



WHAT IS ADS-B OUT?

JANUARY 2017

ADS-B (Automatic Dependent Surveillance-Broadcast) Out is a satellite-based technology that lets properly equipped aircraft broadcast their precise location to ATC (air traffic control) as well as other aircraft equipped with ADS-B In.

Pinpointing an aircraft's precise position isn't possible with the 80-year-old, land-based radar tracking systems currently in use because radar cannot accurately gauge separation above and below and on either side of an aircraft. At the urging of Congress, the FAA began updating the aircraft monitoring infrastructure throughout the United States, transitioning from analog radar to today's digital system that uses a mix of satellite- and land-based equipment. The new digital infrastructure is more precise and more reliable because it isn't affected by weather. It also covers more airspace, including areas where land-based radar was previously sparse or non-existent, such as in the Gulf of Mexico and Alaska.

In addition, more precise and accurate aircraft positioning allows ATC to safely fit more aircraft into smaller air spaces. This allows aircraft to fly more direct routes, which saves time, reduces fuel consumption and lowers the risk of runway incursions because pilots and ATC can see the exact location of other aircraft and vehicles on the ground.

What is the ADS-B out mandate?

The ADS-B Out mandate was established by the FAA requiring all aircraft operating in US airspace to have a certified GPS position source as well as a transponder capable of transmitting data from the aircraft without prompting from the pilot or request from ATC.

Do I need ADS-B out? If so, what equipment do I need?

To comply with the ADS-B mandate, all aircraft need ADS-B Out. This will require a 1090-MHz Mode S Extended squitter transponder combined with a certified GPS navigation source such as WAAS GPS. The aircraft must be able to transmit or broadcast the appropriate data from the minute you take off.

When is the Mandate Deadline?

January 1, 2020

What will happen if I don't have ADS-B by 12:01 a.m. on January 1, 2020?

If your aircraft is unable to transmit the required signals, it will be grounded. On a case-by-case basis, ATC may allow you to take off if you obtain permission from the tower at your destination to land one time only without the ADS-B equipment. You'll then be notified that your aircraft is grounded until it complies with the mandate.