

# **WICEN Tasmania (South) Inc.**



## **Recommended Member Equipment**

**Version 1 - September 2009**

## **Disclaimer**

**The information in this booklet is intended as a guide, especially for new members.**

**Any fisticuffs arising from lively debate on its contents are the sole responsibility of fisticuffees and fisticuffers.**

**It will never be complete!**

**A secondary purpose may be achieved by leaving it in a prominent position a week or two prior to birthdays, Christmas etc. (Take delivery delays into account with timing).**

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# WICEN Members' Equipment Recommendations

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# WICEN Members' Equipment Recommendations

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## 1. Overview

### 1.1. Purpose:

To provide guidance on achieving self sufficiency to participate in and enjoy the activities routinely undertaken by WICEN Tasmania. (South).

### 1.2. Is not:

All encompassing e.g. camping, cooking, four wheel driving. Lots of info. available elsewhere. Some basic minimums are included but not gear only an idiot would be without e.g. vehicle jack.

### 1.3. Focus:

Mobile and portable operations, sometimes extending over two or three days.

## 2. Scope

Equipment needs to provide for operations on the following bands (in priority order).

Channel numbers optional to suit own set up:

- VHF 140 – 165 MHz
  - Ch 04 Rx 146.375 Tx << 67.0
  - Ch 14 Rx 147.950 Tx << 151.4
  - Ch 15 Rx 147.950 Tx 146.150 151.4
  - Ch 35 Rx 151.150 Tx 155.750 114.8
  - Ch 36 Rx 151.150 Tx << 114.8
- UHF 420- 470MHz
  - Ch 39 Rx 430.950 Tx << 91.5
  - Ch 41 Rx 438.475 Tx 433.475 91.5
  - Ch 45 Rx 454.275 Tx << 123.0
  - Ch 46 Rx 463.775 Tx << 123.0
  - Ch 47 Rx 463.775 Tx 454.275 123.0
- VHF 76-84MHz
  - Targa channels
- HF
  - 80m 3.600
  - 40m 7.075
  - 20m 14.125
  - 6m 53.150

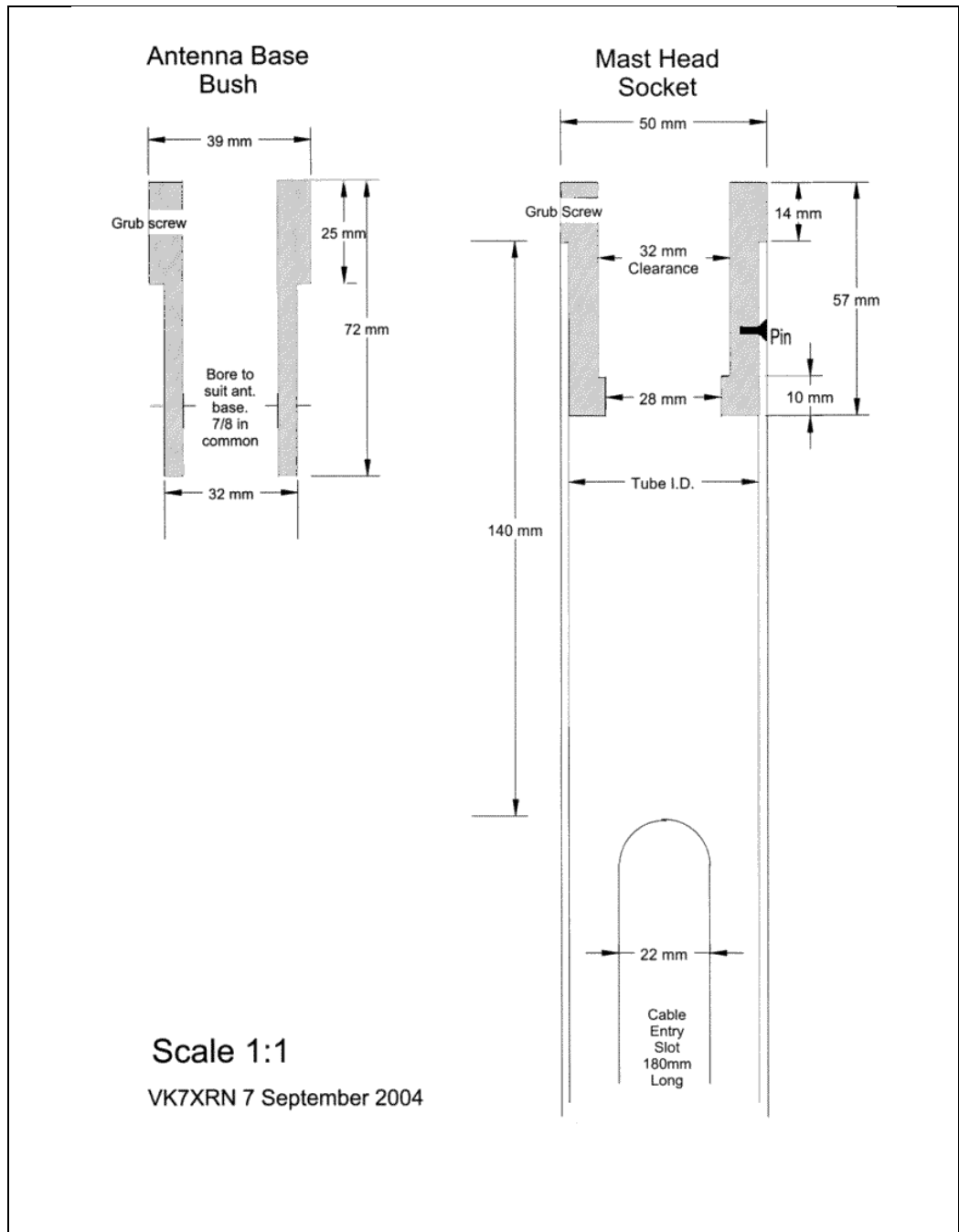
## 3. Standards for performance and inter-changeability.

WICEN has some equipment standards to allow inter-changeability. Standards apply to power coax connectors, portable mast head fittings and power connectors,. If personal preferences or limitations cause members to use non-standard equipment they need to have adapters available. This covers cases when it's necessary to borrow equipment to maintain operations or to extend the capacity of personal equipment.

### 3.1. Coax connectors

- N- type
- BNC type

## 3.2. Mast head fittings

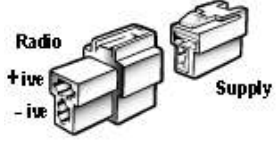
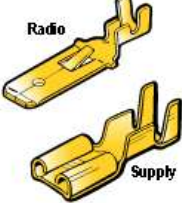


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## 3.3. Power connectors

### 3.3.1. OEM - automotive type

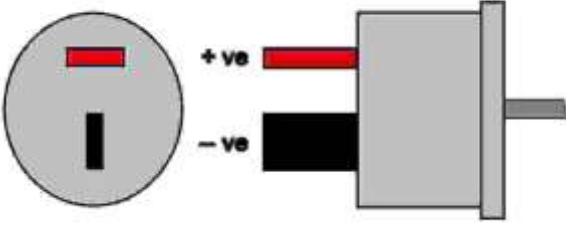
As supplied with Icom, Yeasu and other radios.  
 Supply side (female terminal), radio side (male terminal).  
 Note: plastic housing is reverse gender  
 These can be economically purchased in bulk packs

<p>Narva 56272BL - 1 pair blister pack                  Or bulk buy in 10 packs                  Radio side                  Narva 56252 Female housing, male blade terminals                  Supply side                  Narva 56262 Male housing, female terminals</p>	
<p>Jaycar PP2062 – 0n3 pair – male and female</p> <p>Terminals available in 100 packs                  Radio side                  Narva 56220 male blade terminals                  Supply side                  Narva 56224 female terminals</p>	

**CAUTION** – There are similar connectors around which do not have the same terminal alignment and are not inter-changeable. Dick Smith sold one.

### 3.3.2. 32V 15A 2 PIN T

Look similar to household plugs and sockets, but with two conductors, pins aligned at right angles – T configuration.

<p>Clipsal</p> <p>492/32 Plug                  402/32 Surface Mount Socket                  405/32 Flush Mount Socket                  438/32 Ext. Lead Socket</p>	
<p>Jaycar</p> <p>PP-2075 Plug                  PS-2073 Line Socket                  PS-2074 Surface Mount Socket</p>	

### 3.3.3. Anderson Powerpole Connectors

These are being used increasingly and are considered by many to be the best.  
 Currently they are not WICEN Tas standard, so if used, adapters need to be available.

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## 4. Equipment List

### 4.1. Categories - based on how necessary, or in some cases affordable.

Note: Some of the 'Nice to haves' are 'Essential 'on a group basis

- Essential
- Good to have
- Nice to have
- If you have a generous benefactor, or a more sensible buy than the plasma TV

### 4.2. Groups:        based on type

- Radios
- Antenna systems
- Coax and fittings
- Power
- Computing
- Navigation
- Instruments
- Tools
- General

## WICEN Members' Equipment Recommendations

### 5. List

Category Group	Essential	Good to have	Nice to have	Generous benefactor
5.1. Radio	Mobile VHF 140-165 with CTCSS	Mobile VHF 140-165 / UHF 430-480 with CTCSS	Mobile VHF/UHF crossband capable	Mobile VHF/UHF crossband & APRS capable
		Mobile VHF 77-83		Handheld VHF 77-83
		Handheld VHF 140-165 with CTCSS	Handheld VHF 140-165 / UHF 430-480 with CTCSS	Handheld multiband 6m/VHF/UHF
		Handheld UHF 430-480 with CTCSS		
			Mobile HF & Tuner	Receiver - wideband
		Mobile phone	Phone hands free	
		Ext. speaker	Radio headset Footswitch	VOX headset
5.2. Antennae systems	Dual band 2m/70cm	2m GP		
		70cm GP		
	Marine hi-band VHF whip	Marine hi-band VHF e.g. Moonraker MD		
		VHF mid band whip 80MHz		
				VHF mid band 80MHz eg Moonraker MD
	Magnetic Base or spare fixed base & coax	Adapter SO239 to 5/16"		
	Mast 6m inc. base & support system	Mast 9m inc. base, support system, coax		
	2m/70cm 5/8 colinear e.g. Diamond X30	2m/70cm 5/8 colinear e.g. Diamond X50		
		Marine VHF eg Moonraker MD		
			Squid pole HF antenna	
		Long wire	80/40/20m dipole	160m dipole
		Launcher		
	Suspension system			
5.3. Coax & fittings	RG213 minimum to suit mast			
	Adapt or patch lead N male to PL259			
	Adapt or patch lead N male to BNC male			



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Category Group	Essential	Good to have	Nice to have	Generous benefactor
	Adapt or patch lead PL259 to BNC male			
	N female barrel x 2			
	BNC female barrel x 2			
<b>5.4. Power</b>	Power lead 13.8V	Deep cycle battery	Power supply 240/13.8	Power fail to battery switching device
	Adaptor OMC	Spare handheld battery	Extension lead	Generator 1KVA Inverter type
			Powerboard - switched	Powerboard - switched with RCD
	Fuses spare suit all own equipment	Handheld battery charger 12V input	Powerboard 13.8V	
		Adapter 32V plug to OMC female		
		Adapter OMC male to 32V socket		
		Adapter own system to OMC female		
<b>5.5. Computing</b>		PC notebook with	TNC	
		APRS & mapping software		Wireless NextG internet modem
<b>5.6. Navigation</b>	GPS	APRS		
	Maps to suit event			
<b>5.7. Instruments</b>	Multimeter	Ammeter		Antenna analyser
		SWR/RF power meter		
<b>5.8. Tools</b>	Side cutters			
	Pliers – needle nose	Wire strippers		
	Pliers - linesmans			
	Knife – trimming			
			Soldering iron – gas or 12V @ solder	
		Crimper Coax RG58		
		Crimper Coax RG213		
		Crimper - Power connector		
			Crimper - modular	
				Multitool e.g. Leatherman

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Category Group	Essential	Good to have	Nice to have	Generous benefactor
	Shifter 100mm			
	Shifter 150mm			
	Screwdriver flat large			
	Screwdriver flat med.			
	Screwdriver flat small			
	Screwdriver Phil # 2			
	Screwdriver Phil # 1	Pozidrive #1		
	Screwdriver Phil #0	Pozidrive #0		
	Screwdriver Pozi #2			
	Screwdriver Jewellers			
	Hex keys 2-8mm			
	Spade/trenching tool			
Hammer				
<b>5.9. General</b>	Insulation tape	Self amalgamating tape		
	Gaffer/Race/Duct tape			
	Torch	Headtorch		
	Spare batteries/globe			
	Fuels			
	Watch	Clock		
<b>5.10. Personal comfort</b>	First aid kit			
	Sleeping Bag	Chair - folding	Table - folding	
	Mattress (air bed/Thermarest)	t	Tarp/groundsheet	
	Swag (or back of vehicle arrangement)		Tent	Caravan / campervan
	Utensils – eating drinking			
	Cook stove, cook pots & fuel	Thermos flask		
	Water container	Drink bottle		
	Food			
	Snacks			
	Hot drink makings			
		Lantern		
Toilet paper & antibacterial wipes				
	Trowel/spade			
<b>5.11. Vehicle</b>	Tow rope			
	Jumper leads			
		Spare fuel		
<b>5.12. Stationery etc.</b>	Biro x 2			
	Pencils			
	Notepad A5 or A4			
	Clipboard	Ruler		
	Note paper			
	Marking pen waterproof	Message Pad NCR		
	Event documents			
	Licences			

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Category Group	Essential	Good to have	Nice to have	Generous benefactor
<b>5.13. Clothing</b>	Hi viz vest or jacket			
	Warm top			
	Jacket waterproof			
	Hat			
	Gloves – leather work			
	Boots			