Office of Airspace Regulation Strategic Work Plan 1 January 2023

Purpose

The Strategic Work Plan (Plan) details the Office of Airspace Regulation's (OAR) priorities, processes and strategies over the next three years for ensuring that Australian airspace complies with the *Airspace Act 2007* and *Airspace Regulations 2007*.

The Plan responds to the policy directions of the Australian Government on air traffic and airspace matters as outlined in the Australian Airspace Policy Statement 2021 (AAPS) and in the Minister's Statement of Expectations (SOE) to the Civil Aviation Safety Authority (CASA) Board 24 November 2021 to 30 June 2023.

This plan will aid the OAR in considering how traditional and non-traditional aviation activities will interact within administered airspace arrangements. The OAR will consider airspace operations through the prism of aircraft mix and performance characteristics. Australia has seen a rapid development of new technologies requiring the OAR to balance outcomes safely, economically and efficiently. The OAR will adopt the Australian Future Airspace Framework (AFAF) in its approach.

Background

Airspace administration in Australia is generally aligned with the International Civil Aviation Organization (ICAO) prescribed airspace classes and associated levels of service as set out in ICAO Annex 11 – Air Traffic Services, from which, 'States shall select those airspace classes appropriate to their needs'.

Section 11 of the *Airspace Act 2007* confers on the CASA functions and powers in connection with the administration and regulation of Australian-administered airspace. Within CASA, these responsibilities are carried out by the OAR.

The OAR administers Australian airspace in accordance with Australian Government Policy. This includes, having responsibility for designating permanent or temporary airspace classifications, designating Prohibited, Restricted and Danger Areas (PRDs), and reviewing existing airspace, as well as the services and facilities provided in particular volumes of airspace.

The OAR considers the principle emphasised by ICAO; Airspace is not managed in isolation but is part of broader Air Traffic Management (ATM). ATM is the *"dynamic, integrated management of air traffic and airspace – safely, economically and efficiently – through the provision of facilities and seamless services in collaboration with all parties."*¹ *"Safely, economically and efficiently"* is a shorthand phrase meaning 'balancing the 11 Key Performance Areas (KPA) in the ICAO Global Air Navigation Plan (GANP), from the very formulation of the performance-problem, through research and down to selection and operation of a solution, with safety being paramount'.² To balance these 11 KPAs the AFAF uses the Australian Performance Based Approach (APBA) which is an extension of the ICAO PBA (PBA). CASA has mapped the 11 KPAs to three broad Australian specific KPAs of Safety, Efficiency and Equitability.

¹ *ICAO Global Air Navigation Plan*, Edition 6, endorsed by the 40th ICAO Assembly (24 September to 4 October 2019). Note that some authors use ATM to describe traditional air traffic service provision rather than the broader ICAO definition used here.

² *ICAO Global Air Traffic Management Operational Concept (GATMOC) 2005*, ICAO Doc. 9854, Appendix D, 'Expectations'. Expectations have been subsequently referred to as Key Performance Areas as follows: Access & Equity, Capacity, Cost-Effectiveness, Efficiency, Environment, Flexibility, Global Interoperability, Participation by the ATM Community, Predictability, Safety, Security.

Key Performance Area for the OAR

CASA has three goals to deliver and meet its commitments as described within the Civil Aviation Safety Authority Corporate Plan 2022-2023:

- Goal 1: Maintain and enhance a fair, effective and efficient aviation safety regulation system.
- Goal 2: Engage collaboratively with the wider aviation community to promote and support a positive safety culture.

Goal 3: Continuously improve organisational performance.

The OAR contributes to these commitments through the administration of airspace regulation including:

- airspace classifications.
- special use airspace (SUA) e.g. PRDs and military operating areas (MOAs).
- published air routes; and
- airspace architecture.

These areas of commitment will meet the requirements to further improve risk based regulatory management (Corporate Plan 1.2)

The Plan has aligned its tasks in accordance with the SOE. These include:

- Implement airspace reform initiatives as identified in the Australian Airspace Policy Statement (SOE 4g).
- Conduct of airspace reviews (*Airspace Act 2007*) aligned to strategic and merit planning.
- Work collaboratively with the Department of Infrastructure, Transport, Regional Development, Communications and the Arts (the Department) and Airservices Australia (Airservices) on modernising airspace management including as the regulator, leading the development of an Australian future airspace framework consistent with the Government's airspace policy objectives, and shaping Australia's future airspace policy and regulatory framework (SOE 4g).

Airspace classifications

The architecture and classes of airspace in Australia are based on the assessed level of risk to airspace users and the consequent need for air navigation services, to support safety outcomes.

Risk based approach

The OAR adopts a pragmatic, practical and proportionate approach to application of airspace reform and airspace management. When determining the need for airspace classifications or SUA, the OAR conducts a risk assessment to make informed decisions about the classification of airspace required. Safety is the primary consideration and considering other aspects including:

- The air traffic control services and facilities needed in the airspace.
- The efficient use of airspace.
- Equitable access for all airspace users.
- Cost implications for all airspace users.
- Advances in aviation technology on the ground and in the air.
- The capacity of Australian-administered airspace to accommodate changes in its use; and

• National security.

OAR Structure and Key Functional Areas

The OAR's structure and key functional areas will adapt to reflect changes in passenger and freight demand at different destinations, the introduction of new and different aircraft types, increased used of satellite-based technology and new airport infrastructure.

For example, the wider application of Automatic Dependent Surveillance - Broadcast (ADS-B), Performance-Based Navigation (PBN), Required Navigation Performance (RNP), Ground Based Augmentation System (GBAS) and Approaches with Vertical Guidance (APV) are all evident in Australian and international aviation. These developments generate opportunities and stakeholder expectations that Australian airspace will be structured in a way that maximises the advantages offered by modern airspace design and the latest technology, in relation to safety, efficiency and equitable access outcomes.

Therefore, the OAR is focussed on delivering an Australian airspace environment that is safe, efficient, equitable and future proof.

The OAR's structure comprises four key functional areas each with their own roles and strategies:

- administration and reviews of existing airspace through Airspace Planning.
- processing airspace change proposals through Airspace Operations.
- Australian future airspace framework through Airspace Strategy; and
- provide advice on obstacles near certified aerodromes through Airspace Protection.

Administration and Reviews of Existing Airspace (Day to Day management)

<u>Role.</u> The OAR has airspace specialists focused on the strategic review of Australianadministered airspace. Each airspace specialist is assigned to each State and Territory in Australia, responsible for reviewing the existing airspace within their designated areas, to identify any issues or risks to airspace users and to ensure the existing airspace is 'appropriate'.

The OAR airspace specialists collaborate with Airservices, airspace users, aviation representative groups, airport operators, Defence and other CASA regulatory areas when completing an airspace profile, airspace review, aeronautical study or proposing an airspace change.

The OAR Operations team is responsible for the day-to-day administration and regulation of Australian-administered airspace including assessing and managing airspace change proposals (ACPs) ensuring appropriate consultation has taken place and sufficient information has been submitted with the proposal. The Operations team provides airspace risk guidance to other business areas in CASA and is involved in the declaration or disestablishment of PRDs.

<u>Strategy.</u> The OAR will build a high degree of trust and reliability while fostering collaboration through regular stakeholder engagement to enable early identification and mitigation of risks to airspace users through implementation of timely solutions. This will ensure that airspace architecture remains 'appropriate' and meets the requirements of the *Airspace Act 2007.*

Airspace Reviews

<u>Role.</u> The OAR may develop an airspace profile or conduct an initial airspace review as a preliminary desktop exercise, using available data and sources, to identify any risks to airspace users that may require more detailed analysis through an airspace review or aeronautical study.

The OAR manages requests for PRDs (such as air displays, military exercises and police operations), through the airspace change proposal process.

<u>Strategy.</u> The OAR has developed a database that presents information about aircraft and passenger movements and aviation incidents in Australia.

The database is being enhanced to enable reliable, robust and timely data entry and information management while enabling the extraction of detailed and specific types of reports. This will inform and update OAR priorities for airspace reviews, should specific changes in activity or incidents emerge.

Future Airspace planning

<u>Role.</u> The OAR to ensure that Australian airspace is suitable for safety, efficiency and future capacity expectations.

The development of future airspace arrangements is undertaken in consultation with the aviation industry, other appropriate Government agencies and analysis of international airspace systems that deliver outcomes to benefit Australia's aviation environment.

The OAR should focus on delivering airspace architecture consistent with ICAO requirements for safety and efficiency, leveraging new technology and procedures wherever practicable.

<u>Strategy.</u> The OAR should focus on the development of a future airspace framework which includes development of new airspace design guidelines based on PBN and other advances in aviation technology.

Key Initiatives

Key initiatives under the Plan are shown at Annex A. These initiatives can be updated if higher priorities or new risks are identified.

The Plan reflects the 2021-2023 Minister's Statement of Expectation to the CASA Board (notably 4f, 4g, 4h, 4j and 5a) and all relevant clauses in the Australian Airspace Policy Statement 2021.

The OAR Strategic Plan will be updated yearly in conjunction with the publication of CASA's corporate plan.

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Annex A – Key Initiatives

Reviews may be delayed due to unscheduled changes to priorities.

| Requirement | Location/Task | Reference | Description | Scheduled commencement date | Scheduled date of draft release for consultation |
|-------------|------------------------|--------------------------|-----------------------------|-----------------------------------|--------------------------------------------------------|
| Minor | Adelaide and Parafield | AAPS 23-31 | Airspace Review | July 2022 | March 2023 |
| Minor | Pilbara Basin | AAPS 23-31 | Airspace Review | March 2021 | April 2023 |
| Minor | Broome and Karratha | AAPS 23-31 | Airspace Review | November 2021 | March 2023 |
| Minor | Horn Island | AAPS 23-31 | Airspace Review | July 2022 | February 2023 |
| Minor | Avalon | AAPS 23-31 | Airspace Change | January 2023 | June 2023 |
| Minor | Launceston | AAPS 23-31 | Airspace Change | January 2023 | June 2023 |
| Major | Lowering Base Class E | AAPS 8, 13, 17, 23-31 | Airspace Change | January 2023 | June 2023 |
| Minor | Brisbane West Wellcamp | AAPS 23-31 | Airspace Review | February 2023 | August 2023 |
| Minor | South Port Gold Coast | ATSB Investigation | Airspace Review | January 2023 | June 2023 |
| Major | Perth and Jandakot | AAPS 23-31 | Aeronautical Study | March 2023 | January 2024 |
| Minor | Port Augusta | AAPS 23-31 | Preliminary Airspace Review | April 2023 | August 2023 |
| Minor | Sunshine Coast | AAPS 23-31 | PIR Airspace Review | May 2023 | November 2023 |

| Requirement | Location/Task | Reference | Description | Scheduled commencement date | Scheduled date of draft release for consultation |
|-------------|-------------------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|--------------------------------------------------------|
| Minor | Proserpine | AAPS 23-31 | Airspace Review | June 2023 | October 2023 |
| Minor | Ayers Rock Class E | AAPS 23-31 | PIR Airspace Review | July 2023 | October 2023 |
| Major | Western Sydney Airport | AAPS 17 | Provide technical advice to Western Sydney Airport Technical Working Group on airspace modelling for new airport | June 2017 | Ongoing |
| Major | Bankstown Aircraft Conflict Management Working Group (Previously named JAPAT) | AAPS 23-31 and AAPS 33 | Implement recommendations for airspace changes and new procedures to enhance safety of aviation around Bankstown | September 2017 | Ongoing |
| Minor | Perth PROSIG | AAPS 17 | Provide advice and support during development of an airspace model for the future parallel runway | July 2017 | Ongoing |
| Major | Brisbane | AAPS 23-31 | Conduct an aeronautical study within 50 nautical miles of Brisbane | Q4/2023 | 2025 |
| Strategic | Restricted airspace outside Australian territorial waters | AAPS 18-22 | Review the use of PRDs outside Australian territorial waters. Investigate the use of military training areas and military exercise areas by other ICAO contracting States, applicable for use within Australian flight information regions. | June 2019 | Ongoing |

| Requirement | Location/Task | Reference | Description | Scheduled commencement date | Scheduled date of draft release for consultation |
|-------------|--------------------------|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|--------------------------------------------------------|
| Strategic | Flexible use of airspace | AAPS 21 | Update the understanding and application of flexible use of airspace | July 2023 | June 2024 |
| Strategic | Business as usual | Act AAPS 16-17 | Review Australian airspace classifications and architecture as detailed in the Australian Airspace Police Statement 2021 | Ongoing | Ongoing |
| Strategic | Business as usual | AAPS 18-19 | Review Restricted and Danger Areas to ensure areas are still required and appropriate for their purpose, including conditional status | Ongoing | Ongoing |
| Strategic | Business as usual | AAPS 26-31 | Assess airspace change proposals | Ongoing | Ongoing |
| Strategic | Business as usual | AAPS 32-36 | Australia's Future Airspace Framework | Ongoing | Ongoing |
| Strategic | Business as usual | AAPS 23-31 | Collaborate with Airservices Australia to identify opportunities to improve or enhance controlled airspace arrangements | Ongoing | Ongoing |
| Admin | Business as usual | AAPS 28-30 | Implementation of review/study recommendations | Ongoing | Ongoing |
| Admin | Business as usual | AAPS 26-31 | Assess airspace change proposals | Ongoing | Ongoing |
| Admin | Business as usual | AAPS 25-31 | Quarterly Risk Indicator Review (QRIR) | Ongoing | Ongoing |

| Requirement | Location/Task | Reference | Description | Scheduled commencement date | Scheduled date of draft release for consultation |
|-------------|-------------------|-----------------|----------------------------------------------------------------------|-----------------------------------|--------------------------------------------------------|
| Admin | Business as usual | AAPS 25-31 | Conduct Risk Profiling as determined through the QRIR or as required | Ongoing | Ongoing |
| Admin | Business as usual | Act AAPS 5-7 | Manage and maintain Designated Airspace Handbook (DAH) | Ongoing | Ongoing |
| Admin | Business as usual | AAPS 28 and 40 | Update the OAR web site, as required | Ongoing | Ongoing |