# Rally Queensland 2007 - Communications Plan

#### **Project Scope:**

This is an authorised WICEN exercise. The aim of this exercise is to send scoring information from the field using laptop computers to a database server at rally "HQ" within several minutes of receiving valid data. Brisbane area WICEN has been tasked with providing primary scores for this event. It is essential to ensure scores are sent quickly and accurately.

#### How is this done?

WICEN personal will use packet radio techniques in conjunction with scoring software know as "RFORM" on any IBM compatible personal computer. RFORM will be supplied by WICEN and controlled by Brian Mennis VK4XS.

#### WICEN field operators will need to obtain the following:

RFORM Ver 11.1 / RFIELD Ver 12 \*\*\* Version 12. released in 2006 \*\*\*.

- 1. Portable IBM Compatible computer
- 2. 1200 Baud Packet Terminal Node Controller (TNC)
- 3. VHF Radio on **144.700 MHz**
- 4. UHF Radio on 439.225 MHz user Primary UHF
- 5. UHF Radio on 434.225 MHz user Secondary (Mooloolaba Primary) UHF
- 6. Fully wired RS232 Cable for TNC to Serial port on Computer.
- 7. 2m or 70cm radio for voice. Note: 70cm needs 91.5 Hz CTCSS
- 8. Field must maintain voice contact with VK4BWI at all times

RFORM / RFIELD software comes with documentation to help you set up for your station and will not be covered here. RFIELD is for Windows OS and requires Pentium 75 or greater.

Prior to the rally Weekend, Brian VK4XS will conduct on-air tests to help you with RFORM / RFIELD.

IT IS WISE TO USE THIS TIME TO CHECK YOUR STATION

In the Brisbane Area, VK4RWI at Spring Hill is on 144.700 MHz.

3 KHz is the standard deviation. RFORM / RFIELD can be used as a simple terminal program.

\*\*\* CHECK and double CHECK your system prior to the Rally!!! \*\*\*

Check that you have RFORM / RFIELD v11.

Should you experience any packet difficulties, please call **RALLY BASE**, **VK4BWI** on Kandanga repeaters **147.125** (+), **147.175**(+), **438.150**(-) or **438.475** (-) (91.5 CTCSS on 70cm) or Derrier Ridge repeaters. Nev VK4TX & Ken VK4KWM will be at Rally Base and can guide you through any problems (up to 15 minutes before the start of your stage). Any problems just before the start will result in using voice scoring only.

#### How Do I Connect To Rally HQ – VK4XS Scores Base at Twin Waters?

- 1. Connect To **VK4BWI Rally Base** QTH Kandanga
  - **144.700** VK4BWI-0 (Primary 2m), or
  - **439.225** VK4BWI-7 (Primary 70cm)
- 2. When Connected to VK4BWI, type "C SCORES" this will take you to VK4XS (Scores Base)
- 3. When connected to VK4XS, you can start sending scores. You must be connected at VK4XS at all times, when sending scores!
- 4. At completion of your stage, verified from VK4BWI that you are clear to depart your stage. This is to ensure all scores you have sent are in the database and the stage is complete.

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#### Alternate Connection To Rally HQ – VK4XS Scores Base at Twin Waters?

- 1. Connect To **VK4BWI Rally Base** QTH Kandanga
  - **144.700** VK4BWI-0 (Primary 2m), or
  - 439.225 VK4BWI-7 (Primary 70cm)
- 2. When Connected to VK4BWI, type "*BBS*" This will take you to VK4RZC site at Maleny.
- 3. When Connected to VK4RZC, type "BBS" again This will take you to VK4XS (Rally HQ).
- 4. When connected to VK4XS, you can start sending scores. You must be connected at VK4XS at all times, when sending scores!
- 5. At completion of your stage, verified from VK4BWI that you are clear to depart your stage. This is to ensure all scores you have sent are in the database and the stage is complete.

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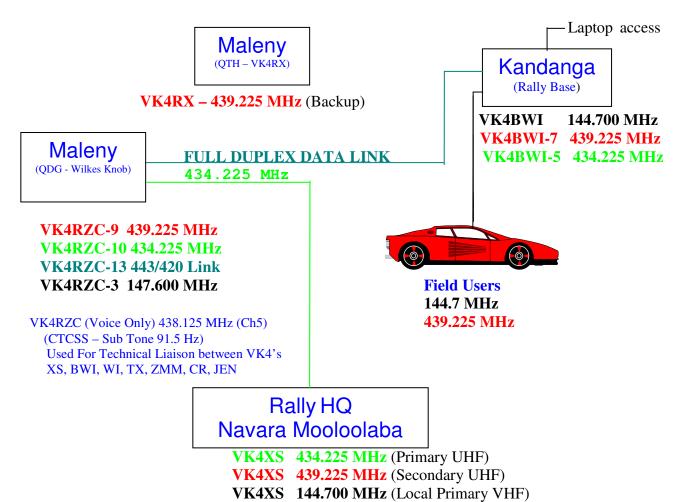
### Alternative Connection If Failure of VK4RZC (Only if directed by Rally Base)

This is to be **only** used if rally base VK4BWI instructs to do so

- 1. Connect to VK4BWI on 144.700 MHz
- 2. At the VK4BWI prompt, type "*HOST*", which will connect you to VK4BWI-7
- 3. At VK4BWI-7, type "CONNECTS VK4XS via VK4RX"
- 4. You may now start sending your scores

## Packet Network Information for WICEN Rally Queensland

(Showing Default Primary Linking Paths Only)



Frequency MHz – Packet Network	FM92 Channel
434.225 Mooloolaba Primary & (Field Secondary 70cm)	70cm CH 89
439.225 Field - Field Primary (70cm) & (Mooloolaba Secondary)	70cm CH 49
144.700 Field – Field Primary (2m)	RT 85 v 2 CH 69
145.175 (Derrier Ridge) APRS	

Frequency MHz - Voice Network to VK4BWI Mt Kandanga	FM92 Channel
438.150 & 147.175 Primary Scores (Kandanga) Repeaters	70cm CH 6
438.475 & 147.125 Primary Scores (Derrier Ridge) Repeaters	70cm CH 19
438.200 (Kandanga) Engineering, Linked to RZC 438.125 Maleny	70cm CH 8
438.125 (Maleny) Engineering VK4XS to VK4BWI only	70cm CH 5

- Note 1: Callsigns use the stage number i.e. 'Rally Base this is Start 1', or 'Rally Base this is Finish 3' for scores. To send a message (not a score) say 'VK4BWI this is [callsign]'. You must be able to communicate with Spectator Operators.
- Note 2: All voice repeaters will be X-linked together up to 15 mins prior to the first event. Call VK4XS to confirm connect.
- Note 3: Safety repeaters 438.150 & 147.175 monitored 24 hrs by VK4BWI and linked to QDG/WICEN voice network (Springbrook 438.100, Mt Cootha 438.200, Maleny 438.125, Mt Perseverance 438.050, Petrie 438.475) when scoring has been finished for the day (i.e. all night). You will wake us by calling on any of these frequencies. 438.200 wont be monitored so QSO on this at any time during the night (you wont wake us). Emergency contact (Nev) TBA.
- Note 4: All 70cm repeaters require 91.5 Hz CTCSS tone & 60 second Time out Timer. No CTCSS required for 2m.

#### **How Do I send a score by VOICE?**

- 1. Call Rally Base "Rally Base this is Stage [number]"
  - 147.175 (+) or 438.150 (-) repeaters Mt Kandanga, 147.125 (+) or 438.475 (-) Derrier Ridge.
- 2. Rally Base will respond with "Send" or "Go Ahead Stage [number]"
- 3. Send score as follows: (Stage, car number, start time, finish time, score time)

  Stage [number], car ###, hhmm, hhmmsss, mmsss
  - Stage 4, 043, 0921, 09426, 00216 (ie seconds are in tenths)
- 4. Leave a pause between each set of numbers. If you have more scores to follow say the words "more to follow" after each score. Remember this is being typing into a computer.
- 5. Rally Base will respond with "Send", then send the next score as in three (3) above.
- 6. Rally Base may confirm receiving score "thank you for [car number]".

#### **How Do I send a message by VOICE?**

- 1. Call Rally Base "VK4BWI this is [callsign] message"
  - 147.175 (+) or 438.150 (-) repeaters Kandanga, 147.125 (+) or 438.475 (-) Derrier Ridge
- 2. If using one of the below frequencies call Rally Base "VK4BWI this is [callsign] on [frequency]"
  - VK4RZA 438.100, VK4RZB 438.200, VK4RZC 438.125, VK4RZD 438.050, VK4BWI 438.200, VK4RZG 438.475 (all 70cm repeaters require 91.5 Hz CTCSS)
- 3. Rally Base will respond with "[callsign] send"
- 4. Remember that Rally Base can get very busy so get to the point and please don't be offended if they don't have a lengthy QSO.
- 5. If Rally Base sends "Stand by" this means they are probably taking a number of scores. If no response in 5 to 10 minutes call again.

### **How Do I send an URGENT message by VOICE?**

- 1. If your message is of an urgent nature (ie safety, injury) send "VK4BWI Urgent"
- 2. If using a frequency of 438.200 or calling on VK4RZA, VK4RZB, VK4RZC or VK4RZD you will need to announce the frequency e.g. "VK4BWI Urgent 438.200"
- 3. Rally Base will respond "station calling URGENT send"
- 4. State callsign and nature of message "VK4BWI this is [callsign] ... message .... over"

### I'm in the bush and the mobile phone does not work. How can I be contacted?

- 1. Third party communications can be reached through VK4BWI
- 2. Neville Mills (VK4TX) (m) TBA monitoring linked repeaters 24 hrs during rally.
- 3. VK4BWI will call you on the radio. Please advise where you are camping so we can find you (vehicle registered number and GPS co-ordinates are good)