

Licence Conditions


THE LICENSING conditions you need for everyday use have been covered in the Foundation and Intermediate exams. Now we will take a look at the additional privileges available to you at the next level.

Since many of these will only be needed occasionally, you are not expected to remember them. However, you must know where to look them up when the occasion demands. A copy of the licence conditions booklet will be provided in the exam for just that purpose. It will of course help if you get a copy of this booklet beforehand. It can be obtained from the licensing authority, either in printed form or on the Internet.

The current syllabus sets out the various clauses in the licence. These should be read alongside the comments in this chapter. Some terms or descriptions are shown in Initial Capitals. That is because they have a specific meaning, which is defined in clause 17 of the licence document. As you are reading this chapter, or the licence document, it is suggested you look up the exact meaning to avoid any misunderstanding.

You should also note the caveat in the syllabus that says that just because a particular clause is not mentioned, it does not necessarily mean it cannot be examined. If its topic or meaning falls within the syllabus details, it is examinable.

Supervision

 Holders of Foundation or Intermediate licences are only permitted to supervise other UK licensed amateurs operating their Radio Equipment.

It is necessary to understand exactly what is meant by 'Radio Equipment'. It is the equipment you are using and identified by your Callsign.

If someone else is using your Callsign under your supervision, it is still your Radio Equipment and operation is in accordance with the terms of your Licence. That is shown in clauses 3(1) and 3(2) of the licence. If they are licensed (either in the UK or overseas) and give their Callsign, then it is their 'Radio Equipment' even though it may be your property. You do not need to supervise and have no responsibility for them. They are then operating under clause 2(1) of their own licence.

It follows that the location and owner-




Greetings messages are a good way to introduce others to amateur radio. This is a Jamboree on the Air (JOTA) event

ship of the equipment being used are not relevant; the issue is simply one of the Callsign being used in identification.


Greetings messages:

Anybody may send a greetings message. The guest, as we shall call him or her, may speak to another amateur and enjoy a few 'overs' of conversation in order to get some feel of what amateur radio is about.

Not all countries permit their amateurs to speak to non-licensed persons so it is etiquette for you to offer such a message, allowing them to decline. These limitations do change as new agreements are reached at national and international level. For the exam you simply need to note that you are permitted to supervise a non-amateur sending such messages. This is shown in clause 3(4) if it is your own Licence and Callsign being used and clause 3(5)(b) if it is a Club Licence and Callsign.

 The guest is only allowed to speak. They must not operate the controls of the transmitter. You must be supervising directly, and able to cut the transmission or prevent wrong operation of the controls if the need arises. As a practical point, the use of a desk microphone is advised; with a hand-held microphone, you do not have adequate control of the PTT button.

Trainees:

 Trainees on a Foundation or Intermediate course or assessment may speak and also operate the controls under your supervision. They must also identify the station as part of their training, using your (or a club) Callsign. You probably remember that

you needed to do that as part of your assessment. Such trainees will be able to produce a "Record of Achievement" card showing their registration as a trainee. You must still directly supervise and be able to stop any inappropriate activity. Operation is now in accordance with clause 3(3)(a).

Disqualified Persons:

Those who have had their licence revoked or refused are not permitted to bypass the procedures in order to send greetings messages. They may operate on a training course if re-taking the exam is a condition of reinstating their licence.

Similarly, anybody who has committed an offence under the Wireless Telegraphy Act in the preceding six months may not use amateur radio, even under supervision. The licence requirement is that you must have reasonable grounds to believe they are not disqualified. If you are running a training course, the application form should give the relevant text of the licence so that applicants, in signing the form, state that they are not restricted in that manner.

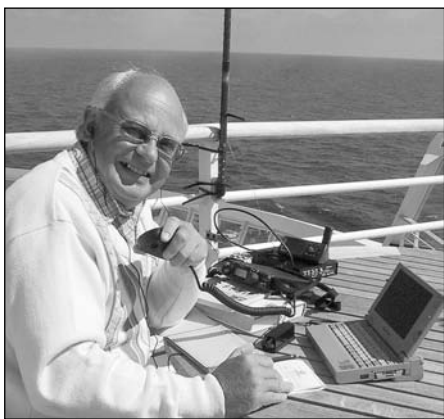
Club stations:

A club may obtain its own callsign and a nominated club member holds the licence. The callsign is identical to a normal Full callsign and is drawn from the same list. Any club member who is a Full Licensee and authorised by the club licensee may use the club station or supervise its use by others. The licence requirements are the same as a normal Full licence.

Foundation and Intermediate licensees may use the station under supervision, with all the privileges of the Full licence, using the club Callsign. Alternatively they may use the equipment under their own Callsign and licence conditions.

Special Event Stations:

Any Full licensee (but not a club station) may obtain a special event station licence, which is issued as a Notice of Variation to the personal licence. The only difference is the use of a special Callsign chosen to relate to the event, which must be one open to the public and commemorating an event that deserves such recognition. Ofcom administer spe-



Operating from the QE2. It is obviously fun, but it may only be done with written permission from the ship's master

cial event callsigns and can give further information. Recognising special event callsigns is covered in the Operating section of the syllabus. They begin with GB or MB, followed by a number and two or three letters. The regional secondary identifier is not used and the same format is used anywhere in the UK.

Operation at sea

Another new facility is operating on a Vessel at Sea (Maritime Mobile). This means afloat on the seaward side of the UK low water line or in international waters. It does not include the territorial waters of other countries since those administrations will define their own rules.

You will need written permission to install, use or change an amateur radio installation on a Vessel and you may be asked to keep a Log of your operations. Maritime services may observe radio silence. You must observe such silences if asked. Similarly, the master of the vessel can ask you to close down.

The frequencies allocated internationally to amateur radio are listed in the International Telecommunication Union (ITU) Radio Regulations, and vary in each of the three ITU regions. The UK and most of Europe and Russia are in region 1, the Americas are region 2 and region 3 is China and Australia etc. You must use only those frequencies allocated internationally in that region.

It is optional to add the suffix '/MM' to your Callsign (as it is /M, /P or /A) but it will be helpful to others if you do, especially if you are in international waters and the station you are contacting should not be beaming towards the UK.

A UK Regional Secondary Locator may be used close to the relevant coastline but in international waters you should use

your callsign as shown on your licence, including the regional locator if you have one.

If the authorities of another country permit you to operate in their waters, you should modify your callsign according to their rules and obey their national licence or frequency requirements.

CEPT Operation

Recommendation T/R 61-01 of the CEPT (Conference of European Posts and Telecommunications) introduced the concept of a CEPT licence, which applies only to holders of a Full licence and its equivalent in the other signatory countries. The UK and about 50 CEPT and non-CEPT countries have signed up to this recommendation which makes it easy for amateurs in these countries to operate abroad for a short period.

Your Full Licence states that it is equivalent to the CEPT licence.

T/R 61-01 only covers temporary, non-resident operation (up to 3 months). You may set up your own station or use the station of another licensed amateur.

In other host countries you will normally identify yourself with your home call sign prefixed with the relevant country code. For operation in France, the call would be in the format F/M0ABC.

You must have your current Licence and a copy of the host countries rules, which can be obtained from their authorities before you make the visit. Failure to do so may be an offence under their laws and could result in arrest and confiscation of your equipment. Take care to check powers and frequencies; they may not be quite the same as in the UK. You must comply with the host country's licence conditions, which may prohibit things allowed in the UK and allow things not permitted in the UK.

Morse is an additional complication at the time of writing. Not all CEPT administrations have removed the need for Morse for HF operation. Prospective visitors need to check with the administration concerned since the situation is still evolving. You should also be aware that your UK licence requires you to comply with the host's licence terms (clause 16(2)(a)) so breaking their terms would also break the UK licence terms.

Visiting CEPT amateurs:

Amateurs holding a CEPT licence may operate in the UK using their own equipment or that of a UK person, giving their own callsign prefixed with 'Mx/' where 'x'

is the appropriate regional secondary locator. They may also operate under the supervision of a UK Full Licensee using the UK Callsign. In either case the rules of the host country take precedence, so visitors must obey the UK rules.


Reciprocal agreements

Any two countries may agree between themselves that their amateurs may operate in the other's country. This is called reciprocal licensing. Where reciprocal agreements are in place, UK licensees may operate in the host country under the terms of the agreement. You will probably be required to take out a temporary licence prior to operating and is often only available to Full licensees. These formalities may take some time and should be completed before visiting the country concerned. If this is not done, there is also a risk that the Customs authorities will impound your radio equipment although having a licence does not, in itself, bypass any Customs regulations.

Alternatively the agreement may be similar to the CEPT arrangements. You should check first to avoid accidentally breaching any particular requirements. Such terms might be a matter of local law and not written in their amateur licence booklet. UK practice is to require visiting (non-CEPT) amateurs to take out a temporary UK licence, which will be granted on the strength of the applicant's own (full) licence. A temporary UK licence is not recognised for CEPT operation in other CEPT countries. The applicant will need to use their own home licence to obtain whatever temporary licence or operating privileges that other country is prepared to offer.

International third party messages and disasters

The ITU (International Telecommunication Union) Radio Regulations were amended at the world conference in 2003 (WRC03) to allow international third party messages in emergencies.

 In the unlikely event of you becoming involved, you are permitted to pass emergency messages. Normally, you should not respond to such requests unless it becomes evident that nobody else is going to.

It is possible that you may hear non-amateur stations using amateur bands in international emergencies. You must give priority to emergency traffic, amateur or otherwise, and avoid using those frequencies.

UK User Services:

You should already know that clause 1(2) of the licence allows you to pass messages on behalf of the User Services or let them use your radio to speak themselves. The list of User Services is given in the licence, clause 17(1)(qq). The first and second responders are fully defined in the Civil Contingencies Act, which you may need to refer to (it is available on the web) if you are asked for help. For exam purposes it is sufficient to know they include Police, Fire, Ambulance, Coastguard, local and central government.

Passing such messages is a separate skill because the need is to pass messages accurately as given and with minimum delay.

Raynet and the Radio Amateur Emergency Network provide training in such activities and can give advice. If you are not trained, you should not normally offer your services because you may then be inviting others to rely on skills you do not have, which could result in more harm than good.

Call signs:

The syllabus requires you to know all the UK call sign prefixes in current use. Basic prefixes are allocated by international agreement by the ITU. The UK has G, M and 2 for all its needs, including amateurs. Some Z prefixes are also used for maritime licences.

Amateur call signs are of the format Gxnaaa, Mxnaaa and 2xnaaa, where 'x' is the regional secondary identifier as defined in the licence booklet (e.g. W for

Wales); 'n' is a number between 0 and 9, and 'aaa' is two or three letters. The G series G0 to G8 is fully allocated (G9 was not used for amateurs). For Foundation and Full licences, the M series is now being used, currently M0 for Full licences and M3 for Foundation licences. The 2 series is used for Intermediate licences. This follows on from the use of 2 for Novices before the M series was available to amateurs.

The Intermediate and Full levels of licence were, prior to 2003, available in two classes. The A class required Morse and gave access to the HF bands. Call signs were M0 for Full and 2x0 for Intermediate (and Novice). The B class did not require Morse and holders were restricted to frequencies above 30MHz. Call signs were M1 for Full and 2x1 for Intermediate.

With the removal of Morse the A and B classes of licence were merged and there are now just 3 types of licence, Foundation, Intermediate and Full. There is a Temporary licence (issued to visitors who do not have a CEPT licence and are staying up to 6 months) but no UK call sign is issued, the amateur uses Mx/<own call>.



Messages:

The licence gives wide scope to the Messages you may send, see clause 11(1); but you should remember clause 1(1) limits you to non-commercial activities. Note (h) reminds that other regulations prohibit grossly offensive, indecent or menacing messages and, although not mentioned, it is also an offence to interfere with safety activities, by causing radio interference or by sending misleading messages.

You are at liberty to record messages addressed to you and retransmit them either to the originator or onwards to their intended destination. You must ensure that if you replay the callsign of the originator, there is no ambiguity as to the origin of your transmission and the original message. Doing this is not acting as a repeater. A repeater simultaneously

re-transmits the incoming signal and needs a separate licence. As a Full licensee you are permitted to apply to run a repeater (or a bulletin board for digital packet use) but this is subject to being able to frequency co-ordinate with the rest of the repeater network. It is not a task for the faint hearted; much expense and effort are involved and is the sort of activity a club or sizable group might undertake.

It is also considered that radio users are entitled to a degree of privacy; consequently it is an offence to seek to receive messages not intended for you or to take any notice of any such message unintentionally received. In that context, amateur radio is authorised for general reception but messages by most other services are not.

Unattended and Remote Control operation:

There are a number of methods of unattended or remote control operation permitted by clause 10 of the amateur licence. Unattended means that you are not actually at the primary controls of the transmitter. Obviously, however you operate the transmitter, the terms of your licence must still be complied with and you may be held responsible for any breaches.

Beacons:

A beacon is a device that regularly sends identification and other technical signals for the purposes of propagation measurements. To be of use, it must transmit at its allotted times over the whole day and indeed for several years. The amateur licence permits this on a number of set bands, shown in schedule 2 and the relevant notes, which give excluded locations to protect existing radio facilities. It is still necessary to co-ordinate this activity within the amateur community but there are no further licensing issues. Exam questions may relate to the frequencies but not the geographical restrictions (National Grid References - NGRs).

Temporary 'beacons' can be set up for direction finding competitions and the schedule makes provision for this. There is a power limit of 25W and close down must be possible within 2 hours, the details are given in the licence booklet, which will be available for checking should an exam question relate to them. Nonetheless the booklet should be read a few times beforehand!

Remote Control:

The licence permits two methods of remote control. A radio link at a maximum power of 500mW pep erp within amateur bands, and, for Full licenses only, any other communication link. That could be using a licence exempt radio band, provided the conditions pertaining to that band are observed, an internet link or even a dial up telephone link. Note (g) to the licence recommends that remote control links use frequencies above 30MHz. This is good advice because lower frequencies are liable to interference by sky wave paths from considerable distances.

The main transmitter may be remote from the operator as long as it is within the UK and covered by the UK licence. The regional secondary identifier should be that of the main transmitter, not the operator, if that is different. The remote control facility is for your personal use and not for general use by any amateur.

The key issue that amateurs need to consider is loss or malfunction of the control link and the need to immediately prevent incorrect operation or unauthorised use by others. Remember, you are responsible for the operation of the transmitter and clause 10(4) makes that clear. Encryption of the link is not permitted. You should also check, if you are using a public communications link, such as the telephone or internet, that such use is in accordance with the service provider's terms and conditions.

Digital operations:

This covers all forms of unattended digital operation but the main issue is packet radio. It is normal, considering the nature of packet radio, to leave packet facilities on whilst unattended, at school or work. Bulletin Boards (BBSs) and Nodes require separate licenses, but digipeating and personal mailboxes (PMS) are permitted by the normal licence. The same power and allowable frequency rules apply.

Logging and Identification:

There are no new requirements to be observed at the Full licence level. The master of a Vessel may require you to keep a Log and this is perhaps more likely now you may operate on a Vessel at Sea. The only other occasion you may need to keep a Log is at the request of a person authorised by Ofcom. This will, in all probability, be as part of an investigation into the cause of interference, which may or may not turn out to involve you. Nonetheless you must keep a Log if asked.

In reality many amateurs keep a Log for their own personal records, for claiming awards and for sending QSL cards. A well kept Log will also go a long way to showing you were not the cause of earlier interference, or indicate exactly what you were doing if the times happen, unfortunately, to coincide.

There are no new requirements for Identification. You must identify when calling CQ or another amateur, at least every 15 minutes if it is a long contact, on the same frequency as the one you are using and when changing to a new frequency. You must also identify in the same mode that you are using for communication, be it FM or SSB speech, TV, CW or any of the data modes. You need only make contact with one member of a group or net, by exchanging callsigns.

When operating for a User Service, you may hear 'tactical callsigns'. Typically a checkpoint location or number or a vehicle or volunteer ambulance number, the Red Cross for example. In licence terms they are not callsigns but are very helpful to controlling the event. The licence rules must still be complied with by giving your amateur Callsign at the appropriate intervals.



Apparatus, Inspection, Close down and licence renewal

The apparatus and Inspection clauses of the licence are all related to the need to not cause interference. As you will know, the licence requirement, which stems from the Wireless Telegraphy Acts, is to not cause undue interference to any other wireless telegraphy apparatus. In reality, it is incumbent on us as responsible amateurs to conduct our hobby in a socially acceptable way and that means not interfering with anything.

The field strengths set up by even a modest installation do exceed the limits of the EMC directives and the planning limits for TV and radio reception.

It may be that fitting a filter to an affected apparatus will resolve the problem and the continued operation well above the prescribed limits is quite possible. Indeed most amateurs do that all the time with no ill effects whatsoever. However in bad cases the amateur can be required to reduce power, possibly quite substantially, on certain bands so that the field strength limits are met. The limit is 125dBmV/m (or 5dBV/m) which is 1.78V/m.

Schedule to the licence:

This topic area includes the notes to the schedule.

There is little new here and you will be familiar with questions asked at Foundation and Intermediate level. At the Advanced level you should expect to have to study the schedule a bit more carefully to check the conditions associated with each amateur band. A question may, for example ask what frequency, if any, is allocated to the amateur satellite service but not to the amateur service. The answer, in 2007 at least, is the band 10.475-10.500GHz.

For historical reasons really associated with the different treatment of satellites, which may overfly and radiate to any part of the world, satellites are regarded as a different service to the ter-

restrial (fixed, land mobile, maritime and aeronautical) services.

The schedule also shows Primary and Secondary allocations. A look at the UK Frequency Allocation Table shows that both nationally and internationally the various radio services are given either primary or secondary status. More than one service may enjoy either status. This table is used in making frequency assignments to particular transmitters and in resolving interference. Only the military and amateurs have the ability to change frequency (within allocated bands) to avoid interference.

Accordingly amateurs are not protected from other authorised services that cannot change frequency. Where amateurs have secondary status, they are not permitted to interfere with services that have primary status and must defer to them if requested.

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.