



**Federal Communications Commission  
Office of Engineering and Technology  
Laboratory Division**

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**TRANSMITTING EQUIPMENT CERTIFIED UNDER MULTIPLE RULE PARTS**

**1. GENERAL**

For transmitters operating under FCC rules other than Part 15, an FCC equipment authorization certification grant signifies that a device is acceptable for licensing (e.g., Part 1 Subpart F) and operation in U.S. non-Federal radio services.<sup>1</sup> Equipment grants are valid based on representations and test data contained in an application filing [Sections 2.907(a), 2.911(c), 2.915(a)(1), 2.927(b)]. Section 2.1033(e) of the FCC rules permits filings for certification of transmitting devices that are subject to multiple rule parts. Such applications require that the devices comply with all the technical requirements specified for the individual rule parts.<sup>2</sup> In addition, Section 2.947(f)<sup>3</sup> has requirements for composite devices which contain multiple transmitters.

Some transmitting devices that operate under multiple licensed or licensed-by-rule<sup>4</sup> wireless radio services have additional requirements. This publication provides guidance for such transmitting device combinations which are: (1) prohibited by rule; (2) permitted with additional requirements beyond the individual rule parts; (3) subject to the “Pre-Approval Guidance”<sup>5</sup> procedure for FCC review prior to Certification; or (4) subject to additional approvals from other government agencies.

Further to Section 2.911(c), multi-rule applications must explicitly document compliance for all technical requirements in each individual rule part (along with Part 2 Subpart J information and test data). For example, a letter exhibit simply stating “Part 90 rules are similar to and more stringent than Part 22” generally is insufficient. At minimum, an exhibit is needed explaining how test data for each specific licensed radio service rule section [e.g., Section 90.210(b)] demonstrates compliance for which specific

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<sup>1</sup> A radio service is an administrative subdivision of the field of radio communication.

<sup>2</sup> Per 2.911(c), each application that a TCB submits to the Commission shall be accompanied by all information required by Part 2 Subpart J and by all information required by those parts of the rules governing operation of the equipment (e.g., Part 27, Part 90, Part 15), and accompanied by requisite test data, diagrams, photographs, etc., as specified in Part 2 Subpart J and as specified in those sections of the rules (e.g., Part 27, Part 90, Part 15) whereunder the equipment is to be operated. Per 2.947(g), test reports shall provide adequate test data to demonstrate compliance for each applicable technical requirement in 47 CFR Chapter I (FCC), or in absence of test data, justification acceptable to the Commission as to why test data is not required.

<sup>3</sup> Section 2.947(f) defines a composite system as a “system that incorporates different devices contained either in a single enclosure or in separate enclosures connected by wire or cable. If the individual devices in a composite system are subject to different technical standards, each such device must comply with its specific standards.” Composite devices and equipment operating under multiple equipment classes are approved under a single FCC ID; however, multiple Form 731 applications for different e-filing equipment classes must be filed.

<sup>4</sup> Licensed-by-rule radio services are those that do not require users to obtain specific station licenses (e.g., FRS and some other Part 95 radio services).

<sup>5</sup> See Section 2.964 and KDB Publication 388624.

similar other service rule section [e.g., Section 22.359(a)]. Preferably, for all rule parts listed on a Form 731, test reports should identify the specific applicable rule section number(s) and paragraph number(s) at each set of test results, and explain how the results demonstrate compliance. Multiple rule parts with differing requirements (emission designators, output power limits, etc.) should not be listed on the same single Form 731 entry; for example, Part 95 with a 50 W power limit cannot be listed on the same line as a Part 90 operating mode transmitting at 100 W. Another example where differing service rule requirements need special consideration in application filings is for transmitting devices supporting scrambling, as allowed under Part 90, must demonstrate how scrambling is disabled by design if a multi-rule grant including Part 95 GMRS frequencies is requested (scrambling not allowed for GMRS).

## **2. COMBINATION TRANSMITTING EQUIPMENT PROHIBITED BY RULE**

- a) Multi-Use Radio Service (MURS) (Part 95 Subpart J) end products capable of operating under other licensed or licensed-by-rule radio services:

Section 95.2761(c) states: “A grant of equipment certification will not be issued for MURS transmitters capable of operating under both this subpart (MURS) and under any other subparts of this chapter (except part 15).”

- b) Family Radio Service (FRS) (Part 95 Subpart B) in combination with any other radio service including General Mobile Radio Service (GMRS) (Part 95 Subpart E):

Section 95.561(c) states: “A grant of equipment certification will not be issued for hand-held<sup>6</sup> portable radio units capable of operating under both this subpart (FRS) and under any other subparts of this chapter (except Part 15) ....”<sup>7</sup> Section 95.587(a) prohibits FRS transmitter types capable of transmitting on any frequency or channel other than those listed in Section 95.563.

- c) General Mobile Radio Service (GMRS) (Part 95 Subpart E) end products are subject to the following restrictions as stated in the following rule:

Section 95.1761(c) includes: “No GMRS transmitter will be certified for use in the GMRS if it is equipped with a frequency capability not listed in § 95.1763, unless such transmitter is also certified for use in another radio service for which the frequency is authorized and for which certification is also required. No GMRS transmitter will be certified for use in the GMRS if it is equipped with the capabilities to operate in services that do not require equipment certification, such as the Amateur Radio Services.” In effect this section prohibits GMRS-amateur combinations; for other GMRS combinations, the unit must also be certified under the other radio service(s).

- d) Part 97 (Amateur) end products in combination with Part 80, Part 87, Part 95 Subpart E (GMRS) or Part 95 Subpart D (CBRS):

Section 97.11(b) states: “The station must be separate from and independent of all other radio apparatus installed on the ship or aircraft except a common antenna may be shared with a voluntary ship radio installation.” However, Part 97 (Amateur), in combination with Part 87 (Aviation VHF 118–136.975 MHz), is permitted under the conditions in item 5) a). Section 97.317(b) prohibits

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<sup>6</sup> Section 95.503 specifies that FRS units must be hand-held. The definition of hand-held includes physically -small mobile station equipment that can be operated while being held in an operator's hand.

<sup>7</sup> Rule effective December 27, 2017.

certification of external RF amplifiers that can be used in services other than the Amateur Radio Service or be easily modified to operate on frequencies between 26 MHz and 28 MHz.

- e) CB Radio Service (CBRS) (Part 95 Subpart D) end products are subject to the following restrictions as stated in the following rule:

Section 95.987(a) states: “No CBRS transmitter type will be certified for use in the CBRS service if it is capable of transmitting on any frequency or channel other than those listed in § 95.963, unless such transmitter type is also certified for use in another radio service for which the frequency capability is authorized and for which FCC certification is also required.” In effect this section prohibits CB-amateur combinations; for other CB combinations, the unit must also be certified under the other radio service(s).

- f) Radio Control Radio Service (RCRS) transmitters capable of transmission on frequencies other than RCRS channel frequencies:

Section 95.787(b) states: “Each RCRS transmitter type must be designed to transmit only on one or more of the channels listed in Section 95.763.”

- g) Part 15.257 and Part 101 at 92-95 GHz:

Certification of a transmitter for outdoor common carrier and private operational point-to-point microwave service under Part 101, in combination with indoor only unlicensed Section 15.257, is not permitted, as summarized in the following table.<sup>8</sup>

<b>Combination <u>Prohibited</u> by Rule</b>			
<b>Frequency Band (MHz)</b>	<b>Radio Service</b>		
	<b>(Part 101)</b>		<b>Unlicensed Part 15</b>
	<b>Common Carrier</b>	<b>Private Radio</b>	<b>Other (Section 15.257)</b>
92,000 – 95,000	CC*	OFS**	Indoor Use Only

\* CC: Common Carrier Fixed Point-to-Point Microwave Service—(Part 101, Subparts C & I)

\*\* OFS: Private Operational Fixed Point-to-Point Microwave Service—(Part 101, Subparts C & H)

### **3. COMBINATION TRANSMITTING EQUIPMENT PERMITTED WITH ADDITIONAL REQUIREMENTS**

- a) Part 80 transmitting devices certified under multiple rule parts in the VHF band must meet the following requirement of Section 80.203(b) which states:

“The external controls, of maritime station transmitters capable of operation in the 156–162 MHz band and manufactured in or imported into the United States after August 1, 1990, or sold or installed after August 1, 1991, must provide for selection of only maritime channels for which the maritime

<sup>8</sup> FCC 03-248; Allocations and Service Rules for the 71-76 GHz, 81-86 GHz and 92-95 GHz Bands; docket. no. 02-146; paragraph 40, etc.; 18 FCC Rcd 23318-23382a.

station is authorized. Such transmitters must not be capable of being programmed by station operators using external controls to transmit on channels other than those programmed by the manufacturer, service or maintenance personnel.”

- b) Part 80 devices in combination with Parts 22 and/or 90 commercial, personal communication, and/or mobile radio services devices operating on Automated Maritime Telecommunications System (AMTS) or VHF Public Coast (VPC) channels:
  - i) Equipment authorization of Part 80 (VHF) portable station and mobile station transmitting devices must meet the following requirements:
    - (1) A table of Part 80 frequency allocations and usage must be in the user’s manual. Inserts are acceptable.
    - (2) The transmitting device must show compliance with Section 80.203(b).
    - (3) The applicant must demonstrate that sufficient security procedures are in place to prevent the end user from modifying the pre-programmed channels. Third parties must not have access to software that permits them to reprogram the available channels.
  - ii) Digital Selective Calling (DSC) capability (Section 80.225) is not required for Part 80 handheld transmitter devices (Section 80.203(n)); however, transmitter devices operating under multiple rule part(s) in combination with Part 80 must meet the Part 80 power requirements for all modes (FCC 07-87, paragraph 23).<sup>9</sup>
  - iii) Parts 22/24 and/or 90 commercial, personal communication, and/or mobile radio services are only permitted for mobile client transmitting devices that operate with a base station using base station master/client network protocol. The mobile shall operate as a client transmitting device and cannot initiate transmissions on frequencies unless it is under control of an authorized licensed base station operating as a master in that licensed service.

#### **4. COMBINATION TRANSMITTING EQUIPMENT REQUIRING A PRIOR APPROVAL FROM THE FCC USING THE “PRE-APPROVAL GUIDANCE” PROCEDURE**

Applications for the following types of transmitters may be permitted, but must be approved under Section 2.964 and the “Pre-Approval Guidance” procedures in KDB Publication 388624. These applications will be reviewed on case-by-case bases.

- a) Part 80 UHF (456–468 MHz) in combination with GMRS.

Applications for Section 80.1175 on-board communicating transmitting devices in combination with Part 95 GMRS are approved on case-by-case bases.

- b) Part 80 on-board communicating transmitting devices are shared with Industrial/Business Pool Part 90 radios (see Section 90.35 Note 60 [Section 90.35(c)(60)]).

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<sup>9</sup> FCC 07-87, MARITEL, INC. and MOBEX NETWORK SERVICES, LLC, docket no. 04-257; Petitions for Rule Making to Amend the Commission's Rules to Provide Additional Flexibility for AMTS and VHF Public Coast Station Licensees, RM-10743; 22 FCC Rcd 8971-8997.

These devices are used with cargo handling equipment from a dock, or at a cargo handling facility, for voice or non-voice remote control of cargo handling apparatus, and are a safety concern.

## **5. COMBINATION TRANSMITTING EQUIPMENT REQUIRING APPROVALS AND COORDINATION WITH OTHER GOVERNMENT AGENCIES**

- a) Part 97 (Amateur) in combination with Part 87 (Aviation VHF 118–136.975 MHz).

This type of transceiver is permitted if the following marketing conditions are met:

- i) Part 97 with Part 87 transceivers must be approved by the FAA Office of Spectrum Policy and Management as specified in Section 87.147(d). The FAA approval letter must be included in the application as a letter exhibit.
  - ii) The Grant condition on the equipment authorization must state:  
  
“This device is for a combination amateur (Part 97) and Aviation (Part 87) device. The holder of this certificate will market this radio only to the aviation community including licensed pilots, aircraft owners, other Aeronautical Radio licensees, and other legitimate members of the aviation industry, and to vendors for such customers, through aeronautical marketing and distribution outlets such as websites, magazines and catalogues intended primarily for such audience.”
- b) Part 80 Emergency Position Indicating Radio Beacon (EPIRB), Part 87 Emergency Locator Transmitter (ELT), Part 95 Subpart K Personal Locator Beacon (PLB) in combination with any other transmitter.
- i) Part 80 EPIRB, Part 87 ELT, Part 95 Subpart K PLB end products operate in the 406–406.1 MHz Inmarsat emergency radio beacon band. These devices must be certified by COSPAS/SARSAT and others (all other government authorities as specified in the applicable rule part). This requirement includes a device approved in combination with any other transmitter.
  - ii) A Part 80 EPIRB device must be shown to meet the requirements in Section 80.1061, and be approved by a test facility recognized by one of the COSPAS/SARSAT partners, prior to submitting an application for FCC certification of the device.
  - iii) The FCC equipment authorization procedure for Part 87 ELTs described in Sections 87.193 through 87.199 is Supplier’s Declaration of Conformity (SDoC). Prior to SDoC, the ELT must be certified by a test facility recognized by COSPAS/SARSAT. The device is considered approved only when all required procedures as specified in Section 87.199 and Part 2 Subpart J of the equipment authorization procedures for SDoC are completed.
  - iv) A Part 95 Subpart K Personal Locator Beacon (PLB) must meet the requirements in Sections 95.2987, 95.2989, 95.2993, and be certified by a test facility recognized by a COSPAS/ SARSAT Partner, prior to submitting an application for FCC Certification to a TCB.

## **Change Notice**

**09/29/2010:** 149672 D01 Xmit Certified Mult Rule Parts v01r01 replaces 149672 D01 Xmit Certified Mult Rule Parts v01. Changes to modify document properties to remove erroneous title.

**12/08/2017:** 149672 D01 Xmit Certified Mult Rule Parts v02 replaces 149672 D01 Xmit Certified Mult Rule Parts v01r01. Changes to reflect revisions to Part 95 under FCC 17-57; also further to Part 2 per FCC 17-93. Section 1 expanded with further basic considerations and guidance.