

UK Foundation Amateur Radio License Licensing

Overview

- Large ranges (bands) of frequencies reserved for Amateur Radio by the government
- Permission to transmit on these bands managed by Ofcom



Purpose

- Self-training in radio communications
- Non-commercial
 - No commercial advertising
 - No business use
- Two-way communications
 - No broadcasting

Important Details

- Can only talk to other licensed Amateur Radio operators
 - Some exceptions for unlicensed people under supervision
- MUST keep your address up to date with Ofcom
 - Whenever you move
 - Every 5 years (revalidation)
- Must not encrypt or obfuscate the meaning of a message
 - Small exception for official emergency communications
- Cannot operate while airborne

License Classes

- Foundation
- Intermediate
- Full

License Classes - Foundation

- First license
- Transmit power of up to 10 Watts*
- Only valid within the UK
- Use only pre-made transmitters (equipment)

License Classes - Intermediate

- Second license
- Transmit power of up to 50 Watts*
- Still only valid within the UK
- Can build your own transmitters (equipment)

License Classes - Full

- Final license
- Transmit power of up to 400 Watts*
- Widely recognized internationally
- Can operate on a vessel at sea
 - With captain's permission

License Classes - Exams

- Foundation
 - 26 Multiple Choice Questions
 - 73% pass mark
 - 6 practical exercises
- Intermediate
 - 46 Multiple Choice Questions
 - 14 practical exercises
- Full
 - 58 Multiple Choice Questions

Who can use equipment?

- Only Amateur Radio license holders
- Foundation and Intermediate can use the equipment and rights of a Full license holder under their supervision
- Only Full license holders can supervise on-air operation during a Foundation training course
- Rare exception, “user services” (Ambulance, Police, etc) can be allowed to use Amateur Radio equipment in an emergency

Callsigns

- Uniquely identifies Amateur Radio operators
 - G * number letter letter (letter)
 - M * number letter letter letter
 - 2 * number letter letter letter
- Regional Secondary Locator
 - The * changes depending on where in the UK you are

England	(E for intermediate)
Wales	W
Scotland	M
Northern Ireland	I
Isle of Man	D
Jersey	J
Guernsey	U

Callsigns

- Foundation
 - M regional {3, 6, **7**} abc
 - Regional = _, W, M, I, D, J, U
- Intermediate
 - 2 regional 0 abc
 - Regional = E, W, M, I, D, J, U
- Full
 - M regional {**0**, 1, 5} abc
 - Regional = _, W, M, I, D, J, U

Not Examined

Special Event Callsigns

- Issued by Ofcom for a limited time
- Collectable, often issued only once!
- Often follow special forms
 - GB#abc
 - M#A

Optional Suffixes

- Added to the end of a callsign
- Signals where you're operating from
 - Alternative: Fixed location with an address (not your main address)
 - Portable: Temporary fixed location in the UK which is not an address
 - Mobile: Used while you're moving
 - Maritime Mobile: Used while on a vessel at sea

Portable	/P
Alternative	/A
Mobile	/M
Maritime Mobile	/MM

When to use your callsign

- At the start and end of a conversation
- As often as is practicable (every ~15 minutes)
- When you change:
 - **Frequency**
 - **Mode** of transmission (aka Voice to Morse)
 - **Supervisor** (such as operating a club station under different Full license holders)
 - **Location** (regional prefix)

What's next?

- Signup for the test
 - <https://www.cardiffars.org.uk/info/licensing/>
- Operating Procedures
- Transmitter and Receiver design
- Practical Exercises starting in two weeks during lab sessions
 - 1) Having a conversation over the radio
 - 2) Setting up a radio
 - 3) A non-voice conversation
 - 4) Tuning antennas