

FAA Aviation Safety

ADS-B Frequently Asked Questions

1. WHY IS THE FAA DEPLOYING ADS-B TECHNOLOGY?

The Federal Aviation Administration (FAA) is transforming air traffic control from a ground-based network to a satellite-based system called ADS-B (Automatic Dependent Surveillance–Broadcast). As the cornerstone of the Next Generation Air Transportation System (NextGen), ADS-B will increase the safety and efficiency of the National Airspace System.

2. WHAT IS THE DIFFERENCE BETWEEN ADS-B OUT AND ADS-B IN, AND WHAT WILL I NEED TO EQUIP?

ADS-B Out is the ability to transmit information from the aircraft to ground stations and to other equipped aircraft. ADS-B In is the ability of the aircraft to receive information from other transmitting aircraft and the ground infrastructure. The proposed ADS-B rule requires ADS-B Out performance avionics in specific airspace (see #3). While the FAA wants the system to evolve to its maximum potential, at this time, the FAA is not mandating ADS-B In. The ADS-B Traffic Information Service–Broadcast (TIS-B) and Flight Information Service–Broadcast (FIS-B) will be available free to anyone who chooses to equip with certified ADS-B In capability.

3. DO I HAVE TO EQUIP?

Only if you operate within certain airspace; ADS-B Out performance is required by 2020 only for those aircraft flying in the following classes of airspace.

- Class A, B, and C.
- Class E above 10,000 ft.
- Around those airports identified in 14CFR 91 Appendix D.

However, until the final rule is published in April 2010, this is subject to change.

4. WHAT EQUIPMENT IS REQUIRED FOR ADS-B OUT?

Either the Universal Access Transceiver (UAT) or 1090 Extended Squitter (1090ES) datalink is acceptable when operating outside of Class A airspace. However, when operating within Class A airspace, the 1090ES ADS-B performance capability will be required.

5. WHEN DO I HAVE TO EQUIP?

The proposed rule requires ADS-B Out performance by 2020. However, to take full advantage of the ADS-B In services, your aircraft must be equipped with a certified receiver/transmitter and a cockpit display or Multi-Function Display (MFD). Check back for the latest information once the final ADS-B rule is published in April 2010.

6. ARE MY CURRENT AVIONICS COMPATIBLE?

Your equipment manufacturer will be able to advise you on the avionics needed to meet the performance requirements of ADS-B Out contained in the proposed airspace rule. Likewise, they can advise you on the compatibility of your existing avionics when making equipage decisions for ADS-B In capabilities.

7. I HEAR THIS IS GOING TO BE EXPENSIVE. HOW MUCH WILL IT COST ME?

Under the proposed rule, starting in 2020 aircraft owners and operators who intend to operate in Class A, B, or C airspace, or in Class E airspace above 10,000 ft., would need to equip their aircraft for the ADS-B Out performance capability. Costs associated with meeting this performance capability vary depending on the equipment and manufacturer chosen. However, equipage costs are expected to decrease as competition among ADS-B avionics manufacturers increases.





FAA Aviation Safety ADS-B Frequently Asked Questions

8. I HAVE TRAFFIC AND WEATHER ADVISORY INFORMATION NOW. HOW IS ADS-B DIFFERENT?

Beyond equipage, the main difference is there are no subscription fees associated with the use of ADS-B traffic (TIS-B), weather and aeronautical information (FIS-B) services.

9. WHAT IS FIS-B?

FIS-B is a component of ADS-B and is the ground-to-air broadcast service of textual/graphical weather and aeronautical data for use in the cockpit. FIS-B enhances the pilot's situational awareness through the availability of a broad range of flight relevant information.

10. WHAT PRODUCTS ARE PROVIDED THROUGH FIS-B?

The basic, free FIS-B service will transmit graphical and textual weather, as well as other aeronautical products. These include:

- Aviation Routine Weather Reports (METARs).
- Non-Routine Aviation Weather Reports (SPECIs).
- Terminal Area Forecasts (TAFs) and their amendments.
- NEXRAD (regional and CONUS) precipitation maps.
- Notice to Airmen (NOTAM) Distant and Flight Data Center.
- Airmen's Meteorological Conditions (AIRMET).
- Significant Meteorological Conditions (SIGMET) and Convective SIGMET.
- Status of Special Use Airspace (SUA).
- Temporary Flight Restrictions (TFRs).
- Winds and Temperatures Aloft.
- Pilot Reports (PIREPS).
- TIS-B service status.

11. WHAT IS TIS-B?

TIS-B is an advisory-only application designed to enhance the pilot's visual acquisition of surrounding traffic and increase situational awareness.

12. DO I HAVE TO SUBSCRIBE TO ADS-B SERVICES?

No, you do not have to subscribe to receive any of these basic services. You only need to equip with compatible avionics and operate within an ADS-B service volume area to receive TIS-B and FIS-B information.

13. WHEN WILL THE ADS-B SERVICES BE AVAILABLE IN MY AREA?

It depends on your location; rollout has already begun. The FAA expects to have services available throughout the National Airspace System wherever there is current radar services by 2013. You can browse the FAA Surveillance and Broadcast Services website at the link below for the latest information on ADS-B deployment.

For more information about the FAA's ADS-B program, visit www.adsb.gov.

QUESTIONS?

Contact the FAA Flight Standards ADS-B Office at:
9-AWA-AVS-ADS-Programs-AFS@faa.gov.

Contact the FAA Aircraft Certification ADS-B Office at:
9-AWA-AVS-ADS-Programs-AIR@faa.gov.