Australian Government
Civil Aviation Safety Authority

Southport Airspace Review 2025

March 2025

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Acknowledgement of Country

The Civil Aviation Safety Authority (CASA) respectfully acknowledges the Traditional Custodians of the lands on which our offices are located and their continuing connection to land, water and community, and pays respect to Elders past, present and emerging.

Inside front cover artwork: James Baban.

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Contents

1. Executive Summary

The purpose of this review is to determine if the airspace architecture, classification and the services within the defined airspace around Southport airport are safe and appropriate for all airspace users.

This airspace review applies the Civil Aviation Safety Authority's (CASA's)[1] regulatory philosophy which considers the primacy of air safety, whilst considering the environment, security, cost and is consistent with the Australian Airspace Policy Statement (2021) and the Minister's Statement of Expectations (2022)[2] [3].

The review included analysis of:

- aerodrome traffic data;
- airspace design;
- Australian Transport Safety Bureau (ATSB) incident data; and
- stakeholder consultation.

The review determined:

- the airspace classification is appropriate.
- aviation activity within the review area is diverse including sightseeing, tourist charters, flight training, emergency services operations and remotely piloted aircraft systems (RPAS).
- the common traffic advisory frequency (CTAF) 119.0 MHz services the review area and extends from the boundary of the Gold Coast control zone (CTR) to north of Heck Field aerodrome. A high number of aircraft can operate on the CTAF at the same time resulting in frequency congestion.
- the benefit of standard operating procedures is clearly understood within the aviation sector. This includes users following published suggested altitudes when operating coastal, the use of standard phraseology during broadcasts, or aircraft making broadcasts. Failure to follow standard procedures can increase risk to operations and increase the workload of other airspace users.

1.1 CASA Actions

CASA will follow-up on the observations, or opportunities to enhance services identified through CASA's analysis of the reviewed airspace:

Observations/Opportunity to enhance regional services

Observation/Opportunity 1
Consideration of effective communication and information from CASA to pilots on operating in uncontrolled airspace around the Gold Coast may provide some safety benefits. This could include further promotion of existing resources for operating in this area, such as the Staying OnTrack booklet and videos, and/or the creation of additional information.

Observation/Opportunity 2
Additional visual approach points and/or visual flight rules routes on the Gold Coast Visual Terminal Chart (VTC) may enhance situational awareness. CASA, could assist local operators in preparing an airspace change proposal (ACP).

[1] A list of abbreviations and acronyms used in this report are in Appendix A – Acronyms and Abbreviations.

[2] Federal Register of Legislation - Australian Airspace Policy Statement 2021 [27 September 2023]

[3] Federal Register of Legislation - Statement of Expectations for the Civil Aviation Safety Authority from 1 July 2023 to 30 June 2025 [27 September 2023]

2. Review Introduction

The Civil Aviation Safety Authority (CASA) [4] acknowledges a mid-air collision between two rotary wing aircraft that occurred on 2 January 2023 resulting in multiple fatalities within the airspace under consideration in this review. The Australian Transport Safety Bureau (ATSB) is completing an Aviation Safety Investigation report, the contents of which are currently unavailable. Information from this report will be included in the report should it become available for public release prior to the completion of this review.

The *Airspace Act 2007* (Act)[5] provides CASA the authority to administer and regulate Australian administered airspace. Under the Act, it is a function of CASA to undertake regular reviews of existing airspace arrangements. CASA is responsible for the administration and regulation of Australian-administered airspace, in accordance with section 11 of. Section 12 of the Act requires CASA to foster both the efficient use of Australian-administered airspace and equitable access to that airspace for all users. It requires that CASA must consider the capacity of Australian-administered airspace to accommodate changes to its use and national security. In exercising its powers and performing its functions, CASA must regard the safety of air navigation as the most important consideration[6].

Section 3 of the Act states that *'… the object of this Act is to ensure that Australian-administered airspace is administered and used safely, taking into account the following matters:*

a. *protection of the environment;*
b. *efficient use of that airspace;*
c. *equitable access to that airspace for all users of that airspace;*
d. *national security.'*

CASA has conducted an airspace review within a defined area around Southport aerodrome between seven and 20 nautical miles (NM) north of Gold Coast Airport from the Gold Coast Distance Measuring Equipment (DME). The lateral boundaries between the aforementioned distances included the coastline between Miami Beach up to approximately half of South Stradbroke Island and along the controlled airspace (CTA) boundary from Reedy Creek to Pacific Pines to Upper Coomera (refer Figure 1).

The review examined the airspace architecture, classifications, procedures and infrastructure from the surface to 1,500 feet (FT) above mean sea level (AMSL).

2.1 Overview of Australian Airspace

Australian airspace classifications accord with Annex 11 of the International Civil Aviation Organization (ICAO)[7] and are described in the Australian Airspace Policy Statement 2021 (AAPS)[8]. Airspace is classified as Class A, C, D, E and G depending on the level of Air Traffic Service (ATS) required to best manage the traffic safely and effectively. Government policy allows the use of Class B and Class F airspace, however, these are not currently utilised in Australia.

The airspace classification determines the category of flights permitted, aircraft equipment requirements and the level of ATS provided. Appendix B – Australian Airspace Structure provides details of the classes of airspace used in Australia. Within this classification system aerodromes are either controlled, i.e. Class C or Class D or uncontrolled airspace, that is, Class G.

Aircraft operating in controlled airspace are provided with an air traffic control and surveillance service by Airservices Australia (Airservices) and can include a mix of visual flight rules (VFR) and instrument flight rules (IFR) operations.

Class G airspace is predominantly used by VFR aircraft flying in good weather so they can navigate using visual references on the ground without the requirement of surveillance or control services. Class G airspace

[4] A list of abbreviations and acronyms used in this report are in Appendix A – Acronyms and Abbreviations.

[5] Federal Register of Legislation - Airspace Act 2007 [27 September 2023]

[6] Civil Aviation Act 1988, section 9A – Performance of Functions

[7] Annex 11 – Air Traffic Services 15th Edition, International Civil Aviation Organization, Montreal Canada, July 2018

[8] Federal Register of Legislation - Australian Airspace Policy Statement 2021 [27 September 2023]

accommodates both VFR and IFR operations. The Southport Airspace Review area is within Class G airspace.

2.2 Purpose and Scope

The purpose of this review was to satisfy CASA that the airspace architecture, classification and the services within the airspace are safe and appropriate for all airspace users.

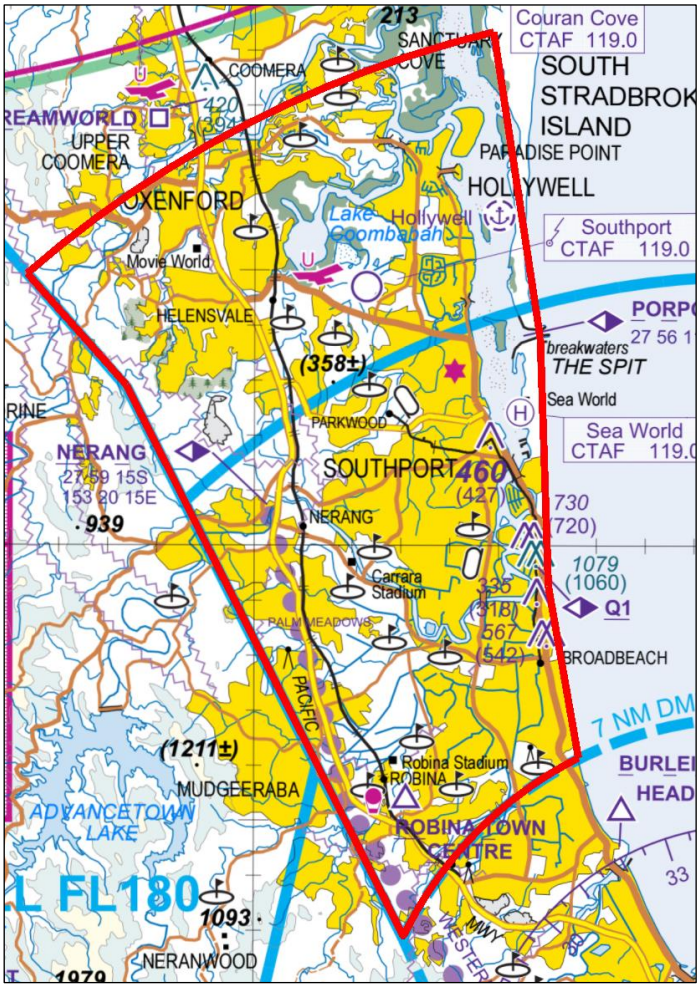
The scope of this Southport Airspace Review includes:

- assessment of risks to airspace users within the defined area around Southport aerodrome
- consultation with stakeholders to obtain information related to airspace issues within the defined area
- an assessment of air routes and procedures to ensure they are efficient and satisfactory for the purpose it was designed or created for
- analysis of any risks that may impact the safety of airspace users to determine the need for any changes to existing airspace architecture, services or procedures.

The scope of the review did not include aircraft operations above 1,500 FT AMSL, aerodrome facilities or developments and surrounding infrastructure, unless a significant safety issue related to the airspace operations was found.

Airspace related matters that occur outside the review area are subject to inclusion at the discretion of CASA. The airspace has not been previously reviewed. The following figure displays the review area.

Figure 1: Southport airspace review area[9]



[9] Gold Coast Visual Terminal Chart (VTC) effective 1 December 2022, Airservices Australia

2.3 Objective

The objective of this review was to evaluate the suitability of the airspace within the review area. Factors considered:

- the efficient use of the airspace
- equitable access to the airspace for all users of that airspace
- national security issues
- the appropriateness of the airspace classification
- environmental issues (aviation specific); and
- the appropriateness of the existing services and facilities provided by the air navigation service provider (ANSP).

The review:

- examined feedback provided to the OAR from airport operators and airspace users
- considered safety data and information to inform recommendations to address safety findings
- ensured there was sufficient evidence and justification to support recommendations; and
- considered risk mitigation based on the cost to industry.

2.4 Background

Following the tragic mid-air collision between two rotary wing aircraft on 2 January 2023, an initial review of the airspace did not indicate there were any immediate safety issues relating to the airspace arrangements. However, CASA considered that it was appropriate to conduct a more detailed airspace review that sought input from airspace users.

The reviewed airspace is uncontrolled airspace i.e. Class G and located north of the Gold Coast airport control zone (CTR). The majority of users are involved in sight-seeing, pilot training, sports aviation or emergency services operations.

The Gold Coast coastline is a drawcard for tourists and activities including theme parks, scenic flights, parachute jumping exercises (PJE).

Users of this reviewed airspace are primarily located at Gold Coast airport, Southport aerodrome or Heck Field aerodrome (near Jacobs Well). Southport and Heck Field are aircraft landing areas (ALA), that is these locations are not certified in accordance with the Civil Aviation Safety Regulations (CASR).

Other airspace users travel from various locations around south-east (SE) Queensland (QLD) and northern New South Wales (NSW).

There are a number of helicopter landing sites (HLS) with the majority of helicopter aviation activities conducted at Sea World and the Westpac Lifesaving Helicopter service which operates adjacent to the stadium at Carrara.

3. Aerodromes and Landing Areas

Southport aerodrome (Southport) is an ALA and the only airfield located within the review area where fixed wing aircraft operate. Sea World, Marina Mirage and Westpac Lifesaving Helicopter Carrara have HLS located at these locations.

Aircraft operating within the reviewed airspace travel from other airports or aerodromes including:

- Gold Coast International Airport
- Heck Field
- Archerfield Airport.

3.1 Southport

Southport is an uncertified aerodrome or ALA operated by the Southport Flying Club.

Southport has an elevation of 5 FT AMSL and has one designated sealed runway (RWY) 01/19 which has the following characteristics:

- Runway length is approximately 808 metres (m) and runway width is 18m
- RWY 01 threshold is displaced by 190m
- RWY 19 threshold is displaced by 140m
- Runway strip width (RWS) is 60m.

Prior permission is required from the aerodrome operator and there are restrictions on the type of aircraft and operations permitted at Southport.

There are no straight-in approaches for either runway end and right hand circuits are required when operating on RWY19. Local flight procedures detailed in the En Route Supplement Australia (ERSA) recommends due to high density air traffic transiting coastal within Class G airspace, aircraft operating coastal should fly southbound at 1,000 FT AMSL and northbound at 500 FT AMSL. This entry is duplicated for Gold Coast airport in ERSA[10].

The aerodrome has an unlit wind direction indicator (WDI) located on the eastern side of RWY 01 and another WDI located on the western side of RWY19.

The primary types of aircraft operating at Southport are light, single engine, fixed winged aircraft with a low passenger carrying capacity.

3.1.1 Radio communications

Common Traffic Advisory Frequency (CTAF) and Aerodrome Frequency Response Unit (AFRU) 119.0 MHz is utilised at Southport.

The CTAF used within this review area is also used at Heck Field and can become congested due to operations at Southport, Heck Field, transiting coastal traffic, and other aircraft operating in the area including Sea World.

The Flight Information Area (FIA) frequency is 119.5 MHz where users communicate with air traffic control (ATC) located at the Air Traffic Service Centre in Brisbane (Brisbane Centre). ATC do not receive transmissions made on the CTAF.

The boundaries of a CTAF are not defined. CTAF procedures are used by pilots when operating in the vicinity of a non-controlled aerodrome, i.e. within 10 NM and at an altitude where operations could conflict with other traffic.

Aircraft operating within the vicinity of Southport will use the CTAF, however aircraft communicating with ATC use the FIA frequency.

[10] En Route Supplement Australia effective 15 June 2023 Airservices Australia Canberra

3.2 Aeronautical information publications

No errors were identified during the review of the suite of aeronautical information publications (AIP) for the review area.

3.3 Local Flight Procedures

As previously indicated, information detailed in the Southport and Gold Coast ERSA entries provide suggested altitudes for aircraft operating north or south along the coast due to the concentration of traffic operating in the area. Similar information is promulgated on the Gold Coast Visual Terminal Chart (VTC) however there is no associated VFR route along the coastal area. This information is displayed within text boxes north or south of the Gold Coast CTR.

Anecdotal evidence suggests a minority of aircraft operators have different interpretations of the altitude requirements detailed in ERSA and operations within Class G airspace which has resulted in opposite direction traffic operating at similar levels.

The benefit of standard operating procedures by all users is understood within the aviation sector. The intent of the promulgated information relating to the coastal route is to provide guidance relating to a standard operations along the coastal area giving some assurance to pilots that aircraft will remain separated from opposite direction traffic operating along the coastal route.

4. Airspace

4.1 General

The Australian airspace classifications accord with ICAO Annex 11 Air Traffic Services and are described in the AAPS.

The airspace within the review area, from the surface to 1,500 FT AMSL is Class G. It is part of the interconnected airspace area within air traffic control sectors between Gold Coast and Brisbane.

Class G airspace is uncontrolled airspace where IFR and VFR flights are permitted. Flights do not need to contact ATC to enter or land but aircraft are subject to weather conditions, speed limitations below 10,000 FT AMSL and radio requirements. In Class G airspace, ATC provide a Flight Information Service (FIS) including traffic information and advice for the safe and efficient conduct of flights to IFR aircraft and, upon request and workload permitting, to VFR aircraft.

In uncontrolled airspace, pilots remain responsible for separation from other aircraft and collision avoidance. The following methods are used by aircraft for separation purposes within uncontrolled airspace:

- climbing, descending, maintaining different altitudes
- referencing ground features such as roads, rivers, townships identifiable or landmarks such as rail lines, solar farms that are visible from the air
- navigation references such as a bearing or radial and/or distance or GPS distance
- clock reference codes which assist with sighting aircraft.

4.2 Special Use Airspace

There are no Restricted Areas (RAs), Danger Areas (DAs) or other Special Use Airspace (SUA) areas within the review area.

4.3 Air Routes

Two low-level air routes in the review area support aircraft activity between Gold Coast to Amberley (W196) and Gold Coast to Archerfield (W192)[11].

In Class G airspace, VFR aircraft generally travel as required, remaining clear of the activated SUAs and operating in visual meteorological conditions (VMC). IFR aircraft usually remain on designated air routes nominated in their flight plan and can operate in instrument meteorological conditions (IMC).

A VFR Route is promulgated on the Gold Coast VTC and subject to ATC approval, provides aircraft a path to transit the western side of the Gold Coast CTR.

Three VFR approach points identified on the Gold Coast VTC are located at Porpoise Point near Sea World, the Q1 building south of Surfers Paradise and the Nerang town centre at Nerang. These are commonly used points provide pilots an awareness of where aircraft could be operating within the review area when the VFR approach point is referenced. However there is no VFR point at or near Carrara Stadium where helicopter operations are regularly conducted.

4.4 Surveillance

ATC surveillance in the review area includes primary surveillance radar (PSR), secondary surveillance radar (SSR) and Automatic Dependent Surveillance – Broadcast (ADS-B) with sites located at Mount Sommerville and Mount Hardgrave. Air traffic services are provided from the Brisbane Centre (Sunshine Sector).

[11] Enroute Chart Low 3 effective 15 June 2023, Airservices Australia, Canberra

ADS-B is a system whereby suitably equipped aircraft automatically broadcasts their location via a digital data link. ADS-B uses Global Navigation Satellite Systems (GNSS) for positioning and can be both broadcast (ADS-B OUT) and received (ADS-B IN).

The ADS-B data is received by ATC ground stations which can be displayed on ATC consoles that enables ATC to provide a radar-like surveillance service. The data can also be received by other suitably equipped aircraft to enable detect and avoid capability and situational awareness.

There is no requirement for all aircraft to be fitted with conspicuity devices or to have these devices activated when flying in all circumstances which provides a limitation when users operate in the area. The application of see-and-avoid techniques as well as radio broadcasts remains the primary risk mitigator for pilots to develop their situation awareness and maintain separation from other users within the reviewed airspace.

CASA Advisory Circular 91-23 (2020) provides the following in relation to VFR aircraft and available ADS-B options within its introduction. “All instrument flight rules (IFR) aircraft have ADS-B transmitting equipment (ADS-B OUT). Logically, ADS-B OUT is the ideal way for VFR aircraft to signal their presence directly to other aircraft. In effect, ADS-B turns the ‘see and avoid’ concept into ‘see, BE SEEN, and avoid.’[12]

ADS-B receivers, suitable for use on aircraft operating under instrument or visual flight rules are available within Australia and can be used in aircraft without any additional regulatory approval or expense.

4.5 Environment

In keeping with CASA’s obligations under subsection 9A(2) of the Civil Aviation Act 1988, and with particular regard to the relevant provisions of the Australian Airspace Policy Statement 2021, CASA administers airspace as far as practicable in a manner that contributes to the protection of the environment.

The airspace within the review area was assessed to consider current environmental impact and there were no issues identified.

Matters relating the interactions with birds and wildlife are the responsibility of the airport’s wildlife management program and are normally detailed within the respective Aerodrome Operations Manual.

[12] AC 91-23 v1.0 - ADS-B for enhancing situational awareness (casa.gov.au) accessed 8 August 2023

5. Traffic

Airspace reviews and aeronautical studies analyse air traffic movements and passenger movements within a set period. This airspace review focused on air traffic movements within a specific volume of airspace. An analysis of passenger numbers was not conducted as part of the process.

The data provided by Airservices identified the majority of aircraft movements in the review area occurred along the coast and around Southport aerodrome. Most of the air traffic were VFR aircraft. Anecdotal information received by pilots operating within the area indicates the number of circuits being conducted within the Gold Coast area since 2021 has increased.

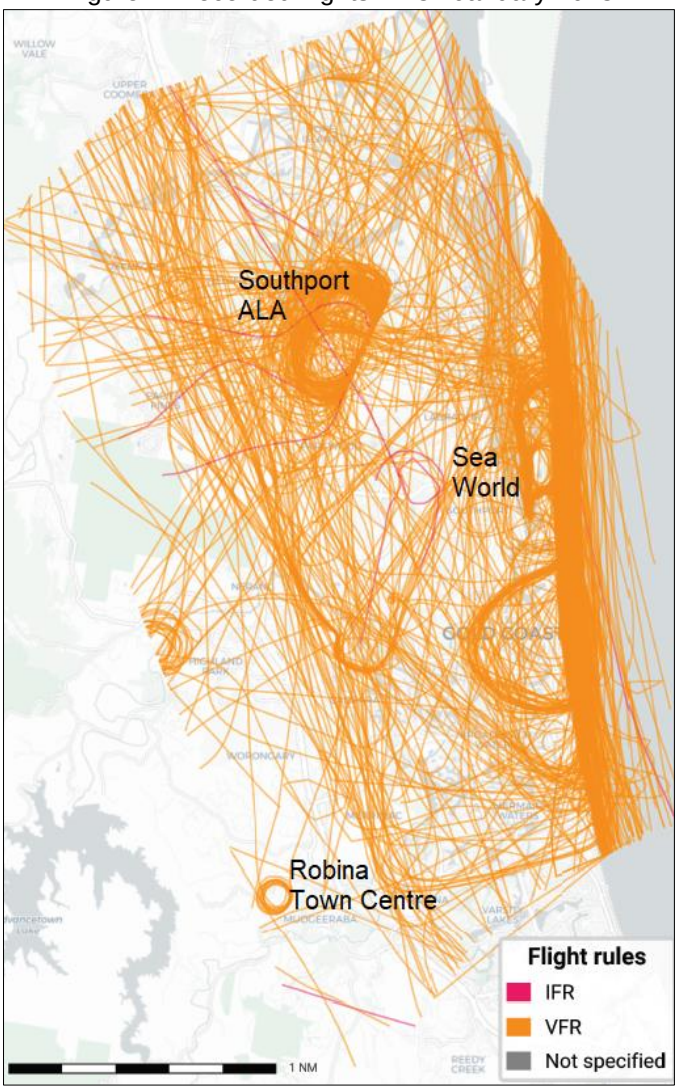
5.1 Analysis of aircraft movements

The analysis determined no change to the airspace classification was required based on aircraft movements.

Aircraft operating in the review area are primarily light aircraft and helicopters undertaking flying training and sight-seeing activities. The analysis of aircraft movements indicated the majority of VFR traffic transit along the coast and complete clear circuit patterns around Sea World and Southport.

On occasion, military jet aircraft operate what is known as a military low jet route (LJR), off the coast and outside the review area. It was noted that military aircraft will remain on area frequency and not necessarily broadcast intentions on the CTAF. Military aircraft conducting a LJR operation are away from regular VFR aircraft operations within this review area.

Figure 2: Recorded flights 24-31 January 2023



6. Aviation Occurrence Reports

All aviation occurrences, consisting of incidents, serious incidents and accidents involving Australian registered aircraft, or foreign aircraft in Australian airspace, must be reported to the ATSB. The ATSB receives occurrence information via pilot/operator reports, aerodrome operator reports, Airservices' Corporate Integrated Reporting and Risk Information System (CIRRIS) reports and the Australian Defence Forces' Aviation Safety Occurrence Reports.

The ATSB maintains a database, the ATSB Investigation Management System (AIMS). Reported occurrences are logged, assessed, classified and recorded. The information contained within AIMS is dynamic and subject to change based on additional and/or updated data. Each individual report is known as an Aviation Safety Incident Report (ASIR) or aviation notification.

For identification purposes each notification is allocated its own unique number, detailed as an incident, serious incident or accident and is assigned one of the following Level 1 Descriptions:

- Airspace – includes near collisions, loss of separation (LoS), loss of separation assurance (LOSA), breakdown of coordination/information error, ANSP operational errors, encounter with a remotely piloted aircraft (RPA), Airborne Collision Alert System (ACAS) Warning.
- Environment – birdstrikes and other wildlife strikes, weather-related incidents affecting the operation of an aircraft such as lightning strikes, turbulence, windshear and microbursts, and interference with an aircraft from the ground.
- Infrastructure – includes runway lighting failures, air traffic management system failures, faults of deficiencies with navigation aids or the operation of a radar or surveillance system affecting the operation of an aircraft.
- Operational – considers pilot actions and runway incursions (resulting in events including LoS), ground proximity warnings, terrain collisions, crew and cabin safety, smoke or fumes events, aircraft loading incidents and aircraft controllability issues.
- Technical – includes airframe issues or failures, aircraft system failures such as avionics, hydraulics and pressurisation, and powerplant/propulsion malfunctions and failures; and
- Consequential Events – includes aircraft conducting missed approaches, fuel dumping, diverting or returning to aerodrome.

A CIRRIS report is an electronically submitted air safety occurrence report which forms part of the risk information system maintained by Airservices Australia. Not all information in CIRRIS is required to be reported to the ATSB and there may be differences between the two reporting systems.

The airspace related incidents within the review area from January 2018 to June 2023 were reviewed.

6.1 ATSB Aviation Safety Incident Reports

An analysis of the ASIR data did not identify the airspace classification as a factor in these reports and demonstrated the diversity of aviation operations within the airspace.

During the period 1 January 2018 to 1 June 2023, 23 ASIRs within the review area were recorded by the ATSB. The following tables identify the level 1 occurrence description of the recorded incidents and the airspace occurrences within the review area.

Table 1: ASIR Occurrences Southport review area between January 2018 to June 2023

Level 1 Occurrence	Number of Incidents
Airspace	8
Environment	3
Operational	7
Technical	5
Total occurrences	**23**

Table 2: Airspace related ASIR recorded during the review period

Date	Summary
05 February 2018	Passing 600 feet, on approach, the helicopter pilot observed a remotely piloted aircraft system (RPAS) pass 30 metres to the left. The pilot turned to increase separation.
17 February 2018	Passing 400 feet, on approach the helicopter crew observed a RPAS 3 metres from the rotor blade tips.
28 October 2018	During cruise, an aircraft observed a helicopter tracking towards them. Aircraft descended to 400 feet to ensure separation was maintained.
28 January 2019	During cruise, the crew received a Traffic Collision Avoidance System Resolution Advisory (TCAS RA) alert and the aircraft climbed into controlled airspace without a clearance.
15 November 2019	A separation issue occurred between three Piper aircraft due to weather and communication issues.
25 March 2021	The pilot was not in normal communication with ATC resulting in the aircraft entering controlled airspace without a clearance.
23 March 2022	While conducting training, the remotely piloted aircraft operator observed a helicopter appear above a nearby tree line and landed the RPA to maintain separation. No radio calls were heard from the helicopter.
02 January 2023	Mid-air collision near Sea World.

6.1.1 ATSB safety investigations and reports

The ATSB's primary focus is the safety of the travelling public. The ATSB prioritises investigations based on accidents and the most serious incidents that are considered most likely to enhance aviation safety.

Between January 2018 and June 2023, the ATSB conducted three investigations into the incidents that occurred or involved the review area.[13] These incidents involved a collision with water involving a Cessna 206 floatplane on 18 March 2018 (final report published 23 October 2018), a fatal incident involving a Yakovlev Aircraft Factories Yak-52 that departed from Southport and crashed along South Stradbroke Island on 5 June 2019, and the mid-air collision on 2 January 2023 which had a preliminary report published 7 March 2023. The investigation was ongoing at the time of this review.

These reports did not specify the airspace classification as a significant safety factor in relation to these incidents.[14]

6.2 Airservices CIRRIS data

An analysis of the CIRRIS data found a common causal factor of these reports was a lack of pilot awareness. This included a number of infringements within a temporary restricted area during special events or the pilot's awareness of the controlled airspace steps.

Recorded incidents show ATC attempted to make contact with aircraft on the FIA frequency, however the CTAF is the primary frequency of used by aircraft within the review area. ATC do not monitor or broadcast on the CTAF.

[13] Source: Australian Transport Safety Bureau website Investigations | ATSB 30 June 2023.

[14] Based on reviewed ATSB reports. Subject to amendment at the conclusion of the investigation.

7. Consultation and stakeholder feedback

Stakeholders were invited to provide comment or input to issues relating to the reviewed airspace through the CASA Consultation Hub or during various onsite meetings conducted by the OAR. Where issues outside the scope of the airspace review were discussed, they are included for completeness.

A list of stakeholders invited to contribute to this review can be found in Appendix C – Stakeholders.

Comments from the stakeholders can be found in Appendix E – Stakeholder comments from CASA Consultation Hub.

7.1 Air Navigation Service Provider

Discussions with Airservices Australia were conducted and the following points are noted:

- aircraft in the review area can operate on the CTAF or the area frequency
- ATC do not monitor or broadcast on the CTAF
- airspace infringements are primarily caused by pilots not maintaining awareness that climb into or transit through controlled airspace without a clearance
- flight planning does not necessarily include an option when clearance is not available into CTA
- the mix of aircraft operations at Gold Coast airport includes international and domestic passenger transport operations, business jet, charter flights, PJE, scenic flights and flight training operations provides challenges to ATC with the additional traffic operating outside controlled airspace.

7.2 Airspace Users

The main airspace users are involved in flight training, sightseeing, recreational or sports aviation, RPAS and private charter. Feedback received from these airspace users included:

- the airspace can get busy at times, particularly when transiting along the coast
- frequency congestion, particularly on the CTAF, does increase cockpit workload, especially when Heck Field is operating
- an increase in the number of broadcasts being made on the CTAF has been noted since the January 2023 collision
- there has been changes made in procedures for helicopter flights at Sea World to enhance the safety of operations such as a dedicated ground observer and radio calls throughout each flight providing position and intentions.
- aircraft transiting either north or south along the coast do not always comply with the promulgated instructions
- denying aircraft a clearance to enter controlled airspace or the CTR by ATC has increased
- aircraft mostly fly along the coast, however aircraft can operate to or from the western VFR route. Both routes funnel aircraft along either path which can increase the likelihood of an airspace infringement when clearance is denied
- consideration should be given to moving the western VFR lane away from terrain
- aircraft operating along the western VFR route can be pushed down due terrain and weather. This is a similar issue that is experienced when flying near Amberley/Lake Manchester. The risk is aircraft that remain outside controlled airspace are operating at lower levels, closer to terrain, due to ATC not providing a clearance. A review of the airspace design at Amberley should be undertaken
- CASA should produce videos specifically on the subject of flying around the Gold Coast

- it is only a matter of time before a RPAS will collide with an operating fixed or rotary winged aircraft. Aircraft specifically avoid certain areas along the coast during fine, light wind conditions because of the number of RPAS units being flown
- Carrara stadium should be listed as a VFR point due to helicopter operations at this location.

7.3 Consultation Hub

Overall, the responses submitted through the Consultation Hub provided a range of perspectives, including contradictive statements, however feedback validated the appropriateness of the current airspace classification while acknowledging the airspace can be busy. Issues with the CTAF when multiple aircraft make simultaneous broadcasts were submitted by a number of respondents. Other suggestions and issues provided through the Consultation Hub included:

- aircraft could be on CTAF or on the FIA frequency therefore broadcasts or traffic information may not be heard by all aircraft.
- non-compliance with use of standard radio phraseology
- radio broadcast procedures are not being followed
- promulgated coastal limits not being adhered to by aircraft
- increased cockpit workload when operating in the airspace
- mandatory fitment of conspicuity devices on all aircraft to assist with situational awareness
- requests by VFR aircraft for flight following information from ATC is always rejected.

8. Issues, Analysis, Observations and CASA Actions

8.1 Airspace Classification

Founded on the feedback received from stakeholders, information received during the consultation process, analysis of incident data and aircraft movement data, the airspace classification is appropriate.

It is noted the airspace can be busy, however the airspace classification provides an efficient use of and equitable access for all users of the airspace. Users included regular and transient operators conducting scenic tours, charters, emergency service operations, flight training and recreational flying with fixed winged and rotary winged aircraft.

8.2 Frequency Congestion and over transmission of radio calls

Frequency congestion and the over transmission of radio calls on the CTAF were the main issues raised by stakeholders. CTAF 119.0 MHz operates in an area north of the Gold Coast CTR to South Stradbroke Island that includes operations at Southport, Sea World, Carrara and Heck Field. Aircraft leaving the Gold Coast CTR transiting north may be on the CTAF. Frequency congestion prevents pilots from effectively communicating with other aircraft, reducing situational awareness.

Frequency congestion or over transmission can occur with as little as three aircraft operating on the CTAF, for example, one aircraft at Southport, one aircraft operating along coast and one helicopter operating from Carrara. A simultaneous broadcast between two aircraft can lead into repeat transmissions to clarify intent, and congest the frequency.

Additionally, aircraft may be operating in the same area but broadcast on the FIA frequency 119.5 MHz. Although this operation may not increase frequency congestion, it may impact the awareness of pilots who are actively listening on the CTAF.

Other factors such as aircraft making numerous broadcasts also impacts the number of over transmissions or frequency congestion issues. Stakeholders believe separating frequencies and establishing a mandatory broadcast area will alleviate frequency congestion. However the consequences of a separate frequency such as increased cockpit workload, impacts on adjacent frequency areas or the location of the frequency boundary were not considered by stakeholders.

8.3 Radio Phraseology

An issue of pilots using non-standard radio phraseology when operating within the review area was identified. Stakeholders reported pilots are not making necessary radio broadcasts and if standardised transmissions were made, the number of transmissions would decrease.

Pilots suggested the issue could be addressed during flight reviews with testing officers reaffirming the correct radio phraseology. Furthermore, additional education material and presentations during CASA Flight Safety Seminars may increase the use of standardised phraseologies by pilots.

8.4 Scenic Coastal Area

The coastal area between Southport and the Gold Coast has a high volume of air traffic. The area is identified on the Brisbane and Gold Coast VTCs and within the ERSA entries for the Gold Coast and Southport aerodromes. The promulgated information indicates aircraft fly southbound at 1,000 FT AMSL and northbound at 500 FT AMSL.

Fixed and rotary winged operators advised users flying along the coastal area at the same time, are not adhering to the promulgated information and increasing the risk of a close proximity event occurring. Acknowledging Class G airspace enables aircraft to operate without a control service, the adherence to the published information mitigates the risk to operations in this area.

Users advised the inland VFR lane presents other issues including flying closer to rising terrain. Aircraft operating on this VFR lane experience more turbulence than aircraft operating coastal. A suggestion to move this VFR lane to the east, away from the terrain, creates aircraft separation and runway operations issues within the CTR.

CASA has produced a series of Stay OnTrack booklets including one for flying in the Gold Coast region to help VFR pilots become familiar with the area. Stay OnTrack: Flying the Gold Coast region (casa.gov.au).[15]

8.5 Air Traffic Services

Stakeholders presented anecdotal information pertaining to air traffic services within the area. Stakeholders acknowledged ATC staff operate in a fast paced environment with a large variation in aircraft types, servicing multiple aviation purposes i.e. domestic and international travel, business jets, private charter, sightseeing, flight training and parachuting operations.

The determination of the airspace classification and services within each classification, particularly controlled airspace, provides an effective mitigate to airspace risk. Pilots tracking to the Gold Coast airport require a clearance to enter controlled airspace, which is not always immediately available. A lack of planned options by pilots when clearance into the CTR is not immediately granted has resulted in aircraft entering controlled airspace without that clearance, affecting aircraft separation and increased workload for pilots and ATC. Consideration of the airspace environment pilots should be resolved during pre-flight planning, instead of planning 'on the run'.

A number of users from different locations reported obtaining a clearance into CTA/CTR kept aircraft operating a low levels, where aircraft operate on different frequencies and may not be fitted with a conspicuity device. Although PSR may identify the object to ATC, broadcasts from Brisbane Centre are not necessary heard by pilots on or monitoring the CTAF.

Air traffic services are limited by available surveillance and fitment of operational conspicuity devices to aircraft. Increasing the number of aircraft fitted with conspicuity devices will change 'see and avoid' to 'see, be seen, and avoid' action. The Australian Government currently offers a rebate of the purchase cost of eligible ADS-B devices and where applicable, the installation, capped at $5,000 (Australian Dollars).[16] [17]

8.6 Other issues

Other issues identified were:

- takeholders stated that a collision between aircraft and RPAS will occur in the future along the coast. The popularity of RPAS and where these devices are used, particularly during favourable conditions, will result in more RPAS users going to the coast. RPAS operators regularly pilot their systems above 500 FT AMSL. Airspace users familiar with this practice plan to avoid specific areas during favourable weather conditions, however there is no advice for transient aircraft.
- Military aircraft conducting a LJR operation off the coast, do not broadcast intentions on the CTAF. ATC make broadcasts on the FIA frequency. Aircraft broadcasting or monitoring the CTAF do not receive information regarding LJR operations.
- Additional VFR reporting points would assist with situational awareness. Carrara Stadium has regular helicopter operational activity and is centrally located between Nerang and Q1.
- The development of additional educational videos featuring different situations when operating in uncontrolled airspace around the Gold Coast may have the benefit of providing pilots practical examples of common situations, describe hazards and assist awareness when operating in the review.

A number of issues provided by stakeholders were outside the scope of this review. Examples of these issues raised related to departing Archerfield, access to Amberley airspace and a VFR route to/from the west for the Gold Coast. The OAR Strategic Workplan details the OAR's priorities and strategies. One key

[15] Civil Aviation Safety Authority Stay OnTrack www.casa.gov.au 4 August 2023

[16] Automatic Dependent Surveillance (ADS-B) Broadcast Rebate Program | business.gov.au accessed 4 August 2023

[17] ADS-B rebate scheme | Civil Aviation Safety Authority accessed 6 February 2025

initiative is an airspace review around south east Queensland on a risk-based determination. Issues outside the scope of this review would be captured in a larger study area.

8.7 CASA Actions

CASA will follow-up on the observations, or opportunities to enhance services identified through CASA's analysis of the reviewed airspace:

Observations/Opportunity to enhance regional services

1. Consideration of effective communication and information from CASA to pilots on operating in uncontrolled airspace around the Gold Coast may provide some safety benefits. This could include further promotion of existing resources for operating in this area, such as the Staying OnTrack booklet and videos, and/or the creation of additional information.
2. Additional visual approach points and/or visual flight rules routes on the Gold Coast Visual Terminal Chart may enhance situational awareness. CASA could assist local operators in preparing an airspace change proposal.

9. Conclusion

Following the tragic mid-air collision between two rotary wing aircraft on 2 January 2023, an initial review of the airspace did not indicate there were any immediate safety issues relating to the airspace arrangements. However, CASA considered that it was appropriate to conduct a more detailed airspace review that sought input from airspace users.

CASA has conducted a review of the airspace within a defined area around Southport aerodrome between seven and 20 DME north of Gold Coast Airport. The review examined the airspace architecture, air navigation services and procedures from the surface to 1,500 FT AMSL.

The airspace review applied CASA's regulatory philosophy which considers the primacy of air safety, whilst considering the environment, security, cost and is consistent with the Australian Airspace Policy Statement (2021) and the Minister's Statement of Expectations (2022).

The airspace classification is appropriate. Airspace users supported the existing airspace classification provides equitable access to the area and should not be altered as a result of the Sea World accident. Changes to the operations at Sea World helicopters including additional radio broadcasts and dedicated ground personnel enhanced operational safety.

The OAR will continue to monitor aircraft movements and incident data within the review area.

Appendices

Appendix A – Acronyms and Abbreviations

Acronym/abbreviation	Explanation
AAPS	Australian Airspace Policy Statement 2018
ACP	Airspace Change Proposal
Act	Airspace Act 2007
ADS-B	Automatic Dependent Surveillance - Broadcast
Airservices	Airservices Australia
ALA	Aircraft landing area
AMSL	Above Mean Sea Level
ANSP	Air Navigation Service Provider
ASA	Aviation Safety Advisor
ASIR	Aviation Safety Incident Report
ATC	Air Traffic Control
ATM	Air Traffic Management
ATS	Air Traffic Services
ATSB	Australian Transport Safety Bureau
CASA	Civil Aviation Safety Authority
CTA	Control Area
CTAF	Common Traffic Advisory Frequency
CTR	Control Zone
DA	Danger Area
Defence	Department of Defence
DME	Distance Measuring Equipment
ERC	En Route Chart
ERSA	En Route Supplement Australia
FT	Feet
FL	Flight Level
GA	General Aviation

Acronym/abbreviation	Explanation
HLS	Helicopter landing site
ICAO	International Civil Aviation Organization
IFR	Instrument Flight Rules
IMC	Instrument Meteorological Conditions
NOTAM	Notice to air men
NM	Nautical Miles
OAR	Office of Airspace Regulation
RA	Restricted Area
RFC	Request for Change
RPAS	Remotely Piloted Aircraft Systems
SSR	Secondary Surveillance Radar
SUA	Special Use Airspace
TAC	Terminal Area Chart
TCAS RA	Traffic Collision Avoidance System Resolution Advisory
TCAS TA	Traffic Collision Avoidance System Traffic Advisory
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions
VNC	Visual Navigation Chart
VTC	Visual Terminal Chart

Appendix B – Australian Airspace Structure

Class	Description	Summary of Services, Procedures, Rules
A	All airspace above Flight Level (FL) 180 (east coast) or FL245 elsewhere	Instrument Flight Rules (IFR) only. All aircraft require a clearance from Air Traffic Control (ATC) and are separated by ATC. Continuous two-way radio and transponder^ required. No speed limitation.
B	Not currently used within Australia	IFR and Visual Flight Rules (VFR) flights are permitted. All flights are provided with ATS and are separated from each other.
C	In control zones (CTRs) of defined dimensions and control area steps generally associated with controlled aerodromes	• All aircraft require a clearance from ATC to enter airspace. All aircraft require continuous two-way radio and transponder^. • IFR separated from IFR, VFR and Special VFR (SVFR) by ATC with no speed limitation for IFR operations. • VFR receives traffic information on other VFR but are not separated from each other by ATC. SVFR are separated from SVFR when visibility (VIS) is less than Visual Meteorological Conditions (VMC). VFR and SVFR speed limited to 250 knots (kt) Indicated Air Speed (IAS) below 10,000 feet (FT) Above Mean Sea Level (AMSL)*.
D	Towered locations such as Bankstown, Jandakot, Archerfield, Parafield and Alice Springs.	• All aircraft require a clearance from ATC to enter airspace. For VFR flights this may be in an abbreviated form. • As in Class C airspace all aircraft are separated on take-off and landing. All aircraft require continuous two-way radio and are speed limited to 200 kt IAS at or below 2,500 FT AMSL within 4 NM of the primary Class D aerodrome and 250 kt IAS in the remaining Class D airspace**. • IFR are separated from IFR, SVFR, and provided with traffic information on all VFR. • VFR receives traffic on all other aircraft but is not separated by ATC. SVFR are separated from SVFR when VIS is less than VMC.
E	Controlled airspace not covered in classifications above	• All aircraft require continuous two-way radio and transponder^ (unless VFR aircraft are unable to power a transponder). All aircraft are speed limited to 250 kt IAS below 10,000 FT AMSL*. • IFR require a clearance from ATC to enter airspace and are separated from IFR by ATC and provided with traffic information as far as practicable on VFR. • VFR do not require a clearance from ATC to enter airspace and are provided with a Flight Information Service (FIS). On request and ATC workload permitting, a Surveillance Information Service (SIS) is available. within surveillance coverage.
F	Not currently used in Australia	IFR and VFR flights are permitted. All IFR flights receive an air traffic advisory service and all flights receive a flight information service if requested.
G	Non-controlled	• Clearance from ATC to enter airspace not required. All aircraft are speed limited to 250 kt IAS below 10,000 FT AMSL*. • IFR require continuous two-way radio and receive a FIS, including traffic information on other IFR. VFR receive a FIS. On request and ATC workload permitting, a SIS is available within surveillance coverage. VHF radio required above 5,000 FT AMSL and at aerodromes where carriage and use of radio is required.

* Not applicable to military aircraft

** If traffic conditions permit, ATC may approve a pilot's request to exceed the 200 kt speed limit to a maximum limit of 250 kt unless the pilot informs ATC a higher minimum speed is required.

^ Transponder requirement includes ADS-B OUT.

Appendix C – Stakeholders

The following stakeholders contributed to this review.

Organisation	Position
CASA	Aviation Safety Advisors CNS/ATM
Airservices Australia	Gold Coast Tower Archerfield Tower Brisbane Centre, Sunshine Sector
Elite Helicopters	Operations
BASAIR Aviation College	Operations
Tisdall Aviation	Operations
Heck Field – Gold Coast Sports Flying Club	Operations
Westpac Lifesaver Rescue Helicopter Service	Operations
Sea World Helicopters	Operations
Southport / Mason Field	Operations
CASA Consultation Hub	Various pilots, aircraft owners/operators, RPAS operators, aviation business operators.

Appendix D – References

Advisory Circular 91-23 ADS-B for enhancing situational awareness (July 2020), Civil Aviation Safety Authority, Canberra.

Airservices Australia; Enroute Chart Low L3 Effective 1 December 2022

Airservices Australia; Visual Terminal Area Chart Gold Coast Effective 1 December 2022

Airservices Australia Designated Airspace Handbook Effective 1 December 2022

Airservices Australia En Route Supplement Australia (ERSA) Effective 1 December 2022

Airspace Act 2007 Australian Government, Canberra

Airspace Regulations 2007, Australian Government, Canberra

Australian Airspace Policy Statement 2021, Australian Government, Canberra

Australian Transport Safety Bureau, Aviation safety investigations and report 2018-2023 retrieved 30 June 2023 https://www.atsb.gov.au/investigation-reports

Aviation Safety Incident Reports 2018-2023 Australian Transport Safety Bureau, Canberra

Corporate Integrated Reporting and Risk Information System 2018-2023, Airservices Australia, Canberra

Department of Infrastructure, Transport and Regional Development 2021. Australian Airspace Policy Statement 2021, Canberra. Australian Airspace Policy Statement 2021 (legislation.gov.au)

Minister's Statement of Expectations for the Board of the Civil Aviation Safety Authority for the period 31 January 2022 to 30 June 2023, Australian Government, Canberra

Appendix E – Stakeholder comments from CASA Consultation Hub

The following sections are the consolidation of comments or responses received during the preparation of this review. Comments have been recorded in order the feedback was received and with the approval to publish from each stakeholder. The OAR received 87 comments via the CASA Consultation hub. Stakeholders who advised their comments remain confidential, have had their comments considered but will not be published during the finalisation of the Consultation Hub activity.

Opinions or comments made relating to the causes of the Sea World incident have been removed or edited from this table. In other cases, personal identifiable information has been edited but the comments are recorded verbatim. Conflicting statements regarding operations in the reviewed airspace were made however this exemplified the diversity of aviation activity within the area.

CASA would like to acknowledge and thank stakeholders who provided comment for this review. CASA would also like to encourage ongoing reports being made, both at the time and in retrospect as this will form a source for evidence-based risk determinations.

Stakeholder	Comment
Pilot	Experienced a lot of frequency congestion particularly on the CTAF. Since the Sea World incident, we have noted an increase in radio broadcasts in the area. Pilots are letting others know where they are. Changing and monitoring frequencies with a single radio operation, increases the cockpit workload.
Pilot	Activity in the review area funnels traffic either down the coast or along the hinterland. There is limited access to controlled airspace but this isn't only at the Gold Coast. It includes airspace to the west i.e. Amberley. Like along the coast, the western airspace isn't designed for purpose. Areas are constrained by weather forming over terrain which provides challenges to remain OCTA especially when ATC don't give clearances and don't see the weather on the hills. Perhaps on the Gold Coast, there could be a track where you come in down to Q1 and return via Robina town centre but given traffic don't follow the instructions along the coast, this won't necessarily be followed. ATC don't broadcast on the CTAF. Aircraft need to be on the area frequency to communicate with ATC but that limits the awareness of traffic on the CTAF, particularly around Mason Field (Southport).
Pilot	People are not following the instructions for flying along the coast and I fly further out over water to avoid more head-to-head situations. ATC are unaccommodating to clear aircraft into CTA or the control zone and this is not just for Airservices. Same issues regarding access to controlled airspace is experienced at Amberly. CASA should look at developing more videos on flying around the Gold Coast, not just flying to be cleared into the control zone. Pilots are making more broadcasts on the CTAF and turning their lights on to make themselves visible and heard when flying in the area. With the additional broadcasts, frequency congestion is increasing. A separate frequency for Southport and Heck Field should be considered, even making the coastal route a Danger Area, given the mix of traffic and the number of aircraft operating in the area. While the VFR lanes are shown, perhaps a VFR lane to the west would benefit aircraft coming in to and out of the area.
Pilot	Approximately 2 years ago, we had a near miss experience in the southern part of the review airspace. Having a more identifiable landmarks would help with situational

Stakeholder	Comment
	awareness of aircraft operating in the area such as Pacific Fair or Carrara Stadium which has helicopter operations. There has been a noticeable increase in radio broadcasts particularly from aircraft at Heck Field or coming down from Archerfield. The coastline does get busy with air traffic and it is important that pilots follow published instructions. We've seen an increase in drone usage along the coast and believe it is a matter of time before an incident occurs where a UAV goes through the front screen of an aircraft. We avoid flying in areas around Burleigh on nil wind and big surf days. There are just too many UAVs operating to risk an incident.
Pilot	The biggest hazard to the area is someone not making any calls on frequency and this does happen. At the moment people are over transmitting on the CTAF with operations at Heck Field and Southport. This is mostly experienced on weekends. People operating in the area should make a mandatory broadcast on the CTAF. We've seen the Hornets fly through from Evans Head, along the coast before turning to Amberley. They appear to be 'blessed' by Airservices but aircraft on the CTAF hear nothing. This could be fixed by having the military aircraft make a broadcast on the CTAF during low jet route operations. As traffic at the Gold Coast airport increases, there will be an increase in traffic within the area.
Pilot	Established Gold Coast/Straddie VFR lanes and non-controlled airspace remain as is. Mandatory reporting waypoints be established.
Pilot	The Southport area class G airspace is an area where frequent high to extreme traffic volumes create a number of hazards, particularly relating to communication on 119.0. Prior to this incident I have personally observed a number of close calls, but far more commonly, frequency congestion which pose a huge risk to airspace users. Anecdotally, frequency congestion resulting in multiple aircraft calling 119.0 simultaneously will occur a number of times each day, spiking on weekends to at least 10 separate occasions. A quick transmission of 'two in together' often does not illicit a response from either aircraft to make a second attempt at their call. My suggestion, at a minimum, is to segregate Heck Field to their own discrete frequency or 126.7. The number of aircraft operating out of Heck Field appears to rival the Southport class G airspace area at times. Citing Southport and Heck Field are both within the vicinity (10nm) of each other, a clear delineation is required if splitting the aerodromes frequencies. A suitably identifiable boundary would be along the existing FAC Class G airspace lines between 119.5 and 125.7, or if a visual boundary is more suitable the Coomera River. If a designated broadcast area was deemed appropriate, the boundary could be extended south along the western side of the 3500/1500 steps to the YBCG CTR boundary and back along the coast.
Pilot	I regularly teach students how to fly in to and out of the Gold Coast from Archerfield. Unlike the Casino, Lismore and Ballina CTAF, every time I have flown in to the GC, the CTAF of 119.0 has not been busy at all. We don't hear pilots stepping over each other on the radio, even though I feel like I should be hearing a lot more helicopter traffic, especially given it serves Heck Field, Southport and Dreamworld etc.

Stakeholder	Comment
	I make this a very prominent point to my students when transiting this area and we always try and fly into the GC at 2500 feet through CTA because of how much low level traffic I know exists in order to keep well clear. It is difficult to provide clear cut recommendations just because of how cramped the airspace is in that area, so this has been my experience.
Pilot	Heck Field needs their own frequency as it clogs up Southport frequency which already has a number of operators inside it using the frequency.
Aircraft owner/operator	The main problem is the degradation of individual, visual lookout skills in pilots. Radio, ADSB, and all the other technologies can never replace a well taught, and well refined visual scan. In fact it could be said that the proliferation of these technologies, along with glass cockpits has resulted in a continuing loss of focus and awareness on the vital skills of lookout, see and avoid. Dark coloured aircraft are also a threat, particularly in the 'look down' sighting scenario. Operators should be educated on the value of aircraft visibility over aesthetics when choosing paint schemes for their aircraft.
Pilot	Current traffic movements are more than satisfactory.
Pilot	I have flown in this area for over 20 years and have never had any concerns. I believe this latest tragic accident is a one off (hopefully).
Pilot	This airspace and the requirements to transit the coastal area whether for sightseeing or to transit Cooly airspace is well known by all pilots and procedures are clearly stated on the VTC. My experience has been that radio communication between aircraft has been sufficient to allow pilots to safely navigate the area.
Aircraft owner/operator	The area identified for this review is predominantly covered by the CTAF frequency 119.0 and Brisbane Centre frequency 119.5 but Heck Field is also covered by the same CTAF frequency and a different Brisbane Centre frequency 125.7. My comments on frequency congestion mostly apply to weekends and predominantly Saturday. Heck Field is now a busy training field that has a constant stream of CTAF calls both midweek and weekends. Helicopter tourist traffic is also relatively constant but also peaks on weekends. Southport flying club is usually very active on weekends and through VFR traffic is erratic at best and may or may not be making relevant radio calls on the correct frequency. My point is that there are peak times during the day when the CTAF frequency is overloaded and all but useless and the only thing that really works is multiple sets of eyes looking out the window for that errant aircraft. Arriving into Southport single pilot IFR can be invigorating. It is possible to flight plan via IFR reporting points in this area and get down to a pilot calculated lowest safe of 2100' in G airspace but there is always the nagging possibility that the trike that has appeared unannounced quite close to me a few times may be around or I simply miss a radio call whilst monitoring two busy frequencies. I also point out that Brisbane Centre combine multiple control frequencies with 119.5 and 125.7 most often combined. From my perspective a monitored traffic frequency as Ballina now has would be ideal for the Southport area but failing this I strongly recommend a mandatory broadcast zone in the Southport tourist area. This zone should be the same as in the map provided for this review and should not include Heck Field.

Stakeholder	Comment
Pilot	There needs to be better communication between pilots and situational awareness.
Pilot	The Class G airspace North of the Gold Coast can often be quite busy, with traffic from surrounding airports, helicopters and training flights. I have found the CTAF is often congested. Good situational awareness and effective radio communication is a must when operating through this airspace.
Drone Operator	It is a very busy airspace. I've never experienced any close calls. Most if not all pilots report their position. I engaged in many aerial film and photography sorties in that area over many years and felt very safe amongst the constant traffic flow.
Aircraft owner/operator	I would recommend that ABSB be mandated for all aircraft operating in Australia. I have had 3 incidences where aircraft have not made the appropriate radio calls and have had near misses. This safety measure would have helped in all of these cases and most importantly the Sea word crash.
Pilot	The current procedures are satisfactory for the current volume and types of operation. What requires improvement is correct use of radio and adherence to procedures. Education is one key component but compliance needs to be reinforced with better surveillance.
Aircraft owner/operator	I find the airspace communication can be very congested particularly now YHEC (Heck Field) has been added to the CTAF area. I feel the 119.00 area is too large as aircraft calling from the edge of the boundary often don't hear other traffic and talk over the top of them which results in neither aircraft hearing the radio call. I understand the issues associated with airspace boundaries etc, so another added assistance for everyone to help alleviate the issues may be more awareness and education sessions.
Pilot	I think the Southport airspace works quite well and I'm not sure there needs to be any major changes to it. I guess one area of improvement that may be worth considering is the frequency that Heck Field operates on. Their volume of flying has increased quite a bit over the years, which is great to see, however they do have a lot of students making circuit type calls that we hear in Southport and they are not really that relevant to us down south. I realise that introducing another frequency in the area can come with its own issues but just think it might be something worth considering. We've also had quite a few issues lately with Airforce Super Hornets doing beach runs and not making any broadcasts on the CTAF frequency and there have been a couple of close calls. They need to be educated of the importance of making a CTAF call and not just getting clearance through Brisbane Centre.
Aircraft owner/operator	I regularly fly in the Southport area on a weekly basis. Whilst I consider this area a moderate to high traffic area particularly between The Spit and Q1 due to both helicopter operations and aircraft transiting into the Gold Coast control zone. Generally I find there is positive communications in particular by the Helicopter operators. The biggest risk is the student pilots who have increased workloads as they approach the GC control zone as they are focused on making radio calls, entry procedures and sometimes are not familiar with the area. Some overseas students have difficulty with their communications, but this issue is not confined to Southport. My view is that it should not be necessary to alter the airspace at Southport however a review should be conducted on how ground operations are conducted by the

Stakeholder	Comment
	Helicopter operators as once airborne the communication by these operators is excellent.
Aircraft owner/operator	I fly this area frequently. There is a large crossover of aircraft operating within the same altitude however using different radio frequencies for each respective overlapping ALA. In my opinion aircraft operations in the coastal belt will be greatly improved if ALL ALAs in the area using the airspace from SFC to 1500 operate on the same 119 radio Frequency. This would be inclusive of Mayson Field/Southport Airport, Heck Field, Dunwich, Boroco and Tangalooma.
Pilot	I have found this patch of airspace to be extremely busy with multiple helicopters all in close proximity to each other and other traversing aircraft during daylight hours. Also concerned about the large amount of take-off and landings in a condensed area. Mandatory broadcasts of intention need to be more vigilant. Perhaps a third party traffic control needs to be implemented enforcing take-off and landing clearances, which would ensure a safer separation of all aircraft airborne and on the ground awaiting clearance.
Pilot	I have flown in the class G airspace between Couran Cove and Q1 a number of times in the past 2 years, on every occasion, I have found the communication and professionalism of other pilots (both the helicopter operators as well as fixed wing aircraft) to be excellent. The route is well documented on the VNC and I have found that all aircraft adhere to the published rule of flying 1,000 feet southbound and 500 feet northbound. The Southport CTAF does get busy on weekends, but I've never experienced it congested to the point of being a safety issue. I don't believe that there is a need for any changes in airspace classification, architecture, or the provision of services in the area. There is considerable value in retaining the existing classification, as nearby flying schools conduct trial flights along the route which is a fantastic introduction to aviation and contributes substantially to the desire of potential students to continue their aviation journeys.
Aircraft owner/operator	As an operator for over 30 years we believe that a new Heck Field zone with a 3 mile radius and frequency. This would alleviate over transmitting of taxiing aircraft in the Southport Broadwater. The Southport CTAF should remain the same due to transitioning aircraft to and from the Gold Coast CTR. This in turn gives more time for incoming aircraft to call their intentions prior to gaining a clearance from the North coastal and allowing more time for joy flight aircraft to look for their position in the CTAF. Mason field does not have training aircraft, movements are slight and can remain on 119.00. We believe this would be a better solution than a new boundary closer to the CTR for the reasons explained.
Pilot	Airservices Australia should provide a Surveillance Flight Information Service (SFIS) in the Southport area.
Local resident or business	I think it would be a great idea to create a video explaining the flight procedures around the Gold Coast area. Similar to the “on track” series, the video would explain the common mistakes and safety hazards of flying in the area.

Stakeholder	Comment
Pilot	I occasionally fly VFR from Heck field south along the coast and through the airspace under review. While I find this airspace is usually quite busy, mostly with sight-seeing helicopters, for the flights I do current procedures seem appropriate and safe. I make it a personal policy to stay well clear of the helicopter landing areas around Sea World and to date have not had any close calls in the area.
Aircraft owner/operator	There are many issues with the current size of the CTAF area. The major uses of the southern part of the CTAF are helicopters operated by Sea World Helicopters and Gold Coast Helitours. Since the accident SWH and GCH have worked together and GCH have agreed to follow the same pattern as SWH with both of us tracking over the area know as Sea World Grass (Just south of SWH terminal) to then fly a scenic pattern either North along the coast at 500 feet, or South, for longer tours, at 1000 feet as per the published coastal route procedures. This procedures eliminates conflict between the major uses of this part of the airspace. Because this coastal route is used by other aircraft to travel north and south there can be conflict with aircraft not broadcasting as per the published instruction. We have also had some conflict with Military aircraft, including fast jets traveling along the coast at 500 feet and NOT calling on the CTAF at all. A recent flight of 2 hornets at 500 feet had no calls on the CTAF. I contacted the area frequency and was told that they had been broadcasting on 119.5. The issue is that area is a CTAF and a busy one so it is unrealistic for aircraft that do not leave the CTAF to be listening to the very busy area frequency. This is an area that should be looked at. The other issue that we feel needs to be addressed is the size of the CTAF area that includes HECK field and the Southport Flying club. These aerodromes are becoming very busy, especially Heck field and the valuable air time of the CTAF is used by private pilots making long winded transmissions and causing over transmission to other aircraft. Our strong recommendation is to change the CTAF areas giving specific frequencies to the Sea World, Broadwater area that goes along the coast to Broadbeach to the south and to Sovereign Island /Coran Cove to the North. This area could be designated Danger area for Fixed wing aircraft to avoid and mandatory broadcast area for all helicopters. Change the costal route to be 1 n/m over water. This would reduce conflict and add to safety with the large number of transiting aircraft.
Aircraft owner/operator	It works perfectly for me, I travel north and south over water often along that route and sometimes inland and I have no issue being able to see and avoid VFR aircraft.
Pilot	There needs to be a more formalised structure to flight paths in the class G airspace published. While local operators may have procedures these are not well known to anyone outside the organisation and the use of reporting points not marked on the VTC is of no use to non-locals. The north/south coastal lane is a good procedure as well as the route around Stradbroke Island.
Aircraft owner/operator	The southern Southport Broadwater around Sea World and the Marina Mirage/Fisherman's wharf area has been home to Scenic Joyflights with Helicopters and Seaplanes since the 1970s. In over 35 years of commercial aviation operations, I have never felt uncomfortable, or that the pattern was congested in a way that jeopardised Aviation safety at any time.

Stakeholder	Comment
	If one does a calculation on the number of take offs and landings that have been carried out by the commercial operators of the spit over 35+ years, I expect there would have been in excess of 700,000 take-offs and landings conducted during that time. Operators have always treated the area with the respect and care it warranted for a busy area as confirmed by that remarkable number of commercial operations. It's my view that what occurred was a complete outlier from the normal course of activity on the day of the Sea World accident. It's my view that the relevant authorities know their jobs well and will ultimately piece together the sequence of events to arrive at a logical outcome that will make recommendations to assist and improve the operations further in the future.
Pilot	The CTAF frequency (119.0) is frequently blocked by training traffic at Heck Field (YHEC). It blocks Sea World helicopter traffic broadcasts and traffic broadcasts from the (less busy) Mason Field (YSPT). Heck Field has become extremely congested of late and I feel it would increase safety if it was allocated its own CTAF discrete frequency or revert to standard 126.7 which then would cover areas from Jumpinpin north and only affect YDUN which has infrequent use. Other than circuit traffic, many flights extend to Jumpinpin and north coastal. There are no training or commercial operations at Southport/ Mason Field YSPT
Aircraft owner/operator	My company aircraft commutes from Mason Field (within the Gold Coast airspace) on VFR flights southbound. Gold Coast ATC require that flight details and clearance requests should be advised to Brisbane Centre well in advance of the control boundary. The alternative OCTA west of the Mount Somerville radar site is often cloud-covered, hilly terrain. A request to Brisbane Centre to transit the western VFR route southbound is refused as no flight plan details have been submitted. You can track OCTA south-westerly from the Robina Town Centre reporting point to gain a clearer view of the weather conditions for a safe southbound OCTA flight. Radio calls at the time from Gold Coast traffic indicate that aircraft movements are confined to the coastal side of the airport with no traffic on the western VFR route. These circumstances can lead to congestion of VFR traffic on the northern approaches to the Gold Coast airspace. Why the reluctance by ATC operators to assist pilots when weather conditions are unfavourable and circumstances are such that a clearance to transit the designated VFR route could be given with safety to both airport traffic and VFR pilots. This is a consideration you need to give to other primary and secondary airspace.
Pilot	With the proximity of Heck Field and Southport, along with the additional helipads and further smaller airports all sharing 119.0, it becomes pretty busy and, at times, challenging to get a transmission in, especially on public holidays or weekends when there are lots of aircraft transiting the CTAF. A dedicated SFIS (like at YBNA) to cover class G between the CTA boundary and Heck Field would be good, especially on those busy days. I feel that it would additionally increase safety for both student pilots in the area and other pilots, both commercial and recreational.
Aircraft owner/operator	I operate as a private recreational pilot from YSPT (Mason Field) and I have also been very involved in the Club's facilities and local circuit and safety requirements etc. for many years.

Stakeholder	Comment
	The recent tragedy at Sea World highlights the very important requirement operating within a CTAF of clear communication on the VHF frequency. There are suggestions of separating the CTAF for Heck Field to a local frequency. I consider this may lessen the radio traffic on the YSPT frequency 119.0 but the risk is that pilots operating out of Heck Field would have to be very disciplined to remember to change frequency and broadcast once leaving the very small local CTAF entering the YSPT area and likewise traffic transiting Heck Field to change frequency and broadcast intentions. A lot of the traffic out of Heck Field is training, so I can see a lot of confusion that would add to the potential conflict of traffic with two different frequencies within a relatively small high density area. I believe the existing CTAF area should remain as is, but an emphasis on clear, concise, meaningful radio transmissions to ensure safe separation of all traffic operating within the CTAF.
Pilot	The airspace mentioned is busy and many times pilots pass in the vicinity of an ALA and do not make any calls. This happens with traffic flying YBAF to YBCG and no calls are made when flying passed or over Southport ALA. Also many times position calls are made in relation to buildings or a feature rather than distance and direction from an airfield. If a separate frequency was used for Heck Field this could help, however where would be the changeover of frequency as YSPT and YHEC are only 9nm from each other and some traffic for each field made be missed when not on frequency. We certainly need helicopter traffic from Marina Mirage and traffic from YSPT to be on the same frequency. YHEC could go to 126.7 as is YDUN.
Aircraft owner, pilot	The airspace between YBCG CTR & North Stradbroke Island is an extremely busy area that sees a large variety of traffic. From Helicopter scenic flights to Flight Training & DHC-6 & C208 RPT operations to/from the Reef Islands. Personally, I have had many conflicts with aircraft not using the radio correctly or were on the incorrect frequency. BNE Centre have often called us to advise of proximate traffic. Most incidents occurred when aircraft did not use the radio. At YHEC, the airfield operator has mandated the carriage & use of radios. Myself, our club, our flying school & our members take it seriously. My opinion, & that of our club committee, is that the Southport CTAF should be clearly defined & be a mandatory broadcast zone. Perhaps from 7DME YBCG north to include D675. From the CTA step west of the M1 to 2nm offshore. From Ground to the base of CTA. This is a large area but having a single mandatory frequency would allow users to maintain an awareness of traffic in the area. Creating too many frequencies would just create confusion & mistakes, especially for the trainee pilots & barely current weekend aviators. Mishandling radio frequencies happens & that would defeat the purpose of making it a mandatory zone. Perhaps if radio chatter became an issue, users could choose their own CTAF frequency within 3 nm of their airfield. Making Southport CTAF a clearly defined Mandatory Broadcast Zone would reduce conflicts, improve Situational Awareness & help prevent frequency confusion.
Pilot	Class G airspace in Southport is quite straightforward and well-structured in my opinion. As a new pilot it can be, overwhelming especially at peak times. But with a bit more experience and situational awareness, it is manageable. I find that with good the standard broadcasts, good listening watch and supplemental situational awareness from Brisbane centre, flying in the class G airspace in Southport is just like any other regular busy CTAF.

Stakeholder	Comment
Aircraft owner/operator	I feel that in an around the busy Gold Coast there should be mandatory Radio calls at various points e.g: Heck Field, Jumpinpin, Sovereign Island, Porpoise Point / Sea World, Q1. I fly through that area a lot and am surprised at the lack of radio calls from some other users. I think it's very important/imperative to all be on the correct CTAF and to clearly broadcast your location and intentions at various well known points so action can be taken to avoid unnecessary additional risk.
Pilot	The class G airspace in the Southport area is increasingly becoming busier. Whilst most operators appear diligent in maintaining and conducting proactive and reactive broadcasts on the shared CTAF (119.000) there appear to be an increasing number of incidents whereby broadcasts are made on the incorrect frequencies, or not at all. This is exacerbated by the fact that OCTA in this region (there) are no less than 4 frequencies that apply to the region (YHEC/YSTP CTAF, YDUN - Unicom, and 2 area frequencies), and at key locations, best practice would involve monitoring 3 of the 4. Specifically in the region west of YSPT (119.5) at the intersection of the two area frequencies (125.7 and 119.5), and North Stradbroke, where YDUN (126.7), YHEC (119.0) and of course the area frequency (125.7) should be monitored. This is complicated by the fact that, many of the aircraft that operate in this airspace are only equipped with one radio (thereby permitting monitoring of only two frequencies). Specific observations include: * Aircraft not appearing to monitor CTAF frequency while transiting through the area, or in the vicinity of one of the many heli sites of landing surfaces. * CTAF broadcasts on area frequencies. * Broadcasts on Unicom to traffic in the Jumpinpin area (who are typically monitoring the area frequency and 119.0 * Overflight of YHEC and YSPT with no observable call on any frequency. (It should be noted that these issues are not limited only to the Gold Coast area, these matters have been observed in other areas) Channel congestion issues aside there are several things that could be done to address this: * Make the 119.000 CTAF a mandatory broadcast area OCTA between Brisbane and the Gold Coast * Establish a special flight information service similar to that which exists in Northern NSW. * Remove the area frequency boundary that divides north and south Gold Coast and make this all one area frequency.
Aircraft owner/operator	The present system operates satisfactorily with a reasonable safety margin, providing that everybody complies with the traffic and radio requirements. The designated zone could be more clearly defined rather than just a vague area of operation.
Aircraft owner/operator	My first initial thought on YHEC having a different freq for circuit ops in theory is an excellent idea but..... In reality it will be MORE dangerous. 1. Most are low time pilots in training. 2. When flying solo they will have increased workload to monitor then push stored freq at the boundary and invites a great opportunity to forget

Stakeholder	Comment
	3. All other Southport traffic will need to monitor local CTAF , YHEC CTAF, Bris Centre, and helicopters also monitor company discrete (increased workload). 4. I suggest a meeting with local operators all together with talks maybe by me ?? To minimise radio calls.....That's the problem...Radio calls save lives but I hear calls every day which only congest the CTAF such as every circuit leg called when only one in circuit, crossing runway, vacating runway, taxi from hangar, taxi from fuel to runup bay. These calls need to be made for conflict but only when there is possible conflict. 5. Education will free up shared comms X 4. 6. Changing YHEC freq will not work as they will track South and transmit blind if they make a simple mistake of not pushing a simple button ... and then opportunity to remain on wrong freq inbound or outbound... guaranteed to happen.
Aircraft owner/operator	The current airspace is exceedingly complicated for most GA users. Controlled airspace in YBBN YBCG YBAF YAMB and PRDs opening and closing at short notice is a veritable nightmare for most single pilot GA operators. Even with 30,000 flying hours mostly in heavy jets multi crew operations I find this airspace a handful. Quite often when I ask for flight following I am rejected out of hand and treated as a nuisance. Mostly I choose to fly IFR so I can operate through Class C airspace for protection due to being rejected for flight following so often. The airspace that I am allowed to operate in clear of CTA is over high dangerous terrain to the West of the Gold Coast. This is not ideal. A North South route similar to the one through Sydney is a must. There have been several accidents over the recent past because of this airspace and aggressive controllers scaring the hell out of inexperienced pilots if the inadvertently stray into CTA.