60m FAQs

Q: Why do I need a Sub-Licence when I can operate on the Amateur bands already?

The GURL which covers the amateur bands does not include 60m so Amateurs have no right to operate there (despite WRC-15 allocating an amateur band in that region). NZART has negotiated with RSM to obtain a licence to allow limited operation on 60m as a trial. Accordingly a Sub-Licence from NZART is required for you to operate legally.

Q: Why is this a trial when we were given full access to the band at WRC-15?

Despite a worldwide amateur allocation being made on a secondary basis, access is subject to the approval of the local regulatory authorities in each country. In ZL RSM has said that access will be subject to the approval of the primary user which in this case is the NZ Defence Force. The NZDF have asked for a trial so they can monitor amateur use to see if it can happen on a non-interference basis.

Q: How long is the trial for?

It has been set down for a year until December 2018 but that can be changed at any time by MBIE (RSM). You will be advised if any change is made.

Q: How do I know I am operating with a power of 10 dBW e.i.r.p?

E.I.R.P. = TX power output in dBW, less losses to the antenna (dB), plus antenna gain (dBi). This licence is for 10 dBW e.i.r.p. which equals 10 Watts e.i.r.p. Peak envelope power (PEP)

For example:

Half wave dipole 7 m above poor ground	+2 dBi, (no ground reflection, a dipole has 2 dBi gain)
Feedline, balun & connector losses	-1 dB
Transmitter Power 8 W	+9 dBW
Total Power	10 dBW e.i.r.p

Quarter Wave Vertical Antenna (“QWV”) With Radials:

An ideal QWV HF antenna has a gain of 5 dBi where the 36 radials are at least quarter wave long & are above ground. A typical amateur QWV is very likely to have much less gain due having many less radials & buried below the ground.

Example of a QWV with 4 radials buried just below the ground:

QWV	+1 dBi
Feedline & other losses	- 1 dB
Transmitter Power 10w	10 dBW
Total Power	10 dBW e.i.r.p

Watts to dBW conversion table

Watts = dBW	Watts = dBW
1 = 0	6 = 7.8
2 = 3	7 = 8.5
3 = 4.8	8 = 9
4 = 6	9 = 9.5
5 = 7	10 = 10

It is the responsibility of the station operator to ensure the e.i.r.p. limit is not exceeded. We regret we cannot help with individual calculations.

Be conservative with your estimate of power out or you will run the risk of an infringement notice from RSM and put the trial in jeopardy. Remember your transmissions will be monitored.

Q: What dial frequencies do I need to use to make sure I am in the correct part of the band?
The frequency allocations are suppressed carrier frequencies; that is the frequency that appears on your transceiver's frequency display.

SSB (USB) Operation
Single Sideband operation is simple. Just tune your transceiver to one of the two allowed frequencies, 5353.0 kHz or 5362.0 kHz, set the mode to USB and operate. Being careful that you do not overmodulate and create "splatter" that would fall outside the 2.8 kHz bandwidth. If your transceiver allows you to adjust your maximum SSB transmit bandwidth, setting it to 2.4 kHz should keep you well within the bandwidth limit

CW

Consult your transceiver manual. Some transceiver's transmit CW at the exact frequencies shown on their displays, but others offset the actual transmission frequency by a certain amount (for example, 600 Hz). If your manual is not clear on this point, seek advice. If you have access to a frequency counter, this is an excellent tool for ensuring that your CW signal is within band. As a rule of thumb stay above the bottom 50 Hz of the 5362.05 - 5364.75 kHz CW allocation and 600 Hz below the top of the allocation.

Digital Operations

For digital modes, the band is 2.35 kHz from 5362.4 - 5364.75 kHz. To operate in band set your transceiver to USB mode and the frequency to 5362.0 kHz. Then using the audio frequency read out at the top of your waterfall display place your signal between 400 and 2750 Hz. You will then be in band.

Q: Can I work DX on 60m?

Yes (if you can hear it). Note that overseas band plans do not necessarily align with our band plan. Digital (primarily FT8) operation for example is on 5357.0 kHz (USB) in the USA and EU which does not align with the ZL allocations. Therefore you would need to work split e.g. transmit on 5364.5 kHz (USB) and listen on 5357.0 kHz and the other station would need to know you are doing this. It should be noted that amateurs in many countries (e.g. VK) do not have any access to 60m.

Q: Exclusive SSB operation is on one frequency only (5353 kHz). What happens if someone else is using it?

Then you will have to wait your turn. Being a trial we would expect that operators do not occupy a frequency for long periods of time. You should also note that there is some EU CW activity on this frequency as well which you should not interfere with.

Q: The 5362 to 5365 kHz frequency can be used for CW, SSB and digital mode operation. Can I use one mode if I hear one of the others in operation, e.g. can I use SSB if I hear FT8 signals?

No. Amateurs should not interfere with the legitimate operations of other Amateur stations.

Q: Can I operate in a contest on 60m?

There are no 60m contests.

Q: Why can't I use my secondary/special event (single letter) callsign?

As this is a trial operation and to make monitoring easy, you are only allowed to use your primary callsign. No special events should be operating on 60m.

Q: What if I hear another signal on 60m?

Do not transmit as it is a term of your licence that you do not cause interference to other users.

Q: Why are you publishing my name on the NZART website as a sub-licence holder?

This is so other users (and NZART/NZDF/MBIE) can identify who is operating and know the station has the legal right to be on 60m.