

Licence Conditions I

IN YOUR FOUNDATION Licence training you learned a little about the rules you needed to follow as a Foundation Licence holder. At the Intermediate level you will need a better understanding of the licence requirements, particularly those covering the additional privileges you will gain at the Intermediate level. The three sets of licence conditions were combined into one document in December 2006 so whilst you will still need to abide by the limitations of the Foundation licence for now, you will need to remember the additional terms covered by the Intermediate syllabus for the exam and for when you take out your Intermediate Licence.

In this worksheet, and a later one covering other parts of the Licence conditions, the style will be to give **the syllabus item in bold**, the actual text from the licence *in italics*, and some words of explanation in plain text.

The licence extracts are correct at the time of printing, but you should ensure you have the latest copy for study. This can be checked by looking at the Ofcom web site (www.ofcom.org.uk) or by obtaining a current copy from the Ofcom publications office.

Section 2	
Terms, conditions and limitations	
1. Purpose	
1(1) The Licensee shall ensure that the Radio Equipment is only used:	
(a)	for the purpose of self-training in radio communications, including conducting technical investigations, and
(b)	as a leisure activity and not for commercial purposes of any kind.
1(2) The Licensee may use or permit the use of the Radio Equipment by a member of a User Service during any operation conducted by a User Service or during any exercise relating to such an operation in each case for the purpose of sending Messages on behalf of the User Service.	
1(3) The Licensee may use the Radio Equipment to assist with communications in times of disaster or national or international emergency.	
2. Location	
2(1) The Licensee may only operate the Radio Equipment:	
(a)	at the Main Station Address;
(b)	at an Alternative Address;
(c)	at a Temporary Location;
(d)	when Mobile;
(e)	where this Licence is a Full Licence only, from a Maritime Mobile location; and
(f)	where this Licence is a Full Licence only, and unless it is a Temporary Licence, the Licensee may operate in countries which have implemented CEPT Recommendation T/R 61-01 in accordance with Clause 16(1).
2(2) The Licensee shall use the following appropriate Regional Secondary Locator after the United Kingdom Callsign prefix 'G', 'M' or '2' as specified in Section 1, when identifying the Radio Equipment in accordance with Clause 13(1):	
(a)	England - No Regional Secondary Locator.
(b)	Guernsey - "U".
(c)	Isle of Man - "D".
(d)	Jersey - "J".
(e)	Northern Ireland - "I".
(f)	Scotland - "M".
(g)	Wales - "W".
2(3) If the Callsign specified in Section 1 begins with the number '2', the provisions of Clause 2(2) shall apply with the addition that when used in England, the Secondary Locator "E" shall be used.	

Amateur Radio Licence, Section 2 - Terms, conditions and limitations

1a.1 Recall the various types of amateur licence. Foundation, Intermediate, Full and identify their callsigns, including Regional Secondary Locators and optional suffixes.

You already know that there are 3 levels of licence and that they each have different callsign series:

- Foundation: M3QQQ
- Intermediate: 2E0QQQ
- Full: M0QQQ

The same Regional Secondary Identifiers (shown in **Fig 16**) are used at the Intermediate level, depending on your location:

- D - Isle of Man
- E - England
- I - Northern Ireland
- J - Jersey
- M - Scotland
- U - Guernsey
- W - Wales

You will recall that for Foundation and Full callsigns these secondary letters are inserted between the M and the number in the callsign prefix (e.g. MW for Wales, MU for Guernsey, etc.). However, for the Intermediate Licence callsigns, E is used for England and is replaced by the Regional Secondary Locator for the other parts of the UK. So the Intermediate Licence holder, 2E0QQQ, would be an amateur based in England. Had the station been registered in Wales the callsign would have been 2W0QQQ.

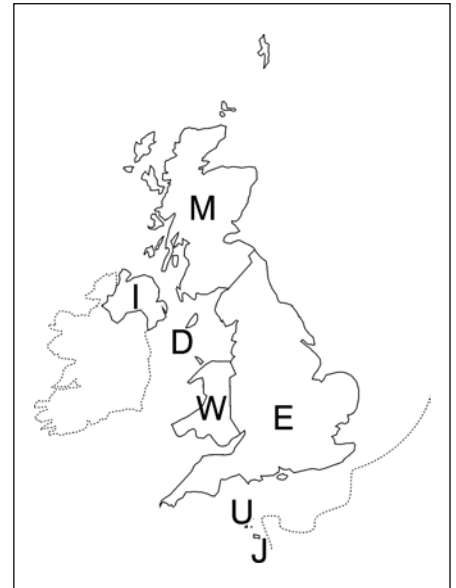


Fig 16: Regional identifiers within the UK.

The suffixes, as for Foundation, are '/P' if at a fixed location which does not have an address, such as a field; '/M' when mobile as a pedestrian or in a vehicle or on a vessel on Inland Waters, such as a river or lake; and '/A' when at an address which is not your Main Station Address, visiting a friend's house perhaps. The suffix '/MM', meaning maritime mobile (on a vessel at sea) is only available to Full Licence holders. Although you are not permitted to operate '/MM' with an Intermediate Licence you do need to remember what the suffix means.

Historically (but not for the exam), UK amateur callsigns began with a G. However, the G series filled up and the M series was started a few years ago. You may also come across GB callsigns, which are issued to special event stations and repeaters.

2a.1 Recall that an Intermediate Licensee may operate the Radio Equipment of any other UK licensed amateur under that person's direct supervision using the supervisor's callsign, and obeying the terms of the supervisor's licence.

Recall that an Intermediate Licensee may (with permission) use another amateur's radio equipment unsupervised, but using the callsign and conditions of his or her own licence.

- 3(1) *Subject to Clauses 1(2), 3(2) and 3(3), the Licensee shall ensure that the Radio Equipment shall only be operated by the Licensee personally and by no other persons.*
- 3(2) *The Licensee may permit the operation of the Radio Equipment by a person who holds a current United Kingdom Amateur Radio Licence provided that any such operation of the Radio Equipment is carried out in the presence of and under the direct supervision of the Licensee and that such persons are made aware of, and of the requirement to comply with, the terms, conditions and limitations of this Licence.*

The new 'lifetime licence' allows you to supervise other UK amateurs using your equipment and callsign. Because your callsign is being used, you are responsible for what happens and must be there to supervise, even if the person operating has a Full licence.

If two amateurs live at the same address and share equipment, then each person uses their own callsign and uses the equipment as if it were their own.

If you visit a Full licensee and operate under their supervision and use their callsign then you can use the higher powers and privileges of their licence. Indeed, if they visit you, you can operate under their supervision and callsign and still enjoy the higher powers even though you are using your own equipment. The rules you operate under are governed by who is supervising and the callsign you give in identification.

You can allow another amateur to operate your equipment unsupervised if you wish, but they must then use their own licence and their own callsign; you and your licence are not involved. Similarly you can, if they let you, use someone else's equipment but giving your callsign and obeying the terms of your own licence. Then they don't need to supervise you. It all depends on which callsign you give and the rules applying to that callsign and licence. Who owns the equipment and where you are just does not matter. Of course, if you are not at your house you may wish to add '/A' or '/P' to your callsign.

2b.1 Recall the Radio Equipment must not be used for business or advertising purposes

- 1(1) *The Licensee shall ensure that the Radio Equipment is only used:*
- (a) *for the purpose of self-training in radio communications, including conducting technical investigations; and*
 - (b) *as a leisure activity and not for commercial purposes of any kind.*

As for the Foundation licence, you should only speak to other amateur stations and talk about personal topics and your amateur radio activities. You should also remember from your Foundation studies that you must not carry out any business activities using amateur radio or pass messages for other groups that are not amateur radio related.

This means that it would be quite acceptable to announce forthcoming radio club meetings to other amateurs you are in contact with or even that one of your own personal radios is for sale, but it would not be acceptable for an amateur radio shop to advertise what is on special offer.

2b.2 Recall that the Licensee may pass messages on behalf of a User Service and may permit a member of the User Service to use the Radio Equipment to send messages. Recall the identity of the Users Services.

- 1(2) *The Licensee may use or permit the use of the Radio Equipment by a member of a User Service during any operation conducted by a User Service or during any exercise relating to such an operation in each case for the purpose of sending Messages on behalf of the User Service.*

As a service to the community, amateurs are permitted to pass messages on behalf of the 'User Services'. Clause 17(1)(qq) gives the full list but the ones you need to remember are:

Police, Fire, Ambulance, Coastguard, British Red Cross, St John Ambulance, the St Andrew's Ambulance Association, the Women's Royal Voluntary Service (WRVS), the Salvation Army and any Government Department.

Many of those bodies will have their own means of radio communications, but often communication between different organisations is not readily available. Some

bodies such as the WRVS do not normally need communications and do not have their own, but at a major event they may well have a need.

Raynet is an amateur organisation set up specifically for the purpose of passing messages at major events and in emergencies. If you are interested in joining, the RSGB or the Local Authority Emergency Planning Department should be able to put you in touch.

2c.1 Recall that the licensee must transmit the Callsign printed in the Licence during CQ calls, when establishing communication and every 15 minutes during long periods of transmission

- 13(1) *The Licensee, or, if this Licence is a Full Licence, then any other authorised person who uses the Radio Equipment, shall transmit the Callsign specified in Section 1 of this Licence and any Modifier applicable under the provisions of this Licence:*

- (a) *during initial calls ("CQ" calls) or calls to establish contact with another Amateur;*
- (b) *at least once every 15 minutes when the period of communication is longer than 15 minutes;*

- (c) *whenever the frequency of transmission is changed, at the beginning of transmission on the new frequency;*
- (d) *by the same type of transmission that is being used for the communication;*
- (e) *on the same frequency that is being used for the communication.*

Section (a) says that you must give your callsign when you make a 'CQ' call or when you first make contact with somebody.

(b) Means that if your conversation lasts more than 15 minutes, you must give your callsign at not more than 15 minute intervals. In practice amateurs give their callsign rather more frequently, but often not on every 'over'.

(c) Makes the point that if you change frequency you will need to give your callsign again.

(d) Says that if you are using a particular type of transmission (e.g. single sideband) then you give your callsign in the same type of transmission.

(e) Goes hand in hand with (c), requiring you to give your callsign on the same frequency as the one you are using for your contact.

2c.2 Recall the meaning of "Main Station Address", "Alternative Address", "Temporary Location" and "Mobile"

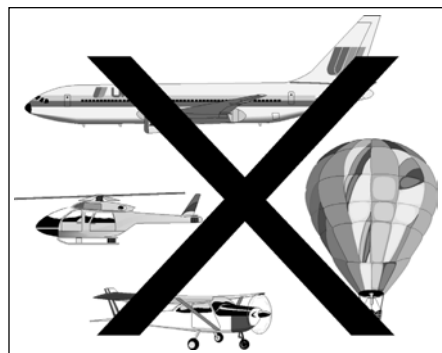
The definitions are in clause 17(1) of the licence.

- (v) *Main Station Address means the main station address stated in Section 1 of this Licence.*
- (c) *Alternative Address means a fixed postal address in the United Kingdom other than the Main Station Address.*
- (kk) *Temporary Location means a fixed location in the United Kingdom, which is not the Main Station Address or an Alternative Address.*
- (y) *Mobile means the Radio Equipment is located in the United Kingdom: in or on any vehicle or conveyance; on the person of the Licensee where the Licensee is a pedestrian; or on any Vessel on Inland Waters.*

This should be reasonably clear. The Main Station Address is the one you notified when you applied for the licence. In normal circumstances this will be your home address.

An alternative address is any other house or premises where a letter can be delivered, typically this might be a friend's house or a hotel.

A temporary location is anywhere else when you are not on the move. Operating in a contest is frequently done away from home. 'Field Days' require you to be inde-



Operating an amateur radio transmitter from any airborne vehicle is forbidden.

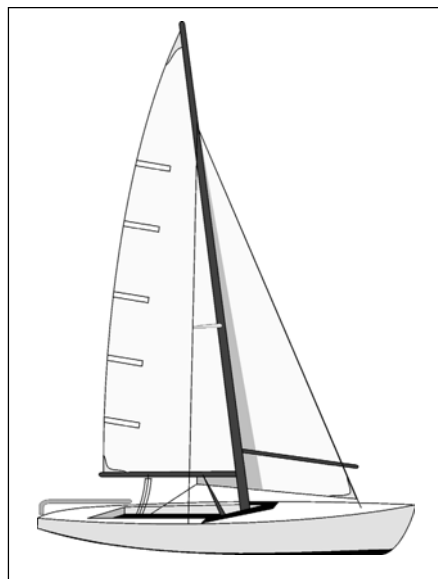
pendent of mains supplies, for example.

Mobile means out and about, and includes short periods of stationary operation such as sitting on a park bench or waiting in the car whilst somebody goes shopping.

It is no longer a requirement to say where you are, whether at an alternative address, a temporary location or mobile although many amateurs do. The requirement to add the appropriate suffix (/A, /P or /M) was also removed in December 2006 although that amateur practice will probably continue as 'recommended best practice'.

2c.3 Recall that the licence does not permit operation from an aircraft or vessel on the seaward side of the low-water line as marked on official charts.

You may be familiar with the request to switch off all mobile phones when on an aircraft. This is due to the possibility of interference with the aircraft's own communications systems. The amateur licence prohibits airborne operation for the same reasons. Operation at sea is also prohibited at Intermediate licence level, but you may use your station mobile (/M) from a vessel on inland waterways, a canal boat, for example.



Operating an amateur radio transmitter from a boat or ship is permitted on inland waterways, but not on tidal rivers or at sea.

2c.4 Recall that other Administrations (foreign countries) do not routinely recognise the Intermediate Licence.

At the Full licence level the qualification requirements throughout Europe and many other countries are harmonised. The Harmonised Amateur Radio Examination Certificate (HAREC) is available to all Full European licence holders, simplifying travel with amateur radio. However, not all countries have Foundation, Intermediate or Novice licences, and where they do their standards are not coordinated. Consequently, other countries do not generally recognise the UK Foundation or Intermediate licences for use abroad. This is also the reason why operation at sea is limited to Full licensees. However, it is always worth checking with the authorities in the country you are travelling to before you go.

What Next?

THAT COMPLETES all you need to know about who can operate your station, what messages you can send and how to identify yourself. It looks like quite a lot of work, but it should not take long for it to become reasonably familiar. It is the sort of material that is best read, discussed as a topic with your instructor or another amateur, then put down while you do something else. When you have a few spare moments take time to read this worksheet and the second one on Licence Conditions again.

In the second worksheet we will look at the rules and regulations that apply to some other aspects of amateur radio such as beacons, digital operations, inspection, and Electromagnetic Compatibility.



Its a big old world, but to operate your transmitter outside of the UK & Northern Ireland you will have to progress onto a Full Licence.

Licence Conditions 2

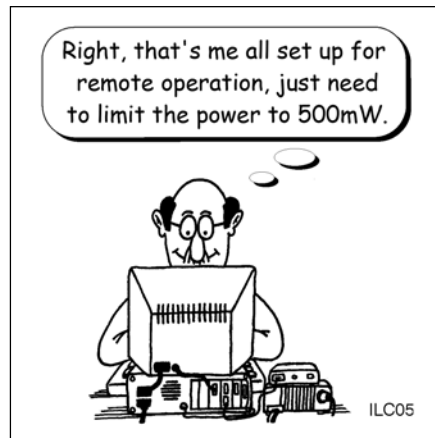
THERE ARE A FEW more items that you need to know at this level from the Terms, Conditions and Limitations, in Section 2 of the licence. Again, the more important ones have been picked out for the exam. As in the previous Licence Conditions worksheet, the style is to give the syllabus item, the text from the licence document and a few words of explanation.

2d.1 Recall that the licence holder may conduct Unattended Operation of a beacon, for the purposes of direction finding competitions, remote control of the main Station or for digital communications.

Recall that the remote control link must be by radio in an amateur band, limited to 500mW maximum transmit power.

Recall that unattended operation does not include providing for general use by other amateurs.

- 10(1) *The Licensee may conduct Unattended Operation of Radio Equipment provided that any such operation is consistent with the terms of this Licence. Additional restrictions which apply to the Unattended Operation of Beacons are specified in Schedule 2 to this Licence.*
- 10(2) *Subject to Clause 10(3), the Licensee may also conduct Remote Control Operation of Radio Equipment (including, for the avoidance of doubt, Beacons) provided that any such operation is consistent with the terms of this Licence.*
- 10(3) *This Clause 10 does not permit the Licensee to install Radio Equip-*



ment capable of Remote Control Operation for general unsupervised use by other Amateurs.

- 10(6) *If this Licence is a Foundation Licence or an Intermediate Licence, and the Licensee wishes to establish communication links to operate the Radio Equipment in accordance with Clause 10(4), then the Licensee may only do so using wireless communication links and the Licensee may only use the amateur band allocations detailed in Schedule 1 to operate those links. Any such communications links shall be subject to a maximum power level of 500 mW pep e.r.p.*

Unattended operation is one of the more complex areas, both technically and in the licence conditions. Only those parts of the conditions that are in the syllabus are shown here. If you intend to carry out any of these activities you really must read the full set of conditions, but for exam purposes it is quite sufficient for you to have a reasonable idea of what you can do and know where to check for the full details.

First of all you may operate a beacon. That is a device that transmits its callsign, usually in Morse, but it can be in synthesised speech, either all the time or on a prearranged clock cycle. Its purpose is to

aid propagation research and allow amateurs to monitor changing band conditions. You may have heard beacons from other countries already. Details of frequencies on which you may find existing beacons are given in the RSGB Yearbook.

A slightly different kind of beacon is the use of a hidden transmitter used for a direction finding competition. If you are intending to do this you should first consult a more experienced amateur or join in one of the organised events that take place throughout the year.

Secondly, you may decide to locate your transmitter in a garden shed (strong and locked, hopefully) or a nearby location that is better sited and control the equipment from the house via a low power radio link. In licence terms the Radio Equipment is now 'Unattended' and clause 10 in the licence allows you to do this. Some amateurs have computer-controlled transceivers. If the transceiver is simply in another room, then that is not classed as unattended, however when you get your Full licence you can site the radio further away and use an internet connection for control. It is only for your personal use however, whether you use a radio link or the internet.

The third type of Unattended Operation is a Packet station that can run for 24 hours a day, seven days a week. Most of the Terminal Node Controllers (TNCs) have the capability of recognising their callsign and storing an incoming message. They are also able to retransmit the messages if the station for which a message is stored happens to log on. Either way, the protocols (procedures) of the Packet system require each packet of data or message received to be acknowledged, even if the operator is not present. That means the station must transmit whilst unattended and the Intermediate licence allows that. It is possible to use the computer and sound card as a software TNC, but that does mean the computer will have to be running all the time the system is available.

2e.1 Recall that a person authorised by Ofcom may require the Licence holder to keep a log of all transmissions made over a specified period of time.

In the past all licensed radio amateurs were required to keep a log of every transmission they made. This requirement was removed in December 2006 but many amateurs will continue to keep a log for personal use and as evidence of contacts for QSL card and award purposes.

However, a person authorised by Ofcom, usually an Ofcom investigation officer, can require you to keep a log. This is to assist in tracing the source of reported interference. A log of all transmissions is very helpful in that respect because if it is well kept, it also shows when you were not operating. The Ofcom officer will tell you what details he wants you to record and how long for. The details are likely to include times, frequency, power and mode of transmission, but if you have a rotatable antenna you might be asked to record where it is pointing as well.

If you keep a log of all your transmissions then you will already have most, if not all of the details. It is also helpful (but not compulsory) to record details of when you check out your equipment, see item 2f.3 below.



A typical computer logging program.

2f.1 Recall that transmissions from the Station must not cause undue interference to other radio users.

2f.2 Recall that the licensee must reduce any emissions causing interference, to the satisfaction of an Officer authorised by Ofcom.

2f.3 Recall that the licensee must carry out tests from time to time to ensure that the Station is not causing undue interference.

- 7(3) *Notwithstanding any other term of this Licence, the Licensee shall ensure that the Radio Equipment is designed, constructed, maintained and used so that its use does not cause Undue Interference to any wireless telegraphy.*
- 7(4) *If any Undue Interference to wireless telegraphy is caused by the radiation of Unwanted Emissions from the Radio Equipment, then the Licensee shall suppress the Unwanted Emissions to the degree satisfactory to Ofcom.*
- 7(5) *The Licensee shall conduct tests from time to time to ensure that the requirements of this Clause 4 are met.*

These licence conditions are all about electromagnetic compatibility (EMC) and good design of your transmitter. Other worksheets will help you understand the

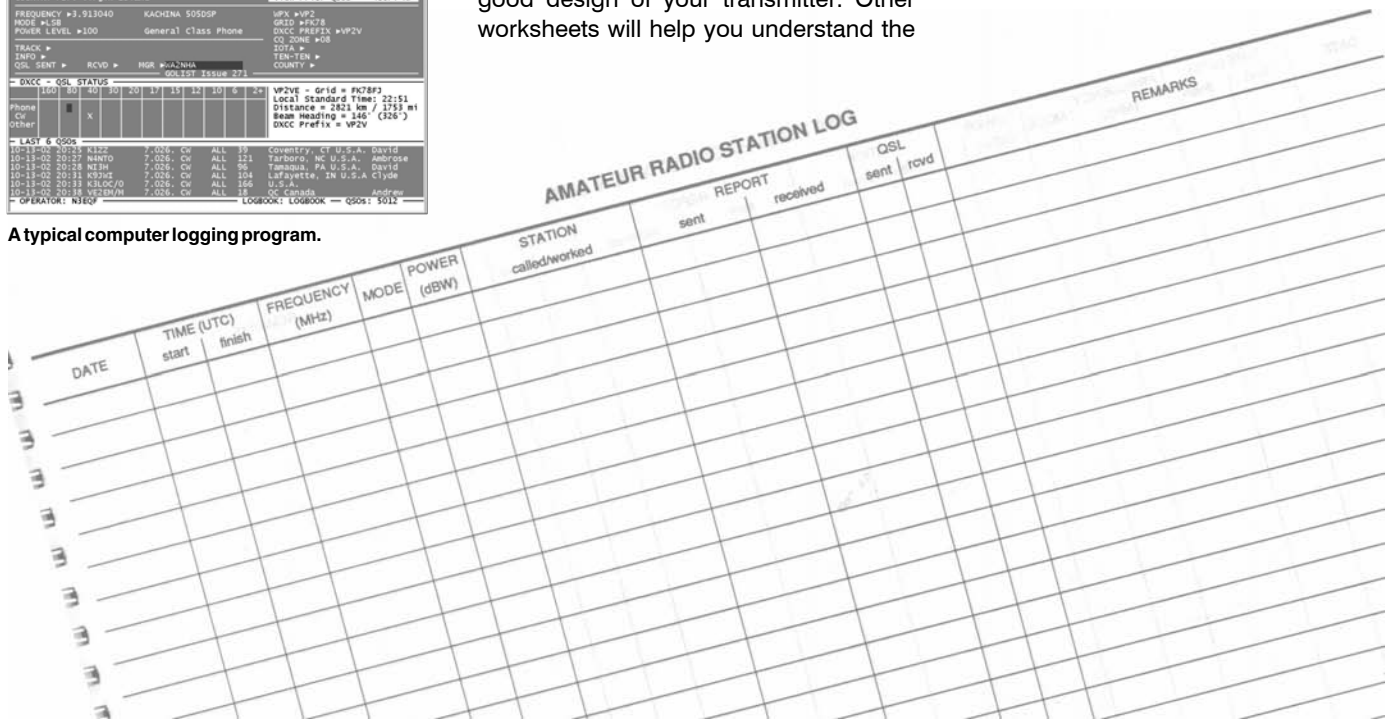
technical issues, but here we are concerned with the licence rules and what you may be asked in the exam.

The first point says you must not cause undue interference to other radio users. You may well think it would also be a good idea not to cause any interference to other electronic equipment such as a music system. In practice you are right, but the licence simply says "wireless telegraphy" so a CD player, for example, would not be covered. For the exam, "wireless telegraphy" is the right answer.

A little care is needed over the rather old-fashioned term "wireless telegraphy". This is a broad term for any radio system, be it real telegraphy (e.g. Morse or teleprinter), telephony (speech), other data, television, radar or even the radio signals from the GPS (global positioning system) satellites.

Unwanted Emissions are any signals that the transmitter is producing that are not needed for communication and should not be there. If it is those unwanted signals that are causing problems then you must suppress them. You must also carry out tests from time to time to check that your transmissions are clean and there is no likelihood of causing interference. Later worksheets give you some advice on how to carry out such tests.

If there is an interference problem Ofcom can ask (or tell) you to cure the problem to a level that does not cause undue interference.



Whilst keeping a logbook is no longer a licence requirement, it is seen as 'recommended best practice'. Transmitting logbooks are available from RSGB books.

2g.1 Recall that the Licensee must give immediate notice to Ofcom of any change to the Licensee's name, Main Station Address or mailing address.

Recall that the licensee must confirm that the details shown on the licence remain valid at least once every five years.

Recall that the licence can be revoked by Ofcom for breaches of licence conditions or for non-confirmation of licence details.

6(2) *The Licensee must give immediate notice to Ofcom either in writing or by means of Ofcom's on-line licensing system of any change to*

the Licensee's name, Main Station Address (or mailing address if different) from that recorded in this Licence.

6(3) *By no later than five years after the date of issue of this Licence, unless during that five year period the Licensee has given notice to Ofcom of any change to any of the Licensee's details as set out in Section 1 of the Licence in accordance with Clause 6(2), the Licensee must confirm to Ofcom that the details set out in Section 1 of this Licence remain current and accurate. The Licensee must make a further confirmation to Ofcom once every five years from the later of:*

(a) the date on which the Licensee last confirms to Ofcom that the details set out in Section 1 of this Licence remain current and accurate; and

(b) the date on which the Licensee last gives notice to Ofcom of any change to the Licensee's details in accordance with Clause 6(2), unless during that five year period the Licensee has already given notice to Ofcom of a change to any of the Licensee's details set out in Section 1 in accordance with Clause 6(2), in which case the subsequent five year period will be calculated from the date on which the Licensee gave that notice. Failure to do so may lead to the revocation of this Licence in accordance with Clause 4(5).

4(2) *Pursuant to schedule 1, paragraph 8 of the Wireless Telegraphy Act 2006 (the "Act") Ofcom may not revoke this Licence under schedule 1, paragraph 6 of the Act except: (b) if there has been a breach of any of the terms, conditions or limitations of the Licence;*

This lengthy passage simply says that you must inform Ofcom immediately if you move house or radio to a different address and confirm it is still current at least every 5 years. You may also lose your licence if you break any of its rules.

2h.1 Apply the Schedule to the Intermediate Licence.

The Schedule to the licence (Schedule 1, Table B) will be available in the exam. There will always be two questions about the Schedule. Normally there will be one question on the HF bands and one on the VHF/UHF bands but there may be a general question about the Schedule. You will be expected to look up the answer. This is much the same as for your Foundation exam, but the questions might be slightly less straightforward. For example, the question may be 'Which frequency shown below cannot be used when mobile in London?'. One of the four answers will be in the range 431.0 - 432.0MHz which column 2 of the schedule shows is not available within 100km of London.

You would be well advised to get used to reading the Intermediate Licence Parameters set out in Table B of the Schedule before the exam, but there is really no need to try to memorise it all!

Section 2
Terms, conditions and limitations

1. Purpose

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- (a) for the purpose of self-training in radio communications, including conducting technical investigations; and
- (b) as a leisure activity and not for commercial purposes of any kind.

1(2) The Licensee may use or permit the use of the Radio Equipment by a member of a User Service during any operation conducted by a User Service or during any exercise relating to such an operation in each case for the purpose of sending Messages on behalf of the User Service.

1(3) The Licensee may use the Radio Equipment to assist with communications in times of disaster or national or international emergency.

2. Location

2(1) The Licensee may only operate the Radio Equipment:

- (a) at the Main Station Address;
- (b) at an Alternative Address;
- (c) at a Temporary Location;
- (d) when Mobile;
- (e) where this Licence is a Full Licence only, from a Maritime Mobile location; and
- (f) where this Licence is a Full Licence only, and unless it is a Temporary Licence, the Licensee may operate in countries which have implemented CEPT Recommendation T/R 61-01 in accordance with Clause 16(1).

2(2) The Licensee shall use the following appropriate Regional Secondary Locator after the United Kingdom Callsign prefix "G", "M" or "2" as specified in Section 1, when identifying the Radio Equipment in accordance with Clause 13(1):

- (a) England - No Regional Secondary Locator;
- (b) Guernsey - "U";
- (c) Isle of Man - "D";
- (d) Jersey - "J";
- (e) Northern Ireland - "I";
- (f) Scotland - "M";
- (g) Wales - "W".

2(3) If the Callsign specified in Section 1 begins with the number "2", the provisions of Clause 2(2) shall apply with the addition that when used in England, the Secondary Locator "E" shall be used.

Amateur Radio Licence, Section 2 - Terms, conditions and limitations