VIC RAPAC 2019-3  
Venue: CASA, Level 13, Medibank Building,  
720 Burke Street, Docklands VIC 3008  

Industry only meeting: 1200  
Start Time: 1300  
Finish Time: 1545  

Date: Thursday 14 November 2019  
Meeting Chair Matthew Bouttell  
Convenor Brian Hannan  

MINUTES  

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1. **OPENING**

The Chair opened the meeting and thanked the RAPAC members for attending. All members introduced themselves.

2. **REVIEW OF ACTION ITEMS**

The status of outstanding action items was reviewed with comment included in the attached table.

3. **REGIONAL SAFETY MATTERS**

There were no regional safety matters raised.

4. **CHANGE PROPOSALS**

4.1 **Proposal to relocate the Automatic Weather Station at YMEN**

Ms Liz Heba (BoM) presented the paper which sought comment from the VIC RAPAC on the proposed relocation of the AWS at Essendon. The Convenor advised that while Vic RAPAC had not endorsed the proposal, due to EAPL not keeping the commitment to supply the 300M and 180M safety cases, EAPL had proceeded in early April 2019 to publish the RWS for RWY 08/26 as 180 metres. Vic RAPAC could therefore not now intrude into the EAPL decision and would leave the AWS positioning between EAPL, CASA ANAA, and BoM.

5. **AGENCY BRIEFINGS AND UPDATES**

5.1 **Bureau of Meteorology**

Ms Liz Heba (BoM) gave a presentation to update the members on significant matters relating to the BoM – see attached.

When discussing the new Space Weather products one member sought to understand whether these will now be incorporated into the RAIM prediction product, currently provided by Airservices. The answer to this question was not immediately known however Ms Heba advised she would provide this question to those within the BoM for further clarification.

5.2 **Airservices Australia**

Mr William Hambly-Clark (Airservices) informed the meeting there were no significant updates.

5.3 **Defence**

SQNLDR David Olsen offered his apologies and therefore there was no Defence update.

6. **OTHER BUSINESS**

6.1 **Representation – Adam Bandt MP – Flights over East Melbourne**

The Convenor advised that the Industry meeting had reviewed the possible solutions put forward in the submission by Adam Bandt MP and had discounted consideration of the noise aspects as these are outside the committee Terms of Reference and more properly the province of Airservices and the ANO.

In considering the safety aspects relevant to the RAPAC role the Industry meeting could not determine any safer alternatives to existing Class C steps and aircraft routes particularly as regards
operations to and from Essendon and noted that the existing situation met the rules of the air requirements.

The industry meeting directed the Convenor to refer the matter to CASA executive level for joint action by CASA, Airservices and the Department.

6.2 Mildura Supplementary Airspace Review
Mr Mark Fineran (CASA) presented the previously distributed paper on the Draft Supplementary Airspace Review of Mildura 2019 to seek further comment from members and noted the feedback is sought by the OAR by 24 November. Members canvassed some aspects and were satisfied with the explanations.

6.3 Moorabbin RFI
Convenor advised that a change was proposed to the YMMB TWR unmute settings (squelch) on 2 December following a joint Airservices / RVAC / RAPAC investigation.

6.4 Evolution of RAPAC
Supported by the Convenor, the Chair gave a presentation on a proposal to ‘evolve’ RAPAC into a more virtual environment, recognising that the existing RAPAC format has been in existence for almost 40 years. The industry participants were generally supportive of this proposal during the Industry only meeting and therefore highlighted the key points for those RAPAC members not in attendance at the industry only meeting per the below:

- Effective immediately there would be no formal CASA chaired meetings, agendas, or minutes after this meeting.
- It was noted that RAPAC has already moved a long way toward with OOS papers in recent years to expedite outcomes and making use of email rather than meetings.
- The Chair proposed a name change from RAPAC to ‘State Engagement Team’, in recognition of the change of format and function. It was requested that formerly RAPAC would be retained in the short term as a suffix to the SET.
- Use a website as the point to share that material with members and for industry to use as a consultation mechanism. Members will join the website and it will advise you of new doco as it arrives via email.
- Probably one meeting a year at CASA Melbourne office that CASA will organise for members but be self-run by industry, with CASA and other Government agency attendance on invite basis.
- To ensure the ‘virtual’ environment works and to make any improvements, it was agreed to hold a meeting in 12 months (November 2020).
- It was noted that website is yet to launch however the Chair advised that plans were already in place to develop the tool.

7. ATTENDANCE LIST

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
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<tbody>
<tr>
<td>Matthew Bouttell (Chair)</td>
<td>CASA</td>
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<td>Brian Hannan (Convenor)</td>
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<tr>
<td>William Hambly-Clark</td>
<td>Airservices</td>
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<tr>
<td>Liz Heba</td>
<td>Bureau of Meteorology</td>
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<tr>
<td>Tony van der Spek</td>
<td>AOPA</td>
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<tr>
<td>Name</td>
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<tr>
<td>Andrea Roberts</td>
<td>CAE OAA</td>
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<tr>
<td>Doug Gould</td>
<td>AOPA/Australian Aerobatics Club</td>
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<tr>
<td>Adrianne Fleming</td>
<td>Tristar Aviation/AWPA</td>
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<tr>
<td>Dick Gower</td>
<td>AAAA/RAAus</td>
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<tr>
<td>Kevin Smith</td>
<td>Shortstop Jet Charter/GAMair</td>
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<tr>
<td>Julian Smibert</td>
<td>AFAP</td>
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<tr>
<td>Ben Ippolito</td>
<td>Point Cook Flying Club</td>
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<tr>
<td>Warren Canning</td>
<td>Kyneton Aero Club</td>
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<tr>
<td>Jim Duff</td>
<td>Shortstop</td>
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<tr>
<td>Rob Payne</td>
<td>VTPC</td>
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<tr>
<td>Mark Fineran</td>
<td>CASA</td>
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<tr>
<td>Tim Penney</td>
<td>CASA</td>
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<tr>
<td>Christopher Thorpe</td>
<td>GFA/HCAPA</td>
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<td>Dallas Nichols (Phone)</td>
<td>REX</td>
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**Apologies**

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<tr>
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<tr>
<td>SQNLDR Daniel Olsen</td>
<td>Defence</td>
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<tr>
<td>John Gleeson</td>
<td>Kyneton Aeroclub / SAAA</td>
</tr>
<tr>
<td>Lachlan Tilley</td>
<td>Qantas</td>
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TITLE | Essendon Airport Runway width clarification
---|---
SUBMITTED BY | Bureau of Meteorology – Ashwin Naidu (email: ashwin.naidu@bom.gov.au)
PURPOSE | To request clarification of action register 2017-3/2 as Runway Strip 300m is at limit of current Essendon Fields (EF) proposal to relocate Automatic Weather Station (AWS) at YMEN
KEY ISSUES | • 2017-3/2 states VIC RAPAC not supporting change of Runway width at YMEN from 300m to 180m
• EF and Bureau of Meteorology are in discussions with EF proposal to move AWS at YMEN approximately 420m to South West, at or slightly within limit of 150m to Runway centreline
• AWS infrastructure includes a metal anemometer mast of 10.4m height AGL
• Bureau of Meteorology require AWS to be located outside the OLS and outside ICAO requirements for obstructions
ATTACHMENTS | 086038180110g.jpg Photo of existing AWS, EF Proposed Plan of AWS location

BACKGROUND

Bureau of Meteorology are currently in discussions with EF request to move the Automatic Weather Station (AWS) at Essendon Airport to a location approximately 420m to SW of current location, close to intersection of runways.

• Current EF request to move AWS to location at or within 300m limit of Runway Width,
• Proposal to provide clarity that proposed future AWS location will not be within the Runway Width or OLS,
• prior to lease being signed for agreement on proposed AWS relocation at EF,
• photo of the existing AWS see attachment 1. Current and proposed locations see attachment 2,
• Stakeholders are Essendon Fields, Bureau of Meteorology, CASA, Air Services,
• The current site has been identified as being compromised, resulting in wind observations being non reflective of true conditions with associated safety implications. Airservices Australia raised concerns to BoM in 2017 around the exposure of the Anemometer.

VIC RAPAC members are invited to provide feedback or to seek clarification to Ashwin Naidu: ashwin.naidu@bom.gov.au by 14-Dec-2019.
PROPOSED GROUND FLOOR PLAN - OPTION 1
SCALE: 1:50

Lat: 37.32987
Long: 144.90279

TBRG ref 50m +12 from boll

150m
120m
75m

Taxiway exclusion zone
Runway exclusion zone
Apron exclusion zone

BUILDINGS OVER 10m TALL EXACT DISTANCE CALCULATED
BY FOLLOWING: Building height X 10 = Distance from anemometer.
Key issue:

- A large part of Mr. Bandt’s electorate is in the Melbourne CTR zone. This includes the CBD, but also some residential areas, including East Melbourne.
- Since at least 2013, residents in East Melbourne have experienced significant aircraft noise resulting from a high level of air traffic from small fixed wing aircraft, helicopters and large passenger jets.
- The height and frequency of small aircraft in particular is impacting on the amenity and health of East Melbourne residents. The issue has become severe and urgent. The City of Melbourne, the State MP and the Federal MP all support the residents in seeking a solution to this issue.

Flight frequency:

- Aircraft fly over inner Melbourne throughout the week and at night and the frequency increases on weekends
- The primary concern is with flights doing low-height orbits, including over the MCG, which takes them directly over residents’ houses. Many helicopters also hover.
- East Melbourne Group has reported up to 150 flights from light aircraft and helicopters over the area on some days
  - They have recorded one flight doing 31 circuits with concentrations of up to 27 flights in one hour
- According to the East Melbourne Group, an AirServices letter to the City of Melbourne stated 5,549 helicopter flights were identified over the City of Melbourne from Jan to July 2015, or 26 per day (52 orbits per day average).
- See attached maps demonstrating these flights, to be read in conjunction with this brief
- The Parliamentary Library provided the following advice, based on an analysis of WebTrak
  - For Monday 5 August 2019, it [WebTrak] showed large aircraft and helicopters regularly transiting the edge of East Melbourne on a flight path along the Yarra River parallel to Flinders road. Helicopters were often below 800ft and sometimes below 400ft at a point over the Yarra River near Batman Avenue and Melbourne Park. It also showed small jets at 2000ft, and light aircraft and helicopters at 1400 ft, transiting directly over East Melbourne and along the Yarra beside East Melbourne from a point near Punt Road.
  - On Sunday 4 August 2019, around ten aircraft also flew single or double circuits around the Melbourne Cricket Ground between 950ft and 1500ft.
- The Parliamentary Library has also compiled more comprehensive data from WebTrak over two days in August
  - 22 August
    - 24 flights by small turbo-prop or helicopters
    - 4 flights that circled twice, including one measured at an altitude of 541 feet, and others measured at 994, 912 and 531 feet.
  - 24 August
    - 73 total flights, 3 flights with a recorded altitude below 1000 feet
Hypothesis:

Small aircraft & helicopters

- Residents suspect the main source of flights are:
  - Aircraft departing Essendon (and maybe Moorabbin) being given permission to do orbits of the MCG and/or the city before returning to their point of departure;
  - ‘Traffic report’ aircraft and media aircraft filming at the MCG or nearby;
  - Some smaller tourist operators with whom the City of Melbourne does not have a ‘Fly Neighbourly’ agreement. (The City of Melbourne has a Fly Neighbourly agreement with Microflite, who operate from helipads on the Yarra River, and as far as we are aware Microflite has abided by these agreement. As part of this agreement, their tourist flights fly along the Yarra and avoid residential areas.)

- Some residents suspect that the issues with small-fixed wing aircraft and helicopters partly began following the implementation of recommendations from the Aeronautical Study of Melbourne, conducted by the Office of Airspace Regulation in March 2011.

Page 44 reads:
  - “7.4.1 Access to the Melbourne CTR by VFR aircraft. Access to the Melbourne CTR is quite restricted. Commercial pilot students are required to gain experience in CTA procedures. Students are often not given access to the Melbourne CTA but are instructed to remain outside controlled airspace.

Page 74 reads:
  - Recommendation
    - “Representatives from the flying schools in the Melbourne area should meet with Airservices to discuss options for increasing access to the Melbourne CTA and CTR by student pilots and VFR aircraft.”

- A ‘preferred route’ was never identified, but traffic to the area was perceived to increase. Some residents believe this has resulted in a significant increase in the amount of pilots conducting ‘city orbits’ and generally flying/hovering over East Melbourne.

- However, it is also the view of residents that many of the flights aren’t associated with formal flying schools, but simply a sole pilot in a small aircraft (which they may or may not own) leaving a nearby airport, performing orbits and then returning.

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Large passenger jets

- We believe the issues with noise from large passenger jets began when the ‘merge point’ changed from the Melbourne Convention Centre to Victoria Gardens, which concentrated flight paths over inner Melbourne.

What has been done so far:

- Together with the East Melbourne Group, the following actions have been taken:
  - Meeting with Deputy Prime Minister
  - Meetings with Airservices Australia and Office of Airspace Regulation (the latter of whom advised approaching RAPAC)
  - Meetings with State and Local government
  - Establishment of *Fly Neighbourly Agreement* with the City of Melbourne
  - Written correspondence to and complaints lodged regarding noise with various airport groups, airports, consultation groups, including the Aircraft Noise Ombudsman.
  - Introduction of federal legislation to, amongst other things, expand the consultation requirements of Airservices Australia. A Senate inquiry was conducted into this legislation.

Proposed solutions:

- To cease permission for MCG orbits (other than for essential services) and instead direct traffic around alternative routing points within controlled airspace, such points to be sufficient distance apart so as not to simply replicate the problem elsewhere.
- Alternatively, to specify that a ‘City Orbit’ route or any flights in East Melbourne and surrounding suburbs maintain a height of at least 2000 feet (where safe to do so) and enter/exit 1-2 km away from the MCG.
- To produce a similar route for the ‘City Orbit’ in the Melbourne CTR zone to that found on pages 5 & 6 of the Canberra ERSA, which designates specific routes for scenic flights in Canberra (City Flight 1 & City Flight 2), based on the above.
- In addition to the above, outside of controlled airspace, the marking of a preferred route along the Yarra for any small aircraft flying for non-essential reasons through, near or around the city.
- To restrict/limit access to the CTR for VFR flights.
- With respect to larger jets, the inclusion of East Melbourne residents in a review of the merge points for approach to Melbourne Airport.
Context and purpose
The Civil Aviation Safety Authority (CASA) Office of Airspace Regulation (OAR) has conducted a Supplementary Airspace Review of the airspace within 20 nautical miles of Mildura Airport, Victoria.

The draft copy of the review is available on the CASA website: https://www.casa.gov.au/airspace/airspace-regulation

Points made in the review include:
- The flying training academy at Mildura has commenced operations.
- Information regarding the operations at the flying training academy has changed since the previous review.
- Mildura Airport has been provided funding for the installation of an ILS.
- Wentworth Airport has been provided funding to seal at least one runway and one taxiway.
- Incidents involving RPT aircraft and other aircraft operating in the circuit at Mildura has been recorded.
- There is an expectation that total aircraft movements will increase with flying training at Mildura.
- Frequency congestion on the Mildura CTAF has been experienced by RPT aircraft.
- There is no change to the airspace classification.
- Recommendations have been made to enhance the service within the review area.

Victorian, South Australian and New South Wales RAPAC members are invited to review the draft document and provide feedback to the OAR by Sunday 24 November 2019. CASA will consider feedback received to be public information and will attribute feedback, however requests to remain anonymous will be considered.

Feedback should be sent to oar@casa.gov.au and/or mark.fineran@casa.gov.au. It is requested that the subject line include “Supplementary Review of Mildura – (stakeholder name)”. 
Topics

• Aviation Space Weather Advisory Service
• Aviation Meteorological Services Transformation Update
• TAF Review
• Trend (TTF) Review
• Use of PCA locations in SIGMETs
• Change in AWIS phone numbers - feedback
Space Weather Impacts on Aviation

- Affects communication system (HF and SAT COM)
- Affects satellite-based Navigation system (GNSS)
- Radiation impacts
Global Space Weather Service for Aviation

Aviation User Requirements
Concept of Operations for Space Weather
Draft Standards and Recommended Practices (SARPs)
Draft updated ICAO documentation (Annexes)
ICAO Space Weather Advisory Centre (SWXC) operational requirements
ICAO SWXC nominations / audits
SWXC selection
Global Service Model


Operational service 07 Nov 2019
Global Space Weather Service for Aviation

ICAO

US Space Weather Prediction Center (SWPC)

European PECASUS

Australia, Canada, France and Japan (ACFJ)
From 7 Nov 2019, the global centres commenced Space Weather Advisories service based on ICAO requirements for three distinct categories:

• HF radio communications advisories (HF COM)
• GNSS navigation and surveillance advisories (GNSS)
• Advisories for elevated radiation dose rates (RADIATION)

The fourth category - Satellite communications advisories (SATCOM) will not be issued by any space weather centres as further work is required to establish operationally relevant advisory thresholds for aviation SATCOM.
User Education and Publications

Bureau of Meteorology
Publications
Information Brochures -

• Space Weather Hazard
• Space Weather Advisories

AIP (update Nov 2019)

Aeronautical Information Circular (AIC) – H57/19
https://www.airservicesaustralia.com/aip/current/sup/a19-h57.pdf
Transformation of Aviation Meteorological Services
Case for Change

Current operations
- Forecasters are generalists
- Forecasting delivered from 11 different offices

Key issues:
- Service improvements are difficult/slow to implement
- Workload managed within offices
- Experienced forecasters specialise, but there is no aviation option.

Future service demands
- Industry trends
  - Growth in air movements
  - Global operations and sourcing
  - Multinational weather corporations
- Future services
  - Digital and graphical met information, in cockpit
  - Air Traffic Flow Management, OneSky
  - Regional Hazardous Weather Advisory Centres (VAAC, TCAC)
<table>
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<th>Quality</th>
<th>• Dedicated aviation specialists with a deep understanding of the industry</th>
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<tr>
<td>Responsive</td>
<td>• Service improvements faster due to consolidation of people and ICT</td>
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<tr>
<td>Resilient</td>
<td>• Two aviation centres underpin continuity; structured training and smart technologies to strengthen and deepen local aviation knowledge</td>
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<tr>
<td>Flexible</td>
<td>• Operations that efficiently scale to tactical loads and accommodate service expansion, including new and expanded services</td>
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Technology Uplift

- Operating environment:
  - simpler, swifter, robust

- Improved Tools
  - Flexible workload
  - Intelligent alerts
  - Situational awareness

- Training / Learning
  - Knowledge-base
  - Immersive simulator
Timeline

- Jul 19: Brisbane Aviation Forecasting Centre operational
- Aug 19: Brisbane systems installed
- Nov 19: Melbourne systems installed
- May 20: Melbourne Aviation Forecasting Centre operational
- Jun 20: Program close & handover

完成了 | 未完成
More information:

Aviation Weather Services

Contact us on:
Aviation_Transformation@bom.gov.au
TAF Review

Purpose:
- Determine the current and future needs of the aviation industry.
- Make recommendations relating to the provision and categorisations of TAFs.
- Quality management.

TAF Review Executive Committee and Technical Working Group, consisting of members from Bureau, Airservices, CASA and Department of infrastructure to met in June and July.


Following a comprehensive review of the Trend Forecast (TTF) service and thorough consultation with industry, it was recommended the TTF be replaced by a three-hourly aerodrome forecast known as a TAF3.

A TAF3 Implementation working group (TIWG) was established on 30 April 2019 consisting of a broad representation from industry and government agencies.

The proposed implementation date for the TAF3 service is 21 May 2020 (date pending industry consultation and feedback through CASA's Summary of Proposed Change process).

Further information, including a detailed trend review report and FAQs can be found on the Bureau’s Aviation webpage - http://www.bom.gov.au/aviation/trend-review
Use of PCA locations in SIGMETs

- Australian SIGMETs currently include PCA locations and/or geographical coordinates for describing the location of phenomena.

- ICAO Annex 3 only allows the use of geographical coordinates to describe the locations of phenomena.

- Examples

**Mix of coordinates and PCA locations**

YMMM SIGMET P01 VALID 032330/040200 YPRM -
YMMM MELBOURNE FIR SEV TURB FCST WI CAJE - YMLF -
BRRR - S2930 E13930 - S3030 E13800 - S3530 E13800
SFC/5000FT STNR WKN
RMK: ME NEW=
The Bureau issues graphical representations of their text SIGMETs for situation awareness.

Currently, Australia has registered a difference to Annex 3 with respect to this.

However, use of PCAs is posing more significant issues as we are moving towards machine to machine ingestion of Operational Meteorological (OPMET) Information (XML format).

Exchange of OPMET data in XML format will become an ICAO standard from 2020.

To comply with ICAO requirements, the Bureau is planning to use geographical coordinates in all Australian SIGMETs, likely from Feb 2020 (AIRAC date).
AWIS Number Changes

• The AWIS phone numbers changed from 15 August 2019.

• These new numbers are available in all Airservices documentation including the ERSA and at http://www.bom.gov.au/aviation/location-info/

• Feedback or comments??
Questions and comments

Ashwin Naidu

Email: Ashwin.naidu@bom.gov.au
Tel: 0434076585