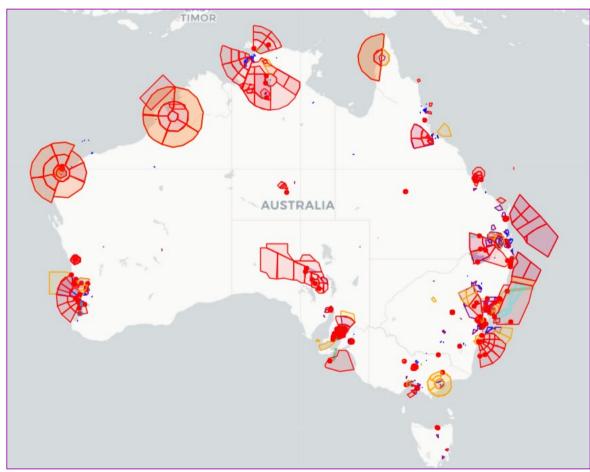


Defence procedures

Defence:

- can operate up to the boundaries of Restricted Areas at any time
- may operate in 'dark mode', ie we cannot tell if they are there or not
- has their own operational separation rules and authorisations
- has training operations during business hours but "own" the airspace and can be active 24/7
- can 'activate' with minimum 30 minutes notice to us
- has no obligation to provide us with background information for actions and activity
- applies these rules for all Restricted Areas nationally.



Australian military Restricted Areas – there is a range of lateral and vertical restrictions on these spaces. Image from Airservices' infringement interactive maps (current at November 2024).

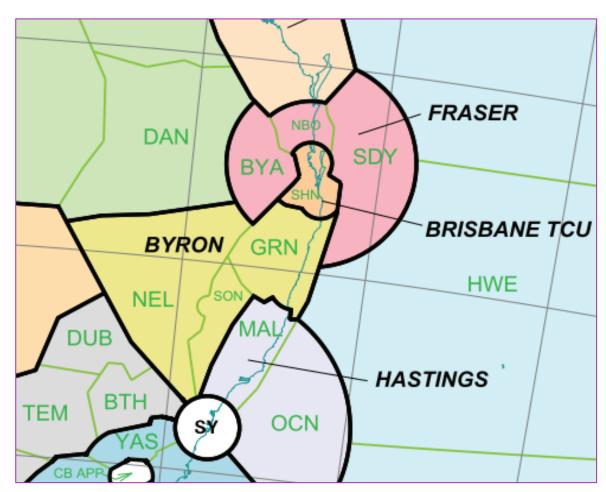


Regulatory requirements

Brisbane airspace is managed by managed by ATC in the Brisbane Terminal Control Unit (TCU – the orange area in the map to the right).

When flight paths pass out of this airspace to join the high-altitude routes towards their destinations, we hand them over from the TCU to ATCs who manage each sector of this enroute airspace. For Brisbane, these sectors are called Fraser and Byron (the pink and yellow areas on the map).

The Manual of Air Traffic Services (which we must follow) specifies that we must keep **three** nautical miles (5.5km) between civil flight paths and Restricted Areas in the Brisbane airspace and **five** nautical miles in enroute sectors.



Fraser and Byron sectors surround Brisbane's TCU-controlled airspace (orange)

Obligations of Airservices flight path design

- Restricted Areas include military traffic corridors and training areas across the whole Brisbane basin (not just military bases)
- flight paths near Restricted Areas must be longer to track around Restricted Areas (cannot go as the crow files)
- also need to allow room for instances such as weather events that may require aircraft to deviate from published flight paths without entering Restricted Areas
- these constraints can result in less room for civil flight paths, reducing design options
- flight paths will be designed as close to Restricted Area boundaries as we can to make the most of the limited space that we can use

Agnes Water

Restricted Areas (shown in red) include airspace over and around military bases, training areas, and corridors between RAs

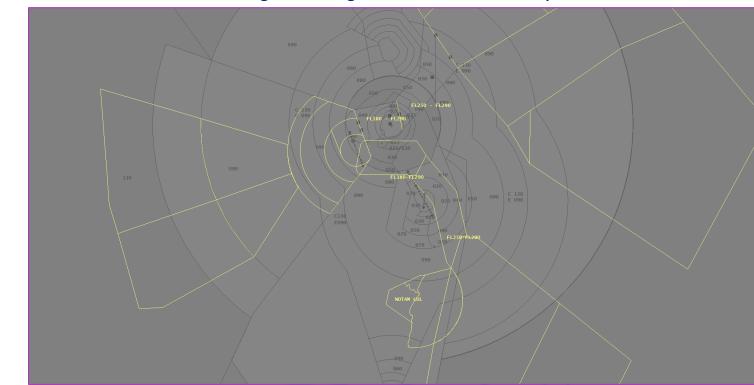


Obligations of Airservices' Air Traffic Control

Restricted Areas must be avoided unless in an emergency:

- we must assume that a military aircraft could be present on the boundary at any time when the Restricted Area is active
- we cannot direct civil aircraft to operate up to the boundary even though Defence can on their side
- air traffic near Restricted Areas is often congested which increases ATC workload
- we may make ad hoc requests to RAAF ATC to release airspace for civil use in emergencies such as weather events
- if any civil aircraft enter a Restricted
 Area, it is considered an error as per our safety system and is reportable
- outside controlled airspace, we monitor and provide safety alerts to pilots but don't direct them.

The ATCs' view: radar image showing restricted areas with yellow borders





Obligations of civil pilots and airlines

Restricted Areas must be avoided unless in an emergency:

- pilots are responsible for remaining clear of Restricted Areas when operating outside controlled airspace (ie ATC will not be giving them directions)
- pilots must monitor and act on safety alerts
- if we can't get emergency clearance for an aircraft (eg to avoid bad weather) it is up to the pilot to manage their own communication with RAAF ATC to safely navigate the Restricted Area (these are rare events)
- when notice has been provided to aircraft operators that a Restricted Area has been activated, airlines/pilots are required to flight plan to avoid those areas.



Airservices and CASA provide tools and resources for pilots