

# Outback Comms

Satellite Phone

UHF CB

27MHz CB

HF SSB Land Mobile

The key objective is to stay in touch while travelling in remote areas, and have the capability of obtaining assistance if the need arises.

Travellers should also be prepared to help out fellow travellers when travelling in remote areas, lives may depend on it.



# Outback Comms - Satellite phone

- Two providers, Globalstar and Iridium
- Expensive call rates
- Handsets can be hired
- Only work “in the clear”
- There have been significant network problems recently



# Outback Comms - UHF CB

- FM, very clear
- Great for inter-car communications
- Also essential for places like the Simpson, where you should be listening on channel 10 for oncoming traffic coming blind over dunes
- Output power limited by law to 5W, efficiency can be improved by using high gain antennas
- 6dB has higher angle of radiation, good for hilly regions, 9dB, lower, provides more range which is good for flat country
- Short range because it is UHF, range is considerably extended by using repeaters,
- Note that these repeaters generally do not exist in the bush



# Outback Comms - 27MHz CB

- Uses AM and SSB, prone to interference
- Good for short range, power limited by law to 4W AM, 12W SSB
- Prone to skip, therefore cannot be relied on for long range communications
- Radios are readily available and cheap



# Outback Comms - HF SSB Land Mobile

- 100 W
- Radios can be expensive to purchase up front, but they can be hired for trips, plenty of second hand sets now available
- Cheap to use compared to Sat Phone
- Ability to hear other parties, useful for providing assistance in times of need
- Nationwide coverage
- Best frequency to use depends on the time of day, rough rule, the higher the sun, the higher the frequency



# Outback Comms - Land Mobile Services

- **RFDS**, direct contact for medical assistance and air ambulance (Outpost non-assigned, ACMA, \$61)
- **VKS737**, non-profit organisation specifically setup for travellers (\$65 per annum)
- **Radtel**, direct dial telephone from the radio (packages start from \$85 per year depending on call plan)
- All require a license, no qualifications are required, just some money



# Outback Comms

- Modern HF radios have Selective Calling (selcall) capability
- Much like a phone number, if you wish to contact another radio you punch in their selcall number and call
- The target radio should be scanning a number of frequencies, when the selcall is detected their radio “rings” like a phone
- The scanning feature provides the ability to listen on many frequencies for incoming selcalls



# Outback Comms - RFDS

- All type approved HF Radios have an Emergency Call button, which generates a two-tone alarm which raises the alarm at the RFDS base
- Voice calling on RFDS frequencies will not get a response, hence it is important to use a type approved Land Mobile radio (Codan, Barret, QMac)
- There are enough bases and frequencies to ensure that a response is received no matter what time of the day and location



# Outback Comms - VKS-737

- Provides twice daily scheduled callbacks (skeds)
- People can leave messages for members, the members are notified of waiting messages during these skeds
- Road reports can be obtained from the base station operators, other conditions can be reported by members calling in
- VKS737 members can call each other as much as they require for no charge,
- There are also a range of selcall numbers allocated to Police, Ambulance, Garages and others, calling these selcall is free to members



# Outback Comms - RADTEL

- Allows direct dialing of any telephone from the radio
- Call rates start from \$1 per minute, reducing depending on the selected plan
- Free incoming calls, the originating party calls a number in Newcastle. The operator will take the details and attempt to contact your radio via selcall
- Once contact with the base operator is established the message is passed on and you then can call the originator
- Several bases around Australia, no matter what time of the day or your location a base station is accesible



# Outback Comms – Wrap Up

- At minimum have a UHF CB, have the radio scan all channels in case there is a fellow traveller in the local vicinity trying to obtain assistance
- When travelling in remote areas have at least a Satphone and/or a HF Land Mobile (if you can afford it, have both)
- Consider taking an EPIRB, activate it only as a last resort. An EPIRB will help emergency services locate you to the last mile (406MHz satellite assisted location and local 121.5 MHz homing beacon)

