



International Civil Aviation Organization

**THE NINTH MEETING OF THE SOUTHEAST ASIA AND BAY OF BENGAL
SUB-REGIONAL ADS-B IMPLEMENTATION WORKING GROUP
(SEA/BOB ADS-B WG/9)**

Beijing, China, 30 October - 1 November 2013

Agenda Item 3: Readiness of implementation of UAP in Australia

READINESS FOR ADS-B MANDATE: DECEMBER 2013

(Presented by Airservices Australia)

SUMMARY

This paper provides an update on the readiness of Australia to implement the UAP ADS-B Mandate in December 2013.

1. INTRODUCTION

1.1 Australia has been preparing for the ADS-B FL290 mandate for almost 5 years.

All elements are in place.

ATC System readiness	Australian ATC has been operational using ADS-B since 2004
ADS-B Ground System commissioned	Approved to Part 171 by regulator in 2006
ATC staff readiness	ATC staff trained were trained to use ADS-B and have been using ADS-B from many years. A comprehensive training package has been developed with delivery beginning in the next few weeks focusing on the ADS-B environment post the mandate. From an ATC perspective, the main issue is dealing with exceptions to the mandate including Exemptions issued by the regulator and the non-applicability of the mandate to State Aircraft.
Technical staff readiness	Technical staff trained and certified (TechCert).
Blacklist management	ATC & Technical staff & Procedures are in place to manage blacklist entry/removal

Data recording, tools & procedures for detection & analysis of anomalies in place	Systematic recording and detection of new ADS-B aircraft allows analysis and statistics generation. Has been in place for some years
Aircraft mandate and technical standards established	ADS-B mandate and avionics standards in place since 2009, mandate effective Dec 2013
Avionics fitment (International Airlines)	Well above 90% fitment at/above FL290. A few carriers may be granted exemption for oceanic approach.
Avionics fitment (Domestic Airlines)	Currently 93%. Exemption available for operation in radar and oceanic areas on application by domestic and foreign aircraft operators.
Avionics fitment (Business jets)	Fitment only 30%. Rush of further fitment expected. Exemption available for operation in radar and oceanic areas on application by domestic and foreign aircraft operators.
Avionics fitment (Turbo props)	Fitment only 30%. Expect many will choose to operate below FL290. Exemption available for operation in radar and oceanic areas on application by domestic and foreign aircraft operators
Airline flight planning	Still some mistakes but progress in last year
Entry of Flight ID	Few errors now. Concerted effort during last 2 years has worked.
Avionics installer & Maintenance	<p>Extensive co-ordination with Aircraft Electronics Association to increase knowledge of ADS-B. “FAQ” documents available on a number of websites (ANSP, Regulator, AEA, AOPA). Support and information provided to installers as they learnt about ADS-B.</p> <p>A number of avionics installation agencies and the major airlines have ADS-B installation capability. Highly integrated avionics in modern bizjets remains a problem area (no OEM STC available from several major manufacturers at this time)</p>
Manual of ATC	Has supported ADS-B for some time. Changes to support the mandate have been finalised and will be effective 12 December.
Regulator support	All necessary regulation has been established in Civil Aviation Orders.

<p>Exemption management</p> <ul style="list-style-type: none"> - Military - State aircraft - Ferry flights 	<p>Regulator has ability and process to issue exemptions. The basic principle is that Exemptions will only apply in areas where either there is no ADS-B coverage or ADS-B coverage is coincident with SSR coverage. Exemptions will not apply in areas where there is ADS-B only coverage. This allows for the full benefits of ADS-B to be realized where there is ADS-B only coverage whilst still allowing non-ADS-B equipped aircraft to access to airspace where there is no or other means of surveillance.</p> <p>State (Military) aircraft are not issued with Exemptions – the mandate doesn’t apply to them. There is no special arrangement for ferry flights - they will have to request an Exemption from the regulator like other civil aircraft.</p>
<p>Management of avionics failures</p>	<p>Regulator has established rule to permit aircraft flight for 3 days to return to maintenance base subject to ATC clearance</p>
<p>AIP update</p>	
<p>Industry co-ordination and publicity</p>	<p>Extensive co-ordination with Industry at significant meetings, 1 on 1 meetings, bulletins, advertisements in trade magazines etc</p>
<p>Government co-ordination</p>	<p>Co-ordination between military, Government departments, regulator and ANSP has been comprehensive. It has included regular meetings of the heads of these organisations.</p>

2. RELEASED DOCUMENTS

2.1 A NOTAM and CASA Instrument were released this week and are included in the Appendices.

2.2 An AIP SUP is expected to be released later this week.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate

APPENDIX A : NOTAM

C6742/13

WEF 1312111600

ALL AUSTRALIAN-ADMINISTERED AIRSPACE AT OR ABV FL290 REQUIRES BOTH AUSTRALIAN AND FOREIGN REGISTERED ACFT TO BE EQUIPPED WITH SERVICEABLE ADS-B TRANSMITTING EQUIPMENT.

ACFT NOT ADS-B EQUIPPED MUST FLIGHT PLAN BELOW FL290.

A GENERAL EXEMPTION TO THE MANDATE EXISTS FOR THE AIRSPACE COVERED BY THE SSR SURVEILLANCE "J" CURVE WHICH EXTENDS ALONG THE EAST COAST FROM NORTH OF CAIRNS TO ADELAIDE AND SOUTH FROM MELBOURNE TO HOBART AND OCEANIC CONTROL AREAS.

IN ORDER TO GAIN ACCESS TO THE EXEMPTED AIRSPACE OPERATORS MUST NOTIFY CASA IN WRITING (CASA FORM 208) AT LEAST 14 DAYS BEFORE OPERATING IN THE EXEMPTED AIRSPACE IN ACCORDANCE WITH CASA EX113/13. THIS INSTRUMENT AND CASA FORM 208 ARE AVAILABLE AT:

[HTTP://WWW.CASA.GOV.AU/SCRIPTS/NC.DLL?WCMS:STANDARD::PC=PC_101740](http://www.casa.gov.au/scripts/nc.dll?wcms:standard::pc=pc_101740).

WHEN AN OPERATOR HAS NOTIFIED CASA THEY MAY PLAN AT OR ABOVE FL290 FOR THE PORTION OF THE FLIGHT IN EXEMPTED AIRSPACE.

ACFT THAT HAVE NOT NOTIFIED CASA MAY NOT BE CLEARED AT THEIR FLIGHT PLANNED LEVEL AND MUST PLAN TO CARRY SUFFICIENT FUEL FOR OPERATING BELOW FL290.

FROM 10 290350 TO 01 290100 EST

APPENDIX B : AIP SUP

Not yet released. Expected before 1 November 2013.

APPENDIX C : EXEMPTION INSTRUMENT

This is available at

http://www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD::pc=PC_101740

The exemption instrument includes the following diagram showing where the exemption will NOT be granted in pink.


