

The Technical Minute

CVARC

Q – Signals

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Introduction

- Q codes are a standardized collection of three-letter encodings, initially developed for commercial *telegraph* communication, and then adopted by other radio services
- Example, an operator will complain about QRM (man-made interference), or tell another operator that there is "QSB on the signal"; "to QSY" is to change the operating frequency

History

- The original Q codes were created in England in 1909, for British ships and coast stations
- The Q codes facilitated communication between radio operators speaking different languages and adopted internationally
- A total of forty-five Q codes was included in the Service Regulations affixed to the Third International Radiotelegraph Convention in London (July 1, 1913)

History

- The Q codes were adopted by amateur radio operators
- In December, 1915, the ARRL began publication of *QST*, named after the Q code for "General call to all stations"
- In amateur radio, the Q codes were originally used in Morse code and were followed by a Morse code question mark (··---··) if the phrase was a question

Code Ranges

- QAA–QNZ code range includes phrases applicable primarily to the aeronautical service
- QOA–QQZ code range is reserved for the maritime service
- QRA–QUZ code range includes phrases applicable to all services and is allocated to the ITU
- QVA–QZZ are not allocated

Code Ranges

- Q codes used in aviation, include QNH and QFE, referring to certain altimeter settings
- A subset of Q codes is used by local government for law enforcement and fire rescue communications

Examples

- QRL? is the accepted form of the question, "Is this frequency in use (or busy)?", the reply is typically "C", "R" or "Y" which, are "Confirm", "Roger" or "Yes."
- There are also a few unofficial and humorous codes in use, such as QLF ("try sending with your LEFT foot")
- QNB?, is supposed to mean "How many buttons does your radio have?" A reply of the form QNB 45/15 means "45, and I know what 15 of them do"
- QSJ is sometimes used to refer to the cost of something

Examples

- QSO is a conversation or contact via amateur radio
- QSL cards are collected as confirmation of having received the signal of a particular station
- In transmitting Morse code, if the speed is too fast and the receiving operator cannot copy the code at that speed, that operator may send "QRS", the request to "please slow down." A courteous sender will slow down

Z Codes

- The military and other organizations have adopted additional codes, such as the Z code used by most European and NATO countries
- for example, "ZBW 2", which means "change to backup frequency number 2"

Z Code

- My favorite is ZBM2 – please put a competent operator on the circuit



References

- The codes can be found on the ARRL web site
- The codes can also be found on iPhone apps Ham-I-Am and HamLog

Careful – we don't use Q signals in emergency communications.

Answer to Trivia Corner Question

- The first amateur radio satellite was launched in 12/1961
- It covered the 2 meter, 10 meter and 70 cm bands