

# Amateur Radio Q-Codes

**The Q-Code** is a standardized collection of three-letter message encodings, also known as a Brevity Code, (Brevity Codes are used in amateur radio, maritime, aviation and military communications. The codes are designed to convey complex information with a few words or codes, all of which start with the letter "Q"), initially developed for commercial radiotelegraph communication, and later adopted by other radio services, especially amateur radio. Although Q-Codes were created when radio used Morse Code exclusively, they continued to be employed after the introduction of voice transmissions. To avoid confusion, transmitter call signs are restricted; while an embedded three-letter Q sequence may occur (for instance when requested by an amateur radio station dedicated to low-power operation), no country is ever issued an ITU prefix starting with "Q", (The International Telecommunication Union [ITU] allocates call sign prefixes for radio and television stations of all types). The codes in the range QAA–QNZ are reserved for aeronautical use; QOA–QQZ for maritime use and QRA–QUZ for all services.

## **Early Developments**

The original Q-Codes were created, about 1909, by the British government as a "list of abbreviations... prepared for the use of British ships and coast stations licensed by the Postmaster General. The Q-Codes facilitated communication between maritime radio operators speaking different languages, so they were soon adopted internationally. A total of forty-five Q-Codes appeared in the "List of Abbreviations to be used in Radio Communications", which was included in the Service Regulations affixed to the Third International Radiotelegraph Convention in London (The Convention was signed on July 5, 1912, and became effective July 1, 1913.)

## **Later Usage**

Over the years, modifications were made to the original Q-Codes to reflect changes in radio practice. Over a hundred Q-Codes were listed in the *Post Office Handbook for Radio Operators* in the 1970s and cover subjects such as meteorology, radio direction finding, radio procedures, search and rescue, and so on.

Some Q-Codes are also used in aviation and some in maritime. (A subset of Q-Codes is used by the Miami-Dade County, Florida local government for law enforcement and fire rescue communications, one of the few instances where Q-codes are used in ground voice communication.) Many military and other organizations that use Morse Code have adopted additional codes, including the Z-Code used by most European and NATO countries. Used in their formal "question/answer" sense, the meaning of a Q-code varies depending on whether or not the individual Q-code is sent as a question or an answer. For example, the message "QRP?" means "Shall I decrease transmitter power?", and a reply of "QRP" means "Yes, decrease your transmitter power". This structured use of Q-codes is fairly rare and now mainly limited to amateur radio and military Morse Code (CW) traffic networks.

## **Breakdown by Service**

- QAA to QNZ – Assigned by the International Civil Aviation Organization (ICAO).
- QOA to QQZ – Reserved for the Maritime Services.
- QRA to QUZ – Assigned by the International Telecommunications Union (ITU).
- QVA–QZZ – Are not allocated.

## **Amateur Radio**

Selected Q-Codes were soon adopted by Amateur Radio Operators. In December, 1915, the American Radio Relay League (ARRL) began publication of a magazine titled “OST”, named after the Q-Code for "General call to all stations". In Amateur Radio, the Q-Codes were originally used in Morse Code transmissions to shorten lengthy phrases and were followed by a Morse Code question mark (··---··) if the phrase was a question.

Q-Codes are commonly used in voice communications as shorthand nouns, verbs, and adjectives making up phrases. For example, an Amateur Radio Operator will complain about QRM (man-made interference), or tell another operator that there is "QSB on the signal"; "to QSY" is to change your operating frequency.

They can still be heard on HF communications but are not normally used on UHF and VHF communications. The reason is quite simple. Many radio amateurs have become certified purely to be volunteer communicators for their local emergency programs and consequently are not very familiar with the Q-Codes. Recently Q-Codes have again been used more for Morse Code communications than for voice communications.

## Q-Codes Applicable for Use in Amateur Radio

Code	Question	Answer or Statement
QRA	What is the name (or call sign) of your station?	The name (or call sign) of my station is ...
QRG	Will you tell me my exact frequency (or that of ...)?	Your exact frequency (or that of ...) is ... kHz (or MHz).
QRH	Does my frequency vary?	Your frequency varies.
QRI	How is the tone of my transmission?	The tone of your transmission is (1. Good; 2. Variable; 3. Bad)
QRJ	How many voice contacts do you want to make?	I want to make ... voice contacts.
QRK	What is the readability of my signals (or those of ...)?	The readability of your signals (or those of ...) is ... (1 to 5).
QRL	Are you busy?	I am busy. (or I am busy with ... ) Please do not interfere.
QRM	Do you have interference?	I have interference.
QRN	Are you troubled by static?	I am troubled by static.
QRO	Shall I increase power?	Increase power.
QRP	Shall I decrease power?	Decrease power.
QRQ	Shall I send faster?	Send faster (... wpm)
QRS	Shall I send more slowly?	Send more slowly (... wpm)
QRT	Shall I cease or suspend operation?/ shutoff the radio	I am suspending operation. /shutting off the radio
QRU	Have you anything for me?	I have nothing for you.
QRV	Are you ready?	I am ready.
QRW	Shall I inform ... that you are calling him on ... kHz (or MHz)?	Please inform ... that I am calling him on ... kHz (or MHz).
QRX	When will you call me again?	I will call you again at ... (hours) on ... kHz (or MHz)
QRZ	Who is calling me?	You are being called by ... on ... kHz (or MHz)
QSA	What is the strength of my signals (or those of ... )?	The strength of your signals (or those of ...) is ... (1 to 5).
QSB	Are my signals fading?	Your signals are fading.
QSD	Is my keying defective?	Your keying is defective.
QSG	Shall I send ... telegrams (messages) at a time?	Send ... telegrams (messages) at a time.
QSK	Can you hear me between your signals?	I can hear you between my signals.
QSL	Can you acknowledge receipt?	I am acknowledging receipt.
QSM	Shall I repeat the last telegram (message) which I sent you, or some previous telegram (message)?	Repeat the last telegram (message) which you sent me (or telegram(s) (message(s)) numbers(s) ...).
QSN	Did you hear me (or ... (call sign)) on .. kHz (or MHz)?	I did hear you (or ... (call sign)) on ... kHz (or MHz).
QSO	Can you communicate with ... direct or by relay?	I can communicate with ... direct (or by relay through ...).
QSP	Will you relay a message to ...?	I will relay a message to ... .
QSR	Do you want me to repeat my call?	Please repeat your call; I did not hear you.
QSS	What working frequency will you use?	I will use the working frequency ... kHz (or MHz).
QST	-	Here is a broadcast message to all amateurs.

QSU	Shall I send or reply on this frequency (or on ... kHz (or MHz))?	Send or reply on this frequency (or on ... kHz (or MHz)).
QSW	Will you send on this frequency (or on ... kHz (or MHz))?	I am going to send on this frequency (or on ... kHz (or MHz)).
QSX	Will you listen to ... (call sign(s) on ... kHz (or MHz))?	I am listening to ... (call sign(s) on ... kHz (or MHz))
QSY	Shall I change to transmission on another frequency?	Change to transmission on another frequency (or on ... kHz (or MHz)).
QSZ	Shall I send each word or group more than once?	Send each word or group twice (or ... times).
QTA	Shall I cancel telegram (message) No. ... as if it had not been sent?	Cancel telegram (message) No. ... as if it had not been sent.
QTC	How many telegrams (messages) have you to send?	I have ... telegrams (messages) for you (or for ...).
QTH	What is your position in latitude and longitude (or according to any other indication)?	My position is ... latitude...longitude
QTR	What is the correct time?	The correct time is ... hours
QTU	At what times are you operating?	I am operating from ... to ... hours.
QTX	Will you keep your station open for further communication with me until further notice (or until ... hours)?	I will keep my station open for further communication with you until further notice (or until ... hours).
QUA	Have you news of ... (call sign)?	Here is news of ... (call sign).
QUC	What is the number (or other indication) of the last message you received from me (or from ... (call sign))?	The number (or other indication) of the last message I received from you (or from ... (call sign)) is ...
QUD	Have you received the urgency signal sent by ... (call sign of mobile station)?	I have received the urgency signal sent by ... (call sign of mobile station) at ... hours.
QUE	Can you speak in ... (language), - with interpreter if necessary; if so, on what frequencies?	I can speak in ... (language) on ... kHz (or MHz).
QUF	Have you received the distress signal sent by ... (call sign of mobile station)?	I have received the distress signal sent by ... (call sign of mobile station) at ... hours.