

GENERAL AVIATION ADVISORY NETWORK

9 July 2021

Director, Airspace and Future Technology
Department of Infrastructure, Transport, Regional Development and Communications
GPO Box 594
CANBERRA ACT 2601

By e-mail to: airspacepolicy@infrastructure.gov.au

Dear Director

I write to you in my capacity as Chair of the *General Aviation Advisory Network* (GAAN), which has been established to provide advice to the Minister for Infrastructure and Transport on matters affecting the General Aviation (GA) sector.

This letter and accompanying papers comprise the GAAN's response to the Department's *National Strategic Airspace National Aviation Policy Issues Paper* (the "*Issues Paper*") published in May, 2021.

Members of the GAAN have been selected based on their skills and expertise in the aviation industry, and work collaboratively to respond to pressures facing the GA sector. They come from a cross section of the diverse GA sector, covering rotorcraft and fixed wing services, including flight training, aerial application, sport, recreational, regional, business, aeromedical, remotely piloted aircraft systems and aircraft maintenance and manufacturing.

Members welcome the work of the Department in developing the nation's airspace policy. Obtaining inputs from the full spectrum of the industry, to both underlying principles and airspace classification, service and configuration settings, are fundamental and essential if the matter is to proceed productively.

At the GAAN meeting of 25 May 2021, members considered and adopted two highly relevant papers to the *Issues Paper*. Additionally, the GAAN incorporated its views on the importance of airspace reform in its paper *A New Strategy for the Australian General Aviation Sector* in December 2020.

Whilst there are several components to this response, **the GAAN's over-riding recommendation is that national airspace policy is too important to be progressed without the guidance of a newly created, formally constituted, strategic airspace advisory body.**

Governance of Airspace Strategy

Section 6.6 of *A New Strategy for the Australian General Aviation Sector* spells out the issues and recommended actions to improve future airspace policy, of which an extract is provided at Appendix 1.

In summary, the GAAN'S strategy called for:

<p>Equitable access to airspace for general aviation users.</p>	<p>[1] Strategic Airspace Advisory Body</p> <ul style="list-style-type: none"> - Formally propose the establishment of a strategic airspace advisory body, as outlined in part 6.6.3.4 of the Strategy, to address 6.6.3.2-3 inclusive. <p>[2] Airspace Review</p> <ul style="list-style-type: none"> - Recommend that Government initiate a review of the Australian strategic airspace model and develop a national airspace plan consistent with that model as outlined at 6.6.3.1. <p>[3] Western Sydney Airport</p> <ul style="list-style-type: none"> - Develop a GAAN position paper on airspace design in the Sydney Basin. - Provide input and advice to Government on Sydney Basin airspace design.
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It is pleasing to observe that the *Issues Paper* provides a step forward in respect of the recommendation at [2].

The key recommendations of the GAAN are therefore focused on [1] and [3], which are addressed in sub-sections 1.1 and 1.2 below.

1.1 Strategic Airspace Advisory Body

Item [1] above refers to the need for a formally constituted strategic airspace advisory body.

The *Issues Paper* correctly identifies numerous difficulties and inconsistencies for coherent national policy, legislation and the design, configuration and management of airspace in Australia, some of which include:

- Lack of a current published policy framework for airspace classification, other than the Australian Airspace Policy Statement, which provides directions only to CASA pursuant to the *Airspace Act 2007* and does not address operational efficiency or assure equitable access to airspace by General Aviation¹;

¹ *Issues Paper, Technical Considerations*, page 16

- Differences between a Ministerial Direction issued to Airservices to provide approach radar services at specific airports (MAVN 13/04) and CASA’s risk-based responsibilities for airspace assessments²;
- Regulatory limitation on VFR flight above flight level 200 that is inconsistent with the base of Class A airspace³;
- Universal communications and transponder requirements for VFR aircraft in Class E airspace, despite its non-uniform implementation and constraining implications for future airspace configuration;
- Various applications of Classes C, D and E classifications to terminal airspace and associated control area steps;
- The current exemption under CASR Part 101, unless captured in future under Part 172, of remotely piloted aircraft systems (RPAS) from VFR and IFR flight rules, despite rapidly growing demand and increasing levels of technology, sophistication, applications and numbers; and
- Lack of coverage within the existing rule set to address airspace requirements for rocketry and operations above 60,000 feet AMSL, which affects the viability of new technology.

In particular, GAAN members have observed that the preceding proposal by Airservices Australia to substantially lower the floor of Class E airspace on the east coast of Australia, and its subsequent modification, lacked cross-sector industry input or direction.

The reference in the Issues Paper to an “open and transparent discussion⁴” in its purpose is therefore timely and sound as a basis to proceed.

The GAAN therefore strongly recommends the establishment of an Australian Airspace *Industry Strategic Advisory Board* (ISAB) to complement the existing inter-agency Aviation Policy Group. The ISAB would be chaired by the Department, with membership to include the relevant agencies, and senior representatives of key aviation sectors, inclusive of airports, aircraft operators, manufacturers and infrastructure providers.

An *Industry Implementation Advisory Board* (IIAB) should also be established to support the ISAB and APG. The IIAB would be a working group comprising senior officials from relevant agencies and industry responsible for preparing advice and reports to the strategic actions identified by the ISAB.

As the lead agency within the transport portfolio, the Department is well-positioned to project the wider national and community interest, security, international standards and support for innovation to stakeholders across the spectrum. In doing so, competing interests between industry sectors would be balanced, and equitable outcomes aligned with policy objectives better served.

² Ibid, page 17

³ Ibid, page 17

⁴ Ibid, *Executive Summary, Purpose*, page 2

Appendix 2 contains the *Airspace Policy Note* adopted by the GAAN. This document sets out the recommendations of the GAAN for future airspace governance and change implementation. Notably, the GAAN believes that the Department has a key role to play in this matter, in the national interest and without the constraints of financially dependence upon sector-specific interests.

1.2 GAAN Sydney Basin Airspace Policy

Appendix 3 contains the *Sydney Basin Airspace* requirements statement adopted by the GAAN. This document sets out General Aviation’s aviation needs in the Sydney Basin, to inform airspace planning under way to support Western Sydney Airport.

2 Specific Proposals Contained in the *Issues Paper*

Much of the *Issues Paper* is directed to the presentation of specific proposals for airspace configuration.

GAAN members appreciate the sound intentions of the Department in obtaining cross-sector industry feedback, given that some aspects of these proposals have been canvassed by Airservices Australia earlier in the year without adequate industry participation or consultation.

Nevertheless, it would be disappointing if the existence of these proposals became limiting in the context of better national airspace governance through the *Industry Strategic Advisory Board* and *Industry Implementation Advisory Board* recommended by the GAAN in its *Airspace Policy Note* at section 2 above and described in Appendix 2.

GAAN members have agreed that commentary on the specific proposals, listed in Appendix 1 of the *Issues Paper* would be best provided by representative bodies of General Aviation users, as they impact their particular sub-sectors and interests. However, given the GAAN’s clearly stated position in supporting more equitable airspace access, the following comments are consistent with the GAAN’s advice:

AC 1	Establishing a continental floor for Class A airspace at FL 245 would support the removal of existing regulatory restrictions on VFR flight below that level.
AC 5	The level of service provided in continental areas need not be related to the level of service provided in oceanic airspace.

AC 6-10	There are multiple considerations in this matter that warrant detailed review, including radio and transponder carriage requirements for all Class E airspace, equitable access, especially for recreational airspace users, communications infrastructure availability and its cost, operationally efficient procedures for IFR clearances, terrain avoidance, and other safety considerations.
AC 12	Utilising the same class of airspace at the first step abutting a control zone would improve GA accessibility and efficiency.
AC 13-14	The proposal is effectively one of determining whether existing Class C control zones should be retained. Whilst Class D generally affords greater flexibility for VFR operations, there are important considerations related to efficient operations in instrument meteorological conditions that must also be considered.
LL 1-3 AD 1-8	These proposals require detailed review by a cross-sector industry body, such as the <i>Industry Strategic Advisory Board</i> and <i>Industry Implementation Advisory Board</i> recommended by the GAAN in its <i>Airspace Policy Note</i> at section 2 above and described in Appendix 2.

3 Draft Australian Airspace Policy Statement (AAPS)

The GAAN has not formally considered this document. Members would recommend that it be amended for consistency with the GAAN's recommendations above. For the future, this Statement could become a responsibility of the *Industry Strategic Advisory Board*.

4 Conclusion

Members of the GAAN trust that this response is clear and helpful.

In supporting the Department's work in this matter, your questions and the opportunity to support ongoing activity would be welcomed.

In the first instance, members may be contacted through the GAAN Secretariat by e-mail (GAAN.Secretariat@infrastructure.gov.au).

Yours sincerely



Andrew Andersen
Chair

Appendix 1

Extract from the GAAN's General Aviation Strategy document⁵.

“6.6 Airspace for GA Operations

6.6.1 Issues

General Aviation access to airspace is critical to its operations.

GA operations continue to be limited by airspace restrictions, including through airspace exclusively claimed by Defence that is not shared, as well as the impact of new developments.

The expected increase in the number of new airspace users (including drones, RPAS⁶, and advanced air mobility), with diverse operational needs, can be expected to compound this situation.

There is currently no single user group to provide advice on airspace changes. The present arrangement only engages airspace users locally. For example, there is no effective national user consultation in relation to instrument approaches, which are a critical resource that has been affected by significant regulatory change in recent years.

Current airspace change discussions have been limited to the specific changes and not assessed against a national strategic plan for the evolution of airspace and air traffic management accounting for the changing needs of all airspace users.

The GA sector is also particularly apprehensive about the future impact of Western Sydney Airport on Bankstown Airport. This apprehension has resulted in a disincentive for investment in training and other GA facilities at Bankstown Airport.

6.6.2 Solutions

Principles and objectives for the national management of Australian airspace should be established that align with the Minister's airspace policy statement.

A national body should be established to advise government, in the national interest, in relation to airspace management.

A strategic operational concept for Australian airspace, accounting for existing and new airspace users, should be developed, which draws on best global practice, particularly the US National Airspace System (NAS) model, which has demonstrated efficiency and safety, whilst assuring GA aircraft equitable access and flexibility under visual flight rules.

Airspace reform would provide a stimulus to the GA sector, bringing job creation, fleet renewal, improved maintenance facilities and a more supportive environment for flight training.

⁵ *A New Strategy for the Australian General Aviation Sector*, General Aviation Advisory Network, December 2020

⁶ Remotely Piloted Aircraft System

Western Sydney Airport, Airservices Australia and the CASA Office of Airspace Regulation should engage with stakeholders to identify key concerns for ongoing visual and instrument operations at Bankstown and the Sydney Basin.

6.6.3 Actions

6.6.3.1 Airspace Model

The government should initiate a review of the Australian strategic airspace model, with particular consideration for existing and emerging airspace user needs, drawing on proven international structures, particularly the US NAS, and compliance with ICAO.

6.6.3.2 National Airspace Plan

A national airspace plan consistent with the model above, and the ICAO Global Air Traffic Management Operational Concept and Australia's State Safety Program should be prepared by the new advisory body, described in section 0, with appropriate industry engagement.

6.6.3.3 Leverage Technology

The Government should establish a policy framework to ensure the continued exploitation of ongoing technical innovation that has the potential to enhance the safety and efficiency of airspace operations and air traffic management. Pertinent examples include the widespread national deployment of ADS-B technology and advancements in automated airspace and air traffic management concepts for drones⁷.

6.6.3.4 Strategic Airspace Advisory Body

The Government should establish an enduring Airspace Industry Advisory Board (AIAB) to complement the existing Airspace Policy Group. The AIAB should provide advice towards:

- Maintaining the vision and flight plan in line with updates to the Minister's Policy Statements, changing stakeholder needs, and emergence of new opportunities for innovation; and
- Ensuring strategic airspace user input in relation to airspace change proposals.

6.6.3.5 Western Sydney Airport

Airspace architecture design should accommodate the needs of Sydney (Kingsford-Smith) Airport, Western Sydney Airport and the Sydney Basin General Aviation airports, including Bankstown and Camden. The design activity must address the airspace needs of existing and emerging flight operations, and be coordinated with, and accepted by, Airservices Australia and the CASA Office of Airspace Regulation."

⁷ Commonly referred to as Unmanned Aircraft System Traffic Management (UTM).

Appendix 2

Attached document - GAAN's *Airspace Policy Note*

Airspace Policy Note

3 June 2021

Industry feedback on recent airspace proposals (e.g., lowering of Class E, Western Sydney Airport, UAS Traffic Management concepts, etc.) have highlighted the need for a renewed look at how Australia strategically manages airspace change and associated infrastructure. In particular, the strategic direction and principles governing the management of Australian airspace and whether current processes allow for adequate stakeholder engagement to ensure the continued safe and efficient use of airspace into the future.

Fair and equitable access to airspace is critical to all sectors of aviation. For General Aviation (GA), successive changes have negatively impacted on access to airspace and infrastructure. For example, insufficient Instrument Landing Systems for flight training, erosion of uncontrolled airspace close to capital cities that limit recreational flying; and extended activation of restricted airspace at military aerodromes to support civil airline operations, have negative consequences for General Aviation.

The approach to airspace management today can be characterised as a siloed, tactical and insular process. Proposals lack traceability to policy and any longer term national plan; and engage stakeholders late and only as required.

It is the General Aviation Advisory Network's view that improvements to Australia's airspace management framework are needed to ensure an airspace system that continues to meet changing safety, efficiency, accessibility, capacity and environmental requirements. Further, greater industry engagement at all levels of decision making is essential.

The principles of equitable access, aviation system safety, operational efficiency and national security should be represented in a national airspace resource policy framework which respects those principles and the rights of existing users, every bit as much as the right of a new proponent to develop usage of the airspace resource.

A sound policy framework would better support emerging technologies, since design and planning could proceed with confidence inside the policy framework; and lessen risk and dependency on administrative decisions.

Recommendations

Establish an Industry Strategic Advisory Board (ISAB) to complement the existing Aviation Policy Group (APG). The ISAB should provide broader aviation stakeholder advice towards:

- a. Informing the Minister's Australian Airspace Policy Statement;
- b. The development of a set of principles, consistent with the Minister's Airspace Policy Statement, to guide Government and agency decision making;
- c. The development of a strategic vision and "flight plan" for Australia's national airspace system consistent with the Minister's Airspace Policy Statement;

- d. Maintaining the vision and flight plan in line with the Minister's Policy Statements, changing stakeholder needs, and emergence of new opportunities for innovation; and
- e. Providing a forum for ensuring a national and strategic industry input to specific airspace change proposals.

The ISAB should be chaired by the Department, include the relevant agencies, and senior representatives of key aviation sectors, inclusive of airports, manufacturers, and infrastructure providers.

An Industry Implementation Advisory Board (IIAB) supporting the ISAB and APG, and complementary to the existing Aviation Implementation Group (AIG) is also required. This could be achieved through a refresh of an existing group (for example, ASTRA), or the creation of an entirely new forum. The IIAB is a working group comprising senior officials from relevant agencies and industry responsible for preparing advice and reports to the strategic actions identified by the ISAB.

As the lead agency within the transport portfolio, the Department is well-positioned to project the wider national and community interest, security, international standards and support for innovation to stakeholders across the spectrum. In doing so, competing interests between industry sectors would be balanced, and equitable outcomes aligned with policy objectives will be better served. For this reason, it is the recommendation of the GAAN that both the proposed ISAB and IIAB be administered by the Department.

The CASA Office of Airspace Regulation (OAR) currently operates three distinct functions⁸:

- Administration and reviews of existing airspace;
- Processing airspace change proposals; and
- Future airspace planning.

The recommendations set out in this paper would enhance the ability of OAR to service the first and second, by clarifying the national airspace policy and supporting the management of conflicting claims; while the third would become more focused on implementation. Overall, the OAR's functions as a resource manager would be strengthened; and policy expectations removed to a forum better placed to consider the national interest.

The GAAN also notes the recent release of the Minister's Australian Airspace Policy Statement and National Strategic Airspace: National Aviation Policy Issues Paper⁹. The GAAN intends to submit similar recommendations as part of the public consultation processes.

⁸ *Office of Airspace Regulation Strategic Work Plan*, CASA 14 July 2020. <https://www.casa.gov.au/sites/default/files/oar-strategic-work-plan.pdf>

⁹ *Department of Infrastructure, Transport, Regional Development and Communications, Australian Airspace Policy webpage*. <https://www.infrastructure.gov.au/aviation/australian-airspace-policy/aaps/index.aspx>

The proposed ISAB and IIAB would fill a critical gap in the current Government framework for the governance, administration and management of Australian airspace and Air Traffic Management, with the intent to ensure a safe, efficient and sustainable airspace environment that meets the changing needs of Australia's aviation industry.

Appendix 3

Attached document - GAAN's *Sydney Basin Airspace*

Sydney Basin Airspace

27 May 2021

Airspace planning within the Sydney Basin is becoming increasingly urgent as the Western Sydney Airport (WSA) developments proceed. Stakeholders are running out of time to make business investment decisions for the future of flight training, charter and business aircraft operations within the Sydney Basin. In the absence of information, it is likely there will be negative economic consequences for jobs and growth.

WSA will have considerable impact on General Aviation traffic in the Sydney Basin, being sited in the middle of the GA training area, and effectively obstructing access for IFR and VFR traffic into and out of Bankstown and Camden Airports.

- Airspace design for the Sydney Basin must account for the changing nature of airspace use and in particular, emergence of new airspace users including remotely piloted aircraft systems (RPAS) and expected increase in low altitude vertical take-off and landing (VTOL) traffic.
- Movements to and from Sydney, Western Sydney, Bankstown, Camden and Richmond should not be adversely affected following both the commencement of single runway operations at WSA in 2026 and dual runway operations at WSA about 2040.
- Flight training and recreational aircraft require access to and from home airfields in all directions, either via corridors or class G lanes, to enable less equipped aircraft to continue to operate. Access to adjacent flight-training areas with suitable force landing areas must also be a consideration.
- IFR arrival and departure traffic into and out of Bankstown and Camden will require dedicated routes to enable access without conflict with RPT traffic and minimal delay for charter and business aircraft. At least one RNAV (GNSS) approach procedure to straight-in landing minima, preferably with vertical guidance, is required at Camden and Bankstown; and at least one terrestrial navaid-based approach procedure is also required at Bankstown.
- Prospect Reservoir and 2RN are the present entry points for traffic into Bankstown. The track from KADOM to 2RN takes traffic directly over WSA. IFR arrivals over WSA would not impact traffic in or out of WSA, which is common practice in the USA. Planning the airspace may require adoption of procedures used in the USA; dedicated inbound and outbound tracks must be available.
- Firebombing and other essential services, using civilian aircraft of varying operating characteristics, are conducted from RAAF Richmond Aerodrome and continued rapid access for those aircraft to their target sites is critical.

- Rotorcraft operations between Sydney Kingsford-Smith Airport and WSA are anticipated and will require an access lane or other means of connectivity to support a range of commercial and community activities.
- The runway alignment at WSA, 05/23, is dictated by the available land dimensions and will be in conflict with traffic out of and into Sydney Airport. Further, the extended flight path for WSA runway 05 is just north of Prospect Reservoir and south of Penrith; noise issues will prevent an early turn to the north on departure. VFR GA aircraft tracking via the lane of entry proceed via the entry point Prospect reservoir; VFR GA aircraft arriving from the north need continued access to this lane.

There has been considerable publicity given to noise related issues in the press, who are demanding details on flight paths. This is a single-issue concern, being focused solely on airline traffic and does not appropriately consider the greater issue of traffic planning and management and design of the airspace for the Sydney Basin and the impact that this lack of forward planning will have on the viability of all stakeholders in the aviation industry.

Planning this airspace will be a considerable task and requires resources and a team dedicated to the task; consultation with all stakeholders will need to be addressed and will take time, any further delay will only make the task harder and result in band aid solutions that will have a negative impact on the aviation industry.

The GAAN urges the Department of Infrastructure, Transport Regional Development and Communications to address design of the Sydney Basin Airspace as a matter of urgency.