

United States Federal Aviation Administration (FAA) Comments

on the

“National Aviation Policy Issues Paper on Emerging Aviation Technologies”

Issued by Australia’s Department of Infrastructure, Transport, Regional Development, and Communications

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GENERAL COMMENTS.

The FAA congratulates the Government of Australia on producing its National Aviation Policy Issues Paper on Emerging Aviation Technologies, and appreciates the opportunity to provide comments.

The Australian UAS integration approach appears to track much the same as the United States’ FAA strategic approach, although Australia seems to look at special use cases for potential regulation of UAS based on mission-type.

The FAA notes that Australia has proactively identified the need to address electric vertical takeoff and landing (eVTOL) vehicles.

Australia and the United States are also closely tracking with advancing UTM and Urban Air Mobility (UAM), as well as acknowledging the need for support infrastructure. This is an excellent time for FAA collaboration with countries facing the same challenges and goals.

Australia’s UAS integration approach is highly reliant on ICAO and JARUS efforts, with emphasis on operational considerations. The FAA and CASA should work toward a harmonized approach for airworthiness approval of UAS that will enhance our ability to accept UAS findings on airworthiness from Australia and vice versa.

SPECIFIC COMMENTS.

Page	Section	Comment(s)	Recommended Change/Proposed Rewrite
8	Technology Landscape	In the final paragraph, “National Aeronautics and Space Administration” is referred to without context.	Recommend prefacing “National Aeronautics and Space Administration” with “United States”.
34	Noise	The first sentence, “Drones are not loud compared to most aircraft or road vehicles, however, they emit an uncommon noise which can attract attention. This has raised concerns...” would be more complete if it explained that drones may have unique acoustic characteristics, flight profiles and can operate in proximity to community, etc.	Consider replacing the first sentence with: “Drones’ unique acoustic characteristics, flight profiles and operation in proximity to community tend to attract attention. This has raised concerns ...”
35	Noise – Current Issues	Consider adding the newly released NASA noise white paper as reference.	HTTPS://NTRS.NASA.GOV/API/CITATIONS/20205007433/DOWNLOADS/NASA-TP-2020-5007433.PDF
37	Noise – Proposed policy approach	<p>It is interesting to note the following does not seem to consider technical feasibility, economic reasonableness, and environmental benefits:</p> <p>“Noise regulations for drones and eVTOL that meet aircraft noise certification standards (once developed) will be acknowledged under the Noise Regulations. Any approach to noise regulation and noise impact levels will be driven by community acceptance.”</p> <p>This is interesting in that noise certification is traditionally linked to aircraft design, thus minimizing noise at the source. The contribution to “community acceptance” is indirect. By mentioning “any approach...driven by community acceptance”, it is not entirely clear what the author thinks about roles of noise certification (standards) in the face of managing noise from drones and eVTOL vehicles.</p>	<p>The United States cautions against allowing community acceptance to solely drive any noise regulations and instead suggests considering the use of the international [ICAO] environmental standard-setting approach to take into account the effectiveness and reliability of certification schemes from the viewpoint of technical feasibility, economic reasonableness and environmental benefit to be achieved. Similarly, in the United States, 49 USC 44715 requires us to consider whether the standard or regulation is economically reasonable, technologically practicable, and appropriate for the applicable aircraft, aircraft engine, appliance, or certificate.</p>

