Lee County ARES – Wilderness Protocol (2025 Edition)

Emergency Communications Reference

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Background

The Wilderness Protocol began with William Alsup, N6XMW, in Oakland, California, and was first published in QST magazine in 1994. Its purpose is to provide effective simplex communication in the backcountry and during times when repeaters are unavailable. It is now part of the ARRL ARES Emergency Resources Manual.

The Wilderness Protocol calls for hams to announce their presence and monitor national calling frequencies for five minutes beginning at the top of the hour, every three hours between 7 AM and 7 PM, while in the back country. National calling frequencies include 146.520 (primary), and secondarily 52.525, 223.500, 446.000, and 1294.500 MHz.

Although originally intended for backpackers and those in remote areas, it remains useful anywhere, especially as a backup when repeaters are down. Monitoring and practicing the protocol ensures operators are prepared to assist when needed.

Local Enhanced Monitoring Schedule (Lee County ARES)

To strengthen emergency readiness, LeeCares recommends the following enhanced monitoring windows:

A) Voice Monitoring (VHF/UHF)

• :00 – Monitor PRIMARY repeater 147.220 MHz (+0.600), PL 114.8

• :30 – Monitor SECONDARY repeater 147.240 MHz (+0.600), PL 114.8

• If repeaters are down: :15 and :45 – Monitor/CALL on 146.540 MHz SIMPLEX

HF Voice (LSB)

• 3.953 MHz

• 7.253 MHz

National Guidance

National practice suggests monitoring at the top of every three-hour interval (07:00, 10:00, 13:00, 16:00, 19:00) for at least five minutes. Enhanced monitoring every hour or continuous monitoring is encouraged when power and conditions allow.

If contact is made, QSY (move) to another simplex frequency such as 146.55 or 146.43 to keep the calling frequency clear for others.

Priority Calling – LiTZ (Long Tone Zero)

For priority or emergency transmissions, use the LiTZ signal: transmit a continuous DTMF '0' tone for approximately 10 seconds before making your call. This alerts monitoring stations that a priority call is coming through.

Operating Notes

• Always LISTEN first before transmitting.

• Call for up to 5 minutes at each window; identify with your callsign.

• Keep transmissions short and concise; share who/where/what you need and give a return time.

• Conserve battery power between monitoring windows.

• Remember: the Wilderness Protocol is a coordination tool, not a limitation—call anytime in an emergency.

B) Winlink Messaging (Data)

Primary RMS Gateway

• Gateway: KD5BJ-10 (Winlink RMS)

• Frequency/Mode: 145.610 MHz, VARA FM (WIDE)

• How to connect (Winlink Express): Open VARA FM Winlink session → Channel Selection → KD5BJ-10.

Secondary RMS Gateway

Winlink provides email capabilities over radio for emergency and coordination use.

• Use this as a backup RMS if KD5BJ-10 is unavailable.

• Frequency/Mode: 144.950 MHz, VARA FM

• Gateway: WB5YYQ-10 (Winlink RMS)

Secondary Peer-to-Peer (P2P)

• Peer: KD5BJ

• Frequency/Mode: 145.610 MHz, VARA FM P2P

• Use if the RMS gateway is unavailable; coordinate P2P windows with operators if possible.

RMS Winlink VARA HF

• Select an available RMS Winlink VARA HF station appropriate for the band conditions. • Check propagation and band openings (e.g., 80m, 40m, 20m) and attempt a connection on whichever band is open. • Use Winlink Express Channel Selection to view and update available RMS HF stations.

Winlink Tips

• Use Channel Selection in Winlink Express to pull updated frequency/mode listings.

• If VARA WIDE won’t work, switch modem to VARA FM NARROW (1200-pin).

• Coordinate P2P usage outside :00/:30 voice windows to avoid contention.