

The version of ADS-B required depends on the airspace you intend to fly in and not just the country your aircraft is registered in. For example, Australia, the Canadian Hudson Bay Area, Hong Kong, Indonesia and Singapore now or will in the future eventually require DO-260(A). EASA and the United States has mandated DO-260(B) by January 1, 2020 for operation in specific airspace. Simply stated, on January 01, 2020, airspace in the United States that requires the use of a Transponder today will require that aircraft to be equipped with a DO-260(B) (aka version 2) Out system.

Airspace	Altitude
Â	All
В	From the ground up within the Mode C ring
С	From the ground up
E	Above 10,000 ft. MSL but not below 2,500 feet AGL

The FAA has identified the specific airspace in the United States requiring D0-260(B) as follows:

- Class A, B, and C airspace
- Above the ceiling and within the lateral boundaries of a Class B or Class C airspace area up to 10,000 feet MSL
- Class E airspace areas at or above 10,000 ft MSL over the 48 states and DC, excluding airspace at and below 2,500 ft AGL
- Class E airspace over the Gulf of Mexico at and above 3,000 feet MSL within 12 nm of the coastline of the United States
- Airspace within 30 nautical miles (nm) at certain busy airports from the surface up to 10,000 feet MSL; airports listed in appendix D to part 91.

EASA has similar airspace requirements that varies slightly depending on the size of the aircraft, speed and flight altitude.

### In short, do you need to install or upgrade to ADS-B 260(B)?

If you plan to operate your aircraft into the United States or Europe the answer is absolutely. Additionally, if you plan to sell your aircraft in the future installing ADS-B 260(B) now will ensure you will have a global market later and operational capability today.



Contact Flying Colours Corp. to discuss your plans for compliance with the ADS-B Out mandates. Based upon the current configuration of your aircraft, FCC would welcome the opportunity to begin working with you to develop an orderly compliance plan which takes into account your individualized needs and expectations.





**ADS-B** Compliance

It depends on where you fly your aircraft today and where you plan to fly in the future.

#### **Different Versions of ADS-B Out:**

- ABS-B DO-260 is often identified as "version 0" ADS-B DO-260(A) is often identified as "version 1" ADS-B DO-260(B) is often identified as "version 2"

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### Does the Automatic Dependent Surveillance-Broadcast (ADS-B) Out mandate apply to me?

# Your aircraft already has ADS-B Out, but does it have the version required for where you plan to fly?

Requirements and capabilities of each version has evolved over time and are based on technological advances in navigation equipment centered on GPS satellites, ground-based equipment and aircraft equipment.

## DO-260

DO-260 (A)

DO-260
00-200

Function / Capability	Available / Comments	Function / Capability	Available / Comments	Function / Capability	Available / Comments
Barometric Altitude Integrity Code (NICBARO)	No	Barometric Altitude Integrity Code (NICBARO)	Yes, indicate integrity of Barometric altitude	Barometric Altitude Integrity Code (NICBARO)	Yes, if Resolution Advisory is or isn't active
Geometric Vertical Accuracy (GVA)	Νο	Geometric Vertical Accuracy (GVA)	No	Geometric Vertical Accuracy (GVA)	Yes, derived from VFOM
GPS offset	No	GPS offset	Yes, if GPS offset is applied	GPS offset	Yes, GPS antenna offset is provided
Indication of capablities	Only Show status of TCAS and CDTI	Indication of capablities	Yes, e.g. Air Reference Velocity, Status of Identity Switch, Target State and Trajectory Change reports	Indication of capablities	Yes, information on type of ADS-B in (i.e. 1090ES in or UAT in) added
Intention	No	Intention	Yes, intended altitude and heading	Intention	Yes, same as DO-260A
Length / Width of Aircraft	No	Length / Width of Aircraft	Yes, provides aircraft size	Length / Width of Aircraft	Yes, same as DO-260A
Mode A	Yes, as a test message (USA ONLY)	Mode A	Yes, as a test message (USA ONLY)	Mode A	Yes, broadcasted as a regular message worldwide
Navigation Accuracy Category (NACP)	No	Navigation Accuracy Category (NACP)	Yes, derived from HFOM and VFOM	Navigation Accuracy Category (NACP)	Yes, derived from HFOM only
Navigation Uncertainty Category (NUCP)	Yes	Navigation Integrity Category (NIC) replaced NUCP	Yes	Navigation Integrity Category (NIC)	Yes, increased number of levels of NIC available & Vertical component removed
Quality Indicator for Velocity (NUCR)	Yes	Quality Indicator for Velocity (NACV) replaced NUCR	Yes	Quality Indicator for Velocity, (NUCR and NACV)	Yes, vertical component removed
Resolution Advisory	No	Resolution Advisory	No	Resolution Advisory	Yes, added Active Resolution Advisories
Status of Resolution Advisory	Νο	Status of Resolution Advisory	Yes, if Resolution Advisory is or isn't active	Status of Resolution Advisory	Yes, Same as DO-260A
Surveillance Integrity Level and Source Integrity Level (SIL)	No	Surveillance Integrity Level and Source Integrity Level (SIL)	Yes	Surveillance Integrity Level and Source Integrity Level (SIL	Yes, renamed as Source Integrity Level. Definition is changed to exclude avionics fault
System Design Assurance (SDA)	No	System Design Assurance (SDA)	No	System Design Assurance (SD/	A) Yes, probability of avionics fault
Target Status	No	Target Status	No	Target Status	Yes, Autopilot mode, Vertical Navigation mode, AltitudeHold mode, Approach Mode and LNAV Mode

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## **(B)**