Amateur Frequencies, Bandwidths, Power and Limitations.

Always consult the LCD and Australian Band Plan.

A 2200m A 630m A 160m F-S-A 80m A 60m F-S-A 40m A 30m S-A 20m A 17 F-S-A 15m A 12m F-S-A 10m A 6m F-S-A 2m	135.7 kHz - 137.8 kHz 472 kHz - 479 kHz 1.8 MHz - 1.875 MHz 3.5 MHz - 3.7 MHz	Any mode. BW< 2.1 kHz Any mode. BW< 2.1 kHz Any Mode BW<8 kHz	As per Note 1 As per Note 2
A 160m F-S-A 80m A 60m F-S-A 40m A 30m S-A 20m A 17 F-S-A 15m A 12m F-S-A 10m A 6m S-A 2m	1.8 MHz – 1.875 MHz 3.5 MHz – 3.7 MHz	Any mode. BW< 2.1 kHz Any Mode BW<8 kHz	As per Note 2
F - S - A 80m A 60m F - S - A 40m A 30m S - A 20m A 17 F - S - A 15m A 12m F - S - A 10m A 6m F - S - A 2m	3.5 MHz – 3.7 MHz	· · · · · · · · · · · · · · · · · · ·	
A 60m F-S-A 40m A 30m S-A 20m A 17 F-S-A 15m A 12m F-S-A 10m A 6m S-A 2m		Any Made DM 40 Lil-	As per Note 3 & 4
A 60m F-S-A 40m A 30m S-A 20m A 17 F-S-A 15m A 12m F-S-A 10m A 6m F-S-A 2m	0.770 MUL 0.0 MUL	Any Mode BW<8 kHz	As per Note 3 & 4
F - S - A 40m A 30m S - A 20m A 17 F - S - A 15m A 12m F - S - A 10m A 6m F - S - A 2m	3.776 MHz – 3.8 MHz	Any Mode BW < 8 kHz	As per Note 3
A 30m S - A 20m A 17 F - S - A 15m A 12m F - S - A 10m A 6m S - A 2m	Not yet available		
A 30m S - A 20m A 17 F - S - A 15m A 12m F - S - A 10m A 6m S - A 2m	7.0 MHz – 7.1 MHz	Any Mode BW < 8 kHz	As per Note 3 & 4
S - A 20m A 17 F - S - A 15m A 12m F - S - A 10m A 6m S - A 2m	7.1 MHz – 7.3 MHz	Any Mode BW < 8 kHz	As per Note 3
A 17 F-S-A 15m A 12m F-S-A 10m A 6m F-S-A 2m	10.1 MHz – 10.15 MHz	Any Mode BW < 8 kHz	As per Note 3
F-S-A 15m A 12m F-S-A 10m A 6m F-S-A 2m	14.0 MHz – 14.35 MHz	Any Mode BW<8 kHz	As per Note 3 & 4
A 12m F - S - A 10m A 6m F - S - A 2m	18.068 MHz – 18.168 MHz	Any Mode BW<8 kHz	As per Note 3 & 4
F - S - A 10m A 6m F - S - A 2m	21.0 MHz – 21.45 MHz	Any Mode BW<8 kHz	As per Note 3 & 4
A 6m F - S - A 2m	24.89 MHz – 24.99 MHz	Any Mode BW<8 kHz	As per Note 3 & 4
S - A 6m F - S - A 2m	28.0 MHz – 29.7 MHz	Any Mode BW < 16 kHz	As per Note 3 & 4
S - A F - S - A 2m	50.0 MHz - 52.0 MHz	Any Mode BW < 100 kHz	As per Note 3
	52.0 MHz - 54.0 MHz	Any Mode	As per Note 3
Г С А 70	144.0 MHz - 148.0 MHz	Any Mode	As per Note 3
F - S - A 70cm	430.0 MHz - 450.0 MHz	Any Mode	As per Note 3
S - A 23cm	1.24 GHz -1.3 GHz	Any Mode	As per Note 3
A 13cm	2.3 GHz – 2.302 GHz	Any Mode	As per Note 3
S - A	2.4 GHz - 2.45 GHz	Any Mode	As per Note 3 & 5
A 9cm	3.3 GHz - 3.4 GHz	Any Mode	As per Note 3
	3.4 GHz - 3.6 GHz	Any Mode	As per Note 3 & 6
S - A 6cm	5.65 GHz - 5.85 GHz	Any Mode	As per Note 3
A 3cm	10.0 GHz – 10.5 GHz	Any Mode	As per Note 3
A 12 mm	24.0 GHz - 24.25 GHz	Any Mode	As per Note 3
A 6 mm	47.0 GHz – 47.2 GHz	Any Mode	As per Note 3
A 4 mm	76.0 GHz – 81.0 GHz	Any Mode	As per Note 3
A 2.5mm	122.25 GHz – 123.0 GHz	Any Mode	As per Note 3
A 2mm	134.0 GHz – 141.0 GHz	Any Mode	As per Note 3
A 1.25mm	241.0 GHz – 250.0 GHz	Any Mode	As per Note 3

<u>Note 1</u> - A maximum Effective Isotropic Radiated Power (EIRP) of 1 watt pX.

<u>Note 2</u> - A maximum Effective Isotropic Radiated Power (EIRP) of 5 watts pX.

Excluded from use in the "Timor Non Directional Beacon Area". Refer to LCD Part 3 (1)

Note 3

Foundation transmitter power - 10 watts pX for all modes

Standard Transmitter power - 100 watts pX for J3E - SSB telephony

R3E - SSB variable carrier telephony

Other modes 30 watts pY

Advanced transmitter power - 400 watts pX for

C3F - Vestigial sideband television

J3E - SSB telephony

R3E - SSB variable carrier telephony

Other modes - 120 watts pY.

<u>Note 4</u> - If the band width is exceeded, the Power Spectral Density (PSD) of the signal must not exceed 1 watt per 100kHz.

<u>Note 5</u> - Other services must accept any harmful interference from Industrial, Scientific & Medical devices.

<u>Note 6</u> - Excluded from operating in areas defined by Schedule 5 of the LCD.

pX - Peak envelope power (PEP).

pY - The average power

pZ - Carrier Power.

Emission Modes - LCD Scedule 1

Repesented by a sequence of nine characters in the following grouping - 4 3 2.

First four characters define bandwidth

Next three characters define the modulation.

Last two characters (These are optional) define the nature of the signal and multiplexing.

Refer to the ACMA document "Emission characteristics of radio transmissions".

Permitted frequencies and emission modes

Advanced licence - LCD Schedule 2 Standard licence - LCD Schedule 3 Foundation licence - LCD Schedule 3A

Continuous Tone Coded Squelch System (CTCSS)

Thirty possible frequencies to use - LCD Schedule 4.

Dual Tone Multi Frequency (DTMF)

Twelve possible combinations from four low tones and three high tones - LCD Schedule 4.

Hierarchical Cell Identification Scheme (HCIS) - LCD Schedule 5.

The HCIS is a structured naming convention applied to the cells in the Australian Spectrum Map Grid 2012 (ASMG 2012) to provide a succinct way of describing groups of ASMG cells.