

**§ 95.589**

of transmitting on any frequency or channel other than those listed in § 95.563.

(b) *Antenna.* The antenna of each FRS transmitter type must meet the following requirements.

(1) The antenna must be a non-removable integral part of the FRS transmitter type.

(2) The gain of the antenna must not exceed that of a half-wave dipole antenna.

(3) The antenna must be designed such that the electric field of the emitted waves is vertically polarized when the unit is operated in the normal orientation.

(c) *Digital data transmissions.* FRS transmitter types having the capability to transmit digital data must be designed to meet the following requirements.

(1) FRS units may transmit digital data containing location information, or requesting location information from one or more other FRS or GMRS units, or containing a brief text message to another specific FRS or GMRS unit or units.

(2) Digital data transmissions must be initiated by a manual action or command of the operator, except that FRS units may be designed to automatically respond with location data upon receiving an interrogation request from another FRS unit or a GMRS unit.

(3) Digital data transmissions must not exceed one second in duration.

(4) Digital data transmissions must not be sent more frequently than one digital data transmission within a thirty-second period, except that an FRS unit may automatically respond to more than one interrogation request received within a thirty-second period.

(d) *Packet mode.* FRS transmitter types must not be capable of transmitting data in the store-and-forward packet operation mode.

(e) Effective September 30, 2019, no person shall manufacture or import hand-held portable radio equipment capable of operating under this subpart (FRS) and other licensed or licensed-by-rule services in this chapter (part 15 unlicensed equipment authorizations are permitted if consistent with part 15 rules).

**47 CFR Ch. I (10–1–20 Edition)**

**§ 95.589 [Reserved]**

**§ 95.591 Sales of FRS combination radios prohibited.**

Effective September 30, 2019, no person shall sell or offer for sale hand-held portable radio equipment capable of operating under this subpart (FRS) and under any other licensed or licensed-by-rule radio services in this chapter (devices may be authorized under this subpart with part 15 unlicensed equipment authorizations).

**§§ 95.593–95.699 [Reserved]**

**Subpart C—Radio Control Radio Service**

**§ 95.701 Scope.**

This subpart contains rules that apply only to the Radio Control Radio Service (RCRS).

**§ 95.703 Definitions, RCRS.**

*Model aircraft.* A small imitation of an aircraft, such as an airplane or a helicopter.

*Model surface craft.* A small imitation of a boat, car, or other type of vehicle for carrying people or objects, other than an aircraft.

*Radio Control Radio Service (RCRS).* A non-commercial short-distance radio service for wirelessly controlling the operation of devices, including, but not limited to, model vehicles such as aircraft and surface craft.

*RCRS transmitter.* A transmitter that is used or intended to be used in the RCRS.

**§§ 95.705–95.717 [Reserved]**

**§ 95.719 RCRS replacement parts.**

The operator of an RCRS transmitter may replace parts of an RCRS transmitter as indicated in this section. All other internal maintenance and repairs must be carried out in accordance with § 95.319.

(a) A damaged antenna may be replaced by another antenna of the same or a compatible similar type.

(b) Batteries in the RCRS transmitter may be replaced with batteries of a type specified by the manufacturer.