

Basic Qualification Question Bank for Amateur Radio Operator Certificate Examinations

Operating & Procedures



B-002-01-01 (2)

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

Say the other operator's name, then your call sign three times

Say the call sign of the station you want to contact, then your call sign

Say, "Breaker, breaker,"

Say the call sign of the station you want to contact three times

B-002-01-02 (2)

What is the main purpose of a repeater?

To link amateur stations with the telephone system

To increase the range of portable and mobile stations

To retransmit weather information during severe storm warnings

To make local information available 24 hours a day

B-002-01-03 (2)

What is an auto patch?

A device which connects a mobile station to the next repeater if it moves out of range of the first

A device that allows repeater users to make telephone calls from their stations

A device which locks other stations out of a repeater when there is an important conversation in progress

Something that automatically selects the strongest signal to be repeated

B-002-01-04 (4)

What is the purpose of a repeater timeout timer?

It lets a repeater have a rest period after heavy use
It logs repeater transmit time to predict when a repeater will fail
It tells how long someone has been using a repeater
It limits the amount of time someone can transmit on a repeater

B-002-01-05 (2)

What is a CTCSS (or PL) tone?

A tone used by repeaters to mark the end of a transmission
A sub-audible tone added to a carrier which may cause a receiver to accept a signal
A special signal used for telemetry between amateur space stations and Earth stations
A special signal used for telecommand control of model craft

B-002-01-06 (1)

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

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

B-002-01-07 (4)

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

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

B-002-01-08 (3)

Why should you keep transmissions short when using a repeater?

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

B-002-01-09 (4)

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

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

B-002-01-10 (2)

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

What is your 20?

Where are you?

Locations are not normally told by radio

What is your 12?

B-002-01-11 (2)

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:

800 kHz

600 kHz

1 000 kHz

400 kHz

B-002-02-01 (4)

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

Use any words which start with the same letters as your call sign for each letter of your call

Talk louder

Turn up your microphone gain

Use Standard International Phonetics for each letter of your call sign

B-002-02-02 (2)

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

Q signals

The Standard International Phonetic Alphabet

Unique words of your choice

A speech compressor

B-002-02-03 (1)

What is the Standard International Phonetic for the letter A?

Alpha

Able

Adam

America

B-002-02-04 (2)

What is the Standard International Phonetic for the letter B?

Brazil

Bravo

Borneo

Baker

B-002-02-05 (4)

What is the Standard International Phonetic for the letter D?

Dog
Denmark
David
Delta

B-002-02-06 (4)

What is the Standard International Phonetic for the letter E?

Easy
Edward
England
Echo

B-002-02-07 (1)

What is the Standard International Phonetic for the letter G?

Golf
George
Germany
Gibraltar

B-002-02-08 (3)

What is the Standard International Phonetic for the letter I?

Iran
Italy
India
Item

B-002-02-09 (4)

What is the Standard International Phonetic for the letter L?

Love
London
Luxembourg
Lima

B-002-02-10 (2)

What is the Standard International Phonetic for the letter P?

Portugal
Papa
Paris
Peter

B-002-02-11 (1)

What is the Standard International Phonetic for the letter R?

Romeo
Roger
Radio
Romania

B-002-03-01 (1)

What is the correct way to call "CQ" when using voice?

Say "CQ" three times, followed by "this is," followed by your call sign spoken three times
Say "CQ" once, followed by "this is," followed by your call sign spoken three times
Say "CQ" at least five times, followed by "this is," followed by your call sign spoken once
Say "CQ" at least ten times, followed by "this is," followed by your call sign spoken once

B-002-03-02 (2)

How should you answer a voice CQ call?

Say the other station's call sign at least five times phonetically, followed by "this is," then your call sign twice
Say the other station's call sign once, followed by "this is," then your call sign given phonetically
Say the other station's call sign at least three times, followed by "this is," and your call sign at least five times phonetically
Say the other station's call sign at least ten times, followed by "this is," then your call sign at least twice

B-002-03-03 (4)

What is simplex operation?

Transmitting and receiving over a wide area
Transmitting on one frequency and receiving on another
Transmitting one-way communications
Transmitting and receiving on the same frequency

B-002-03-04 (1)

When should you use simplex operation instead of a repeater?

When a contact is possible without using a repeater
When the most reliable communications are needed
When an emergency telephone call is needed
When you are traveling and need some local information

B-002-03-05 (1)

Why should local amateur communications use VHF and UHF frequencies instead of HF frequencies?

To minimize interference on HF bands capable of long-distance communication
Because greater output power is permitted on VHF and UHF
Because HF transmissions are not propagated locally
Because signals are louder on VHF and UHF frequencies

B-002-03-06 (3)

Why should simplex be used where possible, instead of using a repeater?

Your antenna's effectiveness will be better tested
Long distance toll charges will be avoided
The repeater will not be tied up unnecessarily
Signal range will be increased

B-002-03-07 (3)

If you are talking to a station using a repeater, how would you find out if you could communicate using simplex instead?

See if a third station can clearly receive both of you
See if you can clearly receive a more distant repeater
See if you can clearly receive the station on the repeater's input frequency
See if you can clearly receive the station on a lower frequency band

B-002-03-08 (1)

If you are operating simplex on a repeater frequency, why would it be good amateur practice to change to another frequency?

Changing the repeater's frequency is not practical
The repeater's output power may ruin your station's receiver
There are more repeater operators than simplex operators
Changing the repeater's frequency requires the authorization of Industry Canada

B-002-03-09 (1)

Which sideband is commonly used for 20-metre phone operation?

Upper
Lower
FM
Double

B-002-03-10 (2)

Which sideband is commonly used on 3755 kHz for phone operation?

FM
Lower
Double
Upper

B-002-03-11 (4)

What is the best method to tell if a band is "open" for communication with a particular distant location?

Ask others on your local 2 metre FM repeater
Telephone an experienced local amateur
Look at the propagation forecasts in an amateur radio magazine
Listen for signals from that area from an amateur beacon station or a foreign broadcast or television station on a nearby frequency

B-002-04-01 (2)

What should you do before you transmit on any frequency?

Check your antenna for resonance at the selected frequency
Listen to make sure others are not using the frequency
Make sure the SWR on your antenna feed line is high enough
Listen to make sure that someone will be able to hear you

B-002-04-02 (4)

If you contact another station and your signal is extremely strong and perfectly readable, what adjustment might you make to your transmitter?

Turn on your speech processor
Reduce your SWR
Continue with your contact, making no changes
Turn down your power output to the minimum necessary

B-002-04-03 (4)

What is one way to shorten transmitter tune-up time on the air to cut down on interference?

Use a random wire antenna
Tune up on 40 metres first, then switch to the desired band
Use twin lead instead of coaxial cable feed lines
Tune the transmitter into a dummy load

B-002-04-04 (4)

How can on-the-air interference be minimized during a lengthy transmitter testing or loading-up procedure?

Choose an unoccupied frequency

Use a non-resonant antenna

Use a resonant antenna that requires no loading-up procedure

Use a dummy load

B-002-04-05 (2)

Why would you use a dummy antenna?

To give comparative signal reports

To allow antenna tuning without causing interference

It is faster to tune

To reduce output power

B-002-04-06 (1)

If you are the net control station of a daily HF net, what should you do if the frequency on which you normally meet is in use just before the net begins?

Conduct the net on a frequency 3 to 5 kHz away from the regular net frequency

Reduce your output power and start the net as usual

Increase your power output so that net participants will be able to hear you over the existing activity

Cancel the net for that day

B-002-04-07 (1)

If a net is about to begin on a frequency which you and another station are using, what should you do?

As a courtesy to the net, move to a different frequency

Increase your power output to ensure that all net participants can hear you

Transmit as long as possible on the frequency so that no other stations may use it

Turn off your radio

B-002-04-08 (4)

If propagation changes during your contact and you notice other activity on the same increasing interference from frequency, what should you do?

Tell the interfering stations to change frequency, since you were there first

Report the interference to your local Amateur Auxiliary Coordinator

Increase the output power of your transmitter to overcome the interference

Move your contact to another frequency

B-002-04-09 (1)

When selecting a single- sideband phone transmitting frequency, what minimum frequency separation from a contact in progress should you allow (between suppressed carriers) to minimize interference?

- Approximately 3 kHz
- 150 to 500 Hz
- Approximately 6 kHz
- Approximately 10 kHz

B-002-04-10 (2)

What is a band plan?

- A plan of operating schedules within an amateur band published by Industry Canada
- A guideline for using different operating modes within an amateur band
- A plan devised by a club to best use a frequency band during a contest
- A guideline for deviating from amateur frequency band allocations

B-002-04-11 (4)

Before transmitting, the first thing you should do is:

- ask if the frequency is occupied
- make an announcement on the frequency indicating that you intend to make a call
- decrease your receiver's volume
- listen carefully so as not to interrupt communications already in progress

B-002-05-01 (4)

What is the correct way to call "CQ" when using Morse code?

- Send the letters "CQ" three times, followed by "DE", followed by your call sign sent once
- Send the letters "CQ" ten times, followed by "DE", followed by your call sign sent once
- Send the letters "CQ" over and over
- Send the letters "CQ" three times, followed by "DE", followed by your call sign sent three times

B-002-05-02 (4)

How should you answer a Morse code "CQ" call?

- Send your call sign four times
- Send the other station's call sign once, followed by "DE", followed by your call sign four times
- Send your call sign followed by your name, station location and a signal report
- Send the other station's call sign twice, followed by "DE", followed by your call sign twice

B-002-05-03 (1)

At what speed should a Morse code CQ call be transmitted?

- At any speed which you can reliably receive
- At any speed below 5 WPM
- At the highest speed your keyer will operate
- At the highest speed at which you can control the keyer

B-002-05-04 (1)

What is the meaning of the procedural signal "CQ"?

Calling any station
Call on the quarter hour
An antenna is being tested
Only the station "CQ" should answer

B-002-05-05 (2)

What is the meaning of the procedural signal "DE"?

Received all correctly
From
Calling any station
Directional Emissions

B-002-05-06 (2)

What is the meaning of the procedural signal "K"?

End of message
Any station transmit
Called station only transmit
All received correctly

B-002-05-07 (2)

What is meant by the term "DX"?

Calling any station
Distant station
Go ahead
Best regards

B-002-05-08 (4)

What is the meaning of the term "73"?

Long distance
Love and kisses
Go ahead
Best regards

B-002-05-09 (2)

Which of the following describes full break-in telegraphy ?

Automatic keys are used to send Morse code instead of hand keys
Incoming signals are received between transmitted Morse dots
An operator must activate a manual send/receive switch before and after every transmission
Breaking stations send the Morse code prosign "BK"

B-002-05-10 (1)

When selecting a CW transmitting frequency, what minimum frequency separation from a contact in progress should you allow to minimize interference?

150 to 500 Hz

5 to 50 Hz

1 to 3 kHz

3 to 6 kHz

B-002-05-11 (2)

Good Morse telegraphy operators:

always give stations a good readability report

listen to the frequency to make sure that it is not in use before transmitting

save time by leaving out spaces between words

tune the transmitter using the operating antenna

B-002-06-01 (2)

What are "RST" signal reports?

A short way to describe transmitter power

A short way to describe signal reception

A short way to describe sunspot activity

A short way to describe ionospheric conditions

B-002-06-02 (4)

What does "RST" mean in a signal report?

Recovery, signal strength, tempo

Recovery, signal speed, tone

Readability, signal speed, tempo

Readability, signal strength, tone

B-002-06-03 (2)

What is the meaning of: "Your signal report is 5 7"?

Your signal is readable with considerable difficulty

Your signal is perfectly readable and moderately strong

Your signal is perfectly readable with near pure tone

Your signal is perfectly readable, but weak

B-002-06-04 (3)

What is the meaning of: "Your signal report is 3 3 "?

Your signal is unreadable, very weak in strength

The station is located at latitude 33 degrees

Your signal is readable with considerable difficulty and weak in strength

The contact is serial number 33

B-002-06-05 (3)

What is the meaning of: "Your signal report is 5 9 plus 20 dB"?

The bandwidth of your signal is 20 decibels above linearity

Repeat your transmission on a frequency 20 kHz higher

A relative signal-strength meter reading is 20 decibels greater than strength 9

Your signal strength has increased by a factor of 100

B-002-06-06 (3)

What is used to measure relative signal strength in a receiver?

An SSB meter

A signal deviation meter

An S meter

An RST meter

B-002-06-07 (2)

If the power output of a transmitter is increased by four times, how might a nearby receiver's S-meter reading change?

Increase by approximately four S units

Increase by approximately one S unit

Decrease by approximately four S units

Decrease by approximately one S unit

B-002-06-08 (3)

By how many times must the power output of a transmitter be increased to raise the S-meter reading on a nearby receiver from S8 to S9?

Approximately 5 times

Approximately 3 times

Approximately 4 times

Approximately 2 times

B-002-06-09 (1)

What does "RST 579" mean in a Morse code contact?

Your signal is perfectly readable, moderately strong, and with perfect tone

Your signal is perfectly readable, weak strength, and with perfect tone

Your signal is fairly readable, fair strength, and with perfect tone

Your signal is barely readable, moderately strong, and with faint ripple

B-002-06-10 (4)

What does "RST 459" mean in a Morse code contact?

Your signal is very readable, very strong, and with perfect tone

Your signal is barely readable, very weak, and with perfect tone

Your signal is moderately readable, very weak, and with hum on the tone

Your signal is quite readable, fair strength, and with perfect tone

B-002-06-11 (1)

What is the meaning of "Your signal report is 1 1"?

Your signal is unreadable, and barely perceptible

Your signal is 11 dB over S9

Your signal is first class in readability and first class in strength

Your signal is very readable and very strong

B-002-07-01 (4)

What is the meaning of the Q signal "QRS"?

Interference from static

Send "RST" report

Radio station location is:

Send more slowly

B-002-07-02 (3)

What is one meaning of the Q signal "QTH"?

Stop sending

My name is

My location is

Time here is

B-002-07-03 (1)

What is the proper Q signal to use to see if a frequency is in use before transmitting on CW?

QRL?

QRV?

QRU?

QRZ?

B-002-07-04 (3)

What is one meaning of the Q signal "QSY"?

Use more power

Send faster

Change frequency

Send more slowly

B-002-07-05 (2)

What is the meaning of the Q signal "QSO"?

A contact is ending

A contact is in progress

A conversation is desired

A contact is confirmed

B-002-07-06 (1)

What is the proper Q signal to use to ask if someone is calling you on CW?

QRZ?

QSL?

QRL?

QRT?

B-002-07-07 (4)

The signal "QRM" signifies:

I am troubled by static

your signals are fading

is my transmission being interfered with

I am being interfered with

B-002-07-08 (4)

The signal "QRN" means:

I am busy

are you troubled by static

I am being interfered with

I am troubled by static

B-002-07-09 (2)

The "Q signal" indicating that you want the other station to send slower is:

QRM

QRS

QRL

QRN

B-002-07-10 (3)

"Who is calling me" is denoted by the "Q signal":

QRK?

QRP?

QRZ?

QRM?

B-002-07-11 (1)

The "Q signal" which signifies "I will call you again" is:

QRX

QRZ

QRS

QRT

B-002-08-01 (4)

When may you use your amateur station to transmit an "SOS" or "MAYDAY"?

Never

Only at specific times (at 15 and 30 minutes after the hour)

Only in case of a severe weather watch

In a life-threatening distress situation

B-002-08-02 (1)

If you are in contact with another station and you hear an emergency call for help on your frequency, what should you do?

Immediately stop your contact and take the emergency call

Tell the calling station that the frequency is in use

Direct the calling station to the nearest emergency net frequency

Call your local police station and inform them of the emergency call

B-002-08-03 (3)

What is the proper distress call to use when operating phone?

Say "SOS" several times

Say "EMERGENCY" several times

Say "MAYDAY" several times

Say "HELP" several times

B-002-08-04 (3)

What is the proper distress call to use when operating CW?

CQD

QRRR

SOS

MAYDAY

B-002-08-05 (3)

What is the proper way to interrupt a repeater conversation to signal a distress call?

Say "EMERGENCY" three times

Say "SOS," then your call sign

Say "BREAK" twice, then your call sign

Say "HELP" as many times as it takes to get someone to answer

B-002-08-06 (3)

Why is it a good idea to have a way to operate your amateur station without using commercial AC power lines?

So you will comply with rules

So you may operate in contests where AC power is not allowed

So you may provide communications in an emergency

So you may use your station while mobile

B-002-08-07 (1)

What is the most important accessory to have for a hand-held radio in an emergency?

- Several sets of charged batteries
- An extra antenna
- A portable amplifier
- A microphone headset for hands-free operation

B-002-08-08 (3)

Which type of antenna would be a good choice as part of a portable HF amateur station that could be set up in case of an emergency?

- A parabolic dish
- A three-element Yagi
- A dipole
- A three-element quad

B-002-08-09 (4)

If you are communicating with another amateur station and hear a station in distress break in, what should you do?

- Continue your communication because you were on frequency first
- Change to a different frequency so the station in distress may have a clear channel to call for assistance
- Immediately cease all transmissions because stations in distress have emergency rights to the frequency
- Acknowledge the station in distress and determine its location and what assistance may be needed

B-002-08-10 (3)

In order of priority, a distress message comes before:

- no other messages
- a government priority message
- an urgency message
- a safety message

B-002-08-11 (1)

If you hear distress traffic and are unable to render assistance you should:

- maintain watch until you are certain that assistance will be forthcoming
- enter the details in the log book and take no further action
- take no action
- tell all other stations to cease transmitting

B-002-09-01 (2)

What is a "QSL card"?

- A Notice of Violation from Industry Canada
- A written proof of communication between two amateurs
- A postcard reminding you when your station license will expire
- A letter or postcard from an amateur pen pal

B-002-09-02 (4)

What is an azimuthal map?

A map projection centered on the North Pole

A map that shows the angle at which an amateur satellite crosses the equator

A map that shows the number of degrees longitude that an amateur satellite appears to move westward at the equator

A map projection centered on a particular location, used to determine the shortest path between points on the earth's surface

B-002-09-03 (4)

What is the most useful type of map to use when orienting a directional HF antenna toward a distant station?

Mercator

Polar projection

Topographical

Azimuthal

B-002-09-04 (4)

A directional antenna pointed in the long-path direction to another station is generally oriented how many degrees from its short-path heading?

45 degrees

90 degrees

270 degrees

180 degrees

B-002-09-05 (1)

What method is used by radio amateurs to provide written proof of communication between two amateur stations?

A signed post card listing contact date, time, frequency, mode and power, called a "QSL card"

A two-page letter containing a photograph of the operator

A radiogram sent over the CW traffic net

A packet message

B-002-09-06 (3)

You hear other local stations talking to radio amateurs in New Zealand but you don't hear those stations with your beam aimed on the normal compass bearing to New Zealand. What should you try?

Point your antenna toward Newington, CT

Point your antenna to the north

Point your beam 180 degrees away from that bearing and listen for the stations arriving on the "long-path"

Point your antenna to the south

B-002-09-07 (2)

Which statement about recording all contacts and unanswered "CQ calls" in a station logbook or computer log IS NOT correct?

- A log is important for recording contacts for operating awards
- A logbook is required by Industry Canada
- A well-kept log preserves your fondest amateur radio memories for years
- A log is important for handling neighbour interference complaints

B-002-09-08 (1)

Why would it be useful to have an azimuthal world map centred on the location of your station?

- Because it shows the compass bearing from your station to any place on earth, for antenna planning and pointing
- Because it looks impressive
- Because it shows the angle at which an amateur satellite crosses the equator
- Because it shows the number of degrees longitude that an amateur satellite moves west

B-002-09-09 (1)

Station logs and confirmation (QSL) cards are always kept in UTC (Universal Time Coordinated). Where is that time based?

- Greenwich, England
- Geneva, Switzerland
- Ottawa, Canada
- Newington, CT

B-002-09-10 (1)

When referring to contacts in the station log, what do the letters UTC mean?

- Universal Time Coordinated (formerly Greenwich Mean Time - GMT)
- Universal Time Constant
- Unlisted Telephone Call
- Unlimited Time Capsule

B-002-09-11 (3)

To set your station clock accurately to UTC, you could receive the most accurate time off the air from _____ ?

- A non-directional beacon station
- Your local television station
- CHU, WWV or WWVH
- Your local radio station