

§ 87.145

continuous transmission of an unmodulated carrier.

§ 87.145 Acceptability of transmitters for licensing.

(a) Each transmitter must be certificated for use in these services, except as listed in paragraph (c) of this section. However, aircraft stations which transmit on maritime mobile frequencies must use transmitters certificated for use in ship stations in accordance with part 80 of this chapter. Certification under part 80 is not required for aircraft earth stations transmitting on maritime mobile-satellite frequencies. Such stations must be certificated under part 87.

(b) Some radio equipment installed on air carrier aircraft must meet the requirements of the Commission and the requirements of the FAA. The FAA requirements may be obtained from the FAA, Aircraft Maintenance Division, 800 Independence Ave., SW., Washington, DC 20591.

(c) The equipment listed below is exempted from certification. The operation of transmitters which have not been certificated must not result in harmful interference due to the failure of those transmitters to comply with technical standards of this subpart.

(1) Flight test station transmitters for limited periods where justified.

(2) U.S. Government transmitters furnished in the performance of a U.S. Government contract if the use of certificated equipment would increase the cost of the contract or if the transmitter will be incorporated in the finished product. However, such equipment must meet the technical standards contained in this subpart.

(3) ELTs verified in accordance with § 87.147(e).

(4) Signal generators when used as radionavigation land test stations (MTF).

(d) Aircraft earth stations must correct their transmit frequencies for Doppler effect relative to the satellite. The transmitted signal may not deviate more than 335 Hz from the desired transmit frequency. (This is a root sum square error which assumes zero error for the received ground earth station signal and includes the AES transmit/receive frequency reference error and

47 CFR Ch. I (10–1–14 Edition)

the AES automatic frequency control residual errors.) The applicant must attest that the equipment provides adequate Doppler effect compensation and where applicable, that measurements have been made that demonstrate compliance. Submission of data demonstrating compliance is not required unless requested by the Commission.

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§ 87.147 Authorization of equipment.

(a) Certification may be requested by following the procedures in part 2 of this chapter. Aircraft transmitters must meet the requirements over an ambient temperature range of -20 degrees to $+50$ degrees Celsius.

(b) ELTs manufactured after October 1, 1988, must meet the output power characteristics contained in § 87.141(i) when tested in accordance with the Signal Enhancement Test contained in subpart N, part 2 of this chapter. A report of the measurements must be submitted with each application for certification. ELTs that meet the output power characteristics of the section must have a permanent label prominently displayed on the outer casing state, "Meets FCC Rule for improved satellite detection." This label, however, must not be placed on the equipment without authorization to do so by the Commission. Application for such authorization may be made either by submission of a new application for certification accompanied by the required fee and all information and test data required by parts 2 and 87 of this chapter or, for ELTs approved prior to October 1, 1988, a letter requesting such authorization, including appropriate test data and a showing that all units produced under the original equipment authorization comply with the requirements of this paragraph without change to the original circuitry.

(c) An applicant for a station license may request certification for an individual transmitter by following the procedure in part 2 of this chapter. Such a transmitter will be individually certified and so noted on the station license.

(d) An applicant for certification of equipment intended for transmission in any of the frequency bands listed in