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Spectrum Management and Telecommunications

Regulation by Reference

Standards for the Operation of Radio Stations in the Amateur Radio Service



Preface

The current issue of this document was updated to reflect the *Canadian Table of Frequency Allocations* as well as the *Final Acts* records resulting from the various World Radiocommunication Conferences (WRCs).

Editorial changes made to the current issue include:

- dividing Schedule I, which originally covered amateur radio stations operating in Canada and Region 2, into two tables
- combining information throughout the document to simplify content
- updating the formatting

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All Innovation, Science and Economic Development Canada publications related to spectrum management and telecommunications are available on the Spectrum Management and Telecommunications website.

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1. Scope

This document sets out the standards for the operation of radio stations in the amateur radio service. Operators must comply with these provisions in accordance with section 45 of the *Radiocommunication Regulations*.

2. Definitions

For the purposes of this standard,

"amateur station" means a radio station operated in the amateur radio service;

"authorized foreign amateur" means an individual who does not hold an Amateur Radio Operator Certificate, but who holds:

- a. an amateur radio operator licence issued by the Government of the United States, where the holder is a citizen and resident of the United States; or
- b. a radio licence in the amateur radio service and an amateur radio operator authorization, issued by the responsible administration of a country other than Canada if, as per paragraph 42(i) of the *Radiocommunication Regulations*:
 - i. the individual is a citizen of that country; and
 - ii. a reciprocal arrangement that allows similar privileges to Canadians exists between that other country and Canada.

Radio Information Circular RIC-3, *Information on the Amateur Radio Service*, contains more details on reciprocal operating agreements and arrangements.

3. Frequency bands and qualifications

This section references the frequency bands allocated to the amateur service, the qualifications required to operate amateur stations and the foreign amateur equivalencies in Canada.

3.1 Amateur stations operating in Canada

An amateur station operating in Canada may operate within the frequency bands set out in the attached Schedule I, in accordance with the operator qualifications identified for the specified band.

3.2 Foreign amateur equivalencies

An authorized foreign amateur may operate an amateur station in Canada in accordance with the provisions applicable to the holder of an Amateur Radio Operator Certificate with Basic and Advanced Qualifications, but not exceeding the privileges of the amateur radio licence granted to them by their own administration.

4. Bandwidths

The maximum permissible bandwidth of a transmitted signal is set out in Column II of Schedules I, II, III and IV.

The bandwidth of a signal shall be determined by measuring the frequency band occupied by that signal at a level that is 26 dB below the maximum amplitude of that signal.

5. Frequencies for radio control of models

The frequency for the radio control of a model is limited to any frequency within the frequency bands above 30 MHz, as set out in Schedule I.

6. Communications on behalf of third parties

Any foreign administration may permit its amateur stations to communicate on behalf of third parties without having to enter into any special arrangements with Canada.

Canada does not prohibit international communications on behalf of third parties.

In cases of emergencies or disaster relief, international third-party communications are expressly permitted unless specifically prohibited by a foreign administration.

7. Operation outside Canada

An amateur station on board a Canadian-registered ship or aircraft operating in international waters or international airspace respectively may operate on any frequency within the frequency bands and corresponding bandwidths set out in Schedules II, III or IV, as the case may be, and is subject to the requirements for operator qualifications.

The International Telecommunication Union's (ITU) regions (Regions 1, 2 and 3), referenced in Schedules II, III and IV, are defined in Article 5 of the ITU's *Radio Regulations*, as amended from time to time. A map showing the ITU's regions is available in the *Canadian Table of Frequency Allocations*.

Amateurs outside Canada and not in international waters or international airspace are subject to the rule of the jurisdiction in which they are operating and are responsible for seeking any needed authorities from the regulatory body for that jurisdiction.

8. Interference

Transmissions from an amateur station shall not cause interference to a station operating in another service nor be protected from interference caused by a station operating in another service in the same frequency band, as set out in Column I of Schedule I in accordance to the provisions of paragraph 5(1)(1) of the *Radiocommunication Act* and sections 52 and 53 of the *Radiocommunication Regulations*.

9. Station identification

The operator of an amateur station in Canada shall identify the station by transmitting the assigned call sign.

The operator of an amateur station in Canada who is licensed by the Government of the United States shall identify the station:

- a. by transmitting the call sign assigned to the licensee's station by the Federal Communications Commission;
- b. if transmitting:
 - i. by radiotelephony, by adding the word "mobile" or "portable," or
 - ii. by radiotelegraphy, by adding an oblique character ("/"); and
- c. by adding the Canadian amateur call sign prefix set out in Column I of an item of Schedule V for the geographical location of the station set out in Column II of that item.

The operator of any amateur station shall transmit the applicable identification, in English or French, at the beginning and end of each period of exchange of communication or test transmission, and at intervals of no more than 30 minutes throughout the period of exchange of communication.

10. Restrictions on capacity and power output

This section outlines the restrictions on capacity and power output of Amateur Radio Operator Certificates with basic and advanced qualifications.

10.1 Transmitting power of an amplifier

The transmitting power of an amplifier installed at an amateur station shall not be capable of exceeding by more than 3 dB the transmitting power limits described in this section.

10.2 Amateur Radio Operator Certificate with Basic Qualification

The holder of an Amateur Radio Operator Certificate with Basic Qualification is limited to a maximum transmitting power of:

- a. where expressed as direct-current input power, 250 W to the anode or collector circuit of the transmitter stage that supplies radio frequency energy to the antenna; or
- b. where expressed as radio frequency output power measured across an impedance-matched load,
 - i. 560 W peak envelope power for transmitters that produce any type of single sideband emission, or
 - ii. 190 W carrier power for transmitters that produce any other type of emission.

10.3 Amateur Radio Operator Certificate with Advanced Qualification

The holder of an Amateur Radio Operator Certificate with Advanced Qualification is limited to a maximum transmitting power of:

- a. where expressed as direct-current input power, 1,000 W to the anode or collector circuit of the transmitter stage that supplies radio frequency energy to the antenna; or
- b. where expressed as radio frequency output power measured across an impedance-matched load,
 - i. 2,250 W peak envelope power for transmitters that produce any type of single sideband emission, or
 - ii. 750 W carrier power for transmitters that produce any other type of emission.

11. Technical requirements

An unmodulated carrier in a frequency band below 30 MHz may be transmitted only for brief tests.

Signals may not be automatically retransmitted in a frequency band below 29.5 MHz unless those signals are received from a station operated by a person qualified to transmit in the frequency bands below 30 MHz.

An amateur station transmitting amplitude modulation is limited to no more than 100% modulation.

The frequency stability of an amateur station in a frequency band below 148.000 MHz shall be equal to or greater than that which is obtainable using crystal control.

An amateur station shall be equipped with a means of:

- a. determining the transmit frequency to the same degree of accuracy as would a crystal calibrator; and
- b. indicating or preventing overmodulation of the transmitter in the case of a radiotelephone transmitter.

12. Environmental process, radio frequency fields and land-use consultation

Innovation, Science and Economic Development Canada (ISED) recognizes the importance of considering the potential impacts of antennas and their supporting structures on their surroundings. As such, amateur radio operators are responsible for complying with Client Procedures Circular CPC-2-0-03, *Radiocommunication and Broadcasting Antenna Systems*, as amended from time to time.

13. Change of address

The holder of an Amateur Radio Operator Certificate shall notify ISED's Amateur Radio Service Centre of a change of mailing address within 30 days.

Schedule I: Frequency bands and bandwidths for use by amateur stations operating in Canada

Definitions:

B: Amateur Radio Operator Certificate with Basic Qualification

5: Amateur Radio Operator Certificate with Morse Code (5 w.p.m.) Qualification

B/H: Amateur Radio Operator Certificate with a Basic Qualification with Honours (score of 80% or above)

A: Amateur Radio Operator Certificate with Advanced Qualification

Frequency bands and bandwidths for use by amateur stations operating in Canada

		Column II:	Column III:	Column IV:
	Column I:	Maximum	Operating	Operator
Item	Frequency band	bandwidth	provision	qualifications
1	135.7-137.8 kHz	100 Hz	5.67A	B and 5, B/H, B and A
2	472-479 kHz	1 kHz	5.80A	B and 5, B/H, B and A
3	1.800-2.000 MHz	6 kHz	-	B and 5, B/H, B and A
4	3.500-4.000 MHz	6 kHz	-	B and 5, B/H, B and A
5	5.332 MHz	2.8 kHz	C21	B and 5, B/H, B and A
6	5.348 MHz	2.8 kHz	C21	B and 5, B/H, B and A
7	5.3515-5.3665 MHz	2.8 kHz	C21	B and 5, B/H, B and A
8	5.373 MHz	2.8 kHz	C21	B and 5, B/H, B and A
9	5.405 MHz	2.8 kHz	C21	B and 5, B/H, B and A
10	7.000-7.300 MHz	6 kHz	5.142	B and 5, B/H, B and A
11	10.100-10.150 MHz	1 kHz	C6	B and 5, B/H, B and A
12	14.000-14.350 MHz	6 kHz	-	B and 5, B/H, B and A
13	18.068-18.168 MHz	6 kHz	-	B and 5, B/H, B and A
14	21.000-21.450 MHz	6 kHz	-	B and 5, B/H, B and A
15	24.890-24.990 MHz	6 kHz	-	B and 5, B/H, B and A
16	28.000-29.700 MHz	20 kHz	-	B and 5, B/H, B and A
17	50.000-54.000 MHz	30 kHz	-	В
18	144.000-148.000 MHz	30 kHz	-	В
19	219.000-220.000 MHz	100 kHz	C11	В
20	220.000-222.000 MHz	100 kHz	C11 – Exceptional	В
			circumstances only	
21	222.000-225.000 MHz	100 kHz	-	В
22	430.000-450.000 MHz	12 MHz	*	В
23	902.000-928.000 MHz	12 MHz	*	В
24	1.240-1.300 GHz	Not specified	*	В
25	2.300-2.450 GHz	Not specified	*	В
26	3.300-3.500 GHz	Not specified	*	В

	1			
27	5.650-5.925 GHz	Not specified	*	В
28	10.000-10.500 GHz	Not specified	*	В
29	24.000-24.050 GHz	Not specified	-	В
30	24.050-24.250 GHz	Not specified	*	В
31	47.000-47.200 GHz	Not specified	-	В
32	76.000-77.500 GHz	Not specified	*	В
33	77.500-78.000 GHz	Not specified	-	В
34	78.000-81.000 GHz	Not specified	*	В
35	81.000-81.500 GHz	Not specified	5.561A	В
36	122.250-123.000 GHz	Not specified	*	В
37	134.000-136.000 GHz	Not specified	-	В
38	136.000-141.000 GHz	Not specified	*	В
39	241.000-248.000 GHz	Not specified	*	В
40	248.000-250.000 GHz	Not specified	-	В

In Column III, "*" means that transmissions shall not cause interference nor be protected from interference by stations licensed in other services operating in that band. Operating provisions defined below are excerpts from the *Canadian Table of Frequency Allocations* and the International Telecommunication Union's (ITU) *Radio Regulations*, as amended from time to time.

In Column III, the operating provision footnotes with a "C" prefix refer to Canadian allocations per the *Canadian Table of Frequency Allocations*, and the footnotes with no prefix refer to international allocations per the ITU *Table of Frequency Allocations*.

5.67A Stations in the amateur service using frequencies in the band 135.7-137.8 kHz shall not exceed a maximum radiated power of 1 W (e.i.r.p.) and shall not cause harmful interference to stations of the radionavigation service operating in countries listed in No. **5.67**. (WRC-07)

5.80A The maximum equivalent isotropically radiated power (e.i.r.p.) of stations in the amateur service using frequencies in the band 472-479 kHz shall not exceed 1 W. Administrations may increase this limit of e.i.r.p. to 5 W in portions of their territory which are at a distance of over 800 km from the borders of Algeria, Saudi Arabia, Azerbaijan, Bahrain, Belarus, China, Comoros, Djibouti, Egypt, United Arab Emirates, the Russian Federation, Iran (Islamic Republic of), Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Uzbekistan, Qatar, Syrian Arab Republic, Kyrgyzstan, Somalia, Sudan, Tunisia, Ukraine and Yemen. In this frequency band, stations in the amateur service shall not cause harmful interference to, or claim protection from, stations of the aeronautical radionavigation service. (WRC-12)

5.142 The use of the band 7 200-7 300 kHz in Region 2 by the amateur service shall not impose constraints on the broadcasting service intended for use within Region 1 and Region 3. (WRC-12)

C6 The use of the band 10 100-10 150 kHz by the amateur service in Canada is not in accordance with the international frequency allocations. Canadian amateur operations shall not cause interference to fixed service operations of other administrations and if such interference should occur, the amateur service may be required to cease operations. The amateur service in Canada may not claim protection from interference by the fixed service operations of other administrations.

C11 (CAN-18) In the frequency band 219-220 MHz, the amateur service is permitted on a secondary basis. In the frequency band 220-222 MHz, the amateur service may be permitted in exceptional circumstances on a secondary basis to assist in disaster relief efforts.

C21 (CAN-18) Amateur service operators may transmit in the frequency band 5 351.5-5 366.5 kHz and on the following four centre frequencies: 5 332 kHz, 5 348 kHz, 5 373 kHz and 5 405 kHz. Amateur stations are allowed to operate with a maximum effective radiated power of 100 W PEP in each channel and are restricted to the following emission modes and designators: telephony (2K80J3E), data (2K80J2D), RTTY (60H0J2B) and CW (150HA1A). Transmissions in any channel may not occupy a bandwidth of more than 2.8 kHz. Such use is not in accordance with international frequency allocations. Canadian amateur operations shall not cause interference to fixed and mobile operations in Canada or in other countries and, if such interference occurs, the amateur service may be required to cease operations. The amateur service in Canada may not claim protection from interference by the fixed and mobile operations of other countries.

Schedule II: Frequency bands and bandwidths for use by amateur stations operating in Region 1

Definitions:

B: Amateur Radio Operator Certificate with Basic Qualification

5: Amateur Radio Operator Certificate with Morse Code (5 w.p.m.) Qualification

B/H: Amateur Radio Operator Certificate with a Basic Qualification with Honours (score of 80% or above)

A: Amateur Radio Operator Certificate with Advanced Qualification

Frequency bands and bandwidths for use by amateur stations operating in Region 1

	Column I:	Column II: Maximum	Column III:	Column IV: Operator
Item	Frequency band	bandwidth	Operating provision	qualifications
1	135.7-137.8 kHz	100 Hz	5.67A	B and 5, B/H, B and A
2	472-479 kHz	1 kHz	5.80A	B and 5, B/H, B and A
3	1.810-1.850 MHz	6 kHz	-	B and 5, B/H, B and A
4	3.500-3.800 MHz	6 kHz	-	B and 5, B/H, B and A
5	5.3515-5.3665 MHz	2.8 kHz	5.133B	B and 5, B/H, B and A
6	7.000-7.200 MHz	6 kHz	-	B and 5, B/H, B and A
7	10.100-10.150 MHz	1 kHz	*	B and 5, B/H, B and A
8	14.000-14.350 MHz	6 kHz	-	B and 5, B/H, B and A
9	18.068-18.168 MHz	6 kHz	-	B and 5, B/H, B and A
10	21.000-21.450 MHz	6 kHz	-	B and 5, B/H, B and A
11	24.890-24.990 MHz	6 kHz	-	B and 5, B/H, B and A
12	28.000-29.700 MHz	20 kHz	-	B and 5, B/H, B and A
13	50.000-52.000 MHz	30 kHz	*	В
14	144.000-146.000 MHz	30 kHz	-	В
15	430.000-440.000 MHz	Not specified	-	В
16	1.240-1.300 GHz	Not specified	*	В
17	2.300-2.450 GHz	Not specified	*	В
18	5.650-5.850 GHz	Not specified	*	В
19	10.000-10.500 GHz	Not specified	*	В
20	24.000-24.050 GHz	Not specified	-	В
21	24.050-24.250 GHz	Not specified	*	В
22	47.000-47.200 GHz	Not specified	-	В
23	76.000-77.500 GHz	Not specified	*	В
24	77.500-78.000 GHz	Not specified	-	В
25	78.000-81.000 GHz	Not specified	*	В
26	81.000-81.5000 GHz	Not specified	5.561A	В
27	122.250-123.000 GHz	Not specified	*	В

28	134.000-136.000 GHz	Not specified	-	В
29	136.000-141.000 GHz	Not specified	*	В
30	241.000-248.000 GHz	Not specified	*	В
31	248.000-250.000 GHz	Not specified	-	В

In Column III, "*" means that transmissions shall not cause interference nor be protected from interference by stations licensed in other services operating in that band. Operating provisions defined below are excerpts from the *Canadian Table of Frequency Allocations* and the International Telecommunication Union's (ITU) *Radio Regulations*, as amended from time to time.

In Column III, the operating provision footnotes with a "C" prefix refer to Canadian allocations per the *Canadian Table of Frequency Allocations*, and the footnotes with no prefix refer to international allocations per the ITU *Table of Frequency Allocations*.

5.67A Stations in the amateur service using frequencies in the band 135.7-137.8 kHz shall not exceed a maximum radiated power of 1 W (e.i.r.p.) and shall not cause harmful interference to stations of the radionavigation service operating in countries listed in No. **5.67.** (WRC-07)

5.80A The maximum equivalent isotropically radiated power (e.i.r.p.) of stations in the amateur service using frequencies in the band 472-479 kHz shall not exceed 1 W. Administrations may increase this limit of e.i.r.p. to 5 W in portions of their territory which are at a distance of over 800 km from the borders of Algeria, Saudi Arabia, Azerbaijan, Bahrain, Belarus, China, Comoros, Djibouti, Egypt, United Arab Emirates, the Russian Federation, Iran (Islamic Republic of), Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Uzbekistan, Qatar, Syrian Arab Republic, Kyrgyzstan, Somalia, Sudan, Tunisia, Ukraine and Yemen. In this frequency band, stations in the amateur service shall not cause harmful interference to, or claim protection from, stations of the aeronautical radionavigation service. (WRC-12)

5.133B Stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 15 W (e.i.r.p.). However, in Region 2 in Mexico, stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 20 W (e.i.r.p.). In the following Region 2 countries: Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Dominica, El Salvador, Ecuador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Saint Lucia, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, Venezuela, as well as the overseas countries and territories within the Kingdom of the Netherlands in Region 2, stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 25 W (e.i.r.p.). (WRC-19)

Schedule III: Frequency bands and bandwidths for use by amateur stations operating in Region 2

Definitions:

B: Amateur Radio Operator Certificate with Basic Qualification

5: Amateur Radio Operator Certificate with Morse Code (5 w.p.m.) Qualification

B/H: Amateur Radio Operator Certificate with a Basic Qualification with Honours (score of 80% or above)

A: Amateur Radio Operator Certificate with Advanced Qualification

Frequency bands and bandwidths for use by amateur stations operating in Region 2

		Column II:	Column III:	Column IV:
	Column I:	Maximum	Operating	Operator
Item	Frequency band	bandwidth	provision	qualifications
1	135.7-137.8 kHz	100 Hz	5.67A	B and 5, B/H, B and A
2	472-479 kHz	1 kHz	5.80A	B and 5, B/H, B and A
3	1.800-2.000 MHz	6 kHz	-	B and 5, B/H, B and A
4	3.500-4.000 MHz	6 kHz	-	B and 5, B/H, B and A
5	5.3515-5.3665 MHz	2.8 kHz	5.133B	B and 5, B/H, B and A
6	7.000-7.300 MHz	6 kHz	5.142	B and 5, B/H, B and A
7	10.100-10.150 MHz	1 kHz	*	B and 5, B/H, B and A
8	14.000-14.350 MHz	6 kHz	-	B and 5, B/H, B and A
9	18.068-18.168 MHz	6 kHz	-	B and 5, B/H, B and A
10	21.000-21.450 MHz	6 kHz	-	B and 5, B/H, B and A
11	24.890-24.990 MHz	6 kHz	-	B and 5, B/H, B and A
12	28.000-29.700 MHz	20 kHz	-	B and 5, B/H, B and A
13	50.000-54.000 MHz	30 kHz	-	В
14	144.000-148.000 MHz	30 kHz	-	В
15	220.000-225.000 MHz	100 kHz	-	В
16	430.000-440.000 MHz	Not specified	*	В
17	902.000-928.000 MHz	12 MHz	*	В
18	1.240-1.300 GHz	Not specified	*	В
19	2.300-2.450 GHz	Not specified	*	В
20	3.300-3.500 GHz	Not specified	*	В
21	5.650-5.925 GHz	Not specified	*	В
22	10.000-10.500 GHz	Not specified	*	В
23	24.000-24.050 GHz	Not specified	-	В
24	24.050-24.250 GHz	Not specified	*	В
25	47.000-47.200 GHz	Not specified	-	В
26	76.000-77.500 GHz	Not specified	*	В
27	77.500-78.000 GHz	Not specified	-	В

28	78.000-81.000 GHz	Not specified	*	В
29	81.000-81.5000 GHz	Not specified	5.561A	В
30	122.250-123.000 GHz	Not specified	*	В
31	134.000-136.000 GHz	Not specified	-	В
32	136.000-141.000 GHz	Not specified	*	В
33	241.000-248.000 GHz	Not specified	*	В
34	248.000-250.000 GHz	Not specified	-	В

In Column III, "*" means that transmissions shall not cause interference nor be protected from interference by stations licensed in other services operating in that band. Operating provisions defined below are excerpts from the *Canadian Table of Frequency Allocations* and the International Telecommunication Union's (ITU) *Radio Regulations*, as amended from time to time.

In Column III, the operating provision footnotes with a "C" prefix refer to Canadian allocations per the *Canadian Table of Frequency Allocations*, and the footnotes with no prefix refer to international allocations per the ITU *Table of Frequency Allocations*.

5.67A Stations in the amateur service using frequencies in the band 135.7-137.8 kHz shall not exceed a maximum radiated power of 1 W (e.i.r.p.) and shall not cause harmful interference to stations of the radionavigation service operating in countries listed in No. **5.67.** (WRC-07)

5.80A The maximum equivalent isotropically radiated power (e.i.r.p.) of stations in the amateur service using frequencies in the band 472-479 kHz shall not exceed 1 W. Administrations may increase this limit of e.i.r.p. to 5 W in portions of their territory which are at a distance of over 800 km from the borders of Algeria, Saudi Arabia, Azerbaijan, Bahrain, Belarus, China, Comoros, Djibouti, Egypt, United Arab Emirates, the Russian Federation, Iran (Islamic Republic of), Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Uzbekistan, Qatar, Syrian Arab Republic, Kyrgyzstan, Somalia, Sudan, Tunisia, Ukraine and Yemen. In this frequency band, stations in the amateur service shall not cause harmful interference to, or claim protection from, stations of the aeronautical radionavigation service. (WRC-12)

5.133B Stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 15 W (e.i.r.p.). However, in Region 2 in Mexico, stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 20 W (e.i.r.p.). In the following Region 2 countries: Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Dominica, El Salvador, Ecuador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Saint Lucia, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, Venezuela, as well as the overseas countries and territories within the Kingdom of the Netherlands in Region 2, stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 25 W (e.i.r.p.). (WRC-19)

5.142 The use of the band 7 200-7 300 kHz in Region 2 by the amateur service shall not impose constraints on the broadcasting service intended for use within Region 1 and Region 3. (WRC-12)

Schedule IV: Frequency bands and bandwidths for use by amateur stations operating in Region 3

Definitions:

B: Amateur Radio Operator Certificate with Basic Qualification

5: Amateur Radio Operator Certificate with Morse Code (5 w.p.m.) Qualification

B/H: Amateur Radio Operator Certificate with a Basic Qualification with Honours (score of 80% or above)

A: Amateur Radio Operator Certificate with Advanced Qualification

Frequency bands and bandwidths for use by amateur stations operating in Region 3

		Column II:	Column III:	Column IV:
	Column I:	Maximum	Operating	Operator
Item	Frequency band	bandwidth	provision	qualifications
1	135.7-137.8 kHz	100 Hz	5.67A	B and 5, B/H, B and A
2	472-479 kHz	1 kHz	5.80A	B and 5, B/H, B and A
3	1.800-2.000 MHz	6 kHz	-	B and 5, B/H, B and A
4	3.500-3.900 MHz	6 kHz	-	B and 5, B/H, B and A
5	5.3515-5.3665 MHz	2.8 kHz	5.133B	B and 5, B/H, B and A
6	7.000-7.200 MHz	6 kHz	-	B and 5, B/H, B and A
7	10.100-10.150 MHz	1 kHz	*	B and 5, B/H, B and A
8	14.000-14.350 MHz	6 kHz	-	B and 5, B/H, B and A
9	18.068-18.168 MHz	6 kHz	-	B and 5, B/H, B and A
10	21.000-21.450 MHz	6 kHz	-	B and 5, B/H, B and A
11	24.890-24.990 MHz	6 kHz	-	B and 5, B/H, B and A
12	28.000-29.700 MHz	20 kHz	-	B and 5, B/H, B and A
13	50.000-54.000 MHz	30 kHz	-	В
14	144.000-148.000 MHz	30 kHz	-	В
15	430.000-440.000 MHz	Not specified	*	В
16	1.240-1.300 GHz	Not specified	*	В
17	2.300-2.450 GHz	Not specified	*	В
18	3.300-3.500 GHz	Not specified	*	В
19	5.650-5.850 GHz	Not specified	*	В
20	10.000-10.500 GHz	Not specified	*	В
21	24.000-24.050 GHz	Not specified	-	В
22	24.050-24.250 GHz	Not specified	*	В
23	47.000-47.200 GHz	Not specified	-	В
24	76.000-77.500 GHz	Not specified	*	В
25	77.500-78.000 GHz	Not specified	-	В
26	78.000-81.000 GHz	Not specified	*	В
27	81.000-81.5000 GHz	Not specified	5.561A	В

28	122.250-123.000 GHz	Not specified	*	В
29	134.000-136.000 GHz	Not specified	-	В
30	136.000-141.000 GHz	Not specified	*	В
31	241.000-248.000 GHz	Not specified	*	В
32	248.000-250.000 GHz	Not specified	-	В

In Column III, "*" means that transmissions shall not cause interference nor be protected from interference by stations licensed in other services operating in that band. Operating provisions defined below are excerpts from the *Canadian Table of Frequency Allocations* and the International Telecommunication Union's (ITU) *Radio Regulations*, as amended from time to time.

In Column III, the operating provision footnotes with a "C" prefix refer to Canadian allocations per the *Canadian Table of Frequency Allocations*, and the footnotes with no prefix refer to international allocations per the ITU *Table of Frequency Allocations*.

5.67A Stations in the amateur service using frequencies in the band 135.7-137.8 kHz shall not exceed a maximum radiated power of 1 W (e.i.r.p.) and shall not cause harmful interference to stations of the radionavigation service operating in countries listed in No. **5.67.** (WRC-07)

5.80A The maximum equivalent isotropically radiated power (e.i.r.p.) of stations in the amateur service using frequencies in the band 472-479 kHz shall not exceed 1 W. Administrations may increase this limit of e.i.r.p. to 5 W in portions of their territory which are at a distance of over 800 km from the borders of Algeria, Saudi Arabia, Azerbaijan, Bahrain, Belarus, China, Comoros, Djibouti, Egypt, United Arab Emirates, the Russian Federation, Iran (Islamic Republic of), Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Uzbekistan, Qatar, Syrian Arab Republic, Kyrgyzstan, Somalia, Sudan, Tunisia, Ukraine and Yemen. In this frequency band, stations in the amateur service shall not cause harmful interference to, or claim protection from, stations of the aeronautical radionavigation service. (WRC-12)

5.133B Stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 15 W (e.i.r.p.). However, in Region 2 in Mexico, stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 20 W (e.i.r.p.). In the following Region 2 countries: Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Dominica, El Salvador, Ecuador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Saint Lucia, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, Venezuela, as well as the overseas countries and territories within the Kingdom of the Netherlands in Region 2, stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 25 W (e.i.r.p.). (WRC-19)

Item	Column I: Amateur call sign prefix	Column II: Geographical location
1	VE1-VA1	Nova Scotia
2	VE2-VA2	Quebec
3	VE3-VA3	Ontario
4	VE4-VA4	Manitoba
5	VE5-VA5	Saskatchewan
6	VE6-VA6	Alberta
7	VE7-VA7	British Columbia
8	VE8	Northwest Territories
9	VE9	New Brunswick
10	VE0*	International waters
11	VO1	Newfoundland
12	VO2	Labrador
13	VY1	Yukon
14	VY2	Prince Edward Island
15	VY0	Nunavut

Schedule V: Amateur call sign prefixes

* VE0 call signs are intended for use only when the amateur radio station is operated from vessels that make international voyages.