

FSK441: Conventions, Reports, Activity and Procedures in VK-ZL

Conventions

- Use 30-second TX/RX periods
- Southerly and easterly stations TX first. While there is some ambiguity at the North-East to South-West boundary this is overcome by the additional rules that ZL always TXs first to VK and VK5 always TXs first to VK2/4
- Do not use signal tones (shorthand messages) on the Focus Frequency
- Use FSK441a which has become the international standard with the “b” and “c” versions being deleted on later releases of the WSJT program.

Signal Reports

A report has two numbers, the first represents the duration of the meteor burst and the second the signal strength.

First Number

- 0 = less than 40 ms
- 1 = 40 to 80 ms
- 2 = 100 to 980 ms
- 3 = greater than 1000 ms

Second Number

- 6 = 0 to 10 dB
- 7 = 11 to 16 dB
- 8 = 17 to 22 dB
- 9 = greater than 22 dB

Thus a 27 report means a burst of signal of 100 to 980 ms duration peaking at between 11 to 16 dB above the noise. Most versions of WSJT provide a computer generated report that can be applied. Note that in many cases long burns will break-up into shorter periods due to the signal arriving out of phase from different parts of the meteor trail. In such cases it is better to estimate the report from the length of the burn as shown on the green signal strength trace.

Activity

FSK441 activity in VK-ZL tends to fall into three categories:

- Activity Sessions on weekends
- Skeds
- DXpeditions to rare grid squares

Activity Sessions

Sessions are held from 0700 to 0800 NSW/Vic time each Saturday and Sunday morning. The sessions are a good way to get started and learn about the mode. A call-back is held just after each session on 40 meters on 7085 kHz (or close by) during which people share experiences and newcomers are welcome to ask questions and seek advice.

All activity is on the same frequency of 144.230 MHz which gives the best chance of seeing a number of stations. In order to avoid interference the following arrangement is used:

- Saturdays: VK3/5/7 transmit in the first period to the North and VK1/2/4 in the second period and to the South.
- Sundays: VK1/2/3/5/7 transmit in the first period to the North and VK4 in the second period and to the South.

The ZLs also run activity sessions on 144.230 each Saturday and Sunday morning starting from 0600 NSW/VIC time.

Skeds

Skeds, which can take advantage of short-hand messages where appropriate, are the most efficient way to complete an FSK441 contact. Skeds can be arranged on 40 meters after the activity sessions, via the Australian VHF reflector of the VK-ZL logger. Skeds are normally arranged on the alternate frequency of 144.330. Skeds can take advantage of Short-hand messages which can be decoded up to 6 dB below normal text. While text is still required to exchange callsigns both ways the use of the short-hand messages for the Reports R26 and R27 and for RRR and 73 can significantly shorten the time to complete a QSO.

Dxpeditions

Dxpeditions are designed to activate rare grid squares. These are usually advertised on the Australian VHF reflector and normally held on 144.330 MHz with the DX station transmitting in the first period.

Procedures

Examples of procedures are as follows:

A. Contacts on the Focus Frequency (144.230 MHz)

Standard method

Message Sent	Station Transmitting
CQ VK7MO	VK7MO
VK7MO 2626 VK2AWD	VK2AWD
VK2AWD R2727 VK7MO	VK7MO
RRR VK2AWD	VK2AWD
7373 VK7MO	VK7MO

Method when working more than one station

Message Sent	Station Transmitting
CQ VK2AWD	VK2AWD
VK2AWD/27 VK4CDI/26 VK7MO	VK7MO
VK7MO/R26 VK3AXH/37 VK2AWD	VK2AWD
AWD/RRR VK4CDI/26 VK7MO	VK7MO
MO/73 VK3AXH/37 VK2AWD	VK2AWD

B. Skeds (144.330)

Message Sent	Station Transmitting
ZL3TY VK7MO	VK7MO
VK7MO 2626 ZL3TY	ZL3TY
R27	VK7MO in short-hand (single tone) format
RRR	ZL3TY in short-hand (single tone) format
73	VK7MO in short-hand (single tone) format

C. Dxpeditons (144.330 MHz)

Message Sent	Station Transmitting
CQ VK7MO PF27	VK7MO
VK7MO 2626 VK2FLR	VK2FLR
VK7MO 2727 VK2KU	VK2KU and any others
VK2FLR R3636 VK7MO	VK7MO
RRR FLR	VK2FLR
VK7MO 3737 VK2KU	VK2KU
73 VK2KU R1616 VK7MO	VK7MO
73	VK2FLR in short-hand (single tone) format
VK2KU R1616 VK7MO	VK7MO drops 73 to advise VK2FLR that his 73 has been received
RRR KU	VK2KU
73	VK7MO 73 in short-hand (single tone) format indicates RXed RRR from VK2KU and going QRT.

Note 1: The DX station will give priority to stations from whom a report has been received so you should not expect a report until you have sent one.

Note 2: As meteor pings rarely overlap there is no problem in continually calling the DX station until he/she gets back to you. It also tells the DX station you are still around.

Note 3: The sending of 73 in short-hand (single tone format) indicates that the DX station will be going QRT.