



**ACT RAPAC**  
**Meeting: 2011-2**  
**Date:** 8<sup>th</sup> September 2011  
**Time:** 1300 hrs  
**Venue:** CASA OFFICES  
 Training Room Level 1, No. 3  
 Aviation House  
 16 Furzer Street Philip/Woden

**Minutes**

**Convenor:** Mr John Hogan

**Agenda**

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<b>1. Opening – 1300 hrs</b>
WGCDR Sheryl Steele, Chair, opened the meeting at 1300 hours.
<b>2. Apologies</b>
Roger Chambers, CASA Operations Ilan Gillespie, RFACA Rob Glenn, CASA Mick Poole, CASA
<b>3. Acceptance of previous Minutes</b>
<b>Discussion:</b> Minutes of the previous ACT RAPAC Meeting 2011-1 held 3/03/2011 were accepted.
<b>4. Correspondence</b>
<b>4.1 In</b> <i>From Martin Holberton, OAR, re Post Implementation Review of the Class D airspace changes</i> <i>From Simon Scott, OAR, re an aeronautical study of the airspace in the vicinity of Canberra aerodrome out of Tower hours</i> <i>From Anna Henry, OAR, re TRA Tidbinbilla 1 June 2011</i> <i>From Simon Scott, CASA, re Bight Group Aeronautical Review</i>
<b>4.2 Out</b> <i>To RAPAC re Post Implementation Review of the Class D airspace changes</i> <i>To RAPAC re an aeronautical study of the airspace in the vicinity of Canberra aerodrome out of Tower hours</i> <i>To RAPAC re TRA Tidbinbilla 1 June 2011</i> <i>To RAPAC re Bight Group Aeronautical Review</i>

## 5. Business arising from previous minutes

### 5.1. Flexible Use of Airspace

#### Previous Minutes:

WGCDR Sheryl Steele provided a further update. Some feedback has already been received and it is apparent that some of the definitions require fine tuning. The key element in successfully integrating FUA is to introduce tools which assist in making the FUA more dynamic for the benefit of all users (e.g. facilitating activation and deactivation of airspace when it is not being used). Modifications to certain documentation are required to affect this which is underway. The current intent is to conduct an implementation review involving a survey that will be distributed widely seeking comments from all.

Comments and questions invited from the floor. None received. Input will be sought as the work progresses.

#### Discussion:

The following correspondence from FLTLT Ben Heaton, Military OAR, regarding Post Implementation Review, was emailed to RAPAC on 18/08/2011.

*Military OAR has completed a comprehensive review of the Nov 10 changes to PRD areas. All areas were allocated Conditional Status i.e. RA1, 2 or 3 depending on the areas activity, usage and application.*

*Feedback was collated by both Military and Civilian Airspace Managers in concert with Industry. The review identified that only one RA was incorrectly categorised in all PRD areas and was notified by FIR NOTAM prior to the Nov 10 changes. This error was permanently corrected in the Jun 11 publications. Other feedback included chart presentation and the reinstatement of altitude levels and the number of issued NOTAMs. The Military OAR continues to work with Airservices Australia in developing streamlined processes to reduce the number of NOTAMs issued.*

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WGCDR Sheryl Steele provided update. There was nothing substantial that came out of the Post Implementing Review. One Restricted Area was incorrectly categorised and it is now fixed. Under RA 2, pilots will be able to get approval from Defence when doing their flight planning.

No further comments were made.

#### Item Closed

**Actions:**

**Responsible:**

**Due Date:**

### 5.2. OAR Update on Transition to D Class Towers

#### Previous Minutes:

The Chairman provided an update on the Post Implementation Review. The key points are:

- The Project Manager had intended the project be completed by the end of 2010. However the availability of data for analysis has impeded progress.
- The OAR has elected to extend the deadline for completion. This will also provide additional time to complete analysis and also conduct additional consultation on specific issues.
- Industry is invited to continue to submit comments which should be provided ASAP to Craig Patterson for consideration and inclusion in the PIR.

- A draft report is expected for release by end of April 2011 and will be circulated for comment.

Comments invited from the floor. None received. The OAR continues to encourage industry feedback primarily through RAPAC among other sources.

The Draft report will be made available by end of April 2011 for stakeholder feedback. An update will be provided upon receipt of all stakeholder comments.

**Discussion:**

The following correspondence from Martin Holberton, OAR, was emailed to RAPAC on 17/06/2011.

**Post Implementation Review of the Class D airspace changes – effective 3 June 2010**

*The OAR has completed a Post Implementation Review (PIR) of the changes to Class D airspace which came into effect on 3 June 2010. Stakeholders may provide feedback on the PIR to the OAR.*

*The PIR can be found on the OAR web page:*

[http://casa.gov.au/scripts/nc.dll?WCMS:STANDARD::pc=PC\\_90447](http://casa.gov.au/scripts/nc.dll?WCMS:STANDARD::pc=PC_90447)

*Kind Regards,*

*Martin Holberton  
Office of Airspace Regulation  
Civil Aviation Safety Authority  
GPO Box 2005  
Canberra City, ACT 2601  
Ph: 02 6217 1712  
Fx: 02 6217 1699*

Mike Cleaver, from the Guild of Air Pilots and Air Navigators (GAPAN), commented that there seems to have been no industry involvement in the Post Implementation Review. WGCDR Sheryl Steele, Chair, pointed out that all the RAPACs have been informed of the Post Implementation Review through emails and the CASA website. However, GAPAN and Mike Cleaver have not had involvement in the ACT RAPAC for the last 18 months at least.

Post meeting, WGCDR Sheryl Steele, Chair, will get the Project Manager to contact Mike Cleaver in this regard.

**Item Closed**

Actions:	Responsible:	Due Date:
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**5.3. Expansion of Hume Helipad**

**From Previous Minutes:**

Peter Romeis, Airservices, provided an update. No direct discussions have been undertaken between the proponents and Airservices to date. The key consideration for Airservices is the proximity of the helipad to the Canberra Runway 35 approach. This is particularly poignant as Peter was made aware by Southcare of plans to request a “no fly zone” over the adjacent prison which potentially may contravene airways clearances and cause difficulties for controllers in separating aircraft.

Comments invited from the floor. The following discussion took place:

Question: Could a restricted area be permanently declared above the jail?

Response: An RA at that proximity would make the Canberra approach unworkable and is not an appropriate solution.

Question: is the “no fly zone” related to safety or prison security?

Response: Security.

Question: Is this “no fly zone” an ATS issue?

No response received.

Cheryl Allman commented that any requests to the OAR for an RA would need to be considered on the grounds of safety as required under the Airspace Regulations. Therefore any RA that is requested solely on the basis of prison security is unlikely to be approved.

No further comments were made.

No further action at this stage. Will await additional information from Airservices as it comes to hand.

**Discussion:**

Airservices has not obtained any additional information regarding the expansion of Hume Helipad. The item is carried forward to the next meeting.

**Actions:**

Carry item to next meeting

**Responsible:**

Secretariat

**Due Date:**

Next RAPAC

**5.4. ADS-B Rollout**

**From previous Minutes:**

Brian Harris, CASA, provided a comprehensive update on the ADS-B project being rolled out by Airservices including a presentation.

The key points were:

- ADS-B is intended to be replacement to radar in the longer term, however will operate to supplement the radar surveillance systems currently deployed in the short to medium term.
- CASA has distributed a Discussion Paper DP1006AS "Proposed Strategy and Regulatory Plan supporting the Australian Government's Aviation White Paper – CASA's Plan for Communication, Navigation and Surveillance Equipment in this Decade". The Paper has generated some controversy as it has been incorrectly considered as a statement of direction rather than its intended purpose as a document to generate industry feedback.
- ADS-B in combination with the surveillance radars essentially offers full continental coverage although ADS-B is only in use at 30,000 feet and above.
- ADS-B enjoys general ATC acceptance and support.
- Accepted and agreed that more consultation, industry feedback and analysis is required as the roll out of ADS-B progresses.
- Brian also provided brief information about the related Wide Area Multi-lateration, Advanced Surface Movement and Guidance Systems and the radar replacement programs which integrate with the ADS-B roll out.

Comments and Questions invited from the floor:

Question: Will Primary Radars remain?

Response: Yes. The AMSTAR Project is replacing all the PSR (inc SSR) at the 8 terminal area radar sites around the nation.

Question: Is there a risk of "vexatious interference" should the 24bit ADS-B code be obtained by parties interested in undertaking such activity?

Response: Risk is very low and in any case there are many simpler methods available to those parties looking to undertake such activities.

Question: What is the advantage of ADS-B for the lower level flight?

Response: The broad benefits are the reduction of the risk of collision in particular for regional airports with surrounding Class E airspace. Generally GA operators glean a benefit from the improved likelihood of being seen especially where ADS-B out is used.

The Presentation can be found at [attachment 9.1](#)

Industry feedback on the Discussion Paper is encouraged. Airservices will provide advice and information as the roll out progresses.

An update will be provided at the next RAPAC which will encompass the broader subject of Communication Navigation and Surveillance fields.

**Discussion:**

CASA has released its revised "Discussion Paper: Plan for Aircraft Communication, Navigation and Surveillance Equipage in this Decade" which relates to this agenda item. The paper can be viewed here: [http://www.casa.gov.au/wcmswr/\\_assets/main/newrules/airspace/download/dp1102as.pdf](http://www.casa.gov.au/wcmswr/_assets/main/newrules/airspace/download/dp1102as.pdf)

Ian Mallett, CASA, gave a brief summary of the Discussion Paper.

The Paper identifies the issues that CASA will be progressing to rule making and issues that are still open for industry's feedback, for example, TCAS and ADS-B equipage. Feedback should be submitted by 31 October 2011 on the specific issues the Paper identifies.

Ian also informed the meeting that there will be an ICAO meeting to discuss the direction of CNS technologies. It seems that CASA is ahead of other Aviation Safety authorities when it comes to ADS-B roll outs as the US is planning for 2020 implementation.

A question was raised on implementation timeline. Ian stated that the timing had to fit with NDB replacements and refurbishments.

Mike Cleaver asked why GAPAN's submission to the Discussion Paper has not been acknowledged. Ian is not aware why this would happen and he will check with the Project Manager.

Mike also asked if thoughts have been given to making available financial assistance, for example interest free loans, to general aviation organisations from the savings that will come from the new CNS. Ian advised that this has been raised in the past without success. The Department of Infrastructure and Transport is the appropriate agency in this regard and Ian will raise the issue with the Department.

**Actions:**

Update

**Responsible:**

Ian Mallett

**Due Date:**

Next RAPAC

**5.5. Frequency Issues**

**From Previous Minutes:**

Cheryl Allman, Chair, spoke to this Item. Frequency congestion in the Canberra region has been raised previously. Local FOI are not aware of the issue and no approach has been made to the FOIs. FOIs have reinforced that they can be contacted in regard to any specific issues regarding congestion directly should the issue require immediate attention (prior to the next RAPAC).

Item to be carried forward. John Hogan to elaborate at the next RAPAC.

**Discussion:**

Local CASA Flight Operations Inspectors are not aware of any frequency related issues in the Canberra region. There were no further comments.

On similar issue, Graeme Rogers, CASA OAR, informed the meeting about the following:

- 1) Industry education / refresher course is being prepared for CAR 166 (Operating at non-towered aerodromes) implementation. More information will be made available to RAPAC.
- 2) The OAR is looking into moving away from the "Big CTAF" concept due to confusion that this is causing for

pilots. Confusion is caused by when to switch to what frequency 'in the vicinity of non-towered aerodrome'. This is particularly an issue in northern part of Australia.

OAR is seeking to standardise operations at non-towered aerodromes and explain that CTAF is not a volume of space. The OAR and CASA Operations are planning on industry Class G frequency management "refresher" education program to reinforce procedures associated with the 2010 changes to non-towered aerodrome procedures.

Matthew Smith, ACT Hang gliding and Paragliding Association, asked if CASA is willing to speak at his organisation's meeting on these issues. Teraya Miller, CASA, agreed to speak with Matthew in this regard.

**Item closed**

**Actions:**

**Responsible:**

**Due Date:**

**5.6. NOTAM Enquiry**

**From Previous Minutes:**

Chris McKeown, Aerial Skydiving, raised an issue regarding the inclusion of the date issued in NOTAMS. Chris described a scenario where he had obtained the necessary NOTAMS to conduct a flight before the trip. Having flown to the remote destination Chris routinely sources the latest NOTAMS (those issued subsequent to his departure) for the return leg typically by phone but also via NAIPS. The process becomes laborious as there is no means of determining the issue date of the NOTAM hence all the NOTAMS relating to the location are passed onto Chris rather than those he is yet to obtain.

**Discussion:**

Correspondence from Mitchell Sloan, Airservices, to Chris McKeown, re the above item is below.

*Dear Chris*

*I have been asked to look into this issue however we do not have any simple answers that will cover of your concerns at this stage. The National Aeronautical Information Processing System (NAIPS) was conceived in the 1980's and was commissioned in 1993. At this time, it was a world leading product, however today we recognise that it has passed its use by date. Airservices Australia is currently scoping a specification for a NAIPS replacement but it is some years before we will see that system commissioned. In the interim, we continue to make minimal upgrades on an as required basis for items like International Civil Aviation Organisation (ICAO) rule and Meteorological (MET) product changes. Unfortunately, we are extremely limited in our abilities to incorporate new functionalities to the core NAIPS system. Adding a promulgation date to a NOTAM would be such an issue as that would entail a significant database change.*

*NAIPS is intended to provide a relevant briefing of all MET forecasts and NOTAMs. This philosophy supports AIP ENR 1.10 which states that before beginning a flight, a Pilot in Command (PIC) must study all available information appropriate to the intended operation and, in the case of flights away from the vicinity of an aerodrome, flights over water (see AIP ENR 1.1, section 61) and all Instrument Flight Rules (IFR) flights, must make careful study of: Current MET forecasts, the airways facilities en-route, condition of the aerodrome, the Air Traffic Control (ATC) rules pertaining to the flight and all Head Office and Flight Information Region (FIR) NOTAMs applicable en-route and location specific NOTAMs for aerodrome.*

*The suggestion to segregate VFR and IFR NOTAMs is noted. However, the criteria for this segregation would be difficult to implement with the current system. For example, no such criteria exist so these would have to be developed and agreed to by Civil Aviation Safety Authority (CASA) and the aviation community before any NAIPS it could be considered. There are already functionalities in NAIPS that provide the capability to create and update a Specific Briefing (SPFIB) and this is described ERSA at GEN-PF 3.2. This product enables the user to create a briefing for a particular route and the information is retrieved based on the parameters of the route, the time and the height entered. A briefing reference number is provided to enable updates to be obtained from NAIPS or the briefing office. The update is available as long as the briefing is valid (from 1 to 240 hours with a default of 24 hours). This update will present either a complete new briefing or a display of only changed products since the last briefing.*

*Chris, again your suggestions are noted however current system and legislation requirements essentially*

dictate our functionality. In the future, Tailored Briefings are in the scope for the NAIPS replacement due to requests by the airlines wishing to use Flex Tracks and User Preferred Routes (UPR). Until a new NAIPS system is implemented I would suggest you try SPFIB and/ or continue to use NAIPS online. Both of these options will enable you filter down the amount of information relevant to you. The Briefing Officers can assist you in setting up a SPFIB also , therefore I have copied in Mr Gary Sawyer who will be able to shed more light on this issue if you wish.

Regards

Mitch Sloan  
 Airport Relations  
 Airservices Australia  
 02 6268 4410  
 0408994410  
[www.airservicesaustralia.com](http://www.airservicesaustralia.com)

No further comments were raised.

**Item Closed**

Action:	Responsible:	Due Date:
<b>5.7. Access to Airports</b>		
<p><b>From Previous Minutes:</b></p> <p>Chris McKeown raised an issue regarding the access to Canberra airport which he wished to discuss with the Canberra International Airport representatives. Item is to be carried forward to next RAPAC meeting. Chris can write to RAPAC outlining the issue if an earlier action/response is required.</p>		
<p><b>Discussion:</b></p> <p>Mike Cleaver, GAPAN, comment on the difficulties with gate access at Canberra airport. Safety officer has to be called to provide access as gate codes are not given.</p> <p>Jeanette Hall, Canberra Airport, is to look into the matter of pilot access at Canberra Airport and report back to RAPAC.</p>		
<p><b>Action:</b></p> <p>Pilot's access at Canberra Airport</p>	<p><b>Responsible:</b></p> <p>Jeanette Hall</p>	<p><b>Due Date:</b></p> <p>Next RAPAC</p>

## 6. Notified Agenda Items

### 6.1. Bureau of Meteorology Brief/Issues

#### 6.1.1. BOM Briefings for VFR pilots

##### From Previous Minutes:

Cheryl Allman, Chair spoke to this Item. Since a BoM representative and John Hogan were not available, the issue will be carried forward to the next RAPAC meeting. Carry forward Item to next meeting.

##### Discussion:

Mohammed Nabi, BOM, provided a briefing on the Bureau's new aviation services website. Feedback should be directed to the BOM via the link on their website.

Ian Mallett commented that the new aviation services website is excellent except that it is hard to locate the link on the main page. Mohammed noted Ian's comment.

##### Actions:

Item Closed

##### Responsible:

##### Due Date:

### 6.2. Defence Brief/Issues

#### 6.2.1. Proposed change to extant R455

##### Discussion:

CASA's recent draft aeronautical study of Canberra revealed the requirement to update charts to reflect accurate R455 activities. FLTLT Ben Heaton, Military OAR, presented proposed changes to R455 as shown below. The proposal is to replace extant R455 with Canberra (CB) Upper, South and North. There will be no change to priority with MAT SUPS caveats in place controlled by AsA. CB Grenades and Flares will be detailed in MAT SUPS only due to activation frequency of less than 10 periods per annum.



OAR will now conduct further stakeholder negotiation on IAP design to cater for the proposal. Industry comments are welcome.

### 6.3. Williamsdale VOR

#### Discussion:

Rob Scott, Airservices, informed RAPAC that Airservices has conducted system maintenance review at Williamsdale VOR and for the past 3 years, it has come last. It is 1 of only 3 of its type. It is a difficult system to maintain, expensive and spare parts is not readily available. ATC are hardly aware of its existence as it is rarely used. Rob put forward three options available regarding the future of Williamsdale VOR:

- 1) Replacement with a Doppler VOR at a cost of about \$1.5 million
- 2) Refurbishment at a cost of \$0.5 million but there will be no maintenance support
- 3) Decommissioning

Airservices would like to hear from users in particular and industry on the above options.

Ian Mallett, CASA, stated that both the NDB and VOR are not needed. Williamsdale VOR is on the ASTRA to go list.

Graeme Rogers asked whether it would be beneficial for Rob to email, through the RAPAC Secretariat, all NSW and ACT RAPACs attendees about this issue. Post the meeting, Rob provided the following correspondence which was emailed to the ACT and NSW RAPACs on 14/09/2011:

*Airservices has decided to decommission the Williamsdale VOR on December 15 2011. This facility was commissioned in 1983 and has exceeded its projected operating life. The type of VOR is no longer supported by the manufacturer, spares are in short supply, if not depleted completely, and is becoming increasingly difficult to maintain. The aid has not met its availability requirements in three of the last four years. It does not appear on any NPA charts and is not part of any SIDs or STARs into Canberra, nor is part of any defined air routes. It is not part of the GNSS backup network.*

*The future of the aid was discussed at the recent Canberra RAPAC meeting - no objections were expressed to the possibility of decommissioning.*

*Airservices would like to give stakeholders who were not able to attend this meeting the opportunity to comment. Please address any comments to the RAPAC Secretariat by close of business 7 October 2011.*

*Regards,  
Rob Scott  
Operating Authority Navigation Aids.  
E-mail: rob.scott@airservicesaustralia.com*

Actions:	Responsible:	Due Date:
Comments from industry to the Secretariat		

### 6.4. Canberra RWY 35 ILS Replacement

#### Discussion:

For RAPAC information, Airservices notes that the ILS Replacement for Canberra Runway 35 ILS remains on schedule; the ILS will be removed from service as per the previously provided advice during October 2011.

More information is found at [attachment 9.2](#).

Mike Cleaver, GAPAN, asked what the likelihood of completing the replacement within the schedule shown is. Rob Scott, Airservices, advised that he is confident that the personnel doing the installation are experienced to finish the project within the schedule.

**Item Closed**

## 7. Other Business & Late Agenda Items

### 7.1. For RAPAC Info

#### Discussion:

Ian Mallette informed the meeting of ICAO's SATCOM Voice Task Force work to replace HF with Satcom Voice. Satcom Voice is already approved in Europe. The Taskforce's next meeting is on 12-16 September 2011.

Airservices indicated that Satcom Voice would not be suitable.

## 8. Next Meeting

### 8.1. Time and Place

**Date:** 2012 RAPAC schedules will be advised by the end of 2011

**Time:**

**Venue:** CASA Offices, Woden

## 9. Attachments

### 9.1. ADS-B Rollout Presentation

#### Airservices' UAP project

The ADS-B Upper Airspace Project (UAP) has been operationally commissioned and air traffic controllers are authorised to provide 5 NM separation services using ADS-B data from all operational sites. Operational coverage is currently provided across the whole continent from 29 sites ADS-B sites and one WAM system comprising 14 sites.

The full system has now been operational for more than 1 year since the final stage was completed on 19 December 2009.

All ADS-B equipped aircraft that have been accepted into AsA's ADS-B program are now receiving ADS-B based separation service. Most aircraft operating in the upper airspace are now ADS-B equipped. Unequipped aircraft continue to be separated procedurally.

The diagram shows all sites of UAP together with radar coverage. All sites are now operational delivering data suitable for separation in keeping with ICAO SASP performance limits.

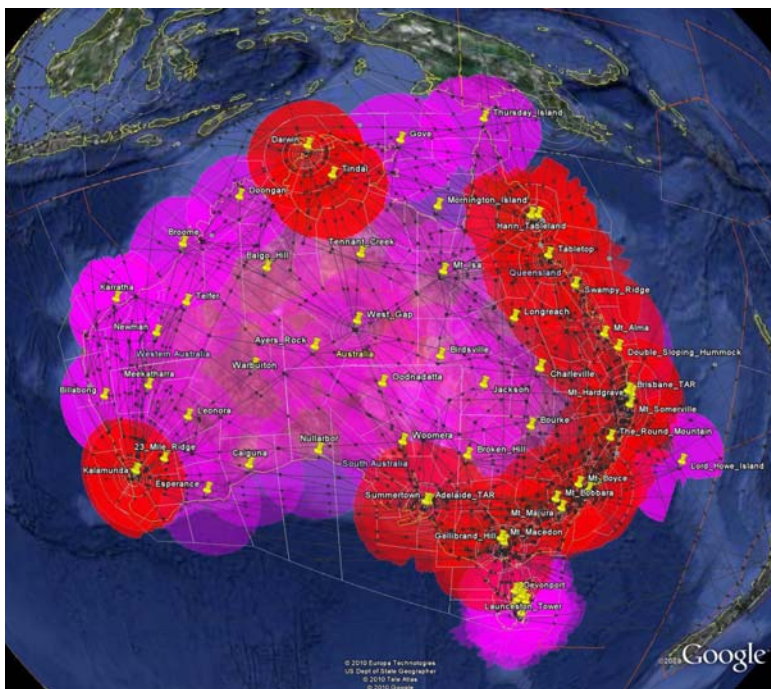


Figure 1 ADS-B predicted coverage at FL300 from 29 ADS-B Ground stations and 14 TAS WAM (Ground stations. Radar coverage in Red)

Airservices is working on a safety case, to abandon the use of the aircraft by aircraft filtering system. Once abandoned, the ATC system will present all ADS-B transmissions (with adequate quality) to ATC. The ATC system will not know whether aircraft are approved or not. As for other avionics, the ATC system will assume that all transmitting aircraft have ADS-B equipment that operates correctly in compliance with the CASA standards.

#### ADS-B Data sharing with Indonesia

On February 1, Airservices Australia ATC commenced using Indonesian ADS-B data operationally for coordination of aircraft hand-overs between the FIRs.

#### CASA Standards for ADS-B

The existing CASA rule for ADS-B equipment carriage is in CAO 20.18. Guidance material including approved GPS/ADS-B equipment configuration listing is in AC 20-45. The CASA standards are completely in accordance with ICAO Asia-Pacific determinations. The CAO mandates the carriage of ADS-B equipment in aircraft operating at/above FL290 from 12 December 2013. That is the only current mandate for Mode S/ADS-B OUT equipment in Australia. Further mandates are possible over the next decade (see below) primarily for application in controlled airspace.

Singapore and Hong Kong CAAs have recently issued similar ADS-B rules applicable to the South China Sea routes that also take effect on 12 December 2013, the same date as the Australian mandate for the upper airspace.

CASA has made recent proposals for further ADS-B fitment over the next decade in Discussion Paper DP 1006AS "Proposed Strategy and Regulatory Plan in Support of the Australian Government's Aviation White Paper – CASA's Plan for Communication, Navigation and Surveillance Equipage in this Decade". Technologies for future ATM included and discussed in the DP were GNSS NAV/PBN/APV; TCAS; Mode S transponders; and ADS-B OUT and ADS-B IN.

A significant number of Industry responses to the DP (particularly from key representative organisations) have been received and are presently being analysed by CASA. CASA is grateful to the industry organisations that took the time and effort to provide responses to the plan for the next decade. A number of proposals have proven to be controversial particularly for the VFR and recreational aviation sectors and it is likely that CASA will issue a further DP on such issues before any decisions are taken on mandatory requirements and timings.

### **TAS WAM**

The Tasmanian Wide Area Multilateration system was approved by CASA and operationally commissioned by Airservices in February 2010. It now provides both SSR and ADS-B coverage to ATC consoles in Melbourne centre. This system includes 14 receivers each of which is ADS-B capable.

### **SYDNEY WAM**

The testing of the Sydney Wide Area Multilateration system was recently completed by Airservices. CASA expects that Airservices will submit a safety case to use the Sydney WAM for 3 NM separation in the Sydney TCU in conjunction with SSR and also for Precision Runway Monitoring.

The system comprises 14 receivers and extensive ADS-B coverage is provided as shown below. ADS-B data will not be used in the Sydney TCU until the associated ATC system is upgraded. ADS-B data will be used in the enroute centres only.

Airservices experience is that WAM systems can be costly and somewhat difficult to deploy when all associated costs and systems are included. Airservices has stated that a lot of engineering study is required before adopting WAM as an alternative to radar. However, for some sites such as mountainous areas, radar may not be technically or cost feasible.

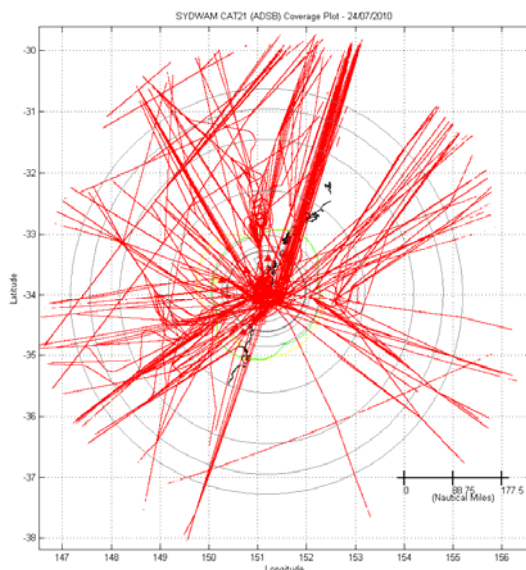


Figure 2: ADS-B data from Sydney WAM. (Outer ring is 200 NM radius)

### **ASMGCS - MELBOURNE, SYDNEY, BRISBANE AND PERTH**

The possibility of the occurrence of aircraft and vehicle runway incursions, particularly in low visibility weather conditions, has become a significant concern among all concerned with safety in the advanced aviation nations. The International Civil Aviation Organization has issued a considerable amount of documentation (termed Advance Surface Movement and Guidance Systems) for the guidance of its member states on this safety risk.

Airservices under its A-SMGCS Program has installed aerodrome surface surveillance equipment at Sydney, Melbourne and Brisbane Airports with Perth also to be equipped this year. The Sydney and Melbourne systems have been commissioned and are used for situational awareness by Tower ATC. Associated Tower ATC procedures

designed to enhance safety by limiting the occurrence of runway and taxiway incursions have been established, using the surveillance facilities. The equipment supporting A-SMGCS is a multi-sensor system that employs a number of compatible technologies for surveillance, these being Primary Surface Movement Radar, Multilateration, and ADS-B. These technologies provide high reliability and accuracy detection of all surface movements – aircraft and vehicles. For inter-operability, the A-SMGCS equipment requires that aircraft and vehicles be fitted with either SSR transponders and/or modern electronic devices that transmit the identity and the GPS derived location, as well as some other information.

CASA will this year issue Part 139 regulatory requirements for ADS-B equipment in surface vehicles operating on manoeuvring areas to support A-SMGCS.

There is presently no intention to extend A-SMGCS beyond the four major airports nominated above.

## 9.2. Canberra RWY 35 ILS

### Instrument Landing System (ILS) Replacement Project 2011 Works Schedule Update

#### Canberra RWY 35 ILS

a) 3<sup>rd</sup> October 2011 to 10<sup>th</sup> October 2011.

During this period it is proposed to remove the CB RWY 35 Glide Path from service. The *LOC RWY 35*, *RNAV<sub>(GNSS)</sub> RWY 35*, and *VOR/DME* IAPs will remain available for use. Works include construction of new Glide Path facility including transmitter, tower and earth mat refurbishment.

b) 10<sup>th</sup> October 2011 to 30<sup>th</sup> November 2011.

During this period it is proposed to remove the complete ILS from service. *RNAV<sub>(GNSS)</sub> RWY 35*, and *VOR/DME* IAPs will remain available for use. Works include the construction of new Localiser antenna array and transmitter equipment. At the end of this period the new ILS will be flight tested and commissioned.

#### **Russell Wiltshire**

Project Manager  
Airservices Australia

## 9.3. Attendance List

Name	Organisation
Mohammed Nabi	BOM
Jeanette Hall	Canberra Airport
Mitch Sloan	Airservices
Rob Scott	Airservices
Teraya Miller	CASA
Oliver Grandjean	CASA
Matthew Smith	ACTHPA
Ian Mallett	CASA
Greg Smith	Majura Training Area (Defence)
Ben Heaton	Military OAR
Binh Huynh	Airservices
Mike Cleaver	GAPAN
Graeme Rogers	CASA OAR
Sheryl Steele – Chair	Military OAR
Merhawi Khelete – Secretariat	CASA OAR

