

2. One of the data elements transmitted by ADS-B is the aircraft's Flight Identification (FLT ID). The FLT ID is comprised of a maximum of seven alphanumeric characters and must correspond to the aircraft identification filed in the flight plan. For airline and commuter aircraft, the FLT ID is usually the company name and flight number (for example, AAL3432), and is typically entered into the avionics by the flight crew during preflight. For general aviation (GA), if aircraft avionics allow dynamic modification of the FLT ID, the pilot can enter it prior to flight. However, some ADS-B avionics require the FLT ID to be set to the aircraft registration number (for example, N1234Q) by the installer and cannot be changed by the pilot from the cockpit. In both cases, the FLT ID must correspond to the aircraft identification filed in its flight plan.

ATC automation systems use the transmitted ADS-B FLT ID to uniquely identify each aircraft within a given airspace, and to correlate it to its filed flight plan for the purpose of providing surveillance and separation services. If the FLT ID and the filed aircraft identification are not identical, a Call Sign Mis-Match (CSMM) is generated and ATC automation systems may not associate the aircraft with its filed flight plan. In this case, air traffic services may be delayed or unavailable until the CSMM is corrected. Consequently, it is imperative that flight crews and GA pilots ensure the FLT ID entry correctly matches the aircraft identification filed in their flight plan.

3. Each ADS-B aircraft is assigned a unique ICAO address (also known as a 24-bit address) that is broadcast by the ADS-B transmitter. This ICAO address is programmed at installation. Should multiple aircraft broadcast the same ICAO address while transiting the same ADS-B Only Service Volume, the ADS-B network may be unable to track the targets correctly. If radar reinforcement is available, tracking will continue. If radar is unavailable, the controller may lose target tracking entirely on one or both targets. Consequently, it is imperative that the ICAO address entry is correct.

4. Aircraft that are equipped with ADS-B avionics on the UAT datalink have a feature that allows them to broadcast an anonymous 24-bit ICAO

address. In this mode, the UAT system creates a randomized address that does not match the actual ICAO address assigned to the aircraft. The UAT anonymous 24-bit address feature may only be used when the operator has not filed an IFR flight plan and is not requesting ATC services. In the anonymity mode, the aircraft's beacon code must be set to 1200 and, depending on the manufacturer's implementation, the aircraft FLT ID might not be transmitted. Pilots should be aware that while in UAT anonymity mode, they will not be eligible to receive ATC separation and flight following services, and may not benefit from enhanced ADS-B search and rescue capabilities.

5. ADS-B systems integrated with the transponder will automatically set the applicable emergency status when 7500, 7600, or 7700 are entered into the transponder. ADS-B systems not integrated with the transponder, or systems with optional emergency codes, will require that the appropriate emergency code is entered through a pilot interface. ADS-B is intended for inflight and airport surface use. Unless otherwise directed by ATC, transponder/ADS-B systems should be turned "on" and remain "on" whenever operating in the air or on the airport surface movement area.

d. ATC Surveillance Services using ADS-B – Procedures and Recommended Phraseology

Radar procedures, with the exceptions found in this paragraph, are identical to those procedures prescribed for radar in AIM Chapter 4 and Chapter 5.

1. Preflight:

If ATC services are anticipated when either a VFR or IFR flight plan is filed, the aircraft identification (as entered in the flight plan) must be entered as the FLT ID in the ADS-B avionics.

2. Inflight:

When requesting surveillance services while airborne, pilots must disable the anonymous feature, if so equipped, prior to contacting ATC. Pilots must also ensure that their transmitted ADS-B FLT ID matches the aircraft identification as entered in their flight plan.