

# CONSULTATION DOCUMENT

**Recommendation of the Eastern Caribbean Telecommunications Authority  
("ECTEL")  
To the National Telecommunications Regulatory Commission to consult on  
The Draft Telecommunications Amateur Radio Regulations**

**Consultation Document  
August 2010**

1. The National Telecommunications Regulatory Commission is in receipt of a submission from ECTEL containing ECTEL's **Draft Amateur Radio Regulations** for its Member States.
2. A copy of the draft regulations for Amateur Radio is attached to this Consultative Document.
3. The initial comments period will run from 5<sup>th</sup> August to 6<sup>th</sup> September 2010.
4. The Comment on Comments period will run from 9<sup>th</sup> September to 30<sup>th</sup> September 2010.
5. Following the Reply Comments period, ECTEL's Directorate will revise and submit the draft Amateur Radio Regulations to the Council of Ministers for its recommendation for adoption in the ECTEL Member States.
6. All responses to this Consultative Document should be written and sent by post, fax or e-mail to: -  
Managing Director  
ECTEL  
P.O. Box 1886  
Vide Boutielle  
CASTRIES  
St. Lucia  
Fax: 1-758-458-1698  
Email: [consultation@ectel.int](mailto:consultation@ectel.int)

## **Disclaimer**

***This consultative document does not constitute legal, commercial or technical advice. The consultation is without prejudice to the legal position of ECTEL's duties to provide advice and recommendations to the Ministers with responsibility for telecommunications and the National Telecommunications Regulatory Commissions.***

## **SUGGESTED GUIDELINES FOR RESPONSES TO CONSULTATIONS**

In order to promote faster processing of views expressed and to reduce administrative lags in ECTEL's public consultation processes, ECTEL hereby recommends that parties desirous of making contributions to the attached consultation follow the procedures outlined below. ECTEL would therefore be grateful if commenting parties could please observe these guidelines where possible.

- 1) Responses to consultations should be clearly labeled as a response to the particular ECTEL consultation and correctly referenced by title.
- 2) Documents should contain; the Name of Party/Licensee/NTRC commenting, address, telephone and fax number and email contacts of commentary author or corporate officer(s) responsible for document. This information will enable ECTEL to clarify any comments where necessary, or to facilitate follow-up dialog by ECTEL where required.
- 3) Commenting parties should avoid making comments in the form of tracked changes to consultation documents.
- 4) Where possible, comment documents should be submitted in PDF format.
- 5) Where possible, parties should make explicit reference to academic articles, legislative provisions in other jurisdictions, or other sources relied on, and should provide copies of these together with comments. Accurate citations of resources relied on will suffice if copies cannot be provided.
- 6) Where parties are commenting on specific provisions of legal language, alternative language should be proposed where possible. Such language should be appropriately highlighted and double-spaced. Parties should avoid proposing alternative language in tracked changes to the consultation document.

ECTEL is grateful to those parties adopting the recommended guidelines for submitting comments.

## **EXPLANATORY MEMORANDUM**

### **DRAFT TELECOMMUNICATIONS AMATEUR RADIO REGULATIONS**

These Explanatory Notes relate to the Amateur Radio Regulations. These notes have been prepared to assist the reader and do not constitute part of the Regulations. Additionally, the notes are not nor are they meant to be a comprehensive description of the Regulations and where a clause does not appear to require comment none will be supplied.

#### **Interpretation**

Regulation 3 sets out definitions for various terms utilized in the regulations. It defines “Amateur” means any person who is the holder of a valid amateur radio station licence; “Amateur radio station” means transmitting and receiving equipment for amateur service. Amateur service” means a radio-communications service for the purpose of self training, intercommunication and technical investigation by amateurs with interest in radio technique and technologies solely with a personal aim and on a non-pecuniary basis; “Call-sign” means a station or address designator represented by a combination of characters or pronounceable words that is used to identify such entities as a communications facility, station, command, authority, activity or unit;

#### **Amateur Radio Station Licence**

Regulation 4 outlines the types of amateur radio station licences and allows the Commission acting on a recommendation from ECTEL to adopt qualification criteria for applicants of an amateur radio station licence. The regulation also permits the Commission acting on a recommendation from ECTEL to adopt any form of licence that it deems appropriate.

#### **Commission to approve equipment**

Regulation 5 prohibits amateur radio operators from utilizing equipment that has not been approved by the Commission gives the Commission the authority to approve the equipment utilized by amateur radio operators as well as inspect, examine or test any amateur radio to ensure compliance.

## **Applications for An Amateur Radio Station Licence**

Under Regulation 6 an applicant for an amateur radio station licence, must be at least 12 years old, in possession of a valid amateur radio station licence and have passed the examination set by the Commission. Where the applicant for an amateur radio station is under the age of 18, a parent or guardian who is responsible for ensuring that the applicant complies with the terms and conditions of the licence must countersign the application.

## **General Obligations of Amateur Radio Station Licences**

Regulation 7 imposes a number of conditions on all amateur radio operators. These conditions include a requirement to, in the case of an emergency to communicate with a radio station that is in the amateur radio service in order to transmit messages that relate to the emergency on behalf of a person, government or relief organization, not to cause harmful interference and to keep a log of transmission periods.

## **Prohibited Activities using an Amateur Radio Station**

Regulation 8 lists a number of prohibited activities. Such activities include the use of the amateur radio station for transmitting news, advertisements, communications of a business or non-experimental nature and using the station to transmit obscene language. The regulation also bans the use of encryption devices or equipment in the use of the station.

## **Call Signs**

Under Regulation 9 the Commission may assign a call sign to an amateur radio station licensee and must ensure that the assignment of call signs complies with the table of allocation contained in the ITU regulations.

## **Qualifying Examinations**

Regulation 10 allows the Commission to recognize a body for the purpose of administering an Amateur Radio Examination and the recognized body must notify the Commission of the name of all amateur radio instructors. The Commission cannot recognize the examining body it has approved a syllabus for the examination. Where there is no recognized body the Commission may administer the examination.

## **Exemptions**

Regulation 11 deals with circumstances where the applicant for an amateur radio station licence is the holder of a valid licence issued in another ECTEL and a non-ECTEL state. Holders of these licences may be recognized by the Commission and shall not have to apply for a licence. Instead such persons must simply register with the Commission.

## **Special Events**

Under regulation 13 the Commission may grant a temporary licence to any person, body, organization that requires access to an amateur radio service in order to participate in a special event. The duration of the temporary licence is 7 days however; the licence may be renewed for a further 7 days.

## **Special Exceptions**

Regulation 14 exempts instructors in amateur radio that utilize the amateur radio for teaching purposes from the prohibition against utilizing the amateur radio service for compensation and financial gain.

## **Fees, Frequencies**

Regulation 15 and 16 mandates the Commission to ensure that amateur radio station licencees pay all applicable fees, operate within within assigned frequency bands and at approved power levels set out in the Schedule.

## **Power to Issue Guidelines**

Regulation 18 allows the Commission, acting on a recommendation from ECTEL to issue guidelines on any aspect of the regulations.

---

**TELECOMMUNICATIONS (AMATEUR RADIO)  
REGULATIONS, [-]**

**ECTEL Member State**

**[No. XX of 20XX]**

**ARRANGEMENT OF REGULATIONS**

Regulations

1. Citation
2. Commencement
3. Interpretation
4. Amateur Radio Station Licence
5. Commission to approve equipment
6. Application for an Amateur Radio Station Licence
7. General obligation of Amateur Radio Station Licensees
8. Prohibited activities using an amateur radio station
9. Call-Signs
10. Qualifying Examinations
11. Exemptions
12. Approved amateur radio station licences
13. Special Events
14. Special exceptions
15. Fees
16. Frequencies
17. Licensee to comply with the law
18. Power to issue guidelines

# TELECOMMUNICATIONS (AMATEUR RADIO) REGULATIONS, [20XX]

## ECTEL Member State

### STATUTORY INSTRUMENT 200X, No. [[X]]

[XX Month 20XX]

IN EXERCISE of the powers conferred by Section [-] of the Telecommunications Act No. X of 20XX the Minister responsible for Telecommunications, makes the following Regulations:

#### **Citation**

1. These Regulations may be cited as the Telecommunications (Amateur Radio) Regulations [20XX].

#### **Commencement**

2. These Regulations shall come into force on the date of publication in the Gazette.

#### **Interpretation**

3. (1) In these Regulations:

“Amateur” means any person who is the holder of a valid amateur radio station licence;

“Amateur radio station” means transmitting and receiving equipment for amateur service;

“Amateur radio station licence” means any class of licence granted under Regulation 4 and “amateur radio station licensee” shall have a corresponding meaning;

“Amateur Radio Advanced Licence” means a licence to a radio amateur who uses a two-way radio to communicate with other radio amateurs in the specified bands for advanced amateurs with the specified power limitations set out in Table C in the Schedule to these Regulations;

“Amateur Radio General Licence” means a licence to a radio amateur who uses a two-way radio to communicate with other radio amateurs in the specified bands for general amateurs with the specified power limitations set out in Table B in the Schedule to these Regulations;

“Amateur Radio Novice Licence” means a licence to a radio amateur who uses a two-way radio to communicate with other radio amateurs in the specified bands for novice amateurs with the specified power limitations set out in Table A in the Schedule to these Regulations;

“Amateur service” means a radio-communications service for the purpose of self training, intercommunication and technical investigation by amateurs with interest in radio technique and technologies solely with a personal aim and on a non-pecuniary basis;

“Body” for the purposes of these Regulations, means any group, club, society, association or organization of any type of radio amateurs;

“Call-sign” means a station or address designator represented by a combination of characters or pronounceable words that is used to identify such entities as a communications facility, station, command, authority, activity or unit;

“Radio Amateur Examination” means an examination administered by a recognized Body for the purpose determining whether a person qualifies for the grant of a licence under these Regulations;

“Special event” means any event recognized as such by the Commission.

- (2) Unless otherwise specified, terms used in these regulations have the meanings assigned to the terms under the Act.

#### **Amateur Radio Station Licence**

4. (1) The Commission may grant the following Amateur Radio Station Licences to qualified or approved persons for the operation of radio communications equipment solely for the purpose of self-training, intercommunication and technical investigation in radio techniques with a personal aim and not for pecuniary interest:
  - (a) Amateur Radio Novice Licence;
  - (b) Amateur Radio General Licence;
  - (c) Amateur Radio Advanced Licence; and
  - (d) Any other class the Commission may adopt, after consultation with ECTEL.
- (2) The Commission may, acting on a recommendation from ECTEL, adopt criteria for the qualification of persons applying for any class of Amateur Radio Station Licence specified in sub-regulation (1).
- (3) An Amateur Radio Station Licensee shall not permit the use of any radio communication equipment by any other person not holding a valid Amateur Radio Station Licence.
- (4) Acting on a recommendation from ECTEL, the Commission may adopt any form for an Amateur Radio Station Licence it deems appropriate.

### **Commission to approve equipment**

5. (1) An Amateur Radio Station Licensee shall not use an amateur radio station unless such equipment has been approved by the Commission for that purpose.
- (2) Subject to the Act and these Regulations, the Commission shall be authorized to inspect, examine or test any amateur radio station, to ensure compliance with these Regulations, any relevant licence, any guidelines issued by the Commission or other provisions of law.

### **Applications for an Amateur Radio Station Licence**

6. (1) An applicant for an Amateur Radio Station Licence shall, unless exempted by the Commission in writing –
  - (a) have passed the relevant Radio Amateur Examination set by the Commission or any other Body recognized by the Commission for this purposes; or
  - (b) be in possession of a valid Amateur Radio Station Licence acceptable to the Commission; and
  - (c) be at least 12 years of age.
- (2) The Commission shall ensure that any application for an Amateur Radio Station Licence by a person under the age of 18 is countersigned by the applicant's parent, guardian, or by any other person approved by the Commission for that purpose, and that person shall be responsible for ensuring compliance with the licence conditions, until the licensee has reached the age of 18.

### **General Obligations of Amateur Radio Station Licensees**

7. Every Amateur Radio Station Licensee shall ensure:
  - (a) in cases of emergency, he or she only communicates with a radio station that is in the amateur radio service in order to transmit a message that relates to the emergency on behalf of a person, government or relief organization;
  - (b) the station shall not be operated at any location or in any geographic location that is expressly prohibited by its licence, the Commission or law in effect in [Member State];
  - (c) the station is in all cases operated by the licensee or any other person holding a valid licence and under the supervision of the licensee;
  - (d) the station is operated in accordance with good engineering and amateur practice;
  - (e) messages transmitted through an amateur radio station is in plain language and relate solely to the licensee's experiments or personal

affairs (not being business affairs), or to the personal affairs of the person with whom the licensee is communicating;

- (f) no harmful interference is caused by any equipment operated under the licence and immediately cease transmission if requested by a duly authorized representative of the Commission or other authorized person;
- (g) he or she identifies him or herself by the call sign assigned to him or her by the Commission under Regulation 9, at the beginning and end of each communication and every ten minutes during any given communication;
- (h) for at least one year, he or she keeps a log of all transmission periods showing the date and time of each period of transmission, the station communicated with and the radio frequency and type of emission employed;
- (i) any record under (h) is made available for inspection by the Commission or any authorized representative of the Commission, upon request; and
- (j) he or she complies with the terms of the Act, these Regulations, his or her licence, and any other provisions of law.

### **Prohibited Activities using an Amateur Radio Station**

**8.** All of the following activities are prohibited using an amateur radio station:

- (a) using the amateur radio station for transmitting news, advertisements, communications of a business or non-experimental nature, messages for pecuniary reward or messages for or on behalf of a third party, except that messages for or on behalf of a third party may be transmitted in cases of national emergencies or national disasters;
- (b) except with the written authorization of the Commission, using the station to call, transmit or send messages to any station other than an amateur radio station;
- (c) commencing a transmission without listening in on the radio frequency to determine that no interference is likely to be caused to any other station which may be functioning;
- (d) using encryption devices or equipment in the operation or use of the licenced station; or
- (e) using the station to transmit obscene language.

### **Call-Signs**

**9.** (1) The Commission may assign a call-sign to an Amateur Radio Station Licensee for use with or in connection with the operation of an amateur radio station or for the purpose of having access to an amateur radio service.

- (2) The Commission shall ensure that an assignment of a call-sign complies with the table of allocation of international call-sign series contained in a current edition of the International Telecommunications Union Radio Regulations.

### **Qualifying Examinations**

- 10.** (1) The Commission may, in its sole discretion, recognize a Body for the purpose of administering an approved Radio Amateur Examination to –
  - (a) a person interested in applying for a licence; or
  - (b) an existing licensee.
- (2) The Commission shall ensure that a Body is not recognized under sub-regulation (1) unless the Commission has approved a syllabus for such examination.
- (3) The Commission may, after consultation with ECTEL and an approved Body, from time to time adopt standards for the preparation of curriculum, setting of examinations, evaluation and certification of examination results by a recognized Body, and may, in its sole discretion, determine the relevant pass mark for an examination.
- (4) A recognized Body shall notify the Commission of persons authorized to instruct others in matters of amateur radio operations and or supervise approved Radio Amateur Examinations.
- (5) Notwithstanding sub-regulations (1)-(4), the Commission may administer a Radio Amateur Examination where no Body has been recognized by the Commission for that purpose.

### **Exemptions**

- 11.** (1) The Commission shall recognize:
  - (a) a valid Amateur Radio Station Licence issued by another ECTEL state; or
  - (b) a valid Amateur Radio Station Licence issued by a non-ECTEL state with which [Member State] has signed any agreement to allow operation of an amateur radio station in the non-ECTEL state, without the need to obtain a licence.
- (2) Where the Commission recognizes a licence under sub-regulation (1), an amateur shall not be required to apply for a licence to operate an amateur radio station in [Member State.]
- (3) Any person under sub-regulation (1) shall register with the Commission prior to operating an amateur radio station in [Member State.]

### **Approved Amateur Radio Station Licences**

12. Notwithstanding Regulations 6 and 11, the Commission may grant a licence to an applicant from a non-ECTEL state, where the Commission is satisfied that the qualifications for obtaining a licence in that state would entitle a person to the grant of a licence under these Regulations.

### **Special Events**

13. (1) The Commission may grant a temporary licence to any person, recognized Body, society, organization or association that requires access to an amateur radio service for the purpose of participating in a special event.
- (2) A temporary licence under sub-regulation (1) shall be 7 days duration, subject to renewal by the Commission for an additional 7 days.
- (3) The Commission shall ensure that any person applying on behalf of a recognized Body, society, organization or association possesses at least an Amateur Radio General Licence.

### **Special Exceptions**

14. Notwithstanding anything contained in these Regulations, and with the written authorization of the Commission, an amateur may accept compensation for serving as an instructor in amateur radio operations, where the station is transmitting for teaching purposes.

### **Fees**

15. The Commission shall ensure an Amateur Radio Station Licensee pays all applicable licence fees in accordance with any fees prescribed from time to time.

### **Frequencies**

16. The Commission shall ensure that an Amateur Radio Station Licensee is assigned the frequency bands and operates at the power levels and emissions specified in the Schedule to these Regulations.

### **Licensee to comply with the law**

17. Nothing in these Regulations or any licence granted under these Regulations is intended to exempt an Amateur Radio Station Licensee from complying with any relevant provision of law relating to the use, sale, installation, or importation of radio communications equipment or with the terms of the Act, or any other law.

### **Power to issue Guidelines**

18. For the purpose of giving effect to these Regulations, and acting on the recommendation of ECTEL, the Commission may publish guidelines on any aspect of these regulations on its website.

Made this [XX] day of [Month] [20XX]

[Signed.....]  
Minister of Telecommunications

**TELECOMMUNICATIONS (AMATEUR RADIO)  
REGULATIONS, [-]**

**SCHEDULE**

**TABLE A - NOVICE CLASS FREQUENCY PRIVILEGES**

| <b>WAVELENGTH</b> | <b>FREQUENCY SEGMENTS<br/>(MHz)</b> | <b>PEP<br/>(WATTS)</b> | <b>MODES OF OPERATION</b> |
|-------------------|-------------------------------------|------------------------|---------------------------|
| 75/80 m           | 3.675 – 3.725                       | 50                     | CW                        |
| 75/80 m           | 3.800 -3.850                        | 50                     | Voice (SSB)               |
| 40 m              | 7.100 – 7.150                       | 50                     | CW                        |
| 40 m              | 7.200 – 7.230                       | 50                     | Voice (SSB)               |
| 10 m              | 28.1 – 28.3                         | 50                     | CW, Data                  |
| 10 m              | 28.3 – 28.5                         | 50                     | Voice (SSB)               |
| 2 m               | 144.0 – 145.0                       | 50                     | Voice (FM)                |
| 2 m               | 145.0 – 148.0                       | 50                     | CW, Voice (SSB)           |

**TABLE B - GENERAL CLASS FREQUENCY PRIVILEGES**

| <b>WAVELENGTH<br/>OR (BAND)</b> | <b>FREQUENCY SEGMENTS<br/>(MHz)</b> | <b>PEP<br/>(WATTS)</b> | <b>MODES OF OPERATION</b> |
|---------------------------------|-------------------------------------|------------------------|---------------------------|
| 160 m                           | 1.800 – 2.000                       | 1500                   | CW, Data, Voice (SSB)     |
| 75/80 m                         | 3.500 – 3.750                       | 1500                   | CW, Data                  |
| 75/80 m                         | 3.775 – 4.000                       | 1500                   | Voice (SSB)               |
| 60 m                            | (Channelised)                       | 50 (ERP)               | Voice (SSB)               |
| 40 m                            | 7.000 – 7.150                       | 1500                   | CW, Data                  |
| 40 m                            | 7.150 – 7.300                       | 1500                   | Voice (SSB)               |
| 30 m                            | 10.100 – 10.150                     | 1500                   | CW, Data                  |
| 20 m                            | 14.000 – 14.150                     | 800                    | CW, Data                  |
| 20 m                            | 14.150 – 14.350                     | 800                    | Voice (SSB)               |

| <b>WAVELENGTH<br/>OR (BAND)</b> | <b>FREQUENCY SEGMENTS<br/>(MHz)</b> | <b>PEP<br/>(WATTS)</b> | <b>MODES OF OPERATION</b>             |
|---------------------------------|-------------------------------------|------------------------|---------------------------------------|
| 17 m                            | 18.068 – 18.110                     | 500                    | CW, Data                              |
| 17 m                            | 18.110 – 18.168                     | 500                    | Voice (SSB)                           |
| 15 m                            | 21.000 – 21.200                     | 800                    | CW, Data                              |
| 15 m                            | 21.200 – 21.450                     | 800                    | Voice (SSB)                           |
| 12 m                            | 24.890 – 24.930                     | 500                    | CW, Data                              |
| 12 m                            | 24.930 – 24.990                     | 500                    | Voice (SSB)                           |
| 10 m                            | 28.000 – 28.300                     | 500                    | CW, Data                              |
| 10 m                            | 28.300 – 29.500                     | 500                    | Voice (SSB)                           |
| 10 m                            | 29.500 – 29.800                     | 100                    | Voice (FM), Repeater Ops.             |
| 6 m                             | 50.000 – 50.100                     | 200                    | CW, Data                              |
| 6 m                             | 50.100 – 51.100                     | 200                    | Voice (SSB)                           |
| 6 m                             | 51.100 – 54.000                     | 100                    | Voice (FM), Repeater Ops.             |
| 2 m                             | 144.000 – 144.100                   | 200                    | CW, Data                              |
| 2 m                             | 144.100 – 144.300                   | 200                    | Voice (SSB)                           |
| 2 m                             | 144.300 – 144.500                   | 200                    | Satellite                             |
| 2 m                             | 145.800 – 146.000                   | 200                    | Satellite                             |
| 2 m                             | 146.000 – 147.995                   | 100                    | Voice (FM), Repeater Ops.             |
| (222 MHz)                       | 222.340 – 223.380                   | 100                    | FM Repeater                           |
| (222 MHz)                       | 223.380 – 224.000                   | 100                    | Voice (FM)                            |
| (440 MHz)                       | 432.000 – 432.125                   | 150                    | CW, Data                              |
| (440 MHz)                       | 432.125 – 438.000                   | 100                    | Voice (FM), Voice (SSB),<br>Satellite |
| (440 MHz)                       | 442.000 – 450.000                   | 100                    | Voice (FM), Repeater Ops.             |

**TABLE C - ADVANCED CLASS FREQUENCY PRIVILEGES**

| <b>WAVELENGTH<br/>OR (BAND)</b> | <b>FREQUENCY SEGMENTS<br/>(MHz)</b> | <b>TX POWER<br/>(WATTS)</b> | <b>MODES OF OPERATION</b> |
|---------------------------------|-------------------------------------|-----------------------------|---------------------------|
| 160 m                           | 1.800 – 2.000                       | 1500                        | CW, Data, Voice (SSB)     |
| 75/80 m                         | 3.500 – 3.750                       | 1500                        | CW, Data                  |
| 75/80 m                         | 3.750 – 4.000                       | 1500                        | Voice (SSB)               |
| 60 m                            | (Channelised)                       | 50 (ERP)                    | Voice (SSB)               |
| 40 m                            | 7.000 – 7.150                       | 1500                        | CW, Data                  |
| 40 m                            | 7.150 – 7.300                       | 1500                        | Voice (SSB)               |
| 30 m                            | 10.100 – 10.150                     | 1500                        | CW, Data                  |
| 20 m                            | 14.000 – 14.150                     | 1500                        | CW, Data                  |
| 20 m                            | 14.150 – 14.350                     | 1500                        | Voice (SSB)               |
| 17 m                            | 18.068 – 18.110                     | 800                         | CW, Data                  |
| 17 m                            | 18.110 – 18.168                     | 800                         | Voice (SSB)               |
| 15 m                            | 21.000 – 21.200                     | 1500                        | CW, Data                  |
| 15 m                            | 21.200 – 21.450                     | 1500                        | Voice (SSB)               |
| 12 m                            | 24.890 – 24.930                     | 800                         | CW, Data                  |
| 12 m                            | 24.930 – 24.990                     | 800                         | Voice (SSB)               |
| 10 m                            | 28.000 – 28.300                     | 800                         | CW, Data                  |
| 10 m                            | 28.300 – 29.500                     | 800                         | Voice (SSB)               |
| 10 m                            | 29.500 – 29.800                     | 100                         | Voice (FM), Repeater Ops. |
| 6 m                             | 50.000 – 50.100                     | 500                         | CW, Data                  |
| 6 m                             | 50.100 – 51.100                     | 500                         | Voice (SSB)               |
| 6 m                             | 51.100 – 54.000                     | 100                         | Voice (FM), Repeater Ops. |
| 2 m                             | 144.000 – 144.100                   | 200                         | CW, Data                  |
| 2 m                             | 144.100 – 144.300                   | 200                         | Voice (SSB)               |
| 2 m                             | 144.300 – 144.500                   | 200                         | Satellite                 |

| <b>WAVELENGTH<br/>OR (BAND)</b> | <b>FREQUENCY SEGMENTS<br/>(MHz)</b> | <b>TX POWER<br/>(WATTS)</b> | <b>MODES OF OPERATION</b>                |
|---------------------------------|-------------------------------------|-----------------------------|--|
| 2 m                             | 145.800 – 146.000                   | 200                         | Satellite                                |
| 2 m                             | 146.000 – 147.995                   | 150                         | Voice (FM), Repeater Ops.                |
| (222 MHz)                       | 222.340 – 223.380                   | 100                         | FM Repeater                              |
| (222 MHz)                       | 223.380 – 224.000                   | 100                         | Voice (FM)                               |
| (440 MHz)                       | 420.000 – 432.000                   | 100                         | Amateur TV                               |
| (440 MHz)                       | 432.000 – 432.125                   | 150                         | CW, Data                                 |
| (440 MHz)                       | 432.125 – 438.000                   | 150                         | Voice (FM), Voice (SSB),<br>Satellite    |
| (440 MHz)                       | 442.000 – 450.000                   | 150                         | Voice (FM), Repeater Ops.                |
| (900 MHz)                       | 902 – 906                           | 1.0                         | CW, Data                                 |
| (900 MHz)                       | 906 – 910                           | 1.0                         | Voice (FM), Repeater Ops.                |
| (900 MHz)                       | 910 – 916                           | 1.0                         | Amateur TV                               |
| (900 MHz)                       | 916 – 918                           | 1.0                         | Data                                     |
| (900 MHz)                       | 918 – 919                           | 1.0                         | Voice (FM)                               |
| (900 MHz)                       | 919 – 928                           | 1.0                         | Vops., Amateur TV                        |
| (1240 MHz)                      | 1240 – 1252                         | 1.0                         | Digital Data                             |
| (1240 MHz)                      | 1252 – 1258                         | 1.0                         | Amateur TV                               |
| (1240 MHz)                      | 1258 – 1260                         | 1.0                         | Data                                     |
| (1240 MHz)                      | 1260 – 1270                         | 1.0                         | Satellite, Amateur TV                    |
| (1240 MHz)                      | 1270 – 1295                         | 1.0                         | Voice (FM), Repeater<br>Ops., Amateur TV |
| (1240 MHz)                      | 1295 – 1300                         | 1.0                         | CW, Data                                 |