

COMMUNICATOR ACTIVITY BADGE – SCOUTS

Support Material from
Greenock and District Scouts Amateur Radio Club - MM0TSG

The Q Code

Code question

QRM Is there any (*man-made*) interference?
QRN Is there any atmospheric noise?
QRO Shall I increase my power?
QRP Shall I reduce power?
QRQ Shall I send faster?
QRS Shall I send more slowly?
QRT Shall I stop sending?
QRZ Who is calling me?
QSB Are my signals fading?
QSL Can you acknowledge receipt?
QSO Can you communicate with....?
QSY Shall I change to another frequency?
QTH What is your location?

Code answer

There is (*man-made*) interference.
There is atmospheric noise.
Increase power.
Reduce power.
Send faster.
Send more slowly.
Stop sending.
You are being called by....
Your signals are fading.
I acknowledge receipt.
I can communicate with....
Change to another frequency.
My location is....

The Phonetic Alphabet

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

The RST Code

for reporting signal reception

Readability

1 Unreadable.
2 Barely readable.
3 Readable with difficulty.
4 Readable with little difficulty.
5 Totally readable.

Signal Strength

1 Faint, barely perceptible.
2 Very weak.
3 Weak.
4 Fair.
5 Fairly good.
6 Good.
7 Moderately strong.
8 Strong.
9 Very strong.

Tone (CW and Digital)

1 Extremely rough note.
2 Very rough note.
3 Rough note.
4 Fairly rough note.
5 Note modulated with strong ripple.
6 Modulated note.
7 Near DC note but with smooth ripple.
8 Good DC note with a trace of ripple.
9 Pure DC note..

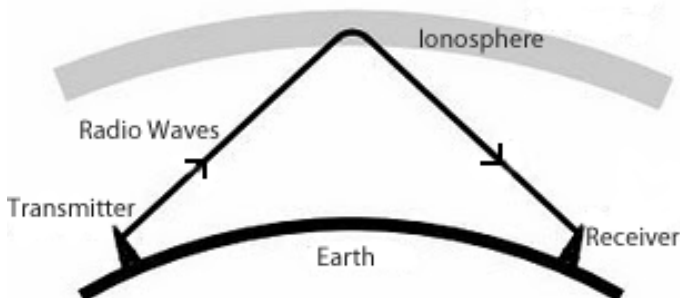


International Morse Code

1. A dash is equal to three dots.
2. The space between parts of the same letter is equal to one dot.
3. The space between two letters is equal to three dots.
4. The space between two words is equal to seven dots.

A	● ■	U	● ● ■
B	■ ● ● ●	V	● ● ■ ■
C	■ ● ■ ●	W	● ■ ■ ■
D	■ ● ●	X	■ ● ● ■
E	●	Y	■ ● ■ ■ ■
F	● ● ■ ●	Z	■ ■ ● ●
G	■ ■ ●		
H	● ● ● ●		
I	● ●		
J	● ■ ■ ■ ■		
K	■ ● ■ ■	1	● ■ ■ ■ ■ ■ ■
L	● ■ ● ● ●	2	● ● ■ ■ ■ ■ ■
M	■ ■ ■	3	● ● ● ■ ■ ■ ■
N	■ ■ ●	4	● ● ● ● ■ ■ ■
O	■ ■ ■ ■	5	● ● ● ● ●
P	● ■ ■ ■ ●	6	■ ■ ● ● ● ●
Q	■ ■ ■ ● ■	7	■ ■ ■ ● ● ●
R	● ■ ■ ●	8	■ ■ ■ ■ ● ●
S	● ● ●	9	■ ■ ■ ■ ■ ●
T	■	0	■ ■ ■ ■ ■ ■ ■

How Radio Waves travel around the World



Radio waves travel up towards the ionosphere where they may be refracted back to the earth's surface some thousands of kilometres from the transmitter. The signal can now be heard far over the horizon and well beyond the direct range from the transmitter to the receiver.

Common Amateur Radio Frequency Bands

HF Frequency Bands

3.5 MHz (80m)

7 MHz (40m)

14 MHz (20m)

28 MHz (10m)

VHF Frequency Bands

144 MHz (2m)

430 MHz (70cm)

Common UK and European Amateur Radio Callsigns

G	England
GM	Scotland
GW	Wales
GI	N. Ireland
GJ	Jersey
EI	Eire
F	France
EA	Spain
ON	Belgium
OZ	Denmark
LA	Norway
PA	Netherlands
CT	Portugal
I	Italy
EM	Ukraine
OM	Slovakia
OE	Austria
SP	Poland
TF	Iceland
UA	Russia

Amateur Radio Rules (Yes, there are some!)

Although it is a hobby there are laws around the world which make it safe for everyone and ensures that the equipment works properly, does not interfere with other things e.g. television, and that the operators are qualified.

The organisation which governs the use of amateur radio equipment in the UK is called **Ofcom**. Among other things it is responsible for issuing the **licence** which all operators must have. It comes with a unique number known as a **callsign** which helps identify every amateur radio station in the world. Our Scout and Guide radio club has been issued with the callsign **MM0TSG**.

All licensed radio amateurs have passed an examination, which in the UK is set by the **Radio Society of Great Britain**. There are three levels **1 Foundation**, **2 Intermediate** and **3 Full**.

When using their equipment Amateur Radio Operators are restricted to particular **frequency bands**, some are listed above.

If an operator does not obey these rules then his or her station may be closed down by Ofcom.