

Information

UK novice licence

Introduction

The Radio Society of Great Britain has long recognised that amateur radio is a medium through which an interest in electronics, science and engineering can be fostered.

In 1988 the RSGB launched Project YEAR (youth into electronics via amateur radio) which is an ongoing initiative designed to encourage youngsters into the hobby for its own sake as well as stimulating an ongoing interest which will in turn benefit the British Electronics Industry. The new 'plank' of this initiative is the Novice Licence which is intended as a 'stepping stone' towards a full licence. This new licence provides a comprehensive range of frequencies and modes while providing an incentive to upgrade. There are two types of novice licence, 'A' and 'B'. The novice 'A' licence allows operation on all the novice sections of the amateur bands whereas the 'B' novice licence enables operation on the novice section of the VHF, UHF and microwave bands (Table 1). All operation is on low power, 3 W output.

There has been detailed consultation and co-operation between the Radiocommunications Agency and the RSGB over the last three years. The result is the desirable novice licence which is offered free to those under the age of 21.

There are three basic steps necessary before a novice licence can be acquired:

- (i) attend an RSGB novice licence training course and obtain a course completion slip
- (ii) sit the City & Guilds multiple-choice examination and obtain a pass slip
- (iii) pass the RSGB 5 wpm morse test (in the case of a novice 'A')

RSGB novice licence training course

Training is provided throughout the country by registered instructors who are licensed amateurs with a wealth of experience and a wish to put something back into a hobby from which they have gained so much enjoyment. All instructors follow a training scheme which is documented in *Training for the Novice Licence*, the manual for instructors. The syllabus is technically comprehensive and practically challenging, covering:

- receivers and receiver techniques
- components
- applications and units
- measurements
- propagation
- transmitter and transmitter techniques
- operating techniques

Table 1 Novice frequency allocations

Those licensed under an Amateur Radio (Novice) Licence (B) may not transmit on these bands between 1.950 and 28.500 MHz.

1	2	3	4	5
Frequency bands in MHz	Status of allocations in the United Kingdom to the Amateur Service	Maximum DC input (Watts)	Power RF output (Watts)	Permitted types of transmission
1.950-2.00	Available on the basis of non-interference to other services (inside or outside the United Kingdom)	5	3	Morse Telephony RTTY Data
3.565-3.585	Primary. Shared with other services	5	3	
10.13-10.14	Secondary	5	3	Morse
21.100-21.149	Primary	5	3	
28.100-28.190		5	3	Morse RTTY Data
28.225-28.300		5	3	
28.300-28.500		5	3	Morse Telephony
50.620-50.760	Primary. Available on the basis of non-interface to other services outside the United Kingdom. Antennas limited to 20 metres above ground level. No maritime mobile operation.	5	3	Data
51.250-51.750	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.	5	3	Morse Telephony Data
433.00-435.00		5	3	
1240-1325	Secondary			Morse Telephony RTTY Data Facsimile SSTV FSTV
10000-10500				

Codes and abbreviations

Most of the following codes etc. are for use when you are working with Morse code but you will sometimes hear them when Telephony (speech) is in use by a station. Try to avoid falling into the habit - there is no advantage in saying "I am going to go QRT" instead of "I am going to close down". The second is the correct way when using phone (speech). Occasionally it will be quicker to use a code and sometimes it will be quite acceptable. We will point out some of these as they occur in the following paragraphs.

The Q Code. This is an International code used widely by many operators in civil and military ships and aircraft. It has been adopted by radio amateurs and sometimes the meaning has been slightly altered. Here are some in common use:-



QTH. The place where the station is. (Location).

QRZ? Who is calling me?

QSB. Fading. The signals change in strength due to the conditions.

QSL. Confirmation of a contact. QSL cards are sometimes exchanged.

QSY. Change frequency.

QRM. Interference (from other stations).

QRN. Interference (from thunder storms or nearby electrical apparatus).

QRP. Low power.

QRO. High power.

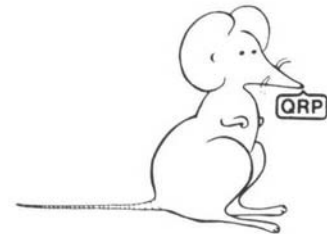
QRX. Stand by; I will call you again. (This is useful when using phone and something happens which must be dealt with quickly).

QRT. Close down.

QRQ? Shall I send faster? (or send faster).

QRS? Shall I send slower? (or send slower).

QS0. A radio contact.



There are more Q Codes in Worksheet 30 together with information on their correct use.

- EMC
- station layout
- safety
- licensing conditions.

The students work from the *Students Notebook* containing 32 worksheets. For an example see Fig. 1. Each section of the course is carefully structured with detailed method of treatment and equipment required being given at the beginning. Although the vast majority of the instructors are teachers, the course is designed in such a way that anyone can feel confident in the role of instructor. The time necessary to complete the course is estimated at 30 hours. This can be spread over a three month period or longer, or condensed as necessary. The basic concept of the training is 'learning through doing', providing a 'hands-on' approach which will in the long run produce more confident radio amateurs. Although initially intended for children, the novice licence has attracted people of all ages as there are no age limits on take-up. In some training courses eight year olds could be training alongside eighty year olds. The students are continually assessed during the training and on successful course completion they are awarded a completion slip/certificate by the RSGB. Armed with this slip they can now enter the next stage.

The novice radio amateurs examination (NRAE 773)

This examination is set by an external examining body – The City & Guilds of London Institute. It is a multiple-choice examination of 45 questions taken in a



Youngsters on novice training course

period of one and a quarter hours. The questions are based on the syllabus and the practical aspects of the training course. Each year there are four examinations which take place in March, June, September and December.

On obtaining the completion slip and the examination pass slip, the student can apply for the novice 'B' licence.

The novice morse test

If students wish to operate on the HF bands, a 5 wpm test run by the RSGB must be passed. This morse test has broken with tradition. Rather than testing students on plain text and a list of numbers, as in the present 12 wpm test (for a full licence), the novice test takes the form of a typical QSO* incorporating procedural signals, Q-codes and abbreviations. This will hopefully better prepare students for life on the air. The test has both a receiving and transmitting section. The receiving test is computer generated using a pre-recorded tape. The character speed is 12 wpm with larger gaps to reduce the overall speed to 5 wpm. The transmitting test follows the same QSO format.

Novice callsigns

Novices will use the UK prefix '2' followed by a letter which denotes the country, i.e.

- 2E – England
- 2M – Scotland
- 2W – Wales
- 2I – Northern Ireland
- 2D – Isle of Man
- 2U – Guernsey
- 2J – Jersey

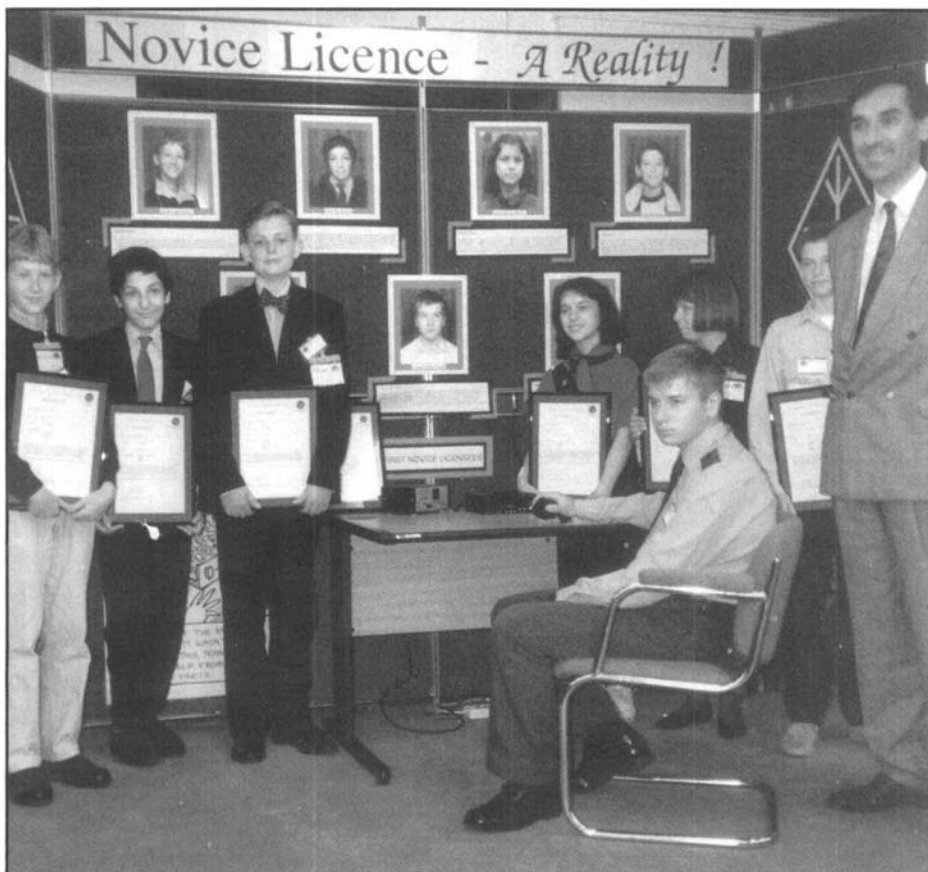
Following the letter comes a number which indicates the class of licence, i.e.

- 'A' licence – 0, 2, 3, 4
- 'B' licence – 1, 6, 7, 8

There will follow a further three letters which are personal to the novice. Typical examples might be:

- 2D0XYZ, 2M0ABC class 'A'
- 2E1XXZ, 2J1ABB class 'B'

* QSO = an amateur radio contact



The first of the new novice licences was presented to seven youngsters at a ceremony in London by the then DTI Minister John Redwood. 25th July 1991 was indeed a red letter day for these children ranging in age from 11 to 17 years.