ATC-initiated departure and arrival delay; however aircraft have to equip for this.

AI 19-1 **Flight Plan Issues**
Reference: IP-08: Status of FAA implementation of Amendment 1 to Doc 4444, 15th Edition
Presented: David S. Burkholder (FAA)
Discussion: The meeting was advised of FAA's status on the agreed transition steps to implementing the New Flight Plan.

The meeting was informed that there is an ICAO State letter revoking the requirement for "J" in the FPL message.

AI 20-1 **Civil - Military Coordination**
Reference: No papers presented.
Discussion: The meeting agreed that AI 20-1 would remain an Open Action Item.

AI 20-2 **Review of ATS Routes**
Reference: No papers presented.
Presented: Hiroyuki Nakano (JCAB)
Discussion: With regard to the establishment and operation of RNAV5 route between OK/ONC and APITO, the meeting was informed that further discussion was required regarding the western route of APITO between JCAB and ATMB CAAC.

AI 21-1 **10 Minute Longitudinal Separation Without Mandatory MNT**
Reference: See Action Item 16-8
Presented: Dennis Addison (FAA)
Discussion: JCAB is looking to get approval. Many other FIRs are interested, though there are alternate ways for ANSPs to interact with RNP-10 aircraft.

AI 21-2 **ADS-C Climb Descent Procedures (CDP)**
Reference: IP-07: Status Of The Development and Implementation of ADS-C Climb Descent Procedures
Presented: Dennis Addison (FAA)
Discussion: The operational trial of ADS-C CDP began on 15 February 2011; a NOTAM was issued for the procedure.

The meeting noted that there was a perception by some operators that there were no benefits to being RNP-4 equipped, and that word needs to spread to these operators that there are indeed benefits, that more than outweigh the cost of additional position reporting for RNP-4 aircraft.

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AI 21-3   DARP Expansion
Reference: WP-03: Proposed DARP Trial between Australia and United States
Presented: Adam Watkin (ASA)
Discussion: Proposal for a limited DARP trial for aircraft operating between
              YSSY/YBBN and KLAX/KSFO. It was noted that interoperability issues
              could impact use of the procedure.
              The meeting discussed the approach for the trial. ASA will let the meeting
              know when it can receive a DARP originated in Oakland. Fiji is able to
              accept. Tahiti indicated its controllers' working methods would have to be
              modified. The meeting agreed that trials could potential be conducted. The
              trials will be advertised at ISPACG and through the IATA Asia Pacific
              office.

AI 21-5   Sharing of Operational Data
Reference: WP06: ASPIRE Update
Presented: Adam Watkin (ASA) and David S. Burkholder (FAA)
Discussion: Background on partnership, strategic plan, target progress, ASPIRE-Daily
              Program, and expansion of the partnership tabled and discussed. Aerothai
              is planning to join the ASPIRE Partnership in June 2011.

              The AKL – SFO is an ASPIRE-Daily 4 Star City Pair (UPRs, 30/30
              Reduced Oceanic Separation, Arrivals Optimization, and Departure
              Optimization). The city pair officially began on 21 February with Air New
              Zealand as the partner airline.

AI 21-6   Wind Trajectory Modelling - CLOSED

AI 24-1   Extracts from GOLD - CLOSED

AI 24-2   Inadvertent Activation of ADS-C Emergency -CLOSED

5. **Identify Future Work Programmes**

    AI 16-2   Updated Capacity Enhancement Table
                  Refer to http://www.airways.co.nz/ispacg/ispacg25/draft.asp,ISPACG/25
                  Documentation, Appendix B, for updates to the Capacity Enhancement
                  Table.

6. **Review & Establish Terms of Reference for Working Groups and Task Forces**
    No items tabled or discussed.

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7. Other Business

7.1   IP-11:   Communications at High Southerly Latitudes
         Presented: Gene Cameron on behalf of Qantas
         Discussion: Provided information on communications during a flight from Buenos Aires, Argentina to Sydney, Australia over a route that proceeded via position 80 degrees south latitude.

- Data Link communications can be maintained outside the nominal INMARSAT coverage for a flight that far south.
- HF communications with Auckland were not possible at lower altitudes while HF with McMurdo Center were adequate.

7.2   Arrangements for ISPACG/26
Fiji has formally agreed to host ISPACG/26 in 2011 with details to be advised in due course.

7.3   AFL will be hosting the ISPACG/PT/11 in November 2011 in Fiji. They will work with Adam Watkins, ISPACG/PT Chair, for the conference details and organisation.

7.4   Closing Remarks
Thanks were extended to all for attending and participating in the meeting.

Attachments:
Appendix A   Open Action Items
Appendix B   Capacity Enhancement Table
Appendix C   Participant List