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This guide is an aid for VFR pilots to use when flying into, out of and around the Gold Coast region. It is designed to help you in planning and conducting your flight.

The guide was developed with the assistance of operators in the Gold Coast region.

For comments and suggestions on improving this guide, contact CASA Safety Promotion at safety.promotion@casa.gov.au

**NOTICE:** The information contained in this booklet was correct at the time of publishing and is subject to change without notice. The Civil Aviation Safety Authority of Australia makes no representation as to its accuracy. The booklet has been prepared by CASA Safety Promotion for information purposes only.

Plan your route thoroughly and carry current charts and documents. Always check ERSA, NOTAMs and the weather before you fly.

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### **Gold Coast procedures overview**

Gold Coast Airspace is unique as Gold Coast Tower controls Class C airspace up to 1500 ft within a 7 nm radius (less to the west). Class G airspace surrounding Gold Coast is very busy with tourist flights to the north of the zone and training flights to the south.

Know your CTAF frequencies and appropriate levels for safe flight through these areas. Submit flight plans and call up Brisbane Centre for your SSR code and be in receipt of the current ATIS, well in advance of an inbound VFR reporting point, or remain clear of the Class C boundaries, as shown on the Gold Coast VTC.

At the Gold Coast you share the airspace with a diverse mix of traffic and pilot experience. Busy domestic and international arrival and departure periods can create delays for clearances, especially coastal clearances and training flights, so be familiar with the western VFR route for transit flights.

Gold Coast is an international airport and can be very busy, so the earlier you can contact ATC inbound, the better. If in any doubt about local procedures, unfamiliar pilots should call a local operator or ATC for advice. ATC recommends you submit a flight plan, which enables controllers to quickly identify you in the system and give you a clearance. If you call for a clearance without having lodged a flight plan, it could lead to delays.

Helicopters routinely fly low level along the coast entering and leaving the zone. Tourist helicopters frequently enter the zone on agreed routes. Lifesaver helicopter is active in the warmer months with low-level coastal patrols a few times each day. Local helicopter operations have a small area on the western grass for circuits and hover ops: details can be found in ERSA and when in use, it will be broadcast on the ATIS.

At Kirra Beach expect parachute operations that land on the beach. When chutes are in the air, coastal transits can expect delays or alternatively may be offered the western VFR route.

Gold Coast Airport hosts a number of flying schools. Their aircraft regularly do touch and go circuits, as well as flights to the southern training area, so light aircraft traffic can make the airspace congested.



## Ballina Broadcast area

Ballina is a busy non-towered aerodrome with a significant amount of passenger transport flights. The correct use of radio communications by all aircraft is critical to the safety of operations.

All aircraft must carry a radio and make appropriate broadcasts and responses. Check latest publications for current information and procedures.



### **General military information**

### Conditional RA (Restricted Area) status

The status of restricted areas (RAs) appears in the DAH and ERSA and is presented in a table on the VTC/VNC. This status indicates which types of restricted airspace it is possible to get a clearance through. NOTAMS are issued to list activation times and levels for military restricted airspace and MUST ALWAYS be consulted before flights through these areas to avoid airspace infringements.

### RA conditional status legend

**RA1:** Pilots may flight plan through the RA and, under normal circumstances, expect a clearance from ATC.

RA2: Pilots must not flight plan through the RA unless on a route specified in ERSA GEN FPR, or by agreement with the Department of Defence. However, a clearance from ATC is not assured. Other tracking may be offered through the RA on a tactical basis.

RA3: Pilots must not flight plan through the RA and clearances will not be available.

Surrounding the Gold Coast are several restricted military areas. Military airspace is activated by NOTAM and may become active at short notice. Check the status prior to going flying using the following codes and, if in doubt while airborne, check with ATC on the frequency you are on.



### Military airspace

Canungra: R634A is RA3.

Overfly above 3800 ft if R634B is not active. R634B is RA2. This airspace extends to 8500 ft above 634A and is activated by NOTAM. To transit around, track north-east of Eagle Heights to pick up the VFR route at Nerang, or vice versa.

**Caution:** low level CTA steps south of Nerang. Clearance will be necessary.

Evans Head: Evans Head is a Military Air Weapons Range to the south of the Gold Coast and is activated by NOTAM. R609 is RA3 while R609A/B/C/D are RA1, (NAIPS code EVX or 0943). High speed jet operations within the airspace require civil pilots to plan carefully and be aware of their location at all times. Aircraft wishing to access Evans Head aerodrome should consult ERSA for flight procedures.

Amberley: Amberley Airbase lies to the north west of Gold Coast. Overlapping civil and military airspace, with operations from high-speed jets to heavy transport and with multiple restricted and danger areas, make the configuration complex and potentially hazardous. Pilots need to plan carefully and be aware of their location at all times.

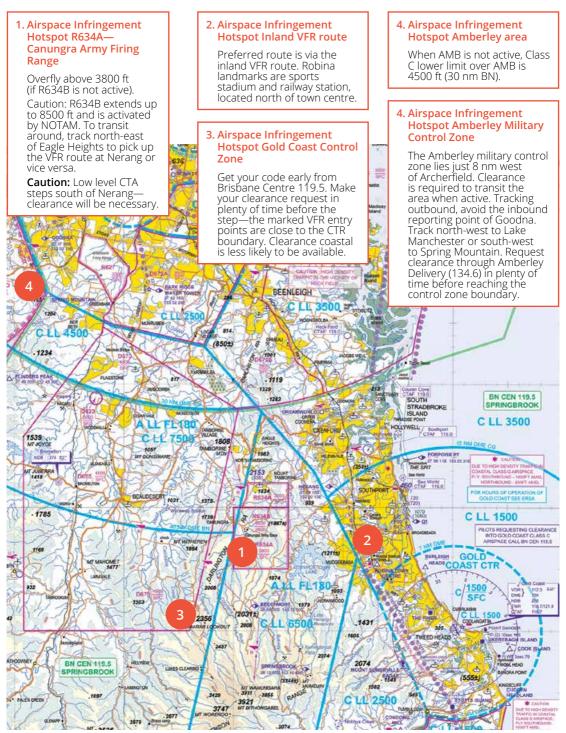
The Amberley military control zone begins approximately 8 nm from Archerfield, from SFC-8500 ft. R625A is to the north of the Amberley CTR and has a lower limit (LL) of 1500 ft. R625B lies to the west and south of the CTR and has a LL of 2500 ft.

Amberley control zone, R625A/B/C/D that are all RA1, (NAIPS codes YAMB, Amberley East Airspace AEX or 0939, Amberley Airspace AMX or 0941, Amberley West Airspace AWX or 0940).

Short notice and partial activation of the AMB CTR and associated restricted areas may occur outside of TWR hours. It is the pilot's responsibility to check and monitor the status.

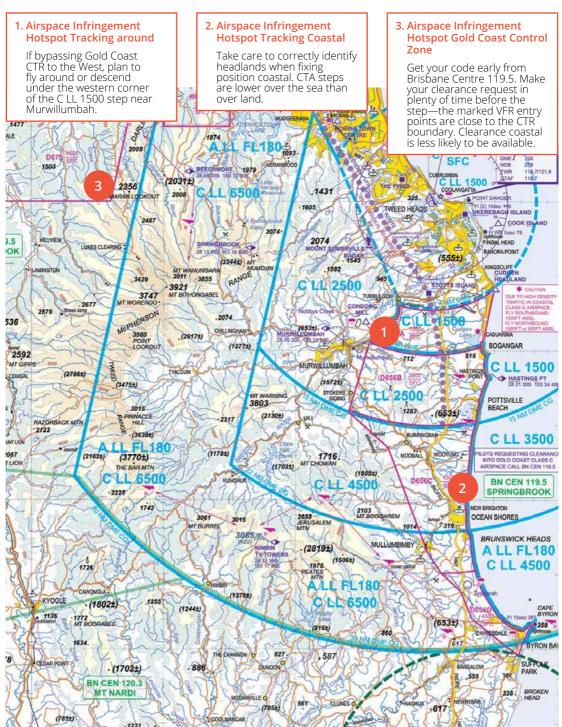


### **Airspace Infringement: Hotspots North**





### **Airspace Infringement: Hotspots South**





### **Gold Coast ground operations**



Gold Coast has a known runway incursion hotspot where RWY 17/35 intersects the taxiway system. Each taxiway has ICAO red markings to highlight the area and holding points. Caution should be exercised at the hotspot and do not cross the runway without a specific crossing clearance.

There are light aircraft run-up bays located on taxiways H and F. If you are unfamiliar, you are encouraged to request detailed taxi instructions.

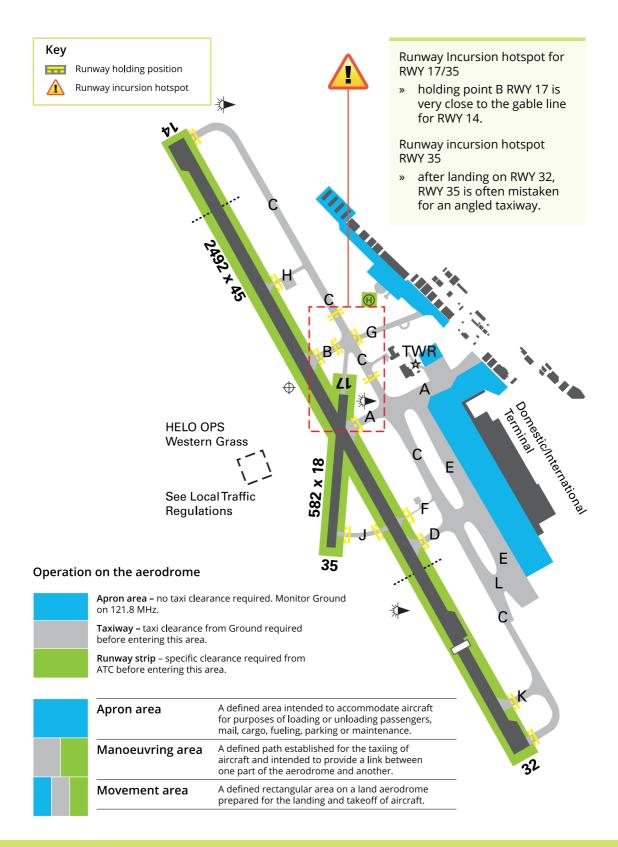




### **Gold Coast helicopter operations**

There is a helicopter aiming point to the north of Taxiway G with an adjacent helicopter parking area. Helicopters must not make an approach or departure over fuel tanks situated to the northeast of the tower. For approaches to the helicopter aiming point in the RWY 14 direction, expect east of Taxiway C to land unless otherwise directed.

In the RWY 32 direction via Taxiway C or 32 then via 35, do not overfly taxiing aircraft. Departures in the RWY 14 direction will be either via Taxiway C or RWY 17. Departures in the RWY 32 direction will be east of Taxiway C.





### **Ground operations**



Key areas when planning for navigating around an aerodrome are:

- » study the layout, paying particular attention to complex intersections and RWY incursion hotspots in ERSA
- » anticipate your taxi route to and from the RWY in use based on information from the ATIS, NOTAMs, ERSA, recent experience and the aerodrome chart
- » have the aerodrome chart or diagram readily available to use during the planning phase and while taxiing
- » check the route on which you are taxiing against the chart or ERSA and again, pay special attention to complex intersections
- » continually scan for conflicting traffic and holding point markings
- » confirm your assigned route if you are in doubt of the taxi instructions received from a controller.

A specific clearance is required to enter, backtrack, line-up on, cross or take-off from a runway. When taxiing ensure that you have received a specific clearance to cross any runway on your taxi route. The clearance will include your callsign and the words 'CROSS RWY XX'. An ATC clearance to line-up does not authorise the pilot to backtrack on the runway.

While taxiing, the use of standard operating procedures and your radio will increase the safety of operations. This includes following instructions from ATC, confirming your understanding of ATC instructions by ensuring correct readbacks, maintaining situational awareness, using all resources available and ensuring effective pilot/controller communication practices.

At the holding point, ensure your 'ready' call is on the correct aerodrome control frequency.

Using non-standard radio calls or readbacks affects the ability of ATC to understand your intentions and confirm that you have understood your clearance.

The principle of good communication is to effectively articulate:

- » who you are
- » where you are
- » what you want

When landing, runway confusion can be avoided by:

- » paying careful attention to runways in clearances
- » always reading back an assigned runway in full
- » taking sufficient time during the approach briefing to determine how positive runway identification will be achieved, particularly if using a non-precision, circling or visual approach
- » visually identifying the correct runway before entering or landing on it, depending on weather conditions
- » distinguishing between runway lighting and taxiway lighting, which are coloured differently.



# Radio use - Requesting airways and taxi clearance

ATIS available on FREQ 134.5 (TWR Hrs only), VOR/DME 112.3 (H24), Telephone (07) 5599 5910		
Gold Coast Terminal Information	Runway	Wind
X-Wind Visibility Cloud Temperature		
QNH		
Requesting airways clearance:		
Clearance Delivery FREQ 128.75		
Gold Coast Clearance Delivery,		Cleared to,
(Aircraft Type and callsign), <b>for</b>	read back	(destination via tracking details),(Altitude), Squawk
(training area / flight planned	,	(Transponder
destination),		Code),(Callsign).
(Altitude), Request clearance.		
Requesting taxi clearance:		
Ground FREQ 121.8		Cleared to taxi, runway
Gold Coast Ground,		via Taxiway
(Aircraft callsign), P.O.B.		(Taxi route
((Dual / Solo if applicable))	read back	Details), Cross / Hold at
Received(ATIS),		(Holding point
at (Location on		instructions),(Callsign).
airfield eg GA), Request taxi.		



# Radio use - Holding points and take-off clearance

Ground FREQ 121.8	read back	Cross holding point(Callsign).
(Gold Coast) Ground,		(Cunsign).
(Aircraft callsign), Request cross		
holding point (Holding		
point identifier)		
		Approach 123.5 / Remain
		this Frequency, Turn right/
Tower FREQ 118.7		left/
Gold Coast Tower,		(assigned heading/turn direction/
(Aircraft callsign), Ready Runway	read back	tracking Instructions), track via
(runway number)		(if applicable),
		Runway Cleared for
		take-off (callsign).

The following components of an ATC transmission require accurate readback:

- 1. an ATC route clearance in its entirety, and any amendments
- 2. en route holding instructions
- 3. any route and holding point specified in a taxi clearance
- any clearances, conditional clearances or instructions to hold short of, enter, land on, line-up on, wait, take-off from, cross, taxi or backtrack on any runway
- 5. any approach clearance
- 6. assigned runway, altimeter settings directed to specific aircraft, radio and radio navigation
- 7. aid frequency instructions
- 8. SSR codes, data link logon codes
- 9. level instructions, direction of turn, heading and speed instructions.





### **Departure and tracking - South**

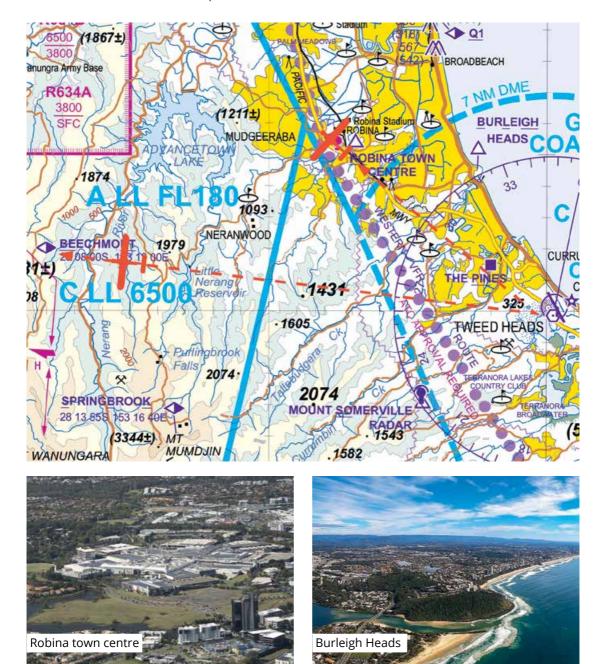
Air traffic control (ATC) may provide departure instructions tracking via geographic locations or a magnetic heading to help with separation or ATC flow management. Usually these may be Tumbulgum or Cudgen Lake depending on traffic. If unfamiliar with these locations, advise ATC.





## **Departure and tracking - North-West**

Air traffic control (ATC) may provide departure instructions tracking via geographic locations or a magnetic heading to help with separation or ATC flow management. Usually these may be Robina town centre (ROTC) or Burleigh Heads depending on traffic. If unfamiliar with these locations, advise ATC.





## Arrival and tracking - From the North

Pilots are reminded to contact Brisbane Centre on 119.5 with inbound flight details and request code / airways clearance **well prior** to the control zone boundary or class C airspace steps. Inbound tracking from the north, is usually via Robina town centre (ROTC) or Q1.







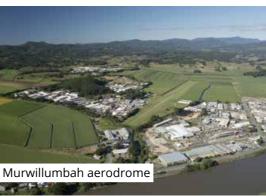


## Arrival and tracking - From the South

Inbound tracking to Gold Coast from the south is usually either coastal via: Hastings Point, Stotts Island, Murwillumbah or Condong Mill.









## Arrival and tracking - From the West

Inbound tracking to Gold Coast from the west is usually via Beechmont or Springbrook. Caution is required due Canungra restricted areas R634 (A & B). It is the pilot's responsibility to check and monitor the status of the restricted areas. Pilots are also advised to exercise caution when flying over this terrain and have contingencies in case of adverse weather, and suitable landing areas in case of emergencies.

Pilots are reminded to contact Brisbane Centre to obtain squawk code prior to obtaining airways clearance from Gold Coast tower.









### Weather on the Gold Coast



The Gold Coast often provides good flying conditions, but there are aviation hazards to consider during every season.

Winds: An afternoon easterly sea breeze develops on many days throughout the year, with the strongest occurring during Spring and Summer. A katabatic south-westerly wind often affects the coastal plain during the evening and early morning hours.

Thunderstorms: Thunderstorms are possible during any season, but mostly occur from Spring through to early Autumn. Severe storms with large hail and strong wind gusts are more likely from October through to December, while storms with heavy rain and strong wind gusts are more likely after December.

Thunderstorms often move onto the coastal plain off the ranges in both New South Wales and Queensland. Look for thunderstorms moving through locations such as Murwillumbah in northern NSW or Lamington National Park and Springbrook in the Gold Coast hinterland. The most dangerous thunderstorms often occur when a southeasterly change is moving northwards along the coast.

**Turbulence:** Turbulence occurs mostly in strong westerly winds, with moderate to severe turbulence possible on and in the lee of the ranges over northern NSW and the Gold Coast. Mountain waves may also occur in the lee of the ranges.

Severe turbulence sometimes occurs in the vicinity of YBCG in very strong westerly winds due to the development of a rotor, presenting as a weak north-easterly wind at YBCG while at the same time a strong west-south-westerly is observed at the Gold Coast Seaway automatic weather station (AWS).

Low cloud: Broken low cloud develops mostly overnight and early morning during a north-easterly wind, often banking up to the north of the ranges inland from the Gold Coast. However, over northern NSW, this usually occurs with a south to south-easterly wind.

Fog: Fully developed fog (FG) does not occur often about the Gold Coast, even in the cooler months but does occur regularly over northern NSW. Shallow fog patches (MIFG) can occur overnight and early morning during the cooler months at YBCG; however, the AWS may often misreport this as FG.

**Showers:** Persistent showers are most likely to occur during south-easterly trade winds, with maximum shower activity occurring overnight and in the morning.



## Radio use when Gold Coast Tower is closed

CTAF Frequency is 118.7

### Calls recommended ALL the time

Situation	Example broadcast
1. Before take-off or during taxi	Gold Coast traffic, C172, ZTQ taxiing runway 14 for Casino, Gold Coast.
2. Inbound at least 10 nm from the aerodrome or further for high performance aircraft or busy aerodromes	Gold Coast traffic, C172, ZTQ one-zero miles north inbound 1,500, estimating circuit at two five, Gold Coast.
3. Overflying or in the vicinity of Gold Coast outside of tower hours, but not landing, or further for high performance aircraft	Gold Coast traffic, C172, ZTQ one-zero miles south 1,500, overflying, estimating overhead two five, Gold Coast.

### Calls when there is OTHER TRAFFIC

Situation	Example broadcast
4. Entering a runway	Gold Coast traffic, C172, ZTQ lining up 14, Gold Coast.
5. Joining the circuit	Gold Coast traffic, C172, ZTQ joining crosswind, runway 32, Gold Coast.
<b>6.</b> Making a straight in approach, not less than 3 nm from the touchdown threshold*	Gold Coast traffic, C172, ZTQ joining 3 nm final, straight in approach runway 32, Gold Coast.
7. Joining on base leg	Gold Coast traffic, C172, ZTQ joining base, runway 14, Gold Coast.
8. During an instrument approach, either when established at the final approach fix, or when commencing the missed approach	Gold Coast traffic, C172, ZTQ conducting missed approach, runway 14, tracking to the south east, climbing 3000, Gold Coast.
9. Once clear of the active runway(s)	Gold Coast traffic, C172, ZTQ clear of runway 32, Gold Coast.

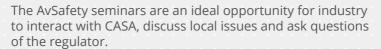
<sup>\*</sup>Pilots should be aware that a GNSS indication of 3 nm from an aerodrome may not be 3 nm to the runway threshold.

Frequencies	
Gold Coast ground	121.8
Gold Coast Tower	118.7
Gold Coast clearance delivery	128.75
ATIS VHF	134.5
ATIS VOR	112.3
Brisbane Approach	123.5
Brisbane Center	119.5
YTYH / YMUR CTAF	126.7
Southport CTAF	119.0

Contact phone numbers	
Gold Coast Tower	07 5599 5990
ATIS	07 5599 5910
CENSAR	1800 814 931



## **AvSafety seminars**



Check the CASA website for upcoming seminars. Registration for AvSafety seminars is through Eventbrite and attendance is free.

Help make the skies safe for all and attend an AvSafety seminar today.









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