

Working together to reduce risk.

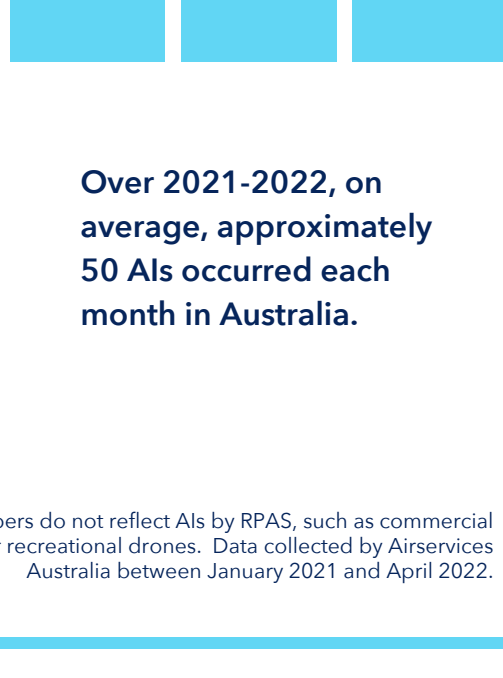
Airspace Infringements

Airspace infringement remains one of the primary airspace safety concerns in Australia and internationally.



An **airspace infringement (AI)** is the **unauthorised entry of an aircraft into airspace where a clearance is required or to which entry is prohibited.**

AIs contribute to **reductions in safety margins and separation between aircraft, which ultimately increases the risk of a conflict between aircraft.**



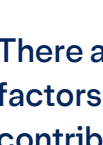
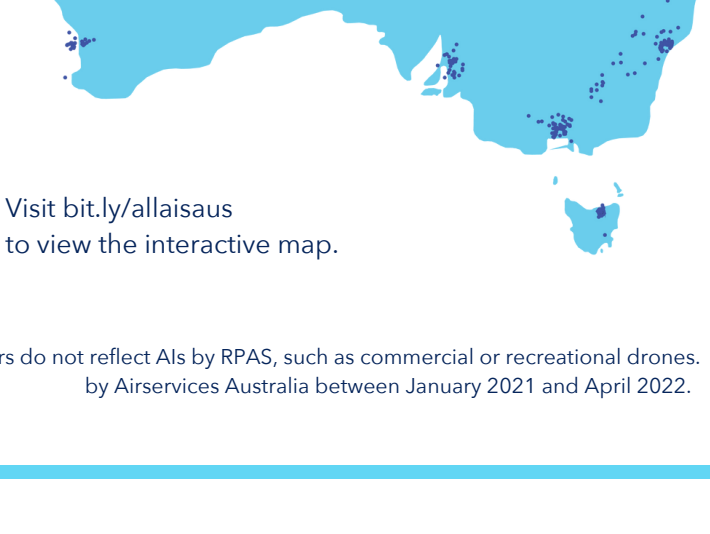
Over 2021-2022, on average, approximately **50 AIs** occurred each month in Australia.

airservices
australia

Numbers do not reflect AIs by RPAS, such as commercial or recreational drones. Data collected by Airservices Australia between January 2021 and April 2022.

Airspace infringement areas are spread across areas bordering controlled airspace throughout Australia.

Hot spot areas exist near Class C and D airspaces and PRD areas.



Visit bit.ly/allaisaus to view the interactive map.

Numbers do not reflect AIs by RPAS, such as commercial or recreational drones. Data collected by Airservices Australia between January 2021 and April 2022.

There are a number of factors that can contribute to airspace infringements.

By understanding what factors you have control of, you can mitigate the risk of causing an AI initially, as well as in response to or in conjunction with other causal factors.

Eurocontrol (2007). Airspace Infringement Risk Analysis

Eurocontrol (2022). European Action Plan for Airspace Infringement Risk Reduction

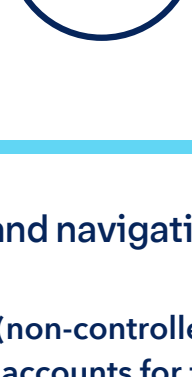
Pilot skills



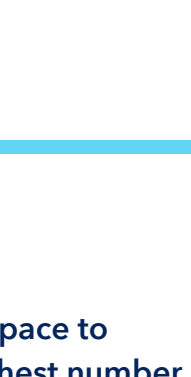
Airspace and navigation



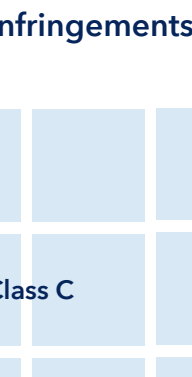
Environment



Human factors

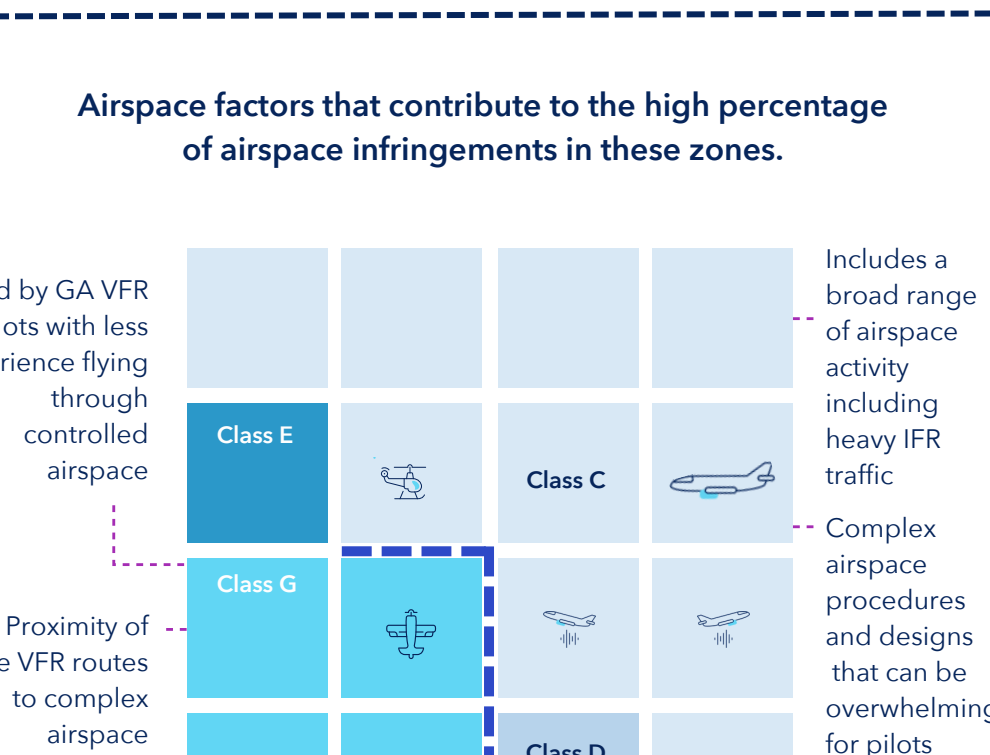


Air traffic control



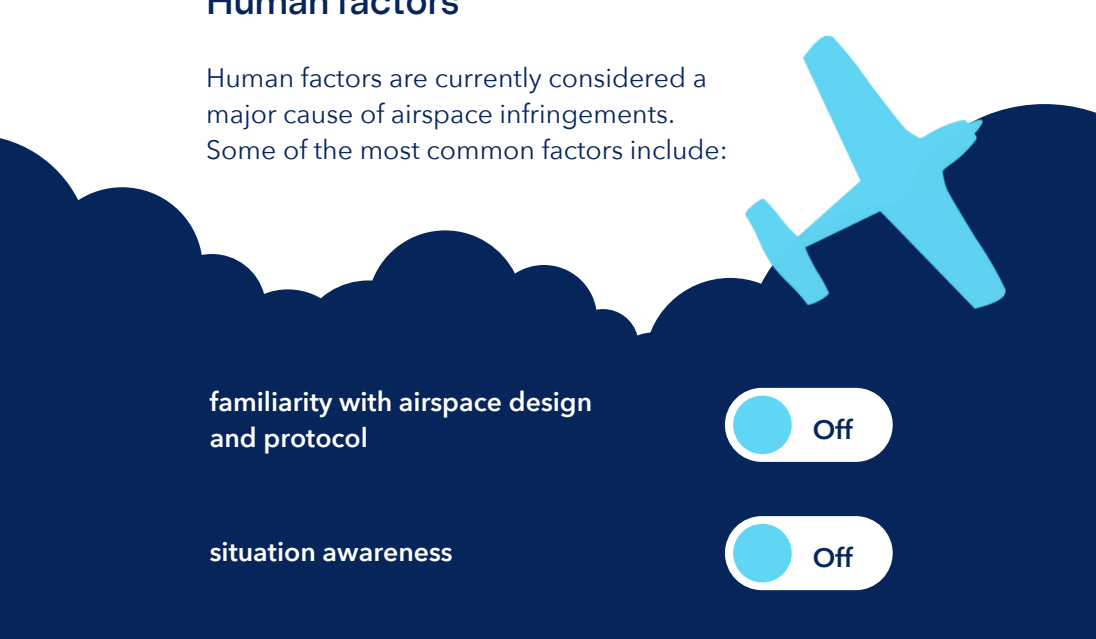
Airspace and navigation

Movement from Class G (non-controlled) airspace to controlled airspaces currently accounts for the highest number of airspace infringements.



By understanding where AIs are more likely to occur, you can prepare yourself for potential unplanned situations that may put you at risk of infringing airspace.

Airspace factors that contribute to the high percentage of airspace infringements in these zones.



Used by GA VFR pilots with less experience flying through controlled airspace

Includes a broad range of airspace activity including heavy IFR traffic

Proximity of some VFR routes to complex airspace

Complex airspace procedures and designs that can be overwhelming for pilots

No clearance required from ATC within class G compared to controlled airspace

Higher rate of communication with ATC

Clearance required tracking into controlled airspace, which GA pilots are less used to

Various classes surrounding Class G airspace, some with varying procedures and hours of activity

Human factors

Human factors are currently considered a major cause of airspace infringements. Some of the most common factors include:

familiarity with airspace design and protocol

Off

situation awareness

Off

human error

On

awareness of PRD area status

Off

high workload or overload

On

routine - expectancy that airspace on a familiar route will not change

On

communication between pilots and ATC

Off

over-reliance on GPS equipment or failure to use it effectively

On

Eurocontrol (2007). Airspace Infringement Risk Analysis

Eurocontrol (2022). European Action Plan for Airspace Infringement Risk Reduction

Solve potential problems before you start your flight.

Familiarise yourself with the design of the airspace you are flying through and near, including CTA steps along your route.

Ensure you have access to current charts and information about local arrival and departure procedures.

Plan a contingency route in case of unexpected changes.

If you are unsure about information on charts or with ATC procedures, you can contact ATC during preflight for advice.

Check NOTAMS for recent updates about all surrounding airspace status.

Familiarise yourself with the kind and frequency of activity at the aerodromes you are flying to and from.

Ensure your transponder is working before you fly...

Check current charts for the correct frequencies for the airspaces you will be flying through.

If you are unsure about information on charts or with ATC procedures, you can contact ATC during preflight for advice.

Resources to support your preparation

Includes information about the volume and kind of activity in the surrounding airspace.

Includes all instrument departure and approach procedures.

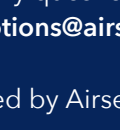
Plan your flights using the most current information.



Includes information about the volume and kind of activity in airspaces and at aerodromes.

Includes a guide to the standard phraseology for radio use.

Airservices pilot and airside safety pages



Visit us for more safety-related information on a range of topics including:

- runway safety
- working with ATC
- current and emerging risks

airservicesaustralia.com/industry-info/pilot-tools/pilot-and-airside-safety/ or bit.ly/pilotsafety for short.

Visit CASA's pilot safety hub for more information on a range of topics including:

- AI hot spots
- flight planning
- non-controlled aerodromes

casa.gov.au/resources-and-education/pilot-safety-hub

CASA's pilot safety hub

If you have any questions about this publication, please email us at safetypromotions@airservicesaustralia.com.

Data collected by Airservices Australia during 2021 and 2022.