# HamCram – Your Doorway to Becoming an Amateur Radio Operator

### Exploring radio, electronics and digital technologies

## What is Amateur Radio?

Amateur radio is a hobby of exploring the limits of radio, electronics and digital technologies. Once you've passed the licence exam, you'll allocated a worldwide-unique call sign and can operate (and build) radio equipment capable of international and space-based communication, from where ever and whenever you like.

#### What can you explore?

- developing your own digital radio projects using Arduino and raspberry Pi micro-computers.
- bouncing radio signals off asteroids and talking to the International space station.
- you can communicate with other electronics and radio hobbyists around the world without a cell phone of skype.
- designing and building radio transceivers and antennas.
- sending signals 2000km using just a Raspberry Pi and an antenna.
- exploring what can be done linking the Internet, radio and computers.
- providing communications support for search-and-rescue and emergencies.

## HamCram - obtaining an Amateur Radio Licence

Like driving, becoming licenced requires passing a technical competence exam. To help with this, the Manawatu and Wanganui Amateur Radio Clubs have organised *HamCram* - a self-study workbook-based course. The course will conclude with a weekend spent with experienced tutors revising the workbook modules in preparation for the multi-choice Amateur Radio Operator's Certificate exam on Sunday afternoon.

## What do I need to know?

The course will take you through all you need to know to pass the exam and become licenced. Some prior understanding of science or electronics would be helpful but not essential...

## What does it cost and what's included?

The cost of the HamCram is \$150 for the weekend. It includes the complete program, exam and a downloadable PDF version of the manual for you to download and print – this is the essential study guide.

The HamCram weekend runs from 8.30am to 5pm on both days.

- teaching sessions by experienced tutors
- exam fee for the official amateur radio licence exam
- a light lunch and morning & afternoon tea on both days

On passing, you'll also receive

- free membership of NZART (National Association) for 12 months (\$99 value)
- free membership of selected local NZART branches

## When can I enrol?

Enrolments are open from 1 March – and close on 30<sup>th</sup> June 2020. we recommend enrolling early so you have the maximum study time.

## The HamCram weekend will be run on 18th & 19th July 2020.

## How do I enrol in the HamCram program?

It is simple, just email the organiser at <a href="mailto:newham@zl2ko.org.nz">newham@zl2ko.org.nz</a> and we will send you an enrolment form and documents or <a href="mailto:fillout the attached enrolment form">fill out the attached enrolment form</a>.

### What happens once I pass the exam?

Once you've passed the exam, you will be eligible for issue of a call sign. This entitles you to operate on a restricted number of amateur bands until you have accumulated 50 logged contacts.

To help you obtain those contacts quickly, the Manawatu Amateur Radio Society's annual activity contest will be run one week after the exam to help you obtain those contacts and introduce you to your first contest.

## **Further Information**

For further information contact:

- Warren Crawley ZL2FE (027) 249 8252 HamCram Co-ordinator
- Peter Moore ZL2AUB (06) 354 7861

or email <u>newham@zl2ko.org,nz</u>

## Pre-HamCram Beginners Classes

The Manawatu Branch is offering "Beginners Classes" prior to the HamCram weekend. Anyone is welcome to attend the evenings at no charge. These classes will cover 27 of the 30 topics that are covered in the HamCram. All who can make it are most welcome.

#### Classes are run from 1900hrs – 2100hrs on the following dates:

- Tuesday May 5 Class 1 Safety / Measurement / Electronics
- Tuesday May 12 Class 2 - Resistance / Ohms Law / Power Law
- Tuesday May 19 Class 3 AC Theory / Resonance / Semiconductors
- Tuesday May 26 Class 4 Devices / Meters / Harmonics
- Tuesday June 2 Class 5 PSU / Regulated PSU / dB
- Tuesday June 9 Class 6 Transmitters 1& 2
- Saturday June 13 Weekend Exercise Practical sessions.
- Tuesday June 16 Class 7 Receivers 1 & 2
- Tuesday June 23 Class 8 Transmissions Lines / Antennas
- Tuesday June 30 Class 9 Propagation / Interference / HF Station
- Tuesday July 7 Class 10 Operating 1 & 2 / Digi modes
- Tuesday July 14 Class 11 Recap

#### Saturday July 18 and Sunday July 19 – HamCram weekend and exam

- Tuesday July 28 What's next? Where to from here now I have your licence?
- Tuesday August 4 What's next? Your Amateur Radio Station

## HamCram Course - Enrolment Form

Nam	ie
Addı	ress:
Ema	il
Pho	ne
Enrolment	
	The Complete Program includes exam fee and meals - \$150.00
	The compulsory manual must be downloaded and printed, it is available from http://www.nzart.org.nz/exam/download-examination-files
	Iment forms must be completed and can be either posted to The HamCram Co- nator or emailed to newham@zl2ko.org.nz
Payment Method	
	<ul> <li>Direct Credit or Direct Deposit</li> <li>to ANZ Account: 01 0745 0496805 00</li> <li>put your surname as the reference, AND hamcram in particulars</li> </ul>
	Cheque made out to the Manawatu Amateur Radio Society
	Post your enrolment form and cheques to:
	<b>The HamCram Co-ordinator</b> Branch 20 24 Langley Ave Palmerston North