

FINAL CALL FOR ADS-B

// By CAA ADS-B Grant Scheme
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From **31 December 2022**
it's mandatory to have
ADS-B installed if you want
to fly in controlled airspace.

It's New Year's Day 2023, the weather is perfect, and you set off for a flight to kick off the new year.

You fire up the machine and prepare to taxi. A radio call to the tower for clearance is met with a query about ADS-B. As your conversation continues it becomes clear – without Automatic Dependent Surveillance-Broadcast, you're stuck on the ground.

That could be the reality for anyone operating out of an aerodrome in controlled airspace.

But what about your regular weekly trip into controlled airspace, or a visit to your maintenance facility within controlled airspace?

Sorry, no clearance for you.

With just four months until transmission of ADS-B data becomes mandatory in controlled airspace, it's now more important than ever to make sure you and your aircraft are ready.

Not every aircraft flies in controlled airspace of course, but there are added safety benefits in having an ADS-B kit, even when flying in Class G uncontrolled airspace.

With ADS-B IN, you receive data about aircraft around you, adding to your situational awareness. ADS-B OUT – your aircraft data can be 'seen' by aircraft around you – offers more accurate position data (think of the search and rescue benefits) and the potential for reduced position reporting to ATC.

ADS-B is more accurate, and coverage is up to 45 percent greater than radar. Air traffic control will be using ADS-B OUT data to separate aircraft in controlled airspace.

Still need convincing?

The ADS-B grant scheme is still available! That's up to \$2500+GST for ADS-B OUT, and up to an additional \$500+GST for ADS-B IN. The scheme is currently due to end on 30 June 2023 – but the scheme is first come, first served.

Criteria for the scheme can be found at aviation.govt.nz > **airspace and aerodromes** > **new southern sky** > **ads-b**.

Take a look, even if you don't think you'll be eligible – the criteria are wider than you might think.

And, once again, do not expect to be able to fly in controlled airspace after 31 December 2022 if your aircraft is not ADS-B equipped.



Other stuff you might want to know

We recommend you speak to your avionics workshop to discuss what equipment would be best for your aircraft. You'll need to equip with an ADS-B system meeting the standards and requirements listed in CAA Notice of Requirement NTC91.258.

Take your time getting to know your equipment – it may operate differently to your previous transponder and you need to transmit in the correct mode, including on the ground. The Airways receiver network can detect ADS-B down to ground level in some places. At larger airports, with surface systems, to be able to see aircraft and other vehicles on airport movement areas, it's essential the aircraft is transmitting the correct altitude/ground data. Make sure your transponder is in the correct mode before the aircraft moves.

With continued non-compliant ADS-B transmission you run the risk of not being granted access to controlled airspace. It's also possible the CAA will need to be in touch with you regarding this.

Handheld/electronic 'conspicuity' devices (EC) cannot be used in controlled airspace. They don't meet the performance requirements of NTC91.258. Due to this, and the risk of ATC officers being distracted by non-compliant data, Airways removes the data from known EC devices so it's not displayed to controllers.

Most of these EC devices also only transmit ADS-B data and don't have a Mode A/C/S component, so they won't trigger a traffic advisory/resolution in TCAS-equipped aircraft. For this reason, a Mode A/C or S transponder (or ADS-B system) will be required in transponder-mandatory uncontrolled airspace.

Transmit ADS-B at all times. If you're leaving from, and returning to, controlled airspace, don't turn off ADS-B while in uncontrolled airspace (rule 91.247).

Turning the transponder off and then back on again when returning to controlled airspace can cause issues with the system's performance. And if you're turning off the ADS-B transmission you're losing its benefits.

In the interests of safety, we would strongly encourage you to transmit ADS-B data at all times.

We recognise it's difficult to remain unidentified on flight tracking websites – because ADS-B is open source data, and anyone with the necessary receiver can receive your transmissions – but there are options.

You can ask the flight tracking website to remove your aircraft's data from their website, but you may be charged a fee for this service.

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Or you can ask the CAA to make your personal information private on the aircraft register and that information is then not displayed on the flight tracking websites.

The tracking data and aircraft registration, however, will still be shown.

Currently, the best option is to contact the FAA through their LADD (Limiting Aircraft Data Displayed) programme.

The CAA doesn't monitor flight tracking websites or use their data for prosecution purposes. The CAA uses flight tracking websites if a report or aviation-related concern is received, only as a first indication of whether there's something to actually investigate. Data from a flight tracking website isn't used as evidence.

Also, keep in mind that the information displayed on these websites should be taken with a pinch of salt. The information displayed can be delayed, or not adjusted for local QNH, or just an estimation of where the aircraft actually is.

If you're unable to equip with ADS-B due to your type of aircraft, take a look at rule 91.255E. It allows for the operation of "an aircraft without transmitting ADS-B data in the prescribed airspace...if the aircraft cannot practicably or reasonably be equipped with an ADS-B system because of the characteristics of the aircraft type".

To use this rule to fly in controlled airspace, you do need to receive specific authorisation from the relevant ATC unit.

The rule isn't for those who just don't want to equip their aircraft with ADS-B. It's for those who're unable to, or it's unreasonable to expect to them to – think hang gliders/paragliders, hot air balloons, or aircraft entering controlled airspace to get equipped with ADS-B. 🙄

Queries or comments?

Email adsb@caa.govt.nz