



Contact: Deanne Frankel

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Development
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Attention: [REDACTED]

Dear [REDACTED]

Review of the Air Navigation (Aircraft Noise) Regulations 2018 – Remotely Piloted Aircraft and Specialised Aircraft

Thank you for the opportunity to input into the review of the Air Navigation (Aircraft Noise) Regulations 2018 for remotely piloted aircraft (RPA) and specialised aircraft. The Department of Planning, Industry and Environment (the Department) encourages the review to develop further guidance to ensure that any future use of these types of aircraft will not adversely impact the number of people or dwellings affected by noise and other associated issues.

It is acknowledged that RPAs, including drones and Urban Mobility Aircraft (UAM), are an emerging and innovative technology that are increasingly being used around the world. Drones in particular have a diversity of applications and are predicted to become a larger part of the urban environment with commercial and residential product delivery.

The Department has undertaken a review of the circulated papers and comments are provided in Attachment A.

If you have any questions or would like to discuss these comments in further detail, please call Deanne Frankel on [REDACTED]

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'DMcN', with a flourish at the end.

27/11/2019

David McNamara
Director, Aerotropolis

NSW Department of Planning, Industry and Environment Comments

Review of the Air Navigation (Aircraft Noise) Regulations 2018 – Remotely Piloted Aircraft and Specialised Aircraft

Remotely Piloted Aircraft

1. Use of the ANEF System in Noise Regulations for Remotely Piloted Aircraft (RPAs).

The Department believes that the proposed use of the Australian Noise Exposure Forecast (ANEF) system to assist in the management of aircraft noise from drones may not provide an accurate representation of noise impact on residents. *Australian Standard 2021:2015- Acoustics – Aircraft Noise Intrusion – Building Siting and Construction* is a land-use planning document for identifying noise impacts in the vicinity of an airport. The Integrated Noise Model (INM), which is used to produce ANEF maps, requires the identification of flight routes (in association with other data such as the types of planes, number of flights etc). As there has been no mention of RPA operations following determined flight routes, use of the ANEF system to manage noise associated with flight operations of RPAs would not be appropriate.

The ANEF system could potentially be used to identify suitable areas for the 'base of operations' to be located, however it is noted that the review is only addressing air navigations, not base of operations.

The Department would also like to raise concerns in relation to the use of N contours in the development for any noise guidelines relating to aircraft. This alternative aircraft noise metrics was proposed in the National Airports Safeguarding Framework – Measures for Managing Impacts of Aircraft Noise. The Department has previously expressed concerns with this use of this noise metrics in land use planning and continues to recommend the use of the ANEF system for land use planning in the vicinity of airports.

2. State/Territory/Local Government Legislation and Regulations

The paper notes *the proximity of drone operations to the community in built up areas and residential areas raises the question of whether state/territories or local government are better placed than the Commonwealth government to regulate drone in terms of their suburban noise intrusions*. Monitoring/regulation of noise, in particular that associated with RPA use, would require specialist equipment to determine exceedance of permitted noise levels. The Department is concerned that if local government is tasked with monitoring compliance of RPA operations, this could potential place an additional burden on Councils to purchase monitoring equipment and undertake staff training etc.

It should be the requirement of the proponent to demonstrate compliance with any regulations/controls on RPA operations, (i.e. noise limits, total number of flights per day, duration of flights, how many flights per hour and timing of flights) rather than require State or Local compliance officers to demonstrate non-compliance.

A requirement for RPAs to display markings enabling easy identification for non-compliance action if required, should also be included in any regulations on RPA use.



3. Use of Existing Noise Regulations for RPA Operations

The paper proposes to utilise existing State/Territory noise regulations for the management of noise intrusion of RPAs. For NSW this would mean the use of the *Protection of the Environment Operations (Noise Control) Regulations 2017 – NSW Environmental Protection Act*. This Regulation provides guidance on acceptable noise levels for noise generated by motor vehicles, gardening equipment, construction tools, domestic animals, urban social gatherings and municipal services etc. Further advice is sought on whether the regulation of aircraft in operation can be delegated to a State agency. The NSW EPA Act does not regulate helicopter use once they are in the air, and it is assumed that RPA use would be similar to this.

The Department would like their concerns noted with the proposed comparison of noise associated with RPA use to that of existing urban noise. RPA use will introduce a new 'urban noise' and will be significantly different to existing urban noise generators.

4. Privacy

In addition to Federal Government restrictions on where drones can operate, any legislation should allow for State/Territory/local planning authorities to identify specific no-fly areas relevant to their local situation.

5. Safety

To ensure safe movement of aircraft, including those associated with emergency service provision, is not compromised, authorities should be able to specify no-fly areas relevant to their local situation. For example, within a certain distance of a helicopter landing site associated with a hospital.

6. RPA Regulation

The Department believes that any regulation of RPA should address the following;

- All RPAs need to meet sound power tests (similar to Australian Design Rules for Cars) before being allowed to operate.;
- The hours of operation for RPAs should be restricted based upon usage (e.g. RPA delivery be permitted between 7am and 5pm);
- RPAs performing delivery services are required to complete the 'drop-off' within a designated time (e.g. 90 seconds), limiting the time that neighbours are subject to RPA delivery noise;
- RPA delivery is restricted in public space, or designated areas for RPA deliveries in public spaces are required.
- RPAs are generally required to travel on designated RPA flight corridors (e.g. above existing verges adjacent to roads). This requirement may also provide some protection of privacy by limiting RPAs from flying over private open space such as backyards.



1. Supersonic Aircraft

Consideration should be given to the number of flights and flight routes associated with these types of aircraft to ensure that impacts on surrounding land uses are minimised (similar to those that apply to military aircraft with supersonic capacity). For example, whenever an aircraft transitions into supersonic speed it should not be operating over occupied areas of land (unless specific approvals are obtained).

2. Heritage Aircraft

Air shows, including those incorporating heritage aircraft, require noise management plans to be developed to control the impacts of air operations on surrounding land uses. Noise management plans provide direction to restrict impacts on neighbouring properties such as managing times of operation, modes of operation and flight paths.

The proposed noise regulation of historic aircraft notes that consideration should be given to whether different conditions or limits should be placed on private historic aircraft flights as opposed to those where the aircraft is being used as part of an air show or special event. Consideration should be given to the proposed number of movements of these aircraft (private use historic aircraft) from an airport/airfield, including the cumulative impact of multiple aircraft movements, and the hours of those movements. If the proposed number of flights is deemed significant, then conditions/limits should be developed to protect the amenity of surrounding land uses.