



Chelmsford Amateur Radio Society

Foundation Course (2) Licence Conditions



UK Licence Structure

<u>Class</u>	<u>Callsign</u>	<u>Bands</u>	<u>Power</u>
• Foundation	Mx6ABC	HF-70cms & 10GHz	10 Watts
• Intermediate	2x0ABC	All	50 Watts
• Full	Mx0ABC	All	400 Watts

- Where 'x' is:-
I=N.Ireland D=I.of Man E=England (Intermediates only)
J=Jersey M=Scotland U=Guernsey W=Wales

- Older Callsigns: Foundation=M3
Class A=M0/5, G0/2/3/4/5 Class B= M1, G1/6/7/8, 2E1

- **July 2003: 5wpm Morse Dropped; Class A/B merged for Intermediate & Full**
- **May 2008: M6 introduced following exhaustion of M3 Foundation series**



Foundation Privileges

- Foundation Licence is the entry level but still permits considerable potential for communications and learning
- Allowed 10 Watts on most bands,
 - but note the exceptions in the Schedule!
- Access to HF, VHF & UHF Bands, plus 10GHz
- Assumes certified radios or commercial kits
- NB: Foundation Licence does NOT allow operation outside the UK or on vessels at sea



Licence Conditions

- In Dec-2006 the conditions for all three levels of amateur licence were merged into a single document - **READ IT CAREFULLY !!**
- Current version can be found on the Ofcom website:
www.ofcom.org.uk
- It is important to identify those Clauses that only apply to Foundation - others may only apply to Intermediate or Full licensees
- You must hold a current validation document for the station to be used. If it is not renewed, your privileges are revoked until it is.
- Licence must be revalidated every 5 yrs - Try to do it more frequently!
- **Ensure you are able to log-on and access your own online version!**



General Rules

- Rights, rules, inspection and Close Down etc are all ultimately on the authority of Ofcom
- Ofcom is the statutory regulator which superceded the Radiocommunications Agency
- Contacts must only be with other licensed amateurs
- No public broadcasting, speeches, offensive language etc



Rules-2

- **Licensees may use codes and abbreviations to assist communication, but they must not obscure the meaning**
- **Any change of name/address must be notified immediately as Ofcom has the power to revoke**
 - As it does for other breaches of Licence conditions
- **Amateur Satellite Operation is permitted, but needs care**
- **Operation on Maritime vessels and aircraft is not permitted**
 - Inland river/canal boats are ok!



Abuse & Guidance

Abuse

- The transmission of music and the use of offensive or threatening language whilst on the air are unacceptable in amateur radio.
- Do not respond on air, approach or confront individuals
- If frequent Log it
- Ofcom have extensive advice online
- Contact RSGB-AROS or use the Ofcom online submission form <https://stakeholders.ofcom.org.uk/tell-us/abuse-amateur-radio-system>

Good Practice

- A widely recommended guide to good practice is:
“Ethics & Operating Procedures for the Radio Amateur”
online at <http://ham-operating-ethics.org/>
- Further information is at <http://www.rsgb.org/operating/>



Callsigns & Suffixes

- **Must Give your Callsign:-**
 - When Calling CQ
 - When the frequency in use is changed
 - Every 15 mins
- **Repeaters, Nets etc**
 - **Good practice to give Callsign more often than 15mins!**
- **It is also good practice to append the following.....**
 - Mobile Operation: **Callsign /M**
 - Temporary Location: **Callsign /P**
 - Alternative Addresses: **Callsign /A**



Addresses / Locations

- Definitions of Addresses should be understood as per Licence Sec-17
- **Main Station Address** is as per your licence validation document
- **Mobile /M** means located in the UK in/on any vehicle, pedestrian, or vessel in inland waters. For example:- M6QQQ/M
- **Alternative Address /A** means a fixed Postal Address in the UK other than the Main Station Address. For example:- M6QQQ/A
- **Temporary Address /P** means a fixed location other than your validation document or Alternative address. For example:- M6QQQ/P eg. A Contest Station in a field, which has no postal address
- When operating from other locations, it is recommended to give your **location within 5km eg by Postcode, Lat/Long, IARU Locator, NGR etc**



Supervision & User Services

- Foundation Licensees may personally operate their Radio Equipment or directly supervise another UK Amateur using it
 - provided they use your callsign and licence conditions.
eg 10W max etc
- In special cases you may either pass messages on behalf of, or permit your equipment to be used by, **the User Services**



Logbooks

- Unlike yesteryear a permanent Log need not be kept but . . .
- A person authorised by Ofcom may require a Licensee to keep a log of all transmissions made over a specified period of time:
 - To aid Interference Investigations
 - To determine Licence Condition Compliance by the Licensee
- Well kept uptodate logbooks are more likely to be accepted
- Logbooks are also good practice and aid QSL Cards, Contests, Award Claims etc.
- Also ideal for records of station tests - **from time to time**
- Logbooks may be on paper or electronic media (backed up!)



Frequency Schedule

- Foundation Frequency Schedules should be studied carefully
 - don't confuse with Intermediate and Full ones
- Allowed 10 Watts on most bands – BUT NOT ALL
- Note those bands where restrictions exist:
 - Power or ERP limits, 100km around Charing Cross
 - Examples are in 136kHz, 430-432MHz, 10GHz
- Allocations may be **Primary** or **Secondary**
 - Secondary means the band is shared and you must not cause harmful interference to the Primary User
- You can be examined on the Foundation Frequency Schedule...
 - **a copy is provided in the Exam - Use It !!!**



Frequency Schedule

- Columns give frequencies and power limits for terrestrial and satellite use
- Note those exceptions!
- Remember to use it in the exam!

Frequency Bands (in MHz)	Status of allocations in UK to the Amateur Service	Status of allocations in UK to the Amateur Satellite Service	Maximum Peak Envelope Power level in Watts (and dB)
0.1357-0.1378	Secondary. Available on the basis of non-interference to other services inside or outside the UK.	Not allocated	1W (0 dBW) e.r.p.
1.810-1.830	Primary. Available on the basis of non-interference to other services outside the UK.	Not allocated	10W (10 dBW)
1.830-1.850	Primary	Not allocated	10W (10 dBW)
1.850-2.000	Secondary. Available on the basis of non-interference to other services inside or outside the UK.	Not allocated	10W (10 dBW)
3.500-3.800	Primary. Shared with other services	Not allocated	10W (10 dBW)
7.000-7.100	Primary	Primary	10W (10 dBW)
7.100-7.200	Secondary. Available on the basis of non-interference to other services inside or outside the UK.	Not allocated	10W (10 dBW)
10.100-10.150	Secondary	Not allocated	10W (10 dBW)
14.000-14.250	Primary	Primary	10W (10 dBW)
14.250-14.350	Primary	Not allocated	10W (10 dBW)
18.068-18.168	Primary	Primary	10W (10 dBW)
21.000-21.450	Primary	Primary	10W (10 dBW)
24.890-24.990	Primary	Primary	10W (10 dBW)
28.000-29.700	Primary	Primary	10W (10 dBW)
50.00-51.00	Primary. Available on the basis of non-interference to other services outside the UK	Not allocated	10W (10 dBW)
51.00-52.00	Secondary. Available on the basis of non-interference to other services inside or outside the UK	Not allocated	10W (10 dBW)
70.00-70.50	Secondary. Available on the basis of non-interference to other services inside or outside the UK	Not allocated	10W (10 dBW)
144.0-146.0	Primary	Primary	10W (10 dBW) e.r.p.
430.0-431.0	Secondary	Not allocated	10W (10 dBW) e.r.p.
431.0-432.0	Secondary. Not available for use within 100km radius of Charing Cross, London (51°30'30"N, 00°07'24"W)	Not allocated	10W (10 dBW) e.r.p.
432.0-438.0	Secondary	Not allocated	10W (10 dBW)
438.0-439.0	Secondary	Not allocated	10W (10 dBW)
439.0-440.0	Secondary	Not allocated	10W (10 dBW)
10000-10125	Secondary	Not allocated	1W (0 dBW)
10225-10450	Secondary	Not allocated	1W (0 dBW)
10450-10475	Secondary	Secondary	1W (0 dBW)
10475-10500	Not allocated	Secondary	1W (0 dBW)



Band Plans

- Bands and Max Powers are laid down in the licence schedule
- Band Plans are agreed operating practice to group modes etc
 - contrast with Licence Schedules which have full legal force
- Note transmission bandwidth varies with mode and is now specified in latest band plans - Don't over deviate !
- Study band plans carefully and understand them
- Note use of calling channels and availability of repeaters on VHF/UHF FM sections of the bands
- Don't have QSOs on Beacon Segments!
- The 14MHz and 144MHz Band Plans may be used in the exam



Band Plan Example

- Columns give frequencies, bandwidth (for modes) and usage
- Remember to use them in the exam!

14MHz (20m)	Necessary Bandwidth	UK Usage
14,000-14,060 kHz	200 Hz	Telegraph - contest preferred 14,055 kHz QRS (slow telegraphy) Centre of Activity
14,060-14,070	200 Hz	Telegraphy 14,060 kHz QRP (low power) Centre of Activity
14,070-14,089	500 Hz	Narrow band modes
14,089-14,099	500 Hz	Narrow band modes - automatically controlled data stations (unattended)
14,099-14,101		IBP - reserved exclusively for beacons
14,101-14,112	2.7 kHz	All modes - automatically controlled data stations (unattended)
14,112-14,125	2.7 kHz	All modes (excluding digimodes)
14,125-14,300	2.7 kHz	All modes - SSB contest preferred segment 14,130kHz - digital voice centre of activity 14,195+- 5 kHz Priority for Expeditions 14,230 kHz - Image Centre of Activity. 14,285 kHz - QRP Centre of Activity
14,300-14,350	2.7 kHz	All modes 14,300 kHz Global Emergency Centre of Activity
LICENCE NOTES: Amateur Service - Primary User. 14,000-14,250 kHz Amateur Satellite Service - Primary User.		



Further Information

- All the licence conditions including the frequency schedules are on the Amateur section of the Ofcom website:-
<http://licensing.ofcom.org.uk/radiocommunication-licences/amateur-radio/>
- Remember to interpret those clauses that apply to Foundation
- If you pass the exam, your own personalised licence and callsign may be obtained from the Ofcom Online Licence Centre:

<https://services.ofcom.org.uk/>

- You will need to Register - remember your ID/Password!
- If in doubt their telephone helpdesk is usually very helpful:-
Tel: 0207-981-3131 or 0300-1231000

Band Plans etc are on the RSGB website:- <http://www.rsgb.org.uk/>