

4-5-10. Automatic Dependent Surveillance-Rebroadcast (ADS-R)

a. Introduction.

ADS-R is a datalink translation function of the ADS-B ground system required to accommodate the two separate operating frequencies (978 MHz and 1090 ES). The ADS-B system receives the ADS-B messages transmitted on one frequency and ADS-R translates and reformats the information for rebroadcast and use on the other frequency. This allows ADS-B In equipped aircraft to see nearby ADS-B Out traffic regardless of the operating link of the other aircraft. Aircraft operating on the same ADS-B frequency exchange information directly and do not require the ADS-R translation function. (See FIG 4-5-8 and FIG 4-5-9.)

b. Reports of ADS-R Malfunctions.

Users of ADS-R can provide valuable assistance in the correction of malfunctions by reporting instances of undesirable system performance. Since ADS-R performance is monitored by maintenance personnel rather than ATC, report malfunctions to the nearest Flight Service Station (FSS) facility by radio or telephone. Reporters should identify:

1. Condition observed.
2. Date and time of observation.
3. Altitude and location of observation.
4. Type and call sign of the aircraft.
5. Type and software version of avionics system.