

B-001-019-003 **(B)**

An amateur station using radiotelephony must install a device for indicating or preventing:

- A plate voltage
- B overmodulation
- C resonance
- D antenna power

B-001-019-004 **(C)**

The maximum percentage of modulation permitted in the use of radiotelephony by an amateur station is:

- A 50 percent
- B 90 percent
- C 100 percent
- D 75 percent

B-001-019-005 **(B)**

All amateur stations, regardless of the mode of transmission used, must be equipped with:

- A a dummy antenna
- B a reliable means of determining the operating radio frequency
- C a DC power meter
- D an overmodulation indicating device

B-001-019-006 **(C)**

The maximum percentage of modulation permitted in the use of radiotelephony by an amateur station is:

- A 75 percent
- B 50 percent
- C 100 percent
- D 90 percent

B-001-020-001 **(C)**

What type of messages may be transmitted to an amateur station in a foreign country?

- A Messages that are not religious, political, or patriotic in nature
- B Messages of any type
- C Messages of a technical nature or personal remarks of relative unimportance
- D Messages of any type, if the foreign country allows third-party communications with Canada

B-001-020-002 **(D)**

The operator of an amateur station shall ensure that:

- A communications are exchanged only with commercial stations
- B all communications are conducted in secret code
- C charges are properly applied to all third-party communications
- D communications are limited to messages of a technical or personal nature

B-001-020-003 **(B)**

Which of the following is not a provision of the ITU Radio Regulations which apply to Canadian radio amateurs?

- A Administrations shall take such measures as they judge necessary to verify the operational and technical qualifications of amateurs
- B Transmissions between countries shall not include any messages of a technical nature, or remarks of a personal character
- C It is forbidden to transmit international messages on behalf of third parties, unless those countries make special arrangements
- D Radiocommunications between countries shall be forbidden, if the administration of one of the countries objects

B-001-020-004 **(C)**

The ITU Radio Regulations limit those radio amateurs, who have not demonstrated proficiency in Morse code, to frequencies above:

- A 3.5MHz
- B 28 MHz
- C none of the other answers
- D 1.8 MHz

B-001-020-005 **(A)**

In addition to complying with the Radiocommunication Act and Regulations, Canadian radio amateurs must also comply with the regulations of the:

- A International Telecommunication Union
- B American Radio Relay League
- C Radio Amateurs of Canada Inc.
- D International Amateur Radio Union

B-001-021-001 (D)

In which International Telecommunication Union Region is Canada?

- A Region 4
- B Region 3
- C Region 1
- D Region 2

B-001-021-002 (A)

A Canadian radio amateur, operating his station in the state of Florida, is subject to which frequency band limits?

- A Those applicable to US radio amateurs
- B ITU Region 2
- C ITU Region 3
- D ITU Region 1

B-001-021-003 (C)

A Canadian radio amateur, operating his station 7 kilometres (4 miles) offshore from the coast of Florida, is subject to which frequency band limits?

- A ITU Region 1
- B ITU Region 2
- C Those applicable to US radio amateurs
- D Those applicable to Canadian radio amateurs

B-001-021-004 (A)

Australia, Japan, and Southeast Asia are in which ITU Region?

- A Region 3
- B Region 1
- C Region 2
- D Region 4

B-001-021-005 (A)

Canada is located in ITU Region:

- A Region 2
- B Region 1
- C Region 3
- D Region 4

B-001-022-001 (C)

Which of these statements is not correct?

- A An accredited volunteer examiner must hold an Amateur Radio Operator Certificate with Basic, Advanced, and Morse code qualifications
- B There are no fees for taking an examination for an Amateur Radio Operator Certificate at an Innovation, Science and Economic Development Canada office.
- C The fee for taking an examination for an Amateur Radio Operator Certificate at an Innovation, Science and Economic Development Canada office is \$5 per qualification
- D An accredited examiner may recover the cost of administering an examination

B-001-022-002 (D)

Which of the following statements is not correct?

- A A disabled candidate, taking a Morse code sending test, may be allowed to recite the examination text in Morse code sounds
- B Examinations for disabled candidates may be given orally, or tailored to the candidate's ability to complete the examination
- C An accredited examiner may recover the cost of administering an examination.
- D A disabled candidate must pass a normal amateur radio certificate examination before being granted any qualification

B-001-022-003 (C)

The fee for taking examinations for amateur radio operator certificates by an accredited volunteer examiner is:

- A always free of charge
- B always \$20 per visit regardless of the number of examinations
- C to be negotiated between examiner and candidate
- D always \$20 per qualification

B-001-022-004 (B)

The fee for taking amateur radio certificate examinations at an Innovation, Science and Economic Development Canada office is:

- A \$5 per qualification examination
- B no charge for qualification examinations
- C \$20 per visit, regardless of the number of qualification examinations
- D \$20 per qualification

B-001-022-005 (D)

Which of the following statements is false?

- A A candidate who fails a written examination for lack of reading skills may be given an oral examination
- B A candidate who fails a written examination due to not usually speaking English or French may be given an oral examination
- C An examiner may request medical evidence from a practicing medical physician before accommodating testing
- D A candidate with insufficient knowledge of English or French may be accompanied by an interpreter

B-001-023-001 (D)

Which of these statements about the installation or modification of an antenna structure is not correct?

- A A radio amateur must follow Innovation, Science and Economic Development Canada's antenna siting procedures.
- B Innovation, Science and Economic Development Canada expects radio amateurs to address community concerns in a responsible manner
- C Prior to an installation, for which community concerns could be raised, radio amateurs may be required to consult with their land-use authority
- D A radio amateur may erect any size antenna structure without consulting neighbours or the local land-use authority

B-001-023-002 (C)

Who has authority over antenna installations including antenna masts and towers?

- A The local municipal government
- B The majority of neighbours residing within a distance of three times the proposed antenna structure height
- C The Minister of Innovation, Science and Economic Development
- D The person planning to use the tower or their spouse

B-001-023-003 (C)

If you are planning to install or modify an antenna system under what conditions may you not be required to contact land use authorities to determine public consultation requirements?

- A When the structure is part of an amateur radio antenna
- B When transmitting will only be done at low power
- C When an exclusion criterion defined by Innovation, Science and Economic Development Canada applies
- D In a rural area

B-001-023-004 (B)

The land use authority has not established a process for public consultation for antenna systems. The radio amateur planning to install or modify an antenna system:

- A must wait for the land use authority to develop a public consultation process
- B must fulfill the public consultation requirements set out in Innovation, Science and Economic Development Canada's Default Public Consultation Process unless the land use authority excludes their type of proposal from consultation or it is excluded by Innovation, Science and Economic Development Canada's process
- C can proceed with their project without public consultation
- D must implement a public consultation process of their own design

B-001-023-005 (D)

Which is not an element of the Innovation, Science and Economic Development Canada Public Consultation Process for antenna systems?

- A Providing written notice
- B Addressing relevant questions comments and concerns
- C Providing an opportunity for the public to respond regarding measures to address reasonable and relevant concerns
- D Participating in public meetings on the project

B-001-023-006 (C)

The Default Public Consultation Process for antenna systems requires proponents to address:

- A comments reported in media reporting on the proposal
- B opposition to the project
- C reasonable and relevant concerns provided in writing within the 30 day public comment period
- D all questions, comments and concerns raised

B-001-023-007 (A)

Where a municipality has developed a public consultation process which of the following options best describes all circumstances when public consultation may not be required?

- A Exclusions listed in either CPC-2-0-03 or the Local land use authority process
- B Exclusions listed in the Innovation, Science and Economic Development Canada Client Procedures Circular on Radiocommunications and Broadcasting Antenna Systems CPC-2-0-03
- C Exclusions defined in the Local land use authority process
- D Exclusions listed in both CPC-2-0-03 and the Local land use authority process

B-001-023-008 (C)

Where the proponent and a stakeholder other than the general public reach an impasse over a proposed antenna system the final decision will:

- A be made by the municipality in which the antenna is to be built
- B be made by a majority vote of those residing within a radius of three times the antenna structure height
- C be made by Innovation, Science and Economic Development Canada
- D be postponed until those in dispute reach an agreement

B-001-023-009 (B)

In general, what is the tallest amateur radio antenna system excluded from the requirement to consult with the land use authority and the public where there is a land use authority defined public consultation process?

- A 21m
- B the taller of the height exclusion in the land use authority public consultation process and Innovation, Science and Economic Development Canada's antenna siting procedures
- C 10m
- D 15m

B-001-023-010 (A)

Where a land use authority or municipality has established a public consultation process for antenna systems, who determines how public consultation should take place?

- A The municipality or local land use authority
- B Innovation, Science and Economic Development Canada
- C The person planning to erect an antenna structure
- D The provincial government

B-001-024-001 (C)

What organization has published safety guidelines for the maximum limits of RF energy near the human body?

- A Environment Canada
- B Transport Canada
- C Health Canada
- D Canadian Standards Association

B-001-024-002 (A)

What is the purpose of the Safety Code 6?

- A It gives RF exposure limits for the human body
- B It lists all RF frequency allocations for interference protection
- C It sets transmitter power limits for interference protection
- D It sets antenna height limits for aircraft protection

B-001-024-003 (D)

According to Safety Code 6, what frequencies cause us the greatest risk from RF energy?

- A 300 to 3000 MHz
- B Above 1500 MHz
- C 3 to 30 MHz
- D 30 to 300 MHz

B-001-024-004 (C)

Why is the limit of exposure to RF the lowest in the frequency range of 30 MHz to 300 MHz, according to Safety Code 6?

- A There are fewer transmitters operating in this range
- B Most transmissions in this range are for a longer time
- C The human body absorbs RF energy the most in this range
- D There are more transmitters operating in this range

B-001-024-005 (A)

According to Safety Code 6, what is the maximum safe power output to the antenna of a hand-held VHF or UHF radio?

- A Not specified
- B 10 watts
- C 25 watts
- D 125 milliwatts

B-001-024-006 (B)

Which of the following statements is not correct?

- A Permissible exposure levels of RF fields increases as frequency is decreased from 10 MHz to 1 MHz
- B Permissible exposure levels of RF fields decreases as frequency is decreased below 10 MHz
- C Maximum exposure levels of RF fields to the general population, in the frequency range 10 to 300 MHz, is 28 V/m RMS (E-field)
- D Permissible exposure levels of RF fields increases as frequency is increased from 300 MHz to 1.5 GHz

B-001-024-007 (A)

The permissible exposure levels of RF fields:

- A increases, as frequency is increased from 300 MHz to 1.5 GHz
- B decreases, as frequency is decreased below 10 MHz
- C increases, as frequency is increased from 10 MHz to 300 MHz
- D decreases, as frequency is increased above 300 MHz

B-001-024-008 (A)

Which statement is not correct?

- A hand held transmitters are excluded from Safety Code 6 requirements
- B Antenna gain, distance, transmitter power and frequency are all factors which influence the electric field strength and a person's exposure to radio energy.
- C Safety Code 6 uses different units for the magnetic field strength and the electric field strength when stating limits
- D Safety Code 6 specifies lower exposure limits for the general public in uncontrolled areas than it does for people in controlled areas

B-001-024-009 **(B)**

Which statement is correct?

- A Portable transmitters, operating below 1 GHz, with an output power equal to, or less than 7 watts, are exempt from the requirements of Safety Code 6
- B Safety Code 6 sets limits for RF exposure from all radio transmitters regardless of power output
- C Safety Code 6 regulates the operation of receivers only
- D The operation of portable transmitting equipment is of no concern in Safety Code 6

B-001-024-010 **(B)**

Which of these statements about Safety Code 6 is false?

- A Safety Code 6 sets limits for allowable rates at which RF energy is absorbed in the body (Specific Absorption Rate)
- B Safety Code 6 sets limits in terms of power levels fed into antennas
- C Safety Code 6 sets limits for contact currents that could be drawn from ungrounded or poorly grounded objects
- D Safety Code 6 sets limits for induced currents, electrical field strength and magnetic field strength from electromagnetic radiation

B-001-025-001 **(A)**

In the event of the malfunctioning of a neighbour's broadcast FM receiver and stereo system, it will be deemed that the affected equipment's lack of immunity is the cause if the field strength:

- A on the premises of the affected equipment is below Innovation, Science and Economic Development Canada's specified immunity criteria
- B at the transmitting location is below the radio amateur's maximum allowable transmitter power
- C at the transmitting location is above 100 watts
- D near the affected equipment is above Innovation, Science and Economic Development Canada's specified immunity criteria

B-001-025-002 **(B)**

In the event of interference to a neighbour's television receiver, according to EMCAB-2 it will be deemed that a radio amateur's transmission is the cause of the problem if the field strength:

- A at the transmitting location is above the radio amateur's maximum allowable transmitter power
- B on the neighbour's premises is above Innovation, Science and Economic Development Canada's specified immunity criteria
- C near the TV is below Innovation, Science and Economic Development Canada's specified immunity criteria
- D at the transmitting location is below the radio amateur's maximum allowable transmitter power

B-001-025-003 **(C)**

Which of the following is defined in EMCAB-2 as "any device, machinery or equipment, other than radio apparatus, the use or functioning of which is, or can be, adversely affected by radiocommunication emissions"?

- A Audio and video recorders
- B Broadcast receivers
- C Radio-sensitive equipment
- D Cable television converters

B-001-025-004 **(B)**

According to EMCAB-2 which of the following types of equipment is not included in the list of field strength criteria for resolution of immunity complaints?

- A Radio-sensitive equipment
- B Broadcast transmitters
- C Broadcast receivers
- D Associated equipment

B-002-001-001 **(A)**

What is a good way to make contact on a repeater?

- A Say the call sign of the station you want to contact, then your call sign
- B Say the other operator's name, then your call sign three times
- C Say, "Breaker, breaker,"
- D Say the call sign of the station you want to contact three times

B-002-001-002 **(D)**

What is the main purpose of a repeater?

- A To link amateur stations with the telephone system
- B To retransmit weather information during severe storm warnings
- C To make local information available 24 hours a day
- D To increase the range of portable and mobile stations

B-002-001-003 **(D)**

What is frequency coordination on VHF and UHF bands?

- A A band plan detailing modes and frequency segments within a band
- B The selection of simplex frequencies by individual operators
- C A part of the planning prior to a contest
- D A process which seeks to carefully assign frequencies so as to minimize interference with neighbouring repeaters

B-002-001-004 **(D)**

What is the purpose of a repeater time-out timer?

- A It lets a repeater have a rest period after heavy use
- B It logs repeater transmit time to predict when a repeater will fail
- C It tells how long someone has been using a repeater
- D It interrupts lengthy transmissions without pauses

B-002-001-005 **(B)**

What is a CTCSS tone?

- A A special signal used for radio control of model craft
- B A sub-audible tone that activates a receiver audio output when present
- C A tone used by repeaters to mark the end of a transmission
- D A special signal used for telemetry between amateur space stations and Earth stations

B-002-001-006 **(D)**

How do you call another station on a repeater if you know the station's call sign?

- A Say "break, break 79," then say the station's call sign
- B Say "CQ" three times, then say the station's call sign
- C Wait for the station to call "CQ", then answer it
- D Say the station's call sign, then identify your own station

B-002-001-007 **(D)**

Why should you pause briefly between transmissions when using a repeater?

- A To check the SWR of the repeater
- B To reach for pencil and paper for third-party communications
- C To dial up the repeater's autopatch
- D To listen for anyone else wanting to use the repeater

B-002-001-008 **(C)**

Why should you keep transmissions short when using a repeater?

- A To give any listening non-hams a chance to respond
- B To see if the receiving station operator is still awake
- C A long transmission may prevent someone with an emergency from using the repeater
- D To keep long-distance charges down

B-002-001-009 **(C)**

What is the proper way to join into a conversation on a repeater?

- A Shout, "break, break!" to show that you're eager to join the conversation
- B Turn on an amplifier and override whoever is talking
- C Say your call sign during a break between transmissions
- D Wait for the end of a transmission and start calling the desired party

B-002-001-010 **(C)**

What is the accepted way to ask someone their location when using a repeater?

- A Locations are not normally told by radio
- B What is your 12?
- C Where are you?
- D What is your 20?

B-002-001-011 **(D)**

FM repeater operation on the 2 metre band uses one frequency for transmission and one for reception. The difference in frequency between the transmit and receive frequency is normally:

- A 800 kHz
- B 1 000 kHz
- C 400 kHz
- D 600 kHz

B-002-002-001 **(B)**

To make your call sign better understood when using voice transmissions, what should you do?

- A Turn up your microphone gain
- B Use Standard International Phonetics for each letter of your call sign
- C Use any words which start with the same letters as your call sign for each letter of your call
- D Talk louder

B-002-002-002 **(C)**

What can you use as an aid for correct station identification when using phone?

- A Unique words of your choice
- B A speech compressor
- C The Standard International Phonetic Alphabet
- D Q signals

B-002-002-003 **(B)**

What is the Standard International Phonetic for the letter A?

- A America
- B Alfa
- C Able
- D Adam

B-002-002-004 **(D)**

What is the Standard International Phonetic for the letter B?

- A Brazil
- B Borneo
- C Baker
- D Bravo

B-002-002-005 **(C)**

What is the Standard International Phonetic for the letter D?

- A Denmark
- B David
- C Delta
- D Dog

B-002-002-006 **(C)**

What is the Standard International Phonetic for the letter E?

- A Edward
- B England
- C Echo
- D Easy

B-002-002-007 **(C)**

What is the Standard International Phonetic for the letter G?

- A Germany
- B Gibraltar
- C Golf
- D George

B-002-002-008 **(B)**

What is the Standard International Phonetic for the letter I?

- A Item
- B India
- C Iran
- D Italy

B-002-002-009 **(B)**

What is the Standard International Phonetic for the letter L?

- A Luxembourg
- B Lima
- C Love
- D London