



Amateur Radio (Intermediate) Licence (A) or (B) Terms, Provisions and Limitations Booklet BR68/I

These terms, provisions and limitations shall be read as an integral part of the Amateur Radio (Intermediate) Licence (A) or (B).

Conditions of use

Purpose

- 1(1) The Licensee shall use the Station for the purpose of self-training in communication by radio telecommunications, which use (without limiting the generality of the foregoing) includes technical investigations.
- 1(1A) The Licensee may use or permit the use of the Station, as part of his self-training in communication by radio telecommunications, during any operation authorised by a User Service (defined in sub-clause 10(1)(1)) or during any exercise relating to such an operation for the purpose of sending Messages on behalf of the User Service to other licensed amateur stations. It is recommended that the Licensee follows a formal emergency communications training scheme, details of which are available from the Radiocommunications Agency.
- 1(1B) The Licensee may use or permit the use of the Station, as part of his self-training in communication by radio telecommunications, during any community event where the Licensee has been requested in writing by a User Service (defined in sub-clause 10(1)(1)) to provide communications without pecuniary gain for the purpose of sending Messages relating to the event to other licensed amateur stations.

Messages

- 1(2) The Licensee shall address Messages only to other licensed amateurs or the stations of licensed amateurs and shall send only:
- (a) Messages relating to technical investigations or remarks of a personal character; or
 - (b) Signals (not enciphered) which form part of, or relate to, the transmission of Messages.
- 1(3) "Messages" and "Signals" include communication by:
- (a) telephony;
 - (b) morse telegraphy;
 - (c) visual communications (which include slow scan television (SSTV), fast scan television (FSTV) and facsimile); and
 - (d) digital communications (which include data, radio teletype (RTTY) and amateur teleprinting over radio (AMTOR)).

- 1(4) Except when conducting emergency communications on behalf of a User Service, the Licensee may use codes and abbreviations for communications as long as they do not obscure the meaning of, but only facilitate, the communications.
- 1(5) The Licensee may send messages to individual amateurs but shall not send messages (whether directly or for onward transmission by another station) for general reception by licensed amateurs other than:
 - (a) initial calls; or
 - (b) to groups of licensed amateurs as long as communication is first established separately with at least one licensed amateur in any such group; or
 - (c) to licensed amateurs who participate within a net and subject to the identification requirements provided for in sub-clause 7(1A) below; or
 - (d) messages transmitted via a mailbox or bulletin board for reception by all or any licensed amateurs who have the facility to transmit and receive RTTY or data transmissions.
- 1(6) The Licensee shall not transmit such material as music, public broadcasts or speeches.

Location

- 1(7) "Station" means the station of the Licensee at the Main Station Address, a Temporary Location or while Mobile, as the case may be.
- 1(8) The Licensee shall operate the Station only:
 - (a) at the Main Station Address ("Main Station Address" means the main station address of the Licensee set forth in the Validation Document);
 - (b) at a Temporary Location ("Temporary Location" means a location, other than the Main Station Address, in the United Kingdom, and in a fixed position);
 - (c) while Mobile ("Mobile" means located in the United Kingdom in any vehicle, as a pedestrian or on any Vessel in Inland Waters).
- 1(9) The Licensee shall give prior written notice to the Secretary of State at the address specified in note (a) to this Booklet of any change in the Main Station Address (or mailing address, if different).

Limitations on use

- 2(1) The Licensee shall only use:
 - (a) the frequency bands specified in the first column of the Schedule to this Licence subject to the limitations set out in the second column of the Schedule;

- (b) a power relating to such frequency bands not exceeding the maximum specified in the third or fourth column of the Schedule; and
 - (c) the types of transmission specified in the fifth column of the Schedule.
- 2(2) If the Licence is an Amateur Radio (Intermediate) Licence (B), then the Licensee:
- (a) shall transmit only in the frequency bands above 30 MHz specified in the first column of the Schedule;
 - (b) may receive Messages on the frequency bands specified in the first column of the Schedule as long as he transmits only in the bands above 30 MHz specified in the first column of the Schedule.
- 2(3) The Licensee may receive Messages from an overseas amateur or from a UK amateur duly authorised by the Secretary of State on a frequency band not specified in the first column of the Schedule as long as the Licensee transmits only in a band specified in the first column of the Schedule which is authorised under sub-clause 2(1) or (2).

Unattended Operation

- 2(4) Subject to sub-clause 2(5), the Licensee may conduct the Unattended Operations ("Unattended Operation" means the operation of the Station when unattended by the Licensee) only:
- (a) of a beacon:
 - (i) in the frequency bands or sub-bands:
 - 1298 MHz to 1299 MHz (Not in N. Ireland and not within 50km of NGR SS 206127 and NGR SE 202577)
 - 10000 MHz to 10125 MHz (not within 50km of NGR SS 206127, NGR SK 985640 and NGR SE 202577)
 - 10400 MHz to 10475 MHz, or
 - (ii) for the purpose of direction finding competitions, at 1.96 MHz with a bandwidth not exceeding 12.5 kHz, in the frequency bands:
 - 28.100 MHz to 28.190 MHz (not within 50km of NGR SK 985640)
 - 28.225 MHz to 28.300 MHz (not within 50km of NGR SK 985640)
 - 28.300 MHz to 28.500 MHz (not within 50km of NGR SK 985640)
- with a maximum power not exceeding that specified in the third column of the Schedule which is capable of transmitting the callsign of the Licensee periodically (in accordance with Clause 7) and capable of being switched off within two hours of a demand to close down given by a person authorised by the Secretary of State:

- (b) of a low power device to control apparatus at the Main Station Address or a Temporary Location by remote control, in the frequency bands or sub-bands:

1298 MHz to 1299 MHz (Not in N. Ireland and not within 50km of NGR SS 206127 and NGR SE 202577)
10000 MHz to 10125 MHz (not within 50km of NGR SS 206127, NGR SK 985640 and NGR SE 202577)
10400 MHz to 10475 MHz

with a maximum power of 100mW pip or 10mW pep (See Note (e) to the Schedule) under all reasonably foreseeable operational conditions in such a way that no electromagnetic energy capable of reception by any station or apparatus outside the boundary of the premises in which the Station is situated is emitted from the Station: or

- (c) by digital communications at the Main Station Address or at a Temporary Location:

- (i) in the frequency sub-band:

50.620 MHz to 50.760 MHz, (not within 50km of NGR SE 202577) or

- (ii) in the frequency bands or sub-bands:

144 MHz to 146 MHz (not within 50km of)
1299 MHz to 1300 MHz (Not in N. Ireland and not within 50km of NGR SS 206127 and NGR SE 202577)
10000 MHz to 10125 MHz (not within 50km of NGR SS 206127, NGR SK 985640 and NGR SE 202577)
10400 MHz to 10475 MHz

with a maximum power not exceeding that specified in the third column of the Schedule.

- 2(5) The Licensee shall not conduct the Unattended Operation of a beacon or of digital communications unless he has given at least 7 days' written notice of the location, period of operation, frequency, power (Watts), identity of other users of wireless telegraphy who share the site and shut down procedures to the Operations Manager of the local office of the Radiocommunications Agency in whose area the operation is to take place. The Operations Manager may, before the commencement of operation, prohibit the Unattended Operation or allow the operation on compliance with the conditions which he may specify.
- 2(6) The Licensee is not required to log the operation of a low power device under sub-clause 2(4)(b), although he shall log the operation of the Station in accordance with Clause 6.

Pulse emissions

- 2(7) The Licensee shall not use pulse emissions.

Operators

- 2(8) The Station shall be operated only by the Licensee personally (Except in the case of Unattended Operations under sub-clause 2(4)).
- 2(9) The Licensee may permit any person to type the Message of the Licensee for transmission by the Licensee from the Station.
- 2(9A) In this clause 2, a “disqualified person” means any person:
- (a) whose United Kingdom Amateur Radio Licence is currently revoked; or varied as a result of revocation action
 - (b) whose last application for an Amateur Radio Licence was refused as a result of revocation action; or
 - (c) who, in the last six months, has been convicted of an offence under the Wireless Telegraphy Acts.

Aircraft and vessels

- 2(10) The Licensee shall not establish or use the Station on any vessel, other than in Inland Waters, or in any aircraft or other airborne vehicle.

Other requirements

- 3(1) The Licensee shall hold:
- (a) Intermediate Licence Training Course Completion Slip and an Amateur Radio (Intermediate) Examination Certificate or be a Class (B) licensee of at least one year’s standing; and
 - (b) in the case of an Amateur Radio (Intermediate) Licence (A), an Amateur (Intermediate) Morse Test Pass Slip issued on behalf of the Secretary of State.
- 3(2) The Licensee shall comply with:
- (a) the relevant provisions of the Telecommunication Convention and Radio Regulations unless such compliance would result in a breach of the Licence; and
 - (b) all relevant statutory enactments including (without limiting the generality of the foregoing) the Act, the Wireless Telegraphy Act 1967 and the Telecommunications Act 1984.
- 3(3) Except as provided by sub-clause 3(4), the Licensee shall:
- (a) have no pecuniary interest (direct or indirect) in any operations conducted under this Licence; and
 - (b) except in the case of activities on behalf of a non-profit organisation established for the furtherance of amateur radio, not use the Station for business, advertisement or propaganda purposes including (without limiting the generality of the foregoing) the sending of news or messages of, or on behalf of, or for the benefit or information of, any social, political, religious or commercial organisation.

- 3(4) The Licensee may use the Station for the purposes of advertising the sale of, or to solicit the purchase of, amateur radio equipment (“the Advertisement”), or in order to allow the onward transmission of Advertisements, subject to the following terms:
- (a) only the initial Advertisement may be sent by the originating Licensee. Subsequent negotiations must not be carried out on amateur radio;
 - (b) advertised goods must be amateur radio or computer related;
 - (c) each Advertisement must not contain more than five separate items;
 - (d) the Licensee may only place one such Advertisement within 28 day period;
 - (e) Advertisements must be restricted to the United Kingdom packet radio network; and
 - (f) Advertisements must be placed on behalf of the Licensee or any non-profit organisation established for the furtherance of amateur radio.

Apparatus

- 4(1) The Licensee shall ensure that:
- (a) the emitted frequency of the apparatus comprised in the Station is as stable and as free from Unwanted Emissions as the state of technical development for amateur radio apparatus reasonably permits; and
 - (b) whatever class of emission is in use, the bandwidth occupied by the emission is such that not more than 1% of the mean power of the transmission (not including the power contained in spurious emissions) falls outside the frequency band.
- 4(2) Notwithstanding any other term of this Licence, the Licensee shall ensure that the apparatus comprised in the Station is designed and constructed, and maintained and used, so that its use does not cause any undue interference to any wireless telegraphy.
- 4(3) If any undue interference to wireless telegraphy is caused by the radiation of Unwanted Emissions or the field strength of electromagnetic energy radiated from the Station, then the Licensee shall suppress the Unwanted Emissions or reduce the level of the field strength to the degree satisfactory to the Secretary of State.
- 4(4) The Licensee shall conduct tests from time to time to ensure that the requirements of this clause 4 are met.
- 4(5) The Station shall be capable of receiving Messages on the same frequencies and with the same classes of emission in use for the transmission of Messages by the Station.

Recorded or retransmitted Messages

- 5(1) The Licensee may record and retransmit Messages addressed to the Licensee from other licensed amateurs:
 - (a) with whom the Licensee is in direct communication; or
 - (b) which are intended for retransmission to a specified licensed amateur.
- 5(2) The Licensee may send Messages by (or as part of) the intermediate relaying of the Messages to or from other licensed amateurs.
- 5(3) When recording and retransmitting the Message of another licensed amateur, if the Licensee also records and retransmits the callsign of the licensed amateur, then the Licensee shall transmit the callsign in such a way that the origin of the Message and the origin of the retransmission are clear.
- 5(4) Notwithstanding sub-clauses 5(1) and (2), the Licensee shall not operate the station as:
 - (a) a mailbox or bulletin board (each being a device which stores, in a readable form, complete messages which are not to or from the Licensee, for re-transmission on behalf of other licensed amateurs)
 - (b) a telephony repeater (a facility which receives and simultaneously retransmits Messages by telephony for or on behalf of other licensed amateurs).

Log

- 6(1) Subject to sub-clause 2(6), the Licensee shall keep a permanent record (the "Log") of all wireless telegraphy transmissions at the Main Station Address and all Temporary Locations showing:
 - (a) dates of transmission;
 - (b) the times (in Co-ordinated Universal Time (UTC)) during each day of:
 - (i) the first and last transmissions from the Station (except when using automatic operations involving digital communications), or
 - (ii) switching the Station on and off for the purpose of enabling transmissions (when using automatic operations involving digital communications), and changing the frequency band, class of emission or power;
 - (c) frequency band of transmission or, in an Unattended Operation, the specific frequency employed;
 - (d) class of emission;
 - (e) power;
 - (f) initial calls ("CQ" calls) (whether or not they are answered);
 - (g) except during automatic operations involving digital communications,

the callsign of licensed amateurs or licensed amateur stations with which communications have been established (not including those amateurs or stations which form part of the intermediate relay of Messages);

- (h) details of tests carried out in accordance with sub-clause 4(4); and
- (i) location when the station is operated at a Temporary Location.

6(2) The Log shall be written in a book or maintained on a magnetic tape, disc or other electronic storage medium. If the Log is maintained on an electronic storage medium the means to view the Log and produce a hard copy shall be kept readily available at the Main Station Address.

6(3) Where the Log is maintained:

- (a) in a book, the book shall not be loose-leaf and no gaps shall be left between the entries;
- (b) on a magnetic tape, disc or other electronic storage medium, suitable precautions shall be taken to ensure that the Log is backed up.

6(4) The Licensee shall keep the Log for inspection by a person authorised by the Secretary of State for at least six months from the date of the last entry whether or not this Licence has expired or been revoked.

6(5) When a person authorised by the Secretary of State requires additional matters to be recorded, the Licensee shall record those additional matters in the Log for the period specified by that person.

Identification

7(1) Subject to sub-clause (IA) below, which does not apply to operation via repeaters during transmissions, the Licensee shall transmit the callsign specified in the Validation Document:

- (a) during initial calls ("CQ" calls);
- (b) at the beginning and at the end of each period of communication with a licensed amateur and when the period of communication is longer than 15 minutes, at the end of each interval of 15 minutes;
- (c) at the beginning of transmission on a new frequency (whenever the frequency of transmission is changed);
- (d) by the same type of transmission that is being used for the communication;
- (e) on the same carrier frequency that is being used for the communication; and
- (f) by morse telegraphy or telephony, at the end of each 30 minute period during which transmissions are sent from the Station (unless already transmitting in morse telegraphy or telephony). If the Licensee is conducting automatic operations involving digital communications

then he shall transmit the callsign under this sub-clause at a maximum speed of 20 words per minute.

- 7(1A) When operating within a net, under sub-clause 1(5)(c), the Licensee shall observe the following requirements in relation to the transmission of his callsign:
- (a) he shall transmit his callsign when he first joins the net and on leaving it;
 - (b) subject to sub-clause 7(1A) (c) below, whilst participating in the net, he shall not be obliged to transmit his callsign when making contact with other participants;
 - (c) whilst participating in the net, he shall transmit his callsign:
 - (i) when 15 minutes have elapsed since the last transmission of his callsign; or
 - (ii) if he has not transmitted speech before 15 minutes have elapsed since such transmission, on the first occasion thereafter on which he transmits speech.
- 7(2) At a Temporary Location, the Licensee shall:
- (a) use the suffix “/P” with his callsign and give the location of the Station every 30 minutes to an accuracy of at least 5km by a generally used identifier (for guidance see note (v) to this booklet); or
 - (b) give prior written notice of the location to the Operations Manager of the local office of the Radiocommunications Agency in whose area the operation is to take place.
- 7(3) When Mobile, the Licensee shall use the suffix “/M”.
- 7(4) When away from the Main Station Address, the Licensee shall use the appropriate Regional Secondary Locator specified in note (w) to this Booklet.
- 7(5) When operating a low power device under sub-clause 2(4)(b), this clause 7 shall not apply to the operation of the low power device (although this clause 7 shall continue to apply to the operation of the Station).
- 7(6) The Secretary of State reserves the right to release details of the callsign of the Licensee specified in the Validation Document to third parties so that the callsign may be published in call books compiled by third parties, either in written form or in the form of “read only” computer disks.

Inspection and close down

- 8(1) The Licensee shall permit a person authorised by the Secretary of State:
- (a) to have access to the Station; and
 - (b) to inspect the Licence and Log and to inspect the apparatus of the Station at any and all reasonable times (or when, in the opinion of a

person authorised by the Secretary of State, an urgent situation exists, at any time) for the purpose of verifying compliance with the terms of the Licence.

- 8(2) When, in the opinion of a person authorised by the Secretary of State:
- (a) the Licensee is in breach of the Licence; and
 - (b) the breach justifies immediate restriction or close down, the Licensee shall restrict the operation of, or close down and cease to operate, the Station (or any apparatus comprised in the Station) forthwith in accordance with the demand of a person authorised by the Secretary of State for the temporary period specified in the demand.
- 8(3) For the purposes of sub-section 1(4) of the Act, this Licence may be revoked, or its terms, provisions or limitations varied, by a notice in writing of the Secretary of State served on the Licensee, or by a general notice addressed to all holders of an Amateur Radio Licence (A) or Amateur Radio Licence (B) published in the London, Edinburgh and Belfast Gazettes or broadcast nationally by the British Broadcasting Corporation.

Period of Licence and fees due

- 9(1) Subject to the payment, if appropriate, (for guidance see note (y) to this booklet) of the fee in the manner indicated in sub-clause 9(2), this Licence shall continue in force from year to year unless revoked by the Secretary of State.
- 9(2) The Licensee shall pay to the Secretary of State before the anniversary date of the Date of Issue in each year, the fee on renewal prescribed by the Regulations for the time being in force under sub-section 2(1) of the Act, and on the payment of the fee the Secretary of State will issue to the Licensee a document in the form of the title page of this Licence (the "Validation Document") which will indicate the next date for renewal.
- 9(3) If the Licensee does not pay any fee due and in the manner described in sub-clause 9(2), then the Licence shall expire at the end of the day before the relevant anniversary date of the Date of Issue.
- 9(4) The licensee shall surrender the Validation Document to the Secretary of State forthwith upon the revocation of the Licence. The Secretary of State reserves the right to publish the name and callsign of the Licensee if the Licence is revoked.

Interpretation

- 10(1) In this Licence, unless the context otherwise requires:
- (a) The Interpretation Act 1978 shall apply to this Licence as it applies to an Act of Parliament;
 - (b) the expression "Co-ordinated Universal Time" has the same meaning as it has in the Radio Regulations (for guidance see note (s) to this booklet);

- (c) "Act" means the Wireless Telegraphy Act 1949;
 - (d) "Inland Waters" means any canal, river, lake, loch or navigation which is not Tidal Water;
 - (e) "Inspect" means examine and test;
 - (f) "Licensee" means the licensee named in paragraph (a) of the Validation Document;
 - (g) "Secretary of State" means the Secretary of State for Trade and Industry;
 - (h) "Telecommunication Convention" and "Radio Regulations" mean the International Telecommunication Convention and the Radio Regulations thereunder and include and Convention or Regulation which may from time to time be enacted or brought into force in substitution for, in amendment of, or in addition to, the Telecommunication Convention or Radio Regulations;
 - (i) "United Kingdom" means the United Kingdom of Great Britain and Northern Ireland, the Channel Islands and the Isle of Man;
 - (j) "Unwanted Emissions" means spurious emissions and out-of-band emissions as defined in the Radio Regulations;
 - (k) "Vessel" includes a hovercraft and any other floating structure which is capable of being manned.
- 10(1)(1) "User Service" means the British Red Cross Society, the St John Ambulance Brigade, the St Andrew Ambulance Association, the Women's Royal Voluntary Service, the Salvation Army, HM Coastguard, the Chief Emergency Planning Officer ("Chief Emergency Planning Officer" means an Emergency Planning Officer who is not responsible to any higher Emergency Planning Officer, such as a County, Regional or Islands Emergency Planning Officer) or any United Kingdom police force, fire or ambulance service, health authority, government department or utility services.
- 10(2) The headings in this Licence are for ease of reference only and shall not affect the interpretation of the Licence.
- 10(3) The Licence consists of the Validation Document, the Terms, Provisions and Limitations Booklet BR68a/l and the Schedule to the Booklet as any of them may be varied from time to time.
- 10(4) To the extent that they do not conflict with or are not inconsistent with any of the clauses herein, the Notes to the Schedule to the Booklet and the Notes to the Booklet shall be complied with by the Licensee.

The Schedule to Terms, Provisions and Limitations Booklet BR68/I

Amateur Radio (Intermediate) Licence (A) or (B)

Those licensed under an Amateur Radio (Intermediate) Licence (B) may not transmit on these bands between 0.1357 and 29.700MHz.

1	2	3	4
Frequency Bands in MHz	Status of Allocations in the United Kingdom to the Amateur Service	Power RF Output in Watts (dB Relative to one watt)	Permitted Types of Transmission
0.1357-0.1378	Secondary. Available on the basis of non-interference to other services (inside or outside the United Kingdom)	1W (0dBW) erp	Morse Telephony RTTY Data Facsimile SSTV
1.810-1.830	Primary. Available on the basis of non-interference to other services (outside the United Kingdom)	50W (17dBW)	
1.830-1.850	Primary		
1.850-1.950	Available on the basis of non-interference to other services (inside or outside the United Kingdom)	32W (15dBW)	Morse Telephony RTTY Data
1.950-2.000		50W (17dBW)	
3.500-3.550	Primary. Shared with other services		Morse Telephony RTTY Data Facsimile SSTV
3.550-3.600			Morse
3.600-3.650			Morse RTTY Telephony
3.650-3.800			Morse Telephony RTTY Data Facsimile SSTV
7.000-7.100	Primary		Morse Telephony RTTY Data Facsimile SSTV
10.100-10.110	Secondary		
10.110-10.140		Morse	
10.140-10.150		Morse Telephony RTTY Data Facsimile SSTV	
14.000-14.250	Primary		
14.250-14.350			
18.068-18.168			
21.000-21.050			

1	2	3	4
Frequency Bands in MHz	Status of Allocations in the United Kingdom to the Amateur Service	Power RF Output in Watts (dB Relative to one watt)	Permitted Types of Transmission
21.050-21.149	Primary	50W (17dBW)	Morse
21.149-21.450			Morse Telephony RTTY Data Facsimile SSTV
24.890-24.990			
28.000-28.050			
28.050-28.190			Morse RTTY Data
28.225-28.300			
28.300-28.500			Morse Telephony
28.500-29.700			Morse Telephony RTTY Data Facsimile SSTV
50.00-51.00	Primary. Available on the basis of non-interference to other services (outside the United Kingdom) Antennas limited to 20 metres above ground level. No maritime mobile operation	50W (17dBW)	Morse Telephony Data
51.00-52.00	Secondary. Available on the basis of non-interference to other services (outside the United Kingdom) Antennas limited to 20 metres above ground level. No maritime mobile operation		
70.00-70.50	Secondary. Available on the basis on non-interference to other services (outside the United Kingdom)		Morse Telephony RTTY Data Facsimile SSTV
144.0-146.00	Primary		
430.0-431.0	Secondary	40W (16dBW) erp	Morse Telephony RTTY Data Facsimile SSTV FSTV
431.0-432.0	Secondary. Not available for use; within a 100km radius of Charing Cross, London (50° 30' 30" N, 00° 07' 24" W)		

1	2	3	4	
Frequency Bands in MHz	Status of Allocations in the United Kingdom to the Amateur Service	Power RF Output in Watts (dB Relative to one watt)	Permitted Types of Transmission	
432.0-435.0	Secondary	50W (17dBW)	Morse Telephony Data	
435.0-438.0			Morse Telephony RTTY Data Facsimile SSTV FSTV	
438.0-440.0			Morse Telephony Data SSTV FSTV	
1240-1260			Secondary. Users must accept interference from ISM users	Morse Telephony RTTY Data Facsimile SSTV FSTV
1260-1270				
1270-1325				
2310-2400				
2400-2450				
3400-3475			Secondary	
5650-5670				
5670-5680				
5575-5765	Secondary. Users must accept interference from ISM users			
5820-5830				
5830-5850				
10000-10125	Secondary			
10225-10450				
10450-10475				
10475-10500		(Not allocated)		
24000-24050	Primary. Users must accept interference from ISM users			
24050-24150	Secondary. May only be used with the written consent of the Secretary of State. Users must accept interference from ISM users			
24150-24250	Secondary			
47000-47200	Primary			
75500-76000				
142000-144000				
248000-250000				

Notes to the schedule

- (a) The maximum power specified in the third column of the Schedule refers to the peak input power (pip) and the maximum power specified in the fourth column of the Schedule refers to the peak envelope power (pep). The Licensee may use either measurement method, provided that the maximum power specified in the fourth column of the Schedule is not exceeded.
- (b) In all frequency bands, high intensities of RF radiation may be harmful and safety precautions should be taken, particularly in locations to which people have access. Advice concerning safe levels of exposure to RF radiation is provided by the National Radiological Protection Board.
- (c) **Primary, permitted and secondary services**
For the purpose of this Licence, frequency bands allocated to the Amateur Service on a primary basis cannot claim protection from undue interference from any other authorised services, such protection being afforded only to users whose frequencies have been registered nationally or internationally. In the United Kingdom, individual frequency assignments are not registered in the Amateur Service, except for beacons and repeaters. This applies equally to all bands allocated on a secondary basis where stations of the Amateur Service are also required not to cause undue interference to stations of a primary or permitted service to which frequencies are already assigned or to which frequencies may be assigned at a later date.
- (d) Any modulation technique (except for pulse emissions below 1000 MHz) may be used for the types of transmission specified in the fifth column of the Schedule which are defined as follows:

Morse:	hand or automatically-sent international morse code
Telephony:	speech, including selective calling signals
RTTY:	radio teletype and AMTOR
Data:	digital codes representing numbers, text, speech, images, measurements, computer programmes or other information authorised by the Licence.
Facsimile:	transmission of fixed or graphic images
SSTV:	slow scan (ie reduced bandwidth) television
FSTV:	fast scan television

- (e) Interpretation
- (i) Peak Input Power (pip): The average DC power supplied to the final stage (power amplifier) of the transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal

operating conditions (except amplitude modulated emissions - see note below).

- (ii) Peak Envelope Power (pep): The average power supplied to the antenna by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions (except amplitude modulated emissions - see note below).

Note: If the Licensee does not have an rf power meter, the pep should be calculated from the pip, assuming an efficiency of 60% for the power amplifier. For simplicity, the pep or pip may be measured using a single modulating tone for suppressed carrier emissions and an unmodulated carrier for all other emissions. For amplitude modulated emissions, it is permitted to use a pep or pip not exceeding four times the unmodulated carrier pep or pip respectively.

Terms, Provisions and Limitations Booklet BR 68/I

- (a) Remittances and correspondence should be sent to the Radio Licensing Centre, P0 Box 885, Bristol B599 5LG. Tel: (0117) 925 8333. Do not send the Licence when making remittances.
- (b) A list of the Radiocommunications Agency's local offices (See sub-clauses 2(5) and 7(2)) may be obtained from the address given in note (y).
- (c) If any message, the receipt of which is not authorised by this Licence, is received by means of the Station, neither the Licensee nor any person using the Station should make known the contents of any such message, its origin or destination, its existence or the fact of its receipt to any person except an authorised officer of Her Majesty's Government or a competent legal tribunal, or retain any copy or make any use of such message, or allow it to be reproduced, copied or made use of. It is an offence under Section 5 of the Act deliberately to receive messages the receipt of which is unauthorised or (except in the special circumstances mentioned in that section of the Act) to disclose any information as to the contents, sender or addressee of any such message.
- (d) It is an offence to send certain misleading messages, viz:
 - "Any person who;
 - (i) by means of wireless telegraphy, sends or attempts to send, any message which, to his knowledge, is false or misleading and is, to his knowledge, likely to prejudice the efficiency of any safety of life service or endanger the safety of any person or of any vessel, aircraft or vehicle, and, in particular, any message which, to his knowledge, falsely suggests that a vessel or aircraft is in distress or in need of assistance or is not in distress or not in need of assistance;
 - ...shall be guilty of an offence under this Act." (Section 5, WT Act 1949).
- (e) This Licence does not authorise the doing of any act which is an infringement of any copyright which may exist in the communication sent or received.
- (f) Notwithstanding sub-clause 2(2), if the Licensee holds an Amateur Radio (Intermediate) (A) or (B), then he may transmit on frequency bands above 30 MHz if he is operating under the licence of, in the presence of, and under the direct supervision of a person who holds an Amateur Radio Licence (B). If the Licensee is operating under the Licence of, in the presence of, and under the direct supervision of a person who holds an Amateur Radio Licence (A) then he may utilise the extra frequencies available to Class (A) licensees.
- (g) References to the operation of the Station include references to the speaking into the microphone comprised in the Station.

- (h) Any operation under this Licence must also comply with the “Self-Provision Licence” granted by the Secretary of State under section 7 of the Telecommunications Act 1984. Copies of this Licence are available from the Office of Telecommunications, Export House, 50 Ludgate Hill, London EC4M 7JJ. The Licensee shall not connect the station to any non-amateur network, including the Public Switched Telecommunications Network, except with the written permission of the Secretary of State.
- (i) It is an offence under the Wireless Telegraphy (Content of Transmission) Regulations 1988 to send a message, communication or other matter in whatever form that is grossly offensive or of an indecent, obscene or menacing character.
- (j) If the Station is situated within 1km of the boundary of an aerodrome, then the height of the antenna or any mast or structure supporting it must not exceed 15m above ground level. An antenna which crosses above, or is liable to fail or to be blown on to, any overhead power wire (including electric lighting) or power apparatus must be guarded to the reasonable satisfaction of the owner of the power wire or power apparatus.
- (k) This Licence does not absolve the Licensee from obtaining any necessary consent before entering on private or public property (including a public transport vehicle) with any apparatus.
- (l) Sub-clause 4(2) of the Licence requires that the apparatus in the Station be so designed, constructed, maintained and used that the use of the Station does not cause any undue interference with any wireless telegraphy. In order to prevent interference due to close coupling of antennas, the antenna used for the Station should be sited as far as possible from any existing television or other receiving antennas. This is particularly important in the case of the installation of an indoor transmitting antenna, e.g. in a loft, where transmissions may be conducted through the electricity supply wiring. In some circumstances it might not be possible to use an indoor antenna. In densely populated areas sufficient separation of the amateur equipment from surrounding transmitters, receivers and electronic equipment may not be possible to permit the amateur to operate with full power without the high probability of causing interference. Adjacent transmitters may produce intermodulation products on other frequencies and excessive field strengths may cause breakthrough even in receivers which display an adequate level of immunity to unwanted transmissions. While owners of receivers should take steps to ensure that their apparatus has a reasonable standard of immunity, in some circumstances the amateur may need to modify his transmission practice to minimise a problem to neighbours.

If an interference problem arises, this may indicate either that the affected equipment has an inadequate immunity or has not been properly installed or maintained or that excessive field strengths are being generated. Each

case needs to be considered on its merits, but regard will be had to the harmonised immunity standards introduced for the purposes of Council Directive 89/336/EEC on electromagnetic compatibility. In order to solve the problem, it may be necessary, depending on the circumstances, to take reasonable steps to improve the immunity of the affected receiving installation, to modify transmission practice or to impose restrictions on the Licensee.

- (m) In the event of a demand by an authorised officer to close down or restrict the operation of the Station under sub-clause 8(2), the Licensee must act in accordance with the demand immediately. He will at that time be given oral reasons for the demand and will have an opportunity to provide reasons why the demand should not be met. If the demand is affirmed, then it will be confirmed in writing to the Licensee as soon as practicable. Written reasons will be given by an Operations Manager of the Radiocommunications Agency and the Licensee will again be invited to comment. The temporary period referred to in sub-clause 8(2) will usually be 28 days, but may be a greater or lesser period as the circumstances warrant. Where appropriate and where circumstances allow the Local Office of the Radiocommunications Agency will be available to discuss with the Licensee how a breach of Licence might be corrected, however, if the Licensee does not comply with the demand or if the breach resulting in the demand is not rectified within a reasonable period of time to the satisfaction of the Secretary of State, then revocation or variation of Licence procedures may be commenced under subsection 1(4) of the Act or a prosecution may be initiated (depending on the circumstances of each case).
- (n) Sub-section 19(5) of the Act applies for the purposes of this Licence as it applies for the purposes of the Act:

“In considering for any of the purposes of this Act, whether, in any particular case, any interference with any wireless telegraphy caused or likely to be caused by the use of any apparatus, is or is not undue interference, regard shall be had to all the known circumstances of the case and the interference shall not be regarded as undue interference if so to regard it would unreasonably cause hardship to the person using or desiring to use the apparatus.”
- (o) The bandwidths of emissions should be such as to ensure the most efficient utilisation of the spectrum, in general this requires that bandwidths be kept at the lowest values which technology and the nature of the service permit. Where bandwidth-expansion techniques are used, the minimum spectral power density consistent with efficient spectrum utilisation should be employed.
- (p) Under section 1 of the Act, it is an offence to use any station or apparatus otherwise than under and in accordance with a licence granted by the Secretary of State. The Licensee is responsible for ensuring that at all times

persons operating under this Licence observe its terms and limitations. Breach of this provision may result in prosecution of the Licensee or operator and the revocation of this Licence.

- (q) The Licence is not transferable.
- (r) No log need be kept in respect of Mobile operations.
- (s) For the purposes of this Licence, "Co-ordinated Universal Time" may be regarded as equivalent to Greenwich Mean Time (GMT).
- (t) Codes for classes of emission**

Under the Telecommunications Convention, classes of emission are designated by groups of a minimum of three characters. The symbols used to designate classes of emission are listed in the Radio Regulations of which the following is a full list.

First symbol - Type of modulation of the main carrier

N Emission of unmodulated carrier

Emission in which the main carrier is amplitude modulated (including cases where sub-carriers are angle modulated):

- A Double sideband
- H Single sideband, full carrier
- R Single sideband, reduced or variable level carrier
- J Single sideband, suppressed carrier
- B Independent sidebands
- C Vestigial sideband

Emission in which the main carrier is angle modulated:

- F Frequency modulation
- G Phase modulation
- D Emission in which the main carrier is amplitude and angle modulated either simultaneously or in a pre-established sequence

Emission of pulses:

P Sequence of unmodulated pulse

A sequence of pulses:

- K Modulated in amplitude
- I Modulated in width/duration
- M Modulated in position/phase
- Q In which the carrier is angle modulated during the period of the pulse
- V Which is a combination of the foregoing or is produced by other means

NB: Emissions where the main carrier is directly modulated by a signal which has been coded into quantized form (eg pulse code modulation) should be designated by A, H, R, J, B, C, F or G as appropriate.

W Cases not covered above, in which an emission consists of the main carrier modulated, either simultaneously or in a pre-established sequence, in a combination of two or more of the following modes: amplitude, angle, pulse

X Cases not otherwise covered

NB: For the purpose of this Licence, modulation used only for short periods and for incidental purposes, such as identification or calling, may be ignored when calculating the emission designator. Double sideband emissions with reduced or suppressed carrier are included in the first character A.

Second symbol - Nature of signal(s) modulating the main carrier

0 No modulating signal

1 A single channel containing quantized or digital information without the use of a modulating sub-carrier (excluding time-division multiplex)

2 A single channel containing quantized or digital information with the use of a modulating sub-carrier (excluding time-division multiplex)

3 A single channel containing analogue information

7 Two or more channels containing quantized or digital information

8 Two or more channels containing analogue information

9 Composite system with one or more channels containing quantized or digital information, together with one or more channels containing analogue information

X Cases not otherwise covered

Third symbol - Type of information to be transmitted (in this context, the word "information" does not include information of a constant, unvarying nature such as that provided by standard frequency emissions or continuous wave or pulse radars)

N No information transmitted

A Telegraphy - for aural reception

B Telegraphy - for automatic reception

C Facsimile

D Data transmission, telemetry, telecommand

E Telephony

F Television (video)

W Combination of the above

X Cases not otherwise covered

The following examples of classes of emission and their symbols are given for the purpose of guidance only:

Telephony (speech):

Single sideband, suppressed carrier (SSB)	J3E
Frequency modulation (FM)	F3E
Phase modulation (PM)	G3E
Amplitude modulation (AM)	A3E

Morse:

Hand sent, on/off keying of the carrier	A1A
Hand sent, on/off keying of the audio tone (FM transmitter)	F2A
Automatic reception, on/off keying of the carrier	A1B

RTTY/AMTOR:

Direct frequency shift keying of the carrier	F1B
Frequency shift keyed audio tone (FM transmitter)	F2B
Frequency shift keyed audio tone (SSB transmitter)	J2B

Packet/Data:

Direct frequency shift keying of the carrier	F1D
Frequency shift keyed audio tone (FM transmitter)	F2D
Frequency shift keyed audio tone (SSB transmitter)	J2D

Television:

Vestigial sideband (AM transmitter)	C3F
Slow scan television (SSB transmitter)	J2

Facsimile:

Frequency shift keyed audio tone (SSB transmitter)	J2C
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- (u) When telephony is used, the letters of the callsign may be confirmed by the pronunciation of well-known words of which the initial letters are the same as those in the callsign. The phonetic alphabet contained in Appendix S14 of the Radio Regulations, reproduced below, should be used:

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

- (v) When the Station must be identified in accordance with sub-clause 7(2) (a), it is recommended that one of the following location identifiers be used:
- (i) the full postcode,
 - (ii) latitude and longitude in degrees and minutes,
 - (iii) National Grid Reference correct to six figures,
 - (iv) International Amateur Radio Union (IARU) locator, or
 - (v) the address or other geographical description correct to 1km.
- (w) The following Regional Secondary Locators should be used immediately after the United Kingdom prefix "2" when identifying the Station in accordance with sub-clause 7(4) of this booklet:

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

- (x) When identifying in accordance with clause 7, please observe the following extract from Article S19 of the Radio Regulations (S19.18-S19.22):
"Identification signals shall wherever practicable be in one of the following forms:
 - (a) speech, using simple amplitude or frequency modulation;
 - (b) international morse code transmitted at manual speed;
 - (c) a telegraph code compatible with conventional printing equipment;
 - (d) any other form recommended by the Radiocommunication Sector of the ITU."
- (y) The Licensee does not have to pay a licence fee if, at the time of application or renewal, he is either under 21 years of age or aged 75 years or over. In order to maintain the accuracy of the licence records, all licensees will receive renewal reminders, however, such licensees only have to indicate that they wish to continue as novice licensees.

For enquiries on amateur radio

Amateur Radio Services Radiocommunications Agency

Wyndham House
189 Marsh Wall
London E14 9SX

Tel: 020 7211 0159/0160

Fax: 020 7211 0228

E-mail: amateurcb@ra.gsi.gov.uk

Agency website: www.radio.gov.uk