altitude reporting feature of your transponder/ADS−B. An instruction by ATC to "STOP ALTITUDE SQUAWK, ALTITUDE DIFFERS BY (number of feet) FEET," may be an indication that the transmitted altitude information is incorrect, or that the aircraft's altimeter setting is incorrect. While an incorrect altimeter setting has no effect on the transmitted altitude information, it will cause the aircraft to fly at a true altitude different from the assigned altitude. When a controller indicates that an altitude readout is invalid, the pilot should verify that the aircraft altimeter is set correctly.

NOTE−
Altitude encoders are preset at standard atmospheric pressure. Local altimeter correction is applied by the surveillance facility before the altitude information is presented to ATC.

3. Pilots should report exact altitude or flight level to the nearest hundred foot increment when establishing initial contact with an ATC facility. Exact altitude or flight level reports on initial contact provide ATC with information that is required prior to using automatically reported altitude information for separation purposes. This will significantly reduce altitude verification requests.

d. IDENT Feature

Transponder/ADS−B Out equipment must be operated only as specified by ATC. Activate the "IDENT" feature only when requested by ATC.

e. Code Changes

1. When making routine code changes, pilots should avoid inadvertent selection of Codes 7500, 7600 or 7700 thereby causing momentary false alarms at automated ground facilities. For example, when switching from Code 2700 to Code 7200, switch first to 2200 then to 7200, NOT to 7700 and then 7200. This procedure applies to nondiscrete Code 7500 and all discrete codes in the 7600 and 7700 series (i.e., 7600−7677, 7700−7777) which will trigger special indicators in automated facilities. Only nondiscrete Code 7500 will be decoded as the hijack code.

2. Under no circumstances should a pilot of a civil aircraft operate the transponder on Code 7777. This code is reserved for military interceptor operations.

3. Military pilots operating VFR or IFR within restricted/warning areas should adjust their transponders to Code 4000 unless another code has been assigned by ATC.

f. Mode C Transponder and ADS−B Out Requirements

1. Specific details concerning requirements to carry and operate Mode C transponders and ADS−B Out, as well as exceptions and ATC authorized deviations from those requirements, are found in 14 CFR Sections 91.215, 91.225, and 99.13.

2. In general, the CFRs require aircraft to be equipped with an operable Mode C transponder and ADS−B Out when operating:

(a) In Class A, Class B, or Class C airspace areas;

(b) Above the ceiling and within the lateral boundaries of Class B or Class C airspace up to 10,000 feet MSL;

(c) Class E airspace at and above 10,000 feet MSL within the 48 contiguous states and the District of Columbia, excluding the airspace at and below 2,500 feet AGL;

(d) Within 30 miles of a Class B airspace primary airport, below 10,000 feet MSL (commonly referred to as the "Mode C Veil");

(e) For ADS−B Out: Class E airspace at and above 3,000 feet MSL over the Gulf of Mexico from the coastline of the United States out to 12 nautical miles.

NOTE−
The airspace described in (e) above is specified in 14 CFR § 91.225 for ADS−B Out requirements. However, 14 CFR § 91.215 does not include this airspace for ATC transponder requirements.