



The New Foundation Licence Your Entry into Amateur Radio

What is the foundation Licence all about?

The hobby of Amateur Radio has a long and proud tradition. The very first radio amateurs were true pioneers of radio technology. Amateurs 'invented' and refined much of the early radio technology and were the first to transmit music, radio plays, and information to the handful of people who had the new fangled radio receivers.

During the war years amateur radio communication was silenced, but radio amateurs enlisted as highly trained and technically competent radio operators in all theatres of war.

After World War II the hobby of amateur radio flourished. Radio clubs sprang up in schools all over the world and kids went home each night to build some new contraption, or have a chat with someone over the wireless. These young people became the mainstay of the technical professions and developed much of the modern technology we use today.

Times change, and Australia is now faced with a serious shortage of people with technical skills. Our country needs more bright young people to become technicians, scientists and engineers, instead of lawyers, money managers and mobile phone salesmen – we already have plenty of them!

The new entry level Foundation Licence provides a great opportunity for young people to foster an interest in communications technology and perhaps lead on to a rewarding career in science, electronics, and communications.

But most importantly amateur radio provides an opportunity to communicate with people. Outback travelers, sailors, retirees, or anyone with a little time to spare and a curious mind will find amateur radio very rewarding. The new Foundation Licence makes an amateur radio Licence very achievable with a just few hours study.

What do I need to know to get a licence?

The emphasis is on candidates having the knowledge of skills to demonstrate a practical ability to put together an amateur radio station from commercial equipment and operate it without causing interference to other users and have the knowledge to be a competent radio operator.

You will also need to be aware of how amateur radio relates to other users of the radio spectrum, your licence conditions, technical basics of electricity and electronics, transmitters, receivers, feedlines and antennas, propagation, electromagnetic compatibility (EMC), and electromagnetic radiation (EMR).

What bands can I operate on and what are the modes can I use?

The foundation licence operator can operate in the bands listed below using the modes listed in the right hand column. The foundation licence operator can only use commercially manufactured equipment.

Item	Frequency band	Permitted emission modes all bands
1	3.500 MHz–3.700 MHz	Amplitude Modulation (AM)
	7.000 MHz–7.300 MHz	Single Side Band (SSB)
	21.000 MHz–21.450 MHz	Hand Keyed Morse Code

Item	Frequency band	Permitted emission modes all bands
2	28.000 MHz–29.700 MHz	Amplitude Modulation (AM)
	144.000 MHz–148.000 MHz	Single Side Band (SSB)
	430.000 MHz–450.000 MHz	Frequency Modulation (FM)
		Hand Keyed Morse Code

What distance will I be able to work on these bands?

3.5MHz (80 metres) up to 150KM during the day and up to 3000KM at night.
7MHz (40 metres) up to 1000KM during the day and during good conditions world wide at night.
21 MHz (15 metres) World wide mostly during the day.
28 MHz (10 metres) World wide during periods of high sunspot activity and up to 3000km in summer.
144MHz (2 metres) local coverage and world wide via IPLP and Echo Link.
432MHz (70cm) local coverage and world wide via IPLP and Echo Link.

Is there a book with all the information I need to know to get a licence?

The WIA has produced a book called the Foundation Licence Manual. It is a full color manual consisting of 95 pages of relevant information for those studying, or those who would just like a reference book for Foundation Licence Operators.

The manual contains the all relevant information you will need to know to successfully complete a training course to obtain a foundation licence. It also contains a wealth of information a Foundation Licence operator will need. Items like Band Plans, Electrical Safety information, operating procedures such as the Q code, how to contact you local radio club, the WIA and much more.

Where do I get this book and what does it cost?

Budding candidates can obtain the Foundation Licence Handbook from several sources. It can be purchased via the WIA website, from the WIA office in Melbourne, via many radio clubs throughout Australia, from most amateur radio equipment suppliers and ultimately newsagents.

The recommended retail price for the manual is \$16.50 plus postage.

The booklet will not be available till mid November, 2005

What study do I need to do to be ready to sit for an assessment?

The new licence structure introduces a practical assessment that is common to the three grades of licence. This means that once you have been declared competent by an assessor for the practical assessment as part of the qualification in receiving an amateur licence, that competency is transferable should you upgrade your licence. An exemption is provided for Novice and Novice-Limited licensees who exist prior to the implementation date of the new structure.

Where can I go to attend a course?

The radio clubs will run the foundation Licence training courses. The clubs are the ideal place to learn all about amateur radio. You can meet other hams, attend interesting lectures, and find out lots of information. If you decide to take up amateur radio as a hobby you will soon learn there are hundreds of different facets to the hobby.

The WIA foundation licence webpages will list all the clubs that are offering training and assessment. If you have trouble finding a club then send us an email to foundation@wia.org.au and we will assist you.

How long does a training course and assessment take?

The standard time for training is around 12 hours. Some clubs will conduct training over several nights and some over a weekend. The practical and 25 question multiple choice written assessment takes around 1 hour.

How do I find my nearest club?

A full list of all the radio clubs and their contact details can be found on the WIA webpage, click on the clubs tab on the top right hand side.

How much will it cost me to attend a training course?

Any charges associated with foundation licence training are up to the radio clubs conducting the training. You will need to check with your local club to find out what their charges are.

How much does an assessment cost?

The WIA charge for a foundation licence assessment is \$25.00

How much does the foundation licence cost?

The foundation licence is issued by ACMA and the licence cost is currently \$58.00 per year.

What if the club is a long way from my location?

The WIA has made provision to conduct remote assessments for those people who live a long distance from a radio club or an assessor. A specially trained assessor will be able to conduct the assessment (via the phone) the candidate will need to be in the presence of a person, such as a local policeman or school headmaster. If you are one of these people and you would like more information you should contact the WIA

What service does the WIA provide?

The WIA is the peak body representing amateur radio to ACMA, the government instrumentality who administers the radio spectrum, it also represents Australian amateurs internationally. The WIA also produces a monthly magazine set to members, weekly broadcasts, provides a bookshop with a discount for members, works closely with the 100 affiliated radio clubs, provides the amateur examination service and helps members with the many questions and information they need to make the hobby more enjoyable.

Where can I find more information?

The Internet is a great source of information on amateur radio, the WIA website has a lot of information including links to club websites and a link to the WIA broadcast pages. You can download last weeks or up to two year of broadcast and listen to them on MP3 files. The WIA website is www.wia.org.au Other sites are the American Radio Relay League at <http://www.arrl.org/index.php3> the Radio Society of Great Britain at <http://www.rsgb.org.uk/contents.htm> Radio Amateurs of Canada at <http://www.rac.ca/> If you search the web you will find thousands of sites world wide that have been set up by radio clubs and individual amateurs, after all there are around three million of us.

If I have other questions whom can I ask?

The WIA does not have the resources to answer a large number of telephone enquiries. All questions should be directed to your nearest club as listed in the club section of the WIA website or e-mail us with your question at foundation@wia.org.au