

Radio Amateur Q-Codes

Given below are a number of Q signals whose meanings most often need to be expressed with brevity and clarity in amateur work. (Q abbreviations take the form of questions only when each is sent followed by a question mark.)

QR....

QRA	What is the name of your station?	The name of my station is...
QRB	How far approximately are you from my station?	My approximate distance to your station is...?
QRD	Where are you bound to and where are you from?	I am bound for ... from ...
QRG	Will you tell me my exact frequency (or that of...)?	Your exact frequency (or that of...) is ... Khz.
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	Are you receiving me badly?	I cannot receive you. Your signals are too weak.
QRK	What is the intelligibility of my signals (or those of...)? (1=Bad 2=Poor 3=Fair 4=Good 5=Excellent)	The intelligibility of your signals (or those of...) is ...
QRL	Are you busy?	I am busy (or I am busy with...). Please do not interfere.
QRM	Is my transmission being interfered with? (1=Nil 2=Slightly 3=Moderately 4=Severely 5=Extremely.)	Your transmission is being interfered with...
QRN	Are you troubled by static?	I am troubled by static... (1-5 as under QRM)
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 stop sending?	Stop sending.
QRU	Have you anything for me?	I have nothing for you.
QRV	Are you ready?	I am ready.
QRX	When will you call me again?	I will call you again at ... hours (on ... Khz).
QRY	What is my turn?	Your turn is numbered ...
QRZ	Who is calling me?	You are being called by... (on ... Khz).

QS....

QSA	What is the strength of my signals (or those of...)? 1=Scarcely perceptible 2=Weak 3=Fairly good 4=Good 5=Very good	The strength of your signals (or those of...) is...
QSB	Are my signals fading?	Your signals are fading.
QSD	Is my keying defective?	Your keying is defective.
QSG	Shall I send ... messages at a time?	Send ... messages at a time.
QSK	Can you hear me between your signals and if so can I break in on your transmission? I can hear you between my signals; break in on my transmission.	
QSL	Can you acknowledge receipt?	I am acknowledging receipt.
QSM	Shall I repeat the last message which I sent you, or some previous message? Repeat the last message which you sent me [or message(s) number(s)...].	
QSN	Did you hear me (or...) on... Khz?	I did hear you (or...) on Khz.
QSO	Can you communicate with... direct or by relay?	I can communicate with... direct (or by relay through...).
QSP	Will you relay to...?	I will relay to...
QST	General call preceding a message addressed to all amateurs and ARRL members. This is in effect "CQ ARRL."	
QSU	Shall I send or reply on this frequency (or on... Khz)?	Send or reply on this frequency (or ... Khz).
QSV	Shall I send a series of V's on this freq. (or on ... Khz)?	Send a series of V's on this frequency (or on ... Khz).
QSW	Will you send on this frequency (or on ... Khz)?	I am going to send on this frequency (or on ... Khz).
QSX	Will you listen to ... on ... Khz?	I am listening to ... on ... Khz.
QSY	Shall I change to transmission on another frequency?	Change to transmission on another frequency (or on ... Khz).
QSZ	Shall I send each word or group more than once?	Send each word or group twice (or ... times).

QT....

QTA	Shall I cancel message number...?	Cancel message number...
QTB	Do you agree with my counting of words? I do not agree with your counting of words. I will repeat	the first letter or digit of each word or group.
QTC	How many messages have you to send?	I have... messages for you (or for...).
QTH	What is your location?	My location is...
QTR	What is the correct time?	The time is...

Phonetic Alphabet

NAO Phonetic Alphabet		
A	=	Alpha
B	=	Bravo
C	=	Charlie
D	=	Delta
E	=	Echo
F	=	Foxtrot
G	=	Golf
H	=	Hotel
I	=	India
J	=	Juliet
K	=	Kilo
L	=	Lima
M	=	Mike
N	=	November
O	=	Oscar
P	=	Papa
Q	=	Quebec
R	=	Romeo
S	=	Sierra
T	=	Tango
U	=	Uniform
V	=	Victor
W	=	Whiskey
X	=	X-ray
Y	=	Yankee
Z	=	Zulu

Western Union Phonetic Alphabet		
A	=	Adams
B	=	Boston
C	=	Chicago
D	=	Denver
E	=	Easy
F	=	Frank
G	=	George
H	=	Henry
I	=	Ida
J	=	John
K	=	King
L	=	Lincoln
M	=	Mary
N	=	New York
O	=	Ocean
P	=	Peter
Q	=	Queen
R	=	Roger
S	=	Sugar
T	=	Thomas
U	=	Union
V	=	Victor
W	=	William
X	=	X-ray
Y	=	Young
Z	=	Zero

The RST System

The RST System of Signal Reporting has been used for years (circa 1934) as a shorthand method of reporting **Readability, Signal Strength & Tone** (when using Morse code) (i.e., quality of the CW tone). For voice contacts only the R and S are used.

The S component is usually the same as your S-Meter reading though most S-Meters aren't calibrated correctly to track the RST System. The RST is also reported on QSL Cards and must be filled in correctly -- e.g., a 569 report for a Voice Contact is invalid. Note that many DX operations and contest stations merely report 59(9) as a convenience to avoid having to log each of the real reports. A questionable practice but a fact of DXing / Contesting.

RST SYSTEM

Readability:	Signal Strength:	Tone: (for Morse code contacts only)
1 - Unreadable. 2 - Barely readable, occasional words heard. 3 - Readable with great difficulty. 4 - Readable with practically no difficulty 5 - Perfectly readable	1 - FAINT Signals, barely perceptible. 2 - VERY WEAK signals. 3 - WEAK signals. 4 - FAIR signals. 5 - FAIRLY GOOD signals. 6 - GOOD signals. 7 - MODERATELY STRONG signals. 8 - STRONG signals. 9 - VERY STRONG signals.	1 - Sixty Hz AC or less, very rough and broad. 2 - Very rough AC, very harsh and broad. 3 - Rough AC tone, rectified but not filtered. 4 - Rough note, some trace of filtering. 5 - Strong ripple modulated. 6 - Ripple modulated tone. 7 - Trace of ripple on tone 8 - Slight trace of ripple on tone. 9 - Perfect tone.

Morse Code Alphabet:

A	didah	A	.-	N	dahdit	N	..
B	dahdididit	B	...-	O	dahdahdah	O	---
C	dahdidahdit	C	-.-	P	didahdahdit	P	..-
D	dahdidit	D	..-	Q	dahdahdidah	Q	..-
E	dit	E	.	R	didahdit	R	..-
F	dididahdit	F	..-	S	dididit	S	...
G	dahdahdit	G	..-	T	dah	T	-
H	didididit	H	....	U	dididah	U	..-
I	didit	I	..	V	didididah	V	...-
J	didahdahdah	J	.-	W	didahdah	W	..-
K	dahdidah	K	.-	X	dahdididah	X	..-
L	didahdidit	L	..-	Y	dahdidahdah	Y	..-
M	dahdah	M	--	Z	dahdahdidit	Z	..-

Numerics:

1	didahdahdahdah	1	..----	6	dahdidididit	6	..----
2	dididahdahdah	2	..----	7	dahdahdididit	7	..----
3	didididahdah	3	...--	8	dahdahdahdidit	8	...--
4	dididididah	4	....-	9	dahdahdahdahdit	9-
5	dididididit	5	.....	0	dahdahdahdahdah	0	.....

Punctuations:

Period	[.]	didahdidahdidah	..-.-	AAA
Comma	[,]	dahdahdididahdah	..-.-	MIM
Question mark	[?]	dididahdahdit	...--	IMI also request for repeat
Error		dididididididit	.....	HH
Hyphen or Dash	[-]	dahdididididah	..-.-	DU
Double dash	[=]	dahdidididah	..-.-	BT
Colon	[:]	dahdahdahdididit	...--	OS
Semicolon	[;]	dahdidahdidahdit	..-.-	KR
Left parenthesis	[(	dahdidahdahdit	..-.-	KN
Right parenthesis	[)]	dahdidahdahdidah	..-.-	KK
Fraction bar	[/]	dahdididahdit	..-.-	DN
Quotation marks	[""]	didahdididahdit	..-.-	AF
Dollar sign	[\$]	didididahdididah	...--	SX
Apostrophe	[']	didahdahdahdahdit	..-.-	WG
Paragraph	[]	didahdidahdit	..-.-	AL
Underline	[_]	dididahdahdidah	..-.-	IQ
Starting signal		dahdidahdidah	..-.-	KA
Wait		didahdididit	..-.-	AS
End of message	[+]	didahdidahdit	..-.-	AR also 'cross'
Invitation to TX	[K]	dahdidah	..-.-	K
End of work		didididahdidah	...--	SK
Understood		didididahdit	..-.-	SN

Signals used in other radio services:

Break-in signal	dahdahdahdahdah	-----	TTTTT
Emergency signal	didididahdahdahdididit	...-----	SOS
Emergency silence	dididididahdah	...--	HM
Executive follows	dididahdididah	..-.-	IX
Interrogatory	dididahdidah	..-.-	INT
Relay of distress	dahdididahdididahdidit	..-.-.-	DDD

Latin alphabet Characters:

Ä ä	didahdidah	..-
Å å	didahdahdidah	..-.-
ê	dahdididahdit	..-.-
ô õ ò	dahdahdahdit	...--
Ü ü	dididahdah	..---

etc.

CW Abbreviations:

AA	All after	OC	Old chap
AB	All before	OM	Old man
ABT	About	OP	Operator
ADR	Address	OPR	Operator
AGN	Again	OT	Old timer; old top
ANT	Antenna	PBL	Preamble
BCI	Broadcast interference	PSE	Please
BCL	Broadcast listener	PWR	Power
BK	Break	PX	Press
BN	All between; been	R	Received as transmitted; are
BUG	Semi-automatic key	RCD	Received
B4	Before	RCVR	Receiver
C	Yes	RX	Receiver
CFM	Confirm	REF	Refer to; referring to; reference
CK	Check	RFI	Radio frequency interference
CL	I am closing my station; call	RIG	Station equipment
CLD	Called; calling	RPT	Repeat; I repeat; report
CLG	Called; calling	RTTY	Radioteletype
CQ	Calling any station	RX	Receiver
CUD	Could	SASE	Self-addressed, stamped envelope
CUL	See you later	SED	Said
CW	Continues wave	SIG	Signature; signal
DLD	Delivered	SINE	Operator's personal initials or nickname
DLVD	Delivered	SKED	Schedule
DR	Dear	SRI	Sorry
DX	Distance; foreign countries	SSB	Single sideband
ES	And, &	SVC	Service; prefix to service msg.
FB	Fine business, excellent	T	Zero
FM	Frequency modulation	TFC	Traffic
GA	Go ahead (or resume sending)	TMW	Tomorrow
GB	Goodbye	TNX	Thanks
GBA	Give better address	TKS	Thanks
GE	Good evening	TT	That
GG	Going	TU	Thank you
GM	Good morning	TVI	Television interference
GN	Good night	TX	Transmitter
GND	Ground	TXT	Text
GUD	Good	UR,Urs	Your; You're; Yours
HI	The telegraph laugh; high	VFO	Variable-frequency oscillator
HR	Here, hear	VY	Very
HV	Have	WA	Word after
HW	How	WB	Word before
LID	A poor operator	WD-WDS	Word; Words
MA	Milliamperes	WKD-WKG	Worked; working
MILS	Milliamperes	WL	Well; will
MSG	Message; prefix to radiogram	WUD	Would
N	No	WX	Weather
NCS	Net control station	XCVR	Transceiver
ND	Nothing doing	XTAL	Quartz crystal
NIL	Nothing; I have nothing for you	XYL (YF)	Wife
NM	No more	YL	Young lady
NR	Number	73	Best regards
NW	Now; I resume transmission	88	Love & kisses
OB	Old Boy		



What are Ten Codes?

Ten Codes are abbreviations of common questions and answers used on all types of radio. Profession CB'ers use Ten Codes to send their message quickly and easily. Additionally, Ten Codes can be readily understood by stations which may be receiving you poorly or when a language barrier is present. Learning Ten Codes is most often done by their use. Copy this list of some of the most common Ten Codes and keep them near your radio. Use these Ten Codes in your daily communications and soon you will have most of them committed to memory!

Common CB Radio Ten Codes

10-1 = Receiving poorly	10-34 = Trouble at this station
10-2 = Receiving well	10-35 = Confidential information
10-3 = Stop transmitting	10-36 = Correct time is
10-4 = Message received	10-37 = Wrecker needed at
10-5 = Relay message to _____	10-38 = Ambulance needed at
10-6 = Busy, please stand by	10-39 = Your message delivered
10-7 = Out of service, leaving the air	10-41 = Please turn to channel
10-8 = In service, subject to call	10-42 = Traffic accident at
10-9 = Repeat message	10-43 = Traffic tie up at
10-10 = Transmission completed, standing by	10-44 = I have a message for you
10-11 = Talking too rapidly	10-45 = All units within range please report
10-12 = Visitors present	10-50 = Break channel
10-13 = Advise Weather/Road conditions	10-60 = What is next message number?
10-16 = Make pick up at _____	10-62 = Unable to copy, use phone
10-17 = Urgent business	10-63 = Net directed to
10-18 = Anything for us?	10-64 = Net clear
10-19 = Nothing for you, return to base	10-65 = Awaiting your next message / assignment
10-20 = My location is _____	10-67 = All units comply
10-21 = Call by telephone	10-70 = Fire at _____
10-22 = Report in person to	10-71 = Proceed with transmission in sequence
10-23 = Stand by	10-77 = Negative contact
10-24 = Completed last assignment	10-81 = Reserve hotel room for _____
10-25 = Can you contact _____	10-82 = Reserve room for _____
10-26 = Disregard last information	10-84 = My telephone number is _____
10-27 = I am moving to channel _____	10-85 = My address is _____
10-28 = Identify your station	10-91 = Talk closer to the microphone
10-29 = Time is up for contact	10-93 = Check my frequency on this channel
10-30 = Does not conform to FCC rules	10-94 = Please give me a long count (1-10)
10-32 = I will give you a radio check	10-99 = Mission completed, all units secure
10-33 = Emergency Traffic	10-200 = Police needed at _____

Official Ten-Code List

Association of Public Communications Officers (APCO)

10-0 = Caution	10-51 = Wrecker needed
10-1 = Unable to copy -- change location	10-52 = Ambulance needed
10-2 = Signal good	10-53 = Road blocked at ...
10-3 = Stop transmitting	10-54 = Livestock on highway
10-4 = Acknowledgement (OK)	10-55 = Suspected DUI
10-5 = Relay	10-56 = Intoxicated pedestrian
10-6 = Busy -- stand by unless urgent	10-57 = Hit and run (fatal, personal injury, property damage)
10-7 = Out of service	10-58 = Direct traffic
10-8 = In service	10-59 = Convoy or escort
10-9 = Repeat	10-60 = Squad in vicinity
10-10 = Fight in progress	10-61 = Isolate self for message
10-11 = Dog case	10-62 = Reply to message
10-12 = Stand by (stop)	10-63 = Prepare to make written copy
10-13 = Weather -- road report	10-64 = Message for local delivery
10-14 = Prowler report	10-65 = Net message assignment
10-15 = Civil disturbance	10-66 = Message cancellation
10-16 = Domestic disturbance	10-67 = Clear for net message
10-17 = Meet complainant	10-68 = Dispatch information
10-18 = Quickly	10-69 = Message received
10-19 = Return to ...	10-70 = Fire
10-20 = Location	10-71 = Advise nature of fire
10-21 = Call ... by telephone	10-72 = Report progress on fire
10-22 = Disregard	10-73 = Smoke report
10-23 = Arrived at scene	10-74 = Negative
10-24 = Assignment completed	10-75 = In contact with ...
10-25 = Report in person (meet) ...	10-76 = En route ...
10-26 = Detaining subject, expedite	10-77 = ETA (estimated time of arrival)
10-27 = Drivers license information	10-78 = Need assistance
10-28 = Vehicle registration information	10-79 = Notify coroner
10-29 = Check for wanted	10-80 = Chase in progress
10-30 = Unnecessary use of radio	10-81 = Breathalyzer
10-31 = Crime in progress	10-82 = Reserve lodging
10-32 = Man with gun	10-83 = Work school xing at ...
10-33 = Emergency	10-84 = If meeting ... advise ETA
10-34 = Riot	10-85 = Delayed due to ...
10-35 = Major crime alert	10-86 = Officer/operator on duty
10-36 = Correct time	10-87 = Pick up/distribute checks
10-37 = (Investigate) suspicious vehicle	10-88 = Present telephone number of ...
10-38 = Stopping suspicious vehicle	10-89 = Bomb threat
10-39 = Urgent -- use light, siren	10-90 = Bank alarm at ...
10-40 = Silent run -- no light, siren	10-91 = Pick up prisoner/subject
10-41 = Beginning tour of duty	10-92 = Improperly parked vehicle
10-42 = Ending tour of duty	10-93 = Blockade
10-43 = Information	10-94 = Drag racing
10-44 = Permission to leave ... for ...	10-95 = Prisoner/subject in custody
10-45 = Animal carcass at ...	10-96 = Mental subject
10-46 = Assist motorist	10-97 = Check (test) signal
10-47 = Emergency road repairs at ...	10-98 = Prison/jail break
10-48 = Traffic standard repair at ...	10-99 = Wanted/stolen indicated
10-49 = Traffic light out at ...	
10-50 = Accident (fatal, personal injury, property damage)	

27 MHz BAND FREQUENCY ALLOCATION PLAN

<u>Chan.</u>	<u>Freq(MHz)</u>	<u>Application.</u>
1	26.965	General
2	26.975	General
3	26.985	General
4	27.005	General
5	27.015	General
6	27.025	General
7	27.035	General
8	27.055	General
9	27.065	USA Emergency (General elsewhere)
10	27.075	General
11	27.085	General
12	27.105	General
13	27.115	General
14	27.125	General
15	27.135	General
16	27.155	General
17	27.165	General
18	27.175	General
19	27.185	AM Calling
20	27.205	General
21	27.215	SA Emergency (General elsewhere)
22	27.225	General
23	27.255	General
24	27.235	General
25	27.245	General
26	27.265	General
27	27.275	SA SSB Calling (General elsewhere)
28	27.285	General
29	27.295	General
30	27.305	General
31	27.315	General
32	27.325	General
33	27.335	General
34	27.345	General
35	27.355	General
36	27.365	General
37	27.375	General
38	27.385	General
39	27.395	General
40	27.405	General

In South Africa only channels 19 to 27 may be used as CB channels.

By gentleman's agreement it was decided to use the following frequencies as follows:

AM Calling Channel = Channel 19

Emergency Channel = Channel 21

SSB Calling Channel = Channel 27

27 MHz BAND RADIO SPECIFICATIONS - in South Africa

TRANSMITTER:

FREQUENCY TOLERANCE: +/- 1.5 KHZ
TYPE OF MODULATION: AM ONLY
TYPE OF EMISSION: TELEPHONY A3, A3J
CHANNEL SPACING: 10 KHZ
BANDWIDTH: A) A3 - 6 KHZ MAX.
B) A3A - 2,8 KHZ MAX.
POWER OUTPUT: A) 4 WATTS MAX. INTO ANTENNA
ERP OUTPUT: B) A3J (SSB) - 12 WATTS PEP INTO ANTENNA
SPURIOUS EMISSION: 40 DB OR BETTER, BELOW MEAN POWER OF
FUNDAMENTAL OR / WITHIN 50 MICROWATT LIMIT IF POSSIBLE

RECEIVER:

ADJ. CHANNEL REJECTION: - 45 DB MINIMUM
SPURIOUS REJECTION: - 50 DB
IMAGE REJECTION: - 10 DB
RECEIVER EMISSION: -

ANTENNAS:

PORTABLE ANTENNA GAIN: UNITY
MOBILE ANTENNA GAIN: UNITY
BASE ANTENNA GAIN: UNITY

29 MHZ BAND-C FREQUENCY ALLOCATION PLAN - in South Africa

<u>CHANNEL</u>	<u>FREQ (MHZ).</u>	<u>APPLICATION.</u>
1	29.7100	MOBILE
2	29.7225	MOBILE
3	29.7350	MOBILE
4	29.7475	CIVIL DEFENCE 1 ###
5	29.7600	MOBILE
6	29.7725	B PRIVATE BOATS (SEA & INLAND) ***
7	29.7850	MOBILE
8	29.7975	MOBILE
9	29.8100	MOBILE
10	29.8225	CIVIL DEFENCE 3 ###
11	29.8350	MOBILE
12	29.8475	CIVIL DEFENCE MAIN ###
13	29.8600	MOBILE
14	29.8725	MOBILE
15	29.8850	MOBILE
16	29.8975	MOBILE
17	29.9100	MOBILE
18	29.9225	RURAL FIRE FIGHTING ###
19	29.9350	A EMERGENCY BOATS (SEA & INLAND) ***
20	29.9475	CIVIL DEFENCE 2 ###
21	29.9600	MOBILE
22	29.9725	C PRIVATE BOATS (SEA & INLAND) ***
23	29.9850	GOVERMENT (CIVIL DEFENCE)

29MHz Transceiver Legal Specifications

TRANSMITTER

FREQUENCY TOLERANCE: +/- 1.5 KHZ
TYPE OF MODULATION: AM ONLY
TYPE OF EMISSION: TELEPHONY A3, A3J
CHANNEL SPACING: 12,5 KHZ
BANDWIDTH: A) A3 - 6 KHZ MAX.
B) A3A - 2,8 KHZ MAX.
POWER OUTPUT: A) 5 WATTS MAX. INTO ANTENNA
B) A3J (SSB) - 20 WATTS PEP INTO ANTENNA
ERP OUTPUT:
SPURIOUS EMISSION: 40 DB OR BETTER, BELOW MEAN POWER OF
FUNDAMENTAL OR / WITHIN 50 MICROWATT
LIMIT IF POSSIBLE

RECEIVER

ADJ. CHANNEL REJECTION: - 45 DB MINIMUM
SPURIOUS REJECTION: - 50 DB
IMAGE REJECTION: - 10 DB
RECEIVER EMISSION: -

ANTENNAS

PORTABLE ANTENNA GAIN: UNITY
MOBILE ANTENNA GAIN: UNITY
BASE ANTENNA GAIN: + 3 DB GAIN OVER DI-POLE