

3. When unable to climb/descend at a rate of a least 500 feet per minute (fpm).
4. When approach has been missed. (Request clearance for specific action (i.e., to alternative airport, another approach).
5. Change in the average true airspeed (at cruising altitude) when it varies by 5 percent or 10 knots (whichever is greater) from that filed in the flight plan.
6. The time and altitude or flight level upon reaching a holding fix or point to which cleared.
7. When leaving any assigned holding fix or point.

*Note: The reports stated in subparagraphs 6 and 7 may be omitted by pilots of aircraft involved in instrument training at military terminal area facilities when radar service is being provided.*

8. Any loss, in controlled airspace, of VOR, TACAN, ADF, low frequency navigation receiver capability, GPS anomalies while using installed IFR-certified GPS/GNSS receivers, complete or partial loss of ILS receiver capability or impairment of air/ground communications capability. Reports should include aircraft identification, equipment affected, degree to which the capability to operate under IFR in the ATC system is impaired, and the nature and extent of assistance desired from ATC.
9. Any information relating to the safety of flight.

Other equipment installed in an aircraft may impair your ability to safely operate under IFR. If a malfunction of such equipment (e.g., weather radar) affects any safety or IFR capability, reports should be made as stated above. When reporting GPS anomalies, be very specific and include the location, altitude, and duration of the anomaly. Deliberate GPS interference or outage areas resulting from pre-approved government tests will be disseminated in NOTAMs. These outages should not be reported to ATC, as this condition is known and not an anomaly. See also AIM 1-1-13.

## Communication Failure

Two-way radio communication failure procedures for IFR operations are outlined in 14 CFR Part 91, § 91.185. Unless otherwise authorized by ATC, pilots operating under IFR are expected to comply with this regulation. Expanded procedures for communication failures are found in the Aeronautical Information Manual (AIM). Pilots can use the transponder to alert ATC to a radio communication failure by squawking code 7600. [Figure 2-69] If only the transmitter is inoperative, listen for ATC instructions on any operational

receiver, including the navigation receivers. It is possible ATC may try to make contact with pilots over a VOR, VORTAC, NDB, or localizer frequency. In addition to monitoring NAVAID receivers, attempt to reestablish communications by contacting ATC on a previously assigned frequency or calling an FSS.

The primary objective of the regulations governing communication failures is to preclude extended IFR no-radio operations within the ATC system since these operations may adversely affect other users of the airspace. If the radio fails while operating on an IFR clearance, but in VFR conditions, or if encountering VFR conditions at any time after the failure, continue the flight under VFR conditions, if possible, and land as soon as practicable. The requirement to land as soon as practicable should not be construed to mean as soon as possible. Pilots retain the prerogative of exercising their best judgment and are not required to land at an unauthorized airport, at an airport unsuitable for the type of aircraft flown, or to land only

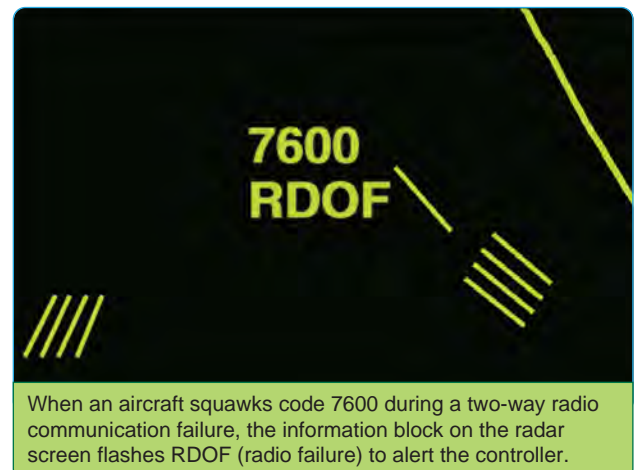


Figure 2-69. Two-way radio communications failure transponder code.

minutes short of their intended destination. However, if IFR conditions prevail, pilots must comply with procedures designated in the CFRs to ensure aircraft separation. If pilots must continue their flight under IFR after experiencing two-way radio communication failure, they should fly one of the following routes:

- The route assigned by ATC in the last clearance received.
- If being radar vectored, the direct route from the point of radio failure to the fix, route, or airway specified in the radar vector clearance.
- In the absence of an assigned route, the route ATC has advised to expect in a further clearance.
- In the absence of an assigned or expected route, the route filed in the flight plan.