

Investigation into complaints about flight paths over East Melbourne

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Table of Contents

1	Executive Summary	2
2	The complaints	4
3	Melbourne Airport	5
4	Helicopter sightseeing flights	11
5	Analysis and conclusions	12
6	Findings and recommendations	14

1 Executive Summary

The complaints

The complainants are community groups from inner Melbourne who complain about both noise from aircraft landing at Melbourne Airport and helicopter sightseeing flights.

Melbourne Airport

Background

Australia consents to an international aviation convention and, further to its recommendations, has been introducing 'Smart Tracking', satellite/GPS systems providing more accurate positioning of aircraft on approach to landing at airports. The system makes landing safer by lengthening the approach to the runway. Its effect on aircraft noise is to concentrate the noise over a narrower path and at greater distances from the airport than previous systems. As more aircraft become equipped with the relevant technology, the flight numbers within these narrower paths also increases. Smart Tracking was introduced for Melbourne Airport in February 2013.

Environmental Impact

Airservices' Environment Branch carried out an exhaustive Environmental Impact Assessment on the effect of introducing Smart Tracking at Melbourne Airport, completed in August 2012. It found that the potential noise from the flight path over the areas occupied by the complainants would have a 'significant' impact on the environment and should be referred to the Minister for the Environment as required by section 160 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

This assessment was rejected by the responsible Airservices managers who determined that the impact would not be "significant". The evidence that the impact would be significant is compelling and the evidence for rejecting the environmental assessment is unconvincing.

When the actual data of flights from the implementation of smart tracking to date is taken into account, there is no doubt that there has been a significant environmental impact on inner Melbourne.

Consultation

Although it was reasonably foreseeable that the impact of Smart Tracking, and subsequent refinements, would most heavily impact areas not represented on the Airport's Community Aviation Consultation Group (CACG), the CACG was the primary vehicle used by Airservices for community engagement about the changes.

Airservices 'messaging' to the CACG meetings was to emphasise the safety benefits while minimising the environmental impact.

Helicopter sightseeing flights

These helicopter sightseeing flights are minimally controlled. The Aircraft Noise Ombudsman (ANO) and Airservices Community Relations have tried in the past to assist the complainants reach agreement with Essendon Airport and relevant operators to 'fly friendly' but these attempts have not resolved the complaints.

The CACGs provide a forum for communities to engage with airports and potentially operators. The complainants' application to join the Essendon CACG was rejected on the basis that they lived too far from the airport. Recommendations are made relating to the membership of the CACGs.

Findings

The introduction of new Melbourne Airport flight paths in 2012/13 had a cumulative and significant impact on the environment for those areas under the approach to Runway 34. In my view, based on the available evidence, the proposal should have been referred to the Minister for the Environment under section 160 of the EPBC Act.

Airservices failed to engage or consult with the communities it knew, or should have known, were likely to be affected by the change to flight paths.

Recommendations

This report makes the following recommendations:

Recommendation 1:	Airservices continue its efforts to engage with the complainants to resolve their complaints including careful consideration of the alternate flight path suggested by them.
Recommendation 2:	Airservices provide a copy of this report to Essendon Airport and invite it to review the community membership of its Community Aviation Consultation Group and consider the adequacy of the representation of communities affected by aircraft noise.
Recommendation 3:	As part of its regular attendance at other airports' CACG meetings, or equivalents, Airservices should present the findings of this report and invite the CACGs to review the adequacy of their representation of their community

adequacy of their representation of their community membership given that the aircraft noise from "smart tracking" flight paths and sightseeing operations affects areas at considerable distances from airports.

2 The complaints

- 2.1 Residents of East Melbourne, the East Melbourne Group (EMG) and the Coalition of Residents and Business Associations (CoRBA) (together the complainants) complained to the Aircraft Noise Ombudsman (ANO) about aircraft noise from heavy commercial traffic to Melbourne Airport and questioned whether Airservices Australia (Airservices) was compliant with its policies regarding consultation with affected communities.
- 2.2 The EMG also complained about noise from general aviation (GA) being helicopters and light aircraft operating predominantly out of Essendon Airport, overflying East Melbourne on sightseeing flights.

3 Melbourne Airport

Background

- 3.1 Australia is party to the Convention on International Civil Aviation and a member of the International Civil Aviation Organisation (ICAO). The ICAO recommends standards and practices to improve aviation safety including the use of satellite based aircraft navigation procedures. With respect to landing and take-offs at airports, the satellite based procedures require aircraft equipped with Global Positioning System (GPS) location technology to lock onto standard approach and departure paths at greater distances from the airport runway than the older methods of visual approaches or land based instrument guided systems. It can reduce overall noise impacts compared to an equivalent flight not undertaking 'smart tracking', as the aircraft maintains a continuous descent, engines are generally kept in idle and landing gear does not need to be lowered until closer to the airport. However these benefits would only be perceptible to those communities experiencing equivalent flights from aircraft not using 'smart tracking'.
- 3.2 The introduction of 'smart tracking' concentrates air traffic into longer, narrower corridors meaning aircraft noise is less dispersed around the airport generally and more concentrated over the areas under the satellite guided flight paths. Although there are a number of terms used to describe the satellite guidance systems, the term generally used in planning for their introduction at Melbourne Airport was Required Navigation Performance Authorisation Required (RNP AR).
- 3.3 For reasons that are not relevant here, RNP AR became redundant in 2017, with the major airlines landing in Melbourne using RNAV (aRea NAVigation) which is also a satellite/GPS system. Both the RNP AR and RNAV systems concentrate aircraft into narrower flight paths at greater distances from the airport and there is little difference as far as the noise experienced in East Melbourne is concerned. The term 'Smart Tracking' is also used to describe the satellite/GPS systems.

Introduction of RNP AR at Melbourne Airport (2012-2013)

Environmental Assessment

3.4 Section 160 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), requires Airservices to obtain and consider the advice of the Commonwealth Minister for the Environment before implementing changes to airspace management that are likely to have a significant impact on the environment. Part of the planning for the introduction of RNP AR at Melbourne Airport included the compilation of an Environmental Assessment report, completed by its author in April 2012 and signed off by the Manager Environmental Services on 10 August 2012. At over 400 pages, it is a comprehensive document assessing the environmental impact of introducing the RNP AR procedures to all Melbourne Airport and based its assessment on projected levels of traffic, provided by Airservices, up to the year 2020.

3.5 At page 3 of the Executive Summary, the report said:

Due to the potential for more populations to be exposed to more noise level events above 60dB(A) [a measure of the relative loudness of sounds in the air] during an average night time period and 70dB(A) during an average 24 hour period...it is possible that the proposed Melbourne Airport RNP procedures, with all 9 proposed procedures considered together are likely to have a significant environmental impact according to the Environment Protection and Biodiversity Conservation Act 1999.

3.6 The flight path approach that affects the complainants is to Runway 34, the southern part of the north/south runway at Melbourne Airport. At page 10 of the Environmental Assessment report's Executive Summary, it concluded:

The Runway 34 proposed RNP approached [*sic*] procedures are likely to have a significant impact and therefore should be referred to the commonwealth environment minister for determination under section 160 of the Environment Protection Biodiversity Conservation Act 1999.

Community Engagement

- 3.7 In preparation for the introduction of RNP AR, Airservices prepared a Community Engagement Plan – Smart Tracking at Melbourne Airport (the CEP) dated as 'effective 19 November 2012'. It broadly praises the introduction of the RNP AR noting it will make 'air travel safer, cleaner and more dependable, while potentially minimising noise impacts for communities close to airports'.
- 3.8 Although the author's environmental qualifications are unclear, the document includes a brief section on 'potential environmental impacts' saying noise will be 'mostly at levels unlikely to be noticed by the community. Any changes will be gradual as the volume of air traffic grows and the use of Smart Tracking increases'. The CEP has no reference to the Environmental Assessment of RNP AR procedures at Melbourne Airport prepared by Environmental Services.
- 3.9 Despite predicting that the 'number of flights is forecast to grow by up to 24% by 2020', the CEP's 'Messaging Strategy' was to 'focus...on how Smart Tracking can assist the Melbourne community to safely, efficiently and fairly manage plane flights'. With respect to noise, the messaging was to be 'we are not changing what happens today'; and 'while there is no guarantee no-one will be worse off from a noise perspective...in most cases any change in noise level...will go unnoticed completely.'
- 3.10 The CEP noted that Community Relations would present to the Melbourne Airport Community Aviation Consultation Group (CACG) with 'proposed engagement activities' and feedback from the CACG to 'be considered and reflected in the ensuing engagement'. It planned to address the Noise Abatement Committee ('NAC') a sub-committee of the CACG, on 19th November 2012, attend the CACG meeting on the 20th and a public forum organised by the Airport, also on the 20th.
- 3.11 Inconsistent with its earlier text on engagement activities, the CEP concluded: 'The Public Forum is a part of the CACG's activities and will be attended by the CACG Members; therefore the CACG remains the starting and finishing point of the engagement process.' While the NAC and CACG were briefed on the change, a separate Public Forum did not occur.

3.12 The meeting of the NAC was uneventful and its update report to the CACG did not mention the introduction of RNP AR. Community Relations briefed both meetings, which were also attended by the Airservices senior manager having carriage of the RNP AR project ("the project manager").

The 'Go/No Go' memo

- 3.13 On 7 December 2012, a memorandum was finalised by the project manager recommending implementation of the RNP AR for Melbourne and Canberra Airports to the manager responsible for approving the proposal. It noted that environmental impact was 'critical issue 1' and attached and addressed the Environmental Assessment report, which had concluded that there would be a significant environmental impact and that the proposal should therefore be referred to the Minister for the Environment.
- 3.14 The memo said the Environmental Assessment was:

..deliberately conservative and compared the potential end state of RNP AR uptake (85% of jet operations from 2020) with current procedures. The assessment also considered the growth in aircraft traffic forecast for Melbourne ... over the next ten years.

3.15 It continued:

While the technical assessment concluded that in the worst case scenario the [*sic*] some changes may be perceptible it does not demonstrate that the changes are likely to have a significant impact on the quality of life of the community rather it points to areas for community consultation.

3.16 On community consultation, it reported:

Representatives of potentially impacted communities were consulted and the primary vehicle for consultation has been the Melbourne and Canberra airport Community Aviation Consultation Groups.

3.17 The memo concluded:

The requirements of the EPBC Act have been appropriately considered and the outcome of the 'self assessment' is that the implementation of permanent RNP AR approach procedures at Melbourne and Canberra is not likely to be potentially significant.

3.18 On 7 December 2012, the Manager Environmental Services signed off as to the 'Technical accuracy of the work within Environment Assessment' and the Acting Executive General Manager, Environment signed off endorsing 'Compliance with EMS and EPBC determination'. On the same day, the approving manager signed off approving implementation.

Relevant policies, procedures, protocols

3.19 Airservices had in place at the time a public Community and Consultation Protocol, 2011. It broadly sets out the process for implementing changes to flight paths, relevant obligations under the EPBC Act and commitment to 'appropriate' community consultation. The nature and extent of consultation is flexible depending on the nature of the change. 3.20 Airservices also had in place at the time a document titled Environmental Impact Assessment Process for Changes to Aircraft Operations (effective 29 November 2012 – AA – NOS- Env.2.0). Under "Principles" on page 4, it notes:

Any proposal that results in an EPBC assessment finding of '**potential significant impact**', shall be referred, by the Executive General Manager Environment, to the Commonwealth environment portfolio Minister (the Environment Minister) for advice, (unless the Proponent decides not to proceed with the proposal).

3.20 As noted above, the Acting Executive General Manager, Environment signed off on the "Go/No go" memo as being in "compliance with…[the] EPBC determination". As this position was responsible to make the referral to the Minister in the event of a significant impact, it presumably accepted the position put in the memo that there was no potentially significant impact.

Re-alignment of Runway 34 approach (2014)

- 3.21 Melbourne Air Traffic Control (ATC) requested a change to the Runway 34 approach to improve safety. The change took four existing approach paths that were operating in addition to the RNP AR flight path and concentrated them onto that path, at a greater distance from the runway.
- 3.22 On 20 November 2013, a member of Airservices Community Relations emailed its Environmental Specialist advising that the proposed change:

...was presented at last night's Melbourne CACG meeting and no concerns were raised. As far as we are concerned, therefore, there is no need for further community engagement.

- 3.23 An Environmental Assessment was prepared, effective 24 February 2014. It said, at page 9, that: 'This realignment will concentrate traffic particularly for the Richmond and Balwyn areas'. The suburb of Richmond is adjacent and to the east of East Melbourne. It also noted, at page 11, that, on 2013 figures, the change would divert 1044 jets annually from the old paths onto the RNP AR path, 'an increase of approximately 3 jet movements per day'. The calculation of the daily traffic increase appears to have been 1044 jets divided by 365 days (2.86) which did not account for monthly variations in flight numbers.
- 3.24 The assessment noted that the average altitude flown over the waypoint concentrating the flights was 3600 feet and that noise levels caused by jets were above 60dB(A) at 4,000 feet. Consequently, it recommended that jets not fly below 4,000 feet at the waypoint. Among the Environmental Assessment's findings was:

No new areas will be exposed to aircraft noise. However, there will be a concentration of noise in some areas. Discussions with Community Relations indicate that community consultation sessions have already been completed (November 2012) in relation to the RNP project and no concerns were raised regarding the change. Community Relations have determined that no further consultation is necessary.

Further concentration (2015)

3.25 Airservices advised that a further change was suggested by ATC in late 2015 on safety grounds. It involved removal of use of visual landing approaches to Runway 34 when operating with the RNP AR approach to ensure greater separation of aircraft. The change was implemented in December 2015. As the procedure removed was only in operation for 90 minutes a day to a maximum of 50 arrivals, Airservices did not undertake an Environmental Assessment but would provide information to the Melbourne CACG. It noted in its response to the ANO that 'the removal of visual approaches increased the traffic to the Runway 34 instrument approach procedure.'

Introduction of GLS (2018)

3.26 The GLS is a ground based navigation augmentation system providing a more precise, and therefore safer, path on the final approach to the runway. Its introduction for Runway 34 meant large aircraft approached at slightly lower altitudes than previously with consequent lowering of the controlled airspace to separate smaller aircraft operating outside of controlled airspace, from the now lower approach path. The lowering of the flight path affected suburbs more immediately to the south of the airport, and appears to have had little impact on East Melbourne.

Air Traffic over East Melbourne 2012/13 to 2019/20

3.27 Airservices provided data on the numbers of flights approaching to land on Runway 34 over East Melbourne from February 2012 to February 2013 inclusive, a total of 831. The same data was requested for February 2019 to February 2020 inclusive and showed a total of 5,427. The monthly figures are set out in the tables below and show a 653% increase in overflights experienced by the East Melbourne region, over a period of seven years.

Table 1 – Aircraf	t approaching via	a East Melbourne to	o land on Ri	unway 34,	Melbourne Airport.
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Number of arrivals – Runway 34 (Feb 2012-Feb 2013)				
Date	Aircraft			
Feb-12	52			
Mar-12	85			
Apr-12	35			
May-12	44			
Jun-12	78			
Jul-12	247			
Aug-12	71			
Sep-12	75			
Oct-12	32			
Nov-12	43			
Dec-12	33			
Jan-13	10			
Feb-13	26			
Total	831			

Number of arrivals – Runway 34 (Feb 2019-Feb 2020)				
Date	Aircraft			
Feb-19	183			
Mar-19	247			
Apr-19	430			
May-19	594			
Jun-19	659			
Jul-19	822			
Aug-19	698			
Sep-19	392			
Oct-19	241			
Nov-19	377			
Dec-19	258			
Jan-20	396			
Feb-20	130			
Total	5,427			

4 Helicopter sightseeing flights

- 4.1 Distinct from large commercial aircraft operations, small aircraft including helicopters are referred to as general aviation (GA). Together with the noise from large aircraft, the complainants have been complaining for a long time about the noise caused by helicopters conducting traffic spotting and sightseeing flights. East Melbourne is close to the state Parliament House, Federation Square and the parkland area including the Melbourne Cricket Ground (MCG). Data provided by Airservices in response to previous East Melbourne complaints showed 5,558 helicopter tracks over East Melbourne from 1 January to 30 June 2015.
- 4.2 East Melbourne is located largely within the controlled airspace of Melbourne Airport although parts of the GA sightseeing operations, such as the MCG, are located just outside controlled airspace. The complainants ask why Airservices does not exercise some control over the sightseeing flights over East Melbourne. 'Controlled airspace' means that aircraft operating within that airspace are subject to the direction of ATC. The extent of ATC control of GA in controlled airspace is to ensure safety of all aircraft using the airspace, with priority given to commercial passenger aircraft, whilst maintaining an efficient and orderly flow of air traffic. ATC does not exercise control to the extent of prescribing flight paths for GA in controlled airspace. Aircraft do not require a clearance from ATC to operate in uncontrolled airspace, but must adhere to the regulations stipulated by the Civil Aviation Safety Authority (CASA), which includes the requirement to not fly over built up areas below 1,000 feet
- 4.3 Airservices Community Relations and the ANO explored the issue of sightseeing flights from 2013 2015. In the absence of any regulatory power, the work concentrated on attempting to reach voluntary agreements with the sightseeing operators to 'Fly Friendly', a program which Airservices promotes in response to noise complaints related to GA. No agreements were reached and further complaints by the East Melbourne complainants to Airservices resulted in advice to take the issue up with the Essendon Airport CACG.
- 4.4 On 17 May 2017 the EMG wrote to the Essendon Airport CACG, from which most of the helicopter traffic came, and received a response rejecting its application for representation on the CACG. The airport said that the CACG had:

..determined that membership on behalf of East Melbourne residents is not appropriate due to the distance of the suburb from the airport and because aircraft flying over the area do not exclusively originate from Essendon Airport.

5 Analysis and conclusions

- 5.1 The introduction of satellite navigation approach procedures at Melbourne Airport in 2013 began a process of concentrating air traffic that had previously taken diverse landing flight paths. Airservices Environment section completed what appears to be a very thorough and credible environmental assessment that concluded there would be a significant noise impact on the environment and that the proposal should be referred to the Minister for the Environment as required by section 160 of the EPBC Act.
- 5.2 The Environmental Assessment was rejected on the basis that it overestimated, at 85%, the number of future aircraft that would be equipped with the relevant technology and able to use the more concentrated flight paths. According to Environmental Assessment report, its estimate was based on data provided by Airservices and there appears to have been no documented examination of the decision to reject it, aside from the "go/no go" memo. At the time of writing this report, Airservices advised that there has been 100% adoption by the Qantas fleet and close to 100% by the Virgin fleet of the technology required to use the smart tracking flight paths.
- 5.3 Airservices policy, Environmental Impact Assessment Process for Changes to Aircraft Operations, vested the decision regarding referral of a potentially significant impact on the environment under the EPBC Act in the Executive General Manager, Environment. The endorsement of the position in the "Go/No Go memo" that there was no potentially significant impact by the manager acting in that position indicates their agreement. Consequently there was no breach of the policy.
- 5.4 The actual increase in flight numbers using Runway 34 and passing over East Melbourne from 2012/13 to 2019/20 confirms that the impact has been significant and validates the finding of the Environmental Assessment.
- 5.5 Airservices did not consult with the communities most likely to be affected but presented its proposals to the CACG, emphasising the benefits and minimising the impacts. The relevant documentation indicates that Airservices was aware that it was not consulting with the affected communities and made no effort to do so.
- 5.6 With its complaint processes exhausted, Airservices referred the complainants back to the airport CACGs, potentially a forum where they might have some prospect of engaging with the airport to address their problems. Essendon rejected their membership request because they were not close enough to the airport. They also applied to Melbourne Airport in January 2020 and, in October 2020, they were advised that a member of the EMG would be appointed to its CACG on a temporary basis, subject to a full application process being conducted. A search of the airports' websites showed community members for both Essendon and Melbourne CACGs came from areas close to the airport.

5.7 The Department of Infrastructure, Transport, Regional Development and Communications (DITRDC) has published guidelines for CACGs. Federally leased airports, including Melbourne and Essendon, must maintain CACGs. Other airports may elect to have CACGs or some equivalent. The DITRDC guidelines for CACGs on community representation say that CACG membership 'should include persons who can contribute views representative of...residents affected by airport developments and operations'.

6 Findings and recommendations

Findings

- 6.1 The introduction of new Melbourne Airport flight paths in 2012/13 had a foreseeable, significant impact on the environment for those areas under the approach to Runway 34. In my view, the proposal should have been referred to the Minister for the Environment under section 160 of the EPBC Act.
- 6.2 Airservices failed to engage or consult with the communities it knew would be affected by the change.
- 6.3 The impacts of further changes in those areas under the approach to Runway 34 resulted in further cumulative impacts. Noise from sightseeing flights also impacted the complainants who were effectively excluded from representation on the relevant airport consultative committees because they resided at some distance from the airports.

Recommendations

- 6.4 The principal conduct giving rise to the complaints occurred between 2012 and 2018. In previous reports¹, the ANO has made recommendations to improve Airservices' community engagement and other procedures when proposing changes to flight paths. All these recommendations have been accepted by the Airservices Board and have been implemented or are in the process of implementation. This matter does not require further recommendations regarding Airservices' systems and procedures for community engagement.
- 6.5 The complainants have suggested an alternate flight path. This was rejected by Airservices in a letter in response to a complaint on 11 July 2016 on the basis that it 'would impact significantly on newly overflown residents'. The option of varying flight paths from time to time, which Smart Tracking can do, was also rejected as it would increase complexity and add to the risks for safety.
- 6.6 Pursuant to Clause 57 of the ANO Charter, the ANO provided Airservices with its assessment of the complaints in this matter in October 2020. Since then, Airservices has been engaging with the complainants and attempting to resolve their complaints. This engagement has included considering further options to change the existing flight paths, which is an ongoing discussion. Although these efforts have been appreciated by the complainants, they have not resolved the matter.
- **Recommendation 1:** I recommend Airservices continue its efforts to engage with the complainants to resolve their complaints including careful consideration of the alternate flight path suggested by them.

¹ Aircraft Noise Ombudsman, *Investigation into complaints about the introduction of new flight paths in Hobart -April 2018*, 27 April 2018; Aircraft Noise Ombudsman, *Review of Airservices Australia's systems for community engagement - Final Report (April 2020)*, 30 June 2020.

- 6.7 It appears from the constitution of the CACGs at Melbourne and Essendon airports that community representatives have in the past been drawn from areas close to or adjacent to the airports. The guidelines for CACG membership refer to communities affected by airport operations and with the implementation of Smart Tracking, those communities most affected will be at greater distances from airports than in the past. Sightseeing routes can also have noise impacts at considerable distances from airports.
- **Recommendation 2:** Airservices provide a copy of this report to Essendon Airport and invite it to review the community membership of its Community Aviation Consultation Group and consider the adequacy of the representation of communities affected by aircraft noise.
- **Recommendation 3:** As part of its regular attendance at other airports' CACG meetings, or equivalents, Airservices should present the findings of this report and invite the CACGs to review the adequacy of their representation of their community membership given that the aircraft noise from "smart tracking" flight paths and sightseeing operations affects areas at considerable distances from airports.