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the Commission databases at least once a day;

(3) Verify that the lease will not result in the lessee holding more than the 40 megahertz of Priority Access spectrum in a given License Area;

(4) Verify that the area to be leased is within the Priority Access Licensee's Service Area and outside of the Priority Access Licensee's PAL Protection Area; and

(5) Provide confirmation to licensee and lessee whether the notification has been received and verified.

(b) During the period of the lease and within the geographic area of a lease, SASs shall treat any CBSD operated by the lessee the same as a similarly situated CBSDs operated by the lessor for frequency assignment and interference mitigation purposes.

[81 FR 49069, July 26, 2016]

Subpart G—Environmental Sensing Capability

§ 96.67 Environmental sensing capability.

(a) The primary purpose of the ESC is to facilitate coexistence of Citizens Broadband Radio Service users with federal Incumbent Users through signal sensing. An ESC will be operated by a non-governmental entity and, except as set forth in this section, will not rely on governmental agencies to affirmatively communicate information about the operations of incumbent radio systems.

(b) An ESC may only operate after receiving approval by the Commission. Such approval shall be conditioned on meeting the requirements of this part and any other requirements imposed by the Commission. The Commission may revoke, modify, or condition ESC approval at its discretion.

(c) An ESC must meet the following requirements:

(1) Be managed and maintained by a non-governmental entity;

(2) Accurately detect the presence of a signal from a federal system in the 3550–3700 MHz band and adjacent frequencies using approved methodologies that ensure that any CBSDs operating pursuant to ESC will not cause harm-

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ful interference to federal Incumbent Users;

(3) Communicate information about the presence of a signal from a federal Incumbent User system to one or more approved SASs;

(4) Maintain security of detected and communicated signal information;

(5) Comply with all Commission rules and guidelines governing the construction, operation, and approval of ESCs;

(6) Ensure that the ESC shall be available at all times to immediately respond to requests from authorized Commission personnel for any information collected or communicated by the ESC; and

(7) Ensure that the ESC operates without any connectivity to any military or other sensitive federal database or system and does not store, retain, transmit, or disclose operational information on the movement or position of any federal system or any information that reveals other operational information of any federal system that is not required by this part to effectively operate the ESC.

(d) ESC equipment may be deployed in the vicinity of the Exclusion Zones and Protection Zones to accurately detect federal Incumbent User transmissions.

PART 97—AMATEUR RADIO SERVICE

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AUTHORITY: 47 U.S.C. 151–155, 301–609, unless otherwise noted.

SOURCE: 54 FR 25857, June 20, 1989, unless otherwise noted.

EDITORIAL NOTE: Nomenclature changes to part 97 appear at 63 FR 54077, Oct. 8, 1998.

Subpart A—General Provisions

§ 97.1 Basis and purpose.

The rules and regulations in this part are designed to provide an amateur radio service having a fundamental purpose as expressed in the following principles:

(a) Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications.

(b) Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art.

(c) Encouragement and improvement of the amateur service through rules which provide for advancing skills in both the communication and technical phases of the art.

(d) Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.

(e) Continuation and extension of the amateur's unique ability to enhance international goodwill.

§ 97.3 Definitions.

(a) The definitions of terms used in part 97 are:

(1) *Amateur operator.* A person named in an amateur operator/primary license station grant on the ULS consolidated licensee database to be the control operator of an amateur station.

(2) *Amateur radio services.* The amateur service, the amateur-satellite service and the radio amateur civil emergency service.

(4) *Amateur service.* A radiocommunication service for the purpose of self-training, intercommunication and technical investigations carried out by amateurs, that is, duly

authorized persons interested in radio technique solely with a personal aim and without pecuniary interest.

(5) *Amateur station*. A station in an amateur radio service consisting of the apparatus necessary for carrying on radiocommunications.

(6) *Automatic control*. The use of devices and procedures for control of a station when it is transmitting so that compliance with the FCC Rules is achieved without the control operator being present at a control point.

(7) *Auxiliary station*. An amateur station, other than in a message forwarding system, that is transmitting communications point-to-point within a system of cooperating amateur stations.

(8) *Bandwidth*. The width of a frequency band outside of which the mean power of the transmitted signal is attenuated at least 26 dB below the mean power of the transmitted signal within the band.

(9) *Beacon*. An amateur station transmitting communications for the purposes of observation of propagation and reception or other related experimental activities.

(10) *Broadcasting*. Transmissions intended for reception by the general public, either direct or relayed.

(11) *Call sign system*. The method used to select a call sign for amateur station over-the-air identification purposes. The call sign systems are:

(i) *Sequential call sign system*. The call sign is selected by the FCC from an alphabetized list corresponding to the geographic region of the licensee's mailing address and operator class. The call sign is shown on the license. The FCC will issue public announcements detailing the procedures of the sequential call sign system.

(ii) *Vanity call sign system*. The call sign is selected by the FCC from a list of call signs requested by the licensee. The call sign is shown on the license. The FCC will issue public announcements detailing the procedures of the vanity call sign system.

(iii) *Special event call sign system*. The call sign is selected by the station licensee from a list of call signs shown on a common data base coordinated, maintained and disseminated by the amateur station special event call sign

data base coordinators. The call sign must have the single letter prefix K, N or W, followed by a single numeral 0 through 9, followed by a single letter A through W or Y or Z (for example K1A). The special event call sign is substituted for the call sign shown on the station license grant while the station is transmitting. The FCC will issue public announcements detailing the procedures of the special event call sign system.

(12) *CEPT radio amateur license*. A license issued by a country belonging to the European Conference of Postal and Telecommunications Administrations (CEPT) that has adopted Recommendation T/R 61-01 (Nice 1985, Paris 1992, Nicosia 2003).

(13) *Control operator*. An amateur operator designated by the licensee of a station to be responsible for the transmissions from that station to assure compliance with the FCC Rules.

(14) *Control point*. The location at which the control operator function is performed.

(15) *CSCE*. Certificate of successful completion of an examination.

(16) *Earth station*. An amateur station located on, or within 50 km of, the Earth's surface intended for communications with space stations or with other Earth stations by means of one or more other objects in space.

(17) [Reserved]

(18) *External RF power amplifier*. A device capable of increasing power output when used in conjunction with, but not an integral part of, a transmitter.

(19) [Reserved]

(20) *FAA*. Federal Aviation Administration.

(21) *FCC*. Federal Communications Commission.

(22) *Frequency coordinator*. An entity, recognized in a local or regional area by amateur operators whose stations are eligible to be auxiliary or repeater stations, that recommends transmit/receive channels and associated operating and technical parameters for such stations in order to avoid or minimize potential interference.

(23) *Harmful interference*. Interference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a

radiocommunication service operating in accordance with the Radio Regulations.

(24) *IARP (International Amateur Radio Permit)*. A document issued pursuant to the terms of the Inter-American Convention on an International Amateur Radio Permit by a country signatory to that Convention, other than the United States. Montrouis, Haiti. AG/doc.3216/95.

(25) *Indicator*. Words, letters or numerals appended to and separated from the call sign during the station identification.

(26) *Information bulletin*. A message directed only to amateur operators consisting solely of subject matter of direct interest to the amateur service.

(27) *In-law*. A parent, stepparent, sibling, or step-sibling of a licensee's spouse; the spouse of a licensee's sibling, step-sibling, child, or stepchild; or the spouse of a licensee's spouse's sibling or step-sibling.

(28) *International Morse code*. A dot-dash code as defined in ITU-T Recommendation F.1 (March, 1998), Division B, I. Morse code.

(29) *ITU*. International Telecommunication Union.

(30) *Line A*. Begins at Aberdeen, WA, running by great circle arc to the intersection of 48° N, 120° W, thence along parallel 48° N, to the intersection of 95° W, thence by great circle arc through the southernmost point of Duluth, MN, thence by great circle arc to 45° N, 85° W, thence southward along meridian 85° W, to its intersection with parallel 41° N, thence along parallel 41° N, to its intersection with meridian 82° W, thence by great circle arc through the southernmost point of Bangor, ME, thence by great circle arc through the southernmost point of Searsport, ME, at which point it terminates.

(31) *Local control*. The use of a control operator who directly manipulates the operating adjustments in the station to achieve compliance with the FCC Rules.

(32) *Message forwarding system*. A group of amateur stations participating in a voluntary, cooperative, interactive arrangement where communications are sent from the control operator of an originating station to the control operator of one or more

destination stations by one or more forwarding stations.

(33) *National Radio Quiet Zone*. The area in Maryland, Virginia and West Virginia Bounded by 39°15' N on the north, 78°30' W on the east, 37°30' N on the south and 80°30' W on the west.

(34) *Physician*. For the purpose of this part, a person who is licensed to practice in a place where the amateur service is regulated by the FCC, as either a Doctor of Medicine (M.D.) or a Doctor of Osteopathy (D.O.)

(35) *Question pool*. All current examination questions for a designated written examination element.

(36) *Question set*. A series of examination questions on a given examination selected from the question pool.

(37) *Radio Regulations*. The latest ITU *Radio Regulations* to which the United States is a party.

(38) *RACES* (radio amateur civil emergency service). A radio service using amateur stations for civil defense communications during periods of local, regional or national civil emergencies.

(39) *Remote control*. The use of a control operator who indirectly manipulates the operating adjustments in the station through a control link to achieve compliance with the FCC Rules.

(40) *Repeater*. An amateur station that simultaneously retransmits the transmission of another amateur station on a different channel or channels.

(41) *Space station*. An amateur station located more than 50 km above the Earth's surface.

(42) *Space telemetry*. A one-way transmission from a space station of measurements made from the measuring instruments in a spacecraft, including those relating to the functioning of the spacecraft.

(43) *Spurious emission*. An emission, or frequencies outside the necessary bandwidth of a transmission, the level of which may be reduced without affecting the information being transmitted.

(44) *Telecommand*. A one-way transmission to initiate, modify, or terminate functions of a device at a distance.

(45) *Telecommand station*. An amateur station that transmits communications to initiate, modify or terminate functions of a space station.

(46) *Telemetry*. A one-way transmission of measurements at a distance from the measuring instrument.

(47) *Third party communications*. A message from the control operator (first party) of an amateur station to another amateur station control operator (second party) on behalf of another person (third party).

(48) *ULS (Universal Licensing System)*. The consolidated database, application filing system and processing system for all Wireless Telecommunications Services.

(49) *VE*. Volunteer examiner.

(50) *VEC*. Volunteer-examiner coordinator.

(b) The definitions of technical symbols used in this part are:

(1) *EHF* (extremely high frequency). The frequency range 30–300 GHz.

(2) *EIRP* (equivalent isotropically radiated power). The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna (absolute or isotropic gain).

NOTE: Divide EIRP by 1.64 to convert to effective radiated power.

(3) *ERP* (effective radiated power) (in a given direction). The product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction.

NOTE: Multiply ERP by 1.64 to convert to equivalent isotropically radiated power.

(4) *HF* (high frequency). The frequency range 3–30 MHz.

(5) *Hz*. Hertz.

(6) *LF* (low frequency). The frequency range 30–300 kHz.

(7) *m*. Meters.

(8) *MF* (medium frequency). The frequency range 300–3000 kHz.

(9) *PEP* (peak envelope power). The average power supplied to the antenna transmission line by a transmitter during one RF cycle at the crest of the modulation envelope taken under normal operating conditions.

(10) *RF*. Radio frequency.

(11) *SHF* (super high frequency). The frequency range 3–30 GHz.

(12) *UHF* (ultra high frequency). The frequency range 300–3000 MHz.

(13) *VHF* (very high frequency). The frequency range 30–300 MHz.

(14) *W*. Watts.

(c) The following terms are used in this part to indicate emission types. Refer to § 2.201 of the FCC Rules, *Emission, modulation and transmission characteristics*, for information on emission type designators.

(1) *CW*. International Morse code telegraphy emissions having designators with A, C, H, J or R as the first symbol; 1 as the second symbol; A or B as the third symbol; and emissions J2A and J2B.

(2) *Data*. Telemetry, telecommand and computer communications emissions having (i) designators with A, C, D, F, G, H, J or R as the first symbol, 1 as the second symbol, and D as the third symbol; (ii) emission J2D; and (iii) emissions A1C, F1C, F2C, J2C, and J3C having an occupied bandwidth of 500 Hz or less when transmitted on an amateur service frequency below 30 MHz. Only a digital code of a type specifically authorized in this part may be transmitted.

(3) *Image*. Facsimile and television emissions having designators with A, C, D, F, G, H, J or R as the first symbol; 1, 2 or 3 as the second symbol; C or F as the third symbol; and emissions having B as the first symbol; 7, 8 or 9 as the second symbol; W as the third symbol.

(4) *MCW*. Tone-modulated international Morse code telegraphy emissions having designators with A, C, D, F, G, H or R as the first symbol; 2 as the second symbol; A or B as the third symbol.

(5) *Phone*. Speech and other sound emissions having designators with A, C, D, F, G, H, J or R as the first symbol; 1, 2, 3 or X as the second symbol; E as the third symbol. Also speech emissions having B or F as the first symbol; 7, 8 or 9 as the second symbol; E as the third symbol. MCW for the purpose of performing the station identification procedure, or for providing telegraphy practice interspersed with speech. Incidental tones for the purpose of selective calling or alerting or to control the level of a demodulated signal may also be considered phone.

(6) *Pulse*. Emissions having designators with K, L, M, P, Q, V or W as the