- (1) For operation of an aircraft with an operating transponder but without operating automatic pressure altitude reporting equipment having a Mode C capability, the request may be made at any time.
- (2) For operation of an aircraft with an inoperative transponder to the airport of ultimate destination, including any intermediate stops, or to proceed to a place where suitable repairs can be made or both, the request may be made at any time.
- (3) For operation of an aircraft that is not equipped with a transponder, the request must be made at least one hour before the proposed operation.
- (e) Unmanned aircraft. (1) The requirements of paragraph (b) of this section do not apply to a person operating an unmanned aircraft under this part unless the operation is conducted under a flight plan and the person operating the unmanned aircraft maintains two-way communication with ATC.
- (2) No person may operate an unmanned aircraft under this part with a transponder on unless:
- (i) The operation is conducted under a flight plan and the person operating the unmanned aircraft maintains twoway communication with ATC; or
- (ii) The use of a transponder is otherwise authorized by the Administrator.

(Approved by the Office of Management and Budget under control number 2120–0005)

[Doc. No. 18334, 54 FR 34304, Aug. 18, 1989, as amended by Amdt. 91–221, 56 FR 469, Jan. 4, 1991; Amdt. 91–227, 56 FR 65660, Dec. 17, 1991; Amdt. 91–227, 7 FR 328, Jan. 3, 1992; Amdt. 91–229, 57 FR 34618, Aug. 5, 1992; Amdt. 91–267, 66 FR 21066, Apr. 27, 2001; Amdt. 91–355, 84 FR 34287, July 18, 2019; Amdt. No. 91–361, 86 FR 4512, Jan. 15, 2021]

## §91.217 Data correspondence between automatically reported pressure altitude data and the pilot's altitude reference.

- (a) No person may operate any automatic pressure altitude reporting equipment associated with a radar beacon transponder—
- (1) When deactivation of that equipment is directed by ATC:
- (2) Unless, as installed, that equipment was tested and calibrated to transmit altitude data corresponding within 125 feet (on a 95 percent probability basis) of the indicated or cali-

brated datum of the altimeter normally used to maintain flight altitude, with that altimeter referenced to 29.92 inches of mercury for altitudes from sea level to the maximum operating altitude of the aircraft; or

- (3) Unless the altimeters and digitizers in that equipment meet the standards of TSO-Cl0b and TSO-C88, respectively.
- (b) No person may operate any automatic pressure altitude reporting equipment associated with a radar beacon transponder or with ADS-B Out equipment unless the pressure altitude reported for ADS-B Out and Mode C/S is derived from the same source for aircraft equipped with both a transponder and ADS-B Out.

[Doc. No. 18334, 54 FR 34304, Aug. 18, 1989, as amended by Amdt. 91–314, 75 FR 30193, May 28, 2010]

## §91.219 Altitude alerting system or device: Turbojet-powered civil airplanes.

- (a) Except as provided in paragraph (d) of this section, no person may operate a turbojet-powered U.S.-registered civil airplane unless that airplane is equipped with an approved altitude alerting system or device that is in operable condition and meets the requirements of paragraph (b) of this section.
- (b) Each altitude alerting system or device required by paragraph (a) of this section must be able to—
  - (1) Alert the pilot—
- (i) Upon approaching a preselected altitude in either ascent or descent, by a sequence of both aural and visual signals in sufficient time to establish level flight at that preselected altitude: or
- (ii) Upon approaching a preselected altitude in either ascent or descent, by a sequence of visual signals in sufficient time to establish level flight at that preselected altitude, and when deviating above and below that preselected altitude, by an aural signal;
- (2) Provide the required signals from sea level to the highest operating altitude approved for the airplane in which it is installed;
- (3) Preselect altitudes in increments that are commensurate with the altitudes at which the aircraft is operated;