

Chapter 11-2 Answers

- Q1 What are the three parts to a signal report?
RST
Readability on a scale of 1 -5
Signal strength from the meter.
Tone 1-9 for morse code. (Not used in audio signal reports)
- Q2 Where do you obtain the signal strength reading?
From the scale on the radio.
- Q3 A midscale reading of S9 is triggered by what?
50 uV signal at the antenna
- Q4 How would you report a good strong audio signal?
5 and 9
- Q5 Which document would you look up to see the amateur band plan?
Australian Amateur band Plan
- Q6 Explain the following terms regarding the repeater directory.

Output	Input	Call	Location	Service Area	S	ERP	HASL	T/O	Sp	Tone	Notes
147.050	147.650	VK3RWL	Mt Warmambool	Warmambool	O	40	-	0.5	3ATL	91.5	58
147.075	147.675	VK3RCR	Mt Dandenong	Melbourne 10/21	U	100	600	-	3VW	-	-
147.100	147.700	VK3RPB	Mt Porepunkah	Bright	O	5	-	2.5	3WI	-	36
147.100	147.700	VK3RSG	Bass Hill	South Gippsland	O	40	-	3	3WI	-	-
147.100	147.700	VK3RWA	Ben Nevis	Ararat	O	30	876	2.5	3WI	91.5	-
147.125	147.725	VK3RDG	Mt Delegate	Delegate	O	-	-	-	3WI	-	-
147.125	147.725	VK3RGC	Montpellier	Geelong	O	45	160	3	3ATL	91.5	-

Output – This is the output frequency of the repeater and the receiving frequency for the radio.

Input – This is the receiving frequency of the repeater and the transmitting frequency of the radio.

Call – The call sign of the repeater.

Location – Site position.

Service area – Coverage.

S – Status of the repeater.

ERP – Effective Radiated Power

HASL – Height above sea level

T/O – The time the repeater will operate before dropping out.

Sp – Sponsor responsible for maintenance.

Tone – Access tone (CTCSS)

Q7 What is the repeater offset value?

The offset is the difference between the transmit and receive frequencies.

Positive offset for over 147 MHz and negative offset for under 147 MHz

Q8 Does VK3RWL have CTCSS if so what tone frequency?

Yes 91.5 Hz

Q9 I want to use the Ararat repeater (VK3RWA). What setting would I need to make to my 2-meter transceiver to use this repeater?

- **Set my receiver to 147.100 MHz with a positive offset of 600 KHz. So, when I transmit, the frequency will change to 147.700 MHz,**
- **Set the CTCSS to 91.5 Hz**

Q10 What is DTMF and how does it work?

DTMF is Dual Tone Multi Frequency. This is the tone you hear when dialing numbers on a phone. A dual combination of audible frequencies allows the radio to transmit numbers.

Q11 Complete the following State prefixes.

VK0 – Antarctica
VK1 – ACT
VK2 – New South Wales
VK3 – Victoria
VK4 – Queensland
VK5 – South Australia
VK6 – Western Australia
VK7 – Tasmania
VK8 – Northern Territory
VK9 – Australian External Territory

Q12 What letter goes after the State prefix if the call sign is for a repeater?

R e.g. VK3RWL

Q13 Why are breaks in repeater transmissions necessary?

- **Don't overload repeaters. They are fitted with time out to prevent continuous use.**
- **Courtesy - Lets others access the frequency if needed. You may be working a remote station that others may want to access e.g. satellite.**
- **Listen for others. Weaker signals of importance may be blocked by your occupation on frequency.**
- **Safety. In marine radio, the frequencies are quite during the period 3 minutes after the hour and three minutes after the half hour to allow any messages to be read.**

Q14 What is IRLP?

The Internet Radio Linking Project, also called IRLP, links amateur radio stations around the world by using Voice over IP (VoIP).