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 out of 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 or the ground infrastructure. The proposed ADS-B rule would mandate ADS-B Out only 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 ADS-B In capability.

3. DO I HAVE TO EQUIP?

No, you are not required to equip unless you operate within certain airspace. The proposed rule would mandate ADS-B Out equipage by 2020 only for those aircraft flying in controlled airspace including:

- 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, this is subject to change. The rule is expected to be final by the spring of 2010.

4. WHAT EQUIPMENT IS REQUIRED?

Either the Universal Access Transceiver or 1090 Extended Squitter (1090ES) datalink is acceptable when operating in Class A airspace. However, if operating outside of Class A airspace, you will need to equip with the 1090ES ADS-B capability.

5. WHEN DO I HAVE TO EQUIP?

The proposed rule would mandate equipage with ADS-B Out by 2020. Check back for the latest information once the final ADS-B rule is published in the spring of 2010.

6. ARE MY CURRENT AVIONICS COMPATIBLE?

For compliance to the proposed rule you will need an ADS-B Out transmit capability. However, to take full advantage of the ADS-B In services, your plane must be equipped with a certified receiver/transmitter and either a cockpit display or a Multi-Function Display (MFD). You will need to consult with a equipment manufacturer to determine if your avionics will be able to fully support ADS-B In or ADS-B Out, and for information on whether a retrofit or a new purchase will be required.

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

There is no charge for ADS-B broadcast services. The government is installing the ground infrastructure at taxpayer expense to support both air traffic control and broadcast services. 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 ADS-B Out performance capability. The price will vary depending on the equipment and manufacturer you choose. We believe prices will fall once competition among manufacturers increases.

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

ADS-B broadcasts are free services provided by the FAA. There will be no subscription charges for these basic services, which include weather, traffic, and aeronautical information.

9. WHAT IS FIS-B?

FIS-B is a component of ADS-B broadcast services. It is the ground-to-air broadcast of meteorological and aeronautical information to the cockpit. FIS-B products may be textual or graphical. They provide data to the cockpit for the display of weather and other aeronautical data.

10. WHAT WEATHER PRODUCTS DO I GET?

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).
- Special Aviation 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 a ground-based uplink of air traffic radar targets. 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 THIS SERVICE?

No, you do not have to subscribe to receive any of these basis services. You only need to equip with compatible equipment and be located in 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 the contractor, ITT Corporation, will have the services throughout the entire National Airspace System by 2013. You can go to the FAA Surveillance and Broadcast Services website 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.