



Fall is here!

The Aero Aerial

The Newsletter of the Aero Amateur Radio Club
Middle River, MD
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Editor Georgeann Vleck KB3PGN

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Website: <http://w3pga.org>

Facebook: <https://www.facebook.com/pages/Aero-Amateur-Radio-Club/719248141439348>

About the Aero Amateur Radio Club

Meetings

The Aero Amateur Radio Club meets at 7:30 pm on the first and third Wednesdays of the month at Essex SkyPark, 1401 Diffendall Road, Essex. Meetings begin at 7:30 p.m. local time. Meetings are canceled if Baltimore County Public Schools are closed or dismiss early.

Repeaters

W3PGA **2 M :** INPUT : 147.84 MHz, OUTPUT : 147.24 MHz, PL 123.0
W3PGA **70 Cm:** INPUT : 444.575 MHz, OUTPUT : 449.575 MHz, PL123.0
W3JEH **1.25 M:** INPUT : 222.24 MHz, OUTPUT : 223.84 MHz

Club Nets

Second Wednesday Net – 10 Meters (28.445 MHz) @ 8 p.m. Local Time

Fourth Wednesday Net – 2 Meters (147.24 MHz Repeater) @ 8 p.m. Local Time

Fifth Wednesday Net – 70 Centimeters (449.575 MHz Repeater) @ 8 p.m. Local Time

Radio License Exams

The Aero Amateur Radio Club sponsors Amateur Radio License Exams with the ARRL VEC. Examination sessions are throughout the year. Walk-ins are welcome; arrive no later than 30 minutes after start time. \$15 charge.

2018 Examination Schedule

Time:			
Dates:			
Where:			

White Marsh Library, 8133 Sandpiper Circle, White Marsh, MD

Contact: Patricia Stone AC3F, email: ac3f@juno.com, landline: 410-687-7209

LOCAL AREA NETS

Day	Time	Freq. (MHz)	Net Name
Daily	9 – 10 am	145.330	Oriole Net
Daily	6 pm	3.820	Maryland Emergency Phone Net
Daily	6:30 – 7 pm	145.330 no PL	Balto. Traffic Net (b/u 146.670 PL 107.2)
Daily	7 pm & 10 pm	3.643	MD/DC/DE Traffic Net
2 nd Tue	7:30 pm	146.670	Baltimore County RACES Net
2 nd Wed	8 pm	28.445	Aero ARC Net
4 th Wed	8 pm	147.240	Aero ARC Net
5 th Wed	8 pm	449.575	Aero ARC Net
Fridays	7:30 pm	145.330	Back in the Day Net
When activated by NOAA		147.030	SkyWarn (primary)

NET REPORTS

9/12/18: 28.445 MHz, 20:00 to 20:28 Local.

W3PGA NCS Joe Essex
W3JEH Ron Perry Hall

There were 2 members on the net.

9-27-18: 2 meter (147.240) simplex net tonight was canceled due to the thunderstorms moving thru the area.

Disconnect and take care.



VE CORNER by Pat Stone, AC3F

No new information available.

UPCOMING HAMFESTS and EVENTS

Saturday, October 6, 2018: 6th Annual TailgateFest

Sponsor: St. Mary's County Amateur Radio Association

Hollywood Volunteer Fire Dept. Bingo Hall, 24801 Three Notch Rd. (MD Rte 235), Hollywood, MD 20636

Talk-In: 146.64(-) PL 146.2

Website: <http://www.k3hki.org/>

Contact: Chuck Gantz, K3WJX, Phone: 240-925-1105, Email: k3wjx@yahoo.com

Sunday, October 7, 2018: CARAfest

Howard County (Maryland) Fairgrounds

Sponsor: Columbia Amateur Radio Association

For more info, click on: [<http://www.carafest.org/>]

Sunday, October 25, 2018: Mason Dixon Hamfest

Upperco, MD

Sponsor: Carroll County Amateur Radio Club

Website: <https://k3pzn.net/>

Saturday, December 8, 2018: Third Annual SantaFest

American Legion Youth Camp, Cheltenham, MD

Sponsor: Prince George's County Emergency Radio Association & American Legion

For more info, click on: [<http://pgares.org/santafest/>]

You may view upcoming Hamfests at: <http://www.arrl.org/hamfests-and-conventions-calendar>

Q codes

From Wikipedia, the free encyclopedia

The **Q code** is a standardized collection of three-letter message encodings, also known as a [brevity code](#), 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 codes in the range QAA–QNZ are reserved for aeronautical use; QOA–QQZ for maritime use and QRA–QUZ for all services.

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Early developments

The original Q codes were created, *circa* 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](#)".^[citation needed] 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.)

The following table reviews a sample of the all-services Q codes adopted by the 1912 Convention:

First Twelve Q Codes Listed in the 1912 International Radiotelegraph Convention Regulations

Code	Question	Answer or Notice
QRA	What ship or coast station is that?	This is ____.
QRB	What is your distance?	My distance is ____.
QRC	What is your true bearing?	My true bearing is ____ degrees.
QRD	Where are you bound for?	I am bound for ____.
QRF	Where are you bound from?	I am bound from ____.
QRG	What line do you belong to?	I belong to the ____ Line.
QRH	What is your wavelength in meters?	My wavelength is ____ meters.
QRJ	How many words have you to send?	I have ____ words to send.
QRK	How do you receive me?	I am receiving (1–5) where 1 is unreadable and 5 is perfect.
QRL	Are you busy?	I am busy.
QRM	Are you being interfered with?	I am being interfered with.
QRN	Are the atmospherics strong?	Atmospherics are very strong.

Later usage

Over the years, modifications were made to the original Q codes to reflect changes in radio practice. In the original international list, QSW/QSX stood for "Shall I increase/decrease my spark frequency?" However, in the 1920s, [spark-gap transmitters](#) were banned in the United States, rendering the original meaning of those Q codes obsolete. By the 1970s, over a hundred Q codes were listed in the *Post Office Handbook for Radio Operators* covering subjects ranging from meteorology to radio direction finding, radio procedures, search and rescue, and so on.

Some Q codes are also used in [aviation](#), in particular QNE, [QNH](#) and [QFE](#), referring to certain altimeter settings. These codes are used in radiotelephone conversations with [air traffic control](#) as unambiguous shorthand, where safety and efficiency are of vital importance. 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.^[1]

The QAA–QNZ code range includes phrases applicable primarily to the aeronautical service,^[2] as defined by the [International Civil Aviation Organisation](#).^[3] The QOA–QQZ code range is reserved for the maritime service. The QRA–QUZ code range includes phrases applicable to all services and is allocated to the

[International Telecommunications Union](#)^[4] QVA–QZZ are not allocated.^[5] Many codes have no immediate applicability outside one individual service, such as maritime operation (many QO or QU series codes) or [radioteletype](#) operation (the QJ series).^[6]

Many military and other organizations that use Morse code have adopted additional codes, including the [Z code](#) used by most European and [NATO](#) countries. The Z code adds commands and questions adapted for military radio transmissions, for example, "ZBW 2", which means "change to backup frequency number 2", and "ZNB abc", which means "my checksum is abc, what is yours?"^[7]

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 – For the Maritime Services.
- QRA to QUZ – Assigned by the International Telecommunications Union (ITU).

Amateur radio

Selected Q codes were soon adopted by [amateur radio operators](#). In December 1915, the [American Radio Relay League](#) began publication of a magazine titled [QST](#), 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" (fading); "to QSY" is to change your operating frequency, or to break in on a conversation QSK is often used even on VHF and UHF frequencies. (See also [Informal usage](#), below.)

Q codes applicable for use in amateur radio[edit]

Code	Question	Answer or Statement
QLE	What is your expected signal?	The expected signal is low...
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.
<u>QRP</u>	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). Please standby / I will call you again at ... (hours) on ... kHz (or MHz)
QRX	Shall I standby / When will you call me again?	You are being called by ... on ... kHz (or MHz)
QRZ	Who is calling me?	The strength of your signals (or those of ...) is ... (1 to 5).
QSA	What is the strength of my signals (or those of ...)?	Your signals are fading.
QSB	Are my signals fading?	Your keying is defective.
QSD	Is my keying defective?	Send ... telegrams (messages) at a time.
QSG	Shall I send ... telegrams (messages) at a time?	I can hear you between my signals.
QSK	Can you hear me between your signals?	I am acknowledging receipt.
<u>QSL</u>	Can you acknowledge receipt?	Repeat the last telegram (message) which you sent me (or telegram(s) (message(s)) numbers(s) ...).
QSM	Shall I repeat the last telegram (message) which I sent you, or some previous telegram (message)?	I did hear you (or ... (call sign)) on ... kHz (or MHz).
QSN	Did you hear me (or ... (call sign)) on .. kHz (or MHz)?	I can communicate with ... direct (or by relay through ...).
<u>QSO</u>	Can you communicate with ... direct or by relay?	I will relay a message to
QSP	Will you relay a message to ...?	Please repeat your call; I did not hear you.
QSR	Do you want me to repeat my call?	I will use the working frequency ... kHz (or MHz).
QSS	What working frequency will you use?	Here is a broadcast message to all amateurs.
QST	-	Send or reply on this frequency (or on ... kHz (or MHz)).
QSU	Shall I send or reply on this frequency (or on ... kHz (or MHz))?	I am going to send on this frequency (or on ... kHz (or MHz)).
QSW	Will you send on this frequency (or on ... kHz (or MHz))?	I am listening to ... (call sign(s) on ... kHz (or MHz))
QSX	Will you listen to ... (call sign(s) on ... kHz (or MHz))?	Change to transmission on another frequency (or on ... kHz (or MHz)).
QSY	Shall I change to transmission on another frequency?	

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?
QTC	How many telegrams (messages) have you to send?
QTH	What is your position in latitude and longitude (or according to any other indication)?
QTR	What is the correct time?
Q TU	At what times are you operating? Will you keep your station open for further communication with me until further notice (or until ... hours)?
QUA	Have you news of ... (call sign)? What is the number (or other indication) of the last message you received from me (or from ... (call sign))?
QU D	Have you received the urgency signal sent by ... (call sign of mobile station)?
QUE	Can you speak in ... (language), – with interpreter if necessary; if so, on what frequencies?
QUF	Have you received the distress signal sent by ... (call sign of mobile station)?
Cancel telegram (message) No. ... as if it had not been sent.	
	I have ... telegrams (messages) for you (or for ...).
	My position is ... latitude...longitude
	The correct time is ... hours
	I am operating from ... to ... hours.
	I will keep my station open for further communication with you until further notice (or until ... hours).
	Here is news of ... (call sign).
	The number (or other indication) of the last message I received from you (or from ... (call sign)) is ...
	I have received the urgency signal sent by ... (call sign of mobile station) at ... hours.
	I can speak in ... (language) on ... kHz (or MHz).
	I have received the distress signal sent by ... (call sign of mobile station) at ... hours.

Note : "KK" is often used at the end of a reply to a Q Code to mean "OK" or "Acknowledged". This practice predates amateur radio as telegraph operators in the late 19th Century are known to have used it.

Informal usage

International Morse Code

1. The length of a dot is one unit.
2. A dash is three units.
3. The space between parts of the same letter is one unit.
4. The space between letters is three units.
5. The space between words is seven units.

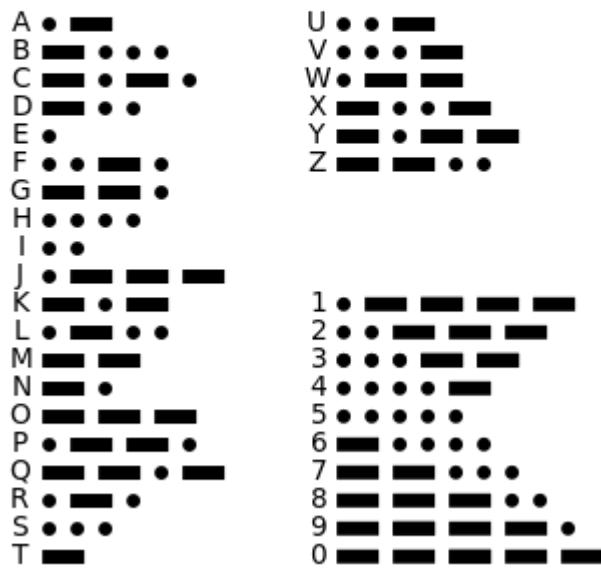


Chart of the Morse code letters and numerals.^[8]

Some of the common usages of amateur radio codes, including in voice and writing, vary somewhat from their formal, official sense. Humorous and unofficial codes may be also be used.

QSK – "I can hear you during my transmission" – refers to a particular mode of Morse code operating in which the receiver is quickly enabled during the spaces between the dits and dahs, which allows another operator to interrupt transmissions. Many modern [transceivers](#) incorporate this function, sometimes referred to as *full break-in* as against *semi-break-in* in which there is a short delay before the transceiver goes to receive.^[9]

QSY – "Change to transmission on another frequency"; colloquially, "move [=change address]". E.g., "When did [GKB](#) QSY from Northolt to Portishead....?"^[10]

QTH – "My location is..."; colloquially in voice or writing, "location". E.g., "The OCF *[antenna]* is an interesting build but at my QTH a disappointing performer."^[11]

Aviation

The majority of the Q codes have slipped out of common use; for example today reports such as QAU ("I am about to jettison fuel") and QAZ ("I am flying in a storm") would be voice or computerized transmissions. But several remain part of the standard [ICAO](#) radiotelephony phraseology in aviation.

Altimeter Settings

Code	Meaning	Sample use
QFE	Atmospheric pressure at a specified datum such as airfield runway threshold. When set, the altimeter reads the height above the specified datum.	Runway in use 22 Left, QFE 990

millibars

OFF	Atmospheric pressure at a place, reduced to MSL using the actual temperature at the time of observation as the mean temperature.
ONE	Atmospheric pressure at sea level in the International Standard Atmosphere (ISA), equal to 1013.25 mbar or hPa and used as reference for measuring the pressure altitude . When flight levels are used as an indication of altitude, 1013.25 hPa is used as mean sea level (QNH).
QNH	Atmospheric pressure at mean sea level (may be either a local, measured pressure or a regional forecast pressure (RPS)). When set on the altimeter it reads altitude. QNH

Radio Navigation

Code	Meaning	Sample use
QDM	Magnetic heading <i>to</i> a station	(callsign) request QDM (callsign) ^[12]
QDL	Series of bearings taken at regular intervals	
QDR	Magnetic bearing <i>from</i> a station	(callsign) request QDR (callsign) ^[12]
QFU	Magnetic bearing of the runway in use	Runway 22 in use, QFU 220 ^[13]
QGE	Distance	
QGH	Controlled Descent through Clouds (Royal Air Force use)	
QTE	True bearing <i>from</i> a station	(callsign) request QTE (callsign) ^[12]
QTF	Position in relation to a point of reference or in latitude and longitude	
QUJ	True heading <i>to</i> a station	

Radio Procedures

Code	Meaning	Sample use
QGH	controller-interpreted DF let-down procedure, on UHF or VHF ^[14]	

Maritime

Q signals are not substantially used in the maritime service. Morse code is now very rarely used for maritime communications, but in isolated maritime regions like Antarctica and the South Pacific the use of Q Codes continues. Q Codes still work when HF voice circuits are not possible due to atmospheric and the nearest vessel is one ionospheric hop away.

See also

[Z code](#)

- [ACP-131](#)
- [Ten-code](#)

- [Prosigns for Morse code](#)
- [International Code of Signals](#)
- [International maritime signal flags](#)

References

1. *National Communications Magazine*. [Radio codes & signals – Florida](#). Retrieved 2010-01-30.
2. [The Q Code](#)
3. [ICAO PANS](#) (Procedures for Air Navigation Services) Doc 8400: The ICAO Q Code.
4. http://www.globalsecurity.org/military/library/policy/navy/nrtc/14244_ch4.pdf
5. www.portland-amateur-radio-club.org.uk – Web site hosted by Freeola.com
6. <http://kyalami.homeip.net/qcodes.htm>
7. [ACP 131\(E\)](#), Communications Instructions – Operating Signals, March 1997. Chapter 2 contains a full list of 'Q' codes
8. ["International Morse code Recommendation ITU-R M.1677-1"](#). *itu.int*. International Telecommunication Union. October 2009. Retrieved 23 December 2011.
9. ["Communications Instructions Operating Signals"](#). [Combined Communications-Electronics Board](#). April 2006. Retrieved 2014-05-16.
10. [Post in the uk.radio.amateur newsgroup](#) Dated 2010-08-21. Accessed 2013-08-04.
11. [Has anyone used a tuner with an Off Centre Fed Dipole? How well did it work?](#) Article on Amateur Radio Wiki. Accessed 2013-08-04.
12. [b c CAP 413 Radiotelephony Manual 21 2 complete.pdf](#), p.12
13. [QFU on The Free Dictionary](#)
14. [QGH on The Free Dictionary](#)

External links

- [Handbook for Wireless Telegraph Operators](#), October, 1909.
- [Radio Laws and Regulations of the United States: Edition July 27, 1914](#). (Includes the 1912 London Radiotelegraphic Convention)
- [List of Q codes](#)
- [A resource for Morse Code operation in the amateur radio hobby](#)

Source: http://en.wikipedia.org/wiki/Q_code



From the Skies over Mt. Essex

SKY Events for October 2018

Oct 2nd -- Last Quarter Moon

Oct 4th – Moon is 1.2° s of the Beehive Cluster (M44), First Earth satellite launched by the USSR in 1957.

Oct 5th – First American woman to walk in space, STS41G in 1984.

Oct 7th – USSR's Luna 3 photographed the Moon's far side in 1959.

Oct 8th – New Moon

Oct 13th – Zodiacal Light visible N Lat in East before morning twilight, next 2 weeks.

Oct 16th - First Quarter Moon

Oct 20th – Orionid meteor shower approx. 20 per hr.

Oct 22nd – First recorded solar eclipse (China) 2,136 B.C.

Oct 23rd – *Uranus is at opposition.*

Oct 24th – Full Moon, Colonial Full Moon name is “Hunter’s Moon” and Cherokee as “Harvest Moon.”

Oct 31st – Last Quarter Moon

Planet Lookout at mid-Month

Sunrise 07:16 EDT and Sunset 18:27 EDT

Mercury – Evening- Rises 08:41 Set 19:03 Magnitude -0.3 Size 5.0 Arc Seconds

Venus - Evening. Rise 08:58 Set 18:32 Magnitude -4.3 Size 57.8 Arc Seconds

Mars - Evening. Rise 15:39 Set 01:27 Magnitude -1.0 Size 13.7 Arc Seconds

Jupiter - Evening. Rise 10:00 Set 20:00 Magnitude -1.8 Size 31.8 Arc Seconds

Saturn - Evening. Rise 13:03 Set 22:27 Magnitude 0.5 Size 16.1 Arc Seconds

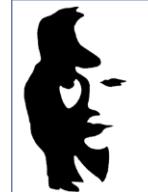
Uranus - Evening. Rise 18:43 Set 08:06 Magnitude +5.7 Size 3.6 Arc Seconds

Neptune - Evening. Rise 16:52 Set 04:13 Magnitude +7.8 Size 2.3 Arc Seconds

Do you see what I see?

Apophenia is the spontaneous perception of connections and meaningfulness of unrelated phenomena. The term was coined by German neurologist and psychiatrist Klaus Conrad (1905-1961).

What do you see! A musician playing a sax or a woman?



A Dragon? How about a Fish?

When you look at the moon, clouds, plants what do you see? When looking at the Moon, do you see a cow? Rabbit? Woman? or a Man? How about the sky, do you see a Fisk in the clouds, a President, a Swan? What about plants, Does a tree spell anything for you “LOVE”?

Lunar Club Sketches

