

8 Aug 2026

To: All prospective LSPR ham radio volunteers

Subject: Recommended ham radio equipment and advance information

1. Ham radio communications at the LSPR on the 2m band(FM) can be difficult on some rally stages. In order to better prepare potential ham radio operator volunteers, the rally organizers make the following recommendations of equipment to bring with you for the rally.
  - a. DO NOT count on handie-talkie(HT's) radios for communicating with net control. They are ok for monitoring, but 90% of the time will not have enough transmit power to trip the repeaters.
  - b. Minimum recommended equipment:
    - i. Mobile/vehicle mounted 25+ watt radio, preferably wired directly to your vehicle battery so that you don't blow power outlet fuses.
    - ii. 3 dB gain or better antenna.
  - c. Optional equipment that will be helpful if/when assigned to the hard-to-reach locations:
    - i. A 20'+ mast or pole.
    - ii. An omni-directional antenna with a gain greater than 3 dB.
    - iii. A directional antenna, i.e. yagi.
    - iv. **On the Friday stages we have 6 high priority locations that require this optional equipment to effectively reach the repeater. There are also a couple of other marshal locations where this optional equipment would be beneficial. If you can help out with this optional gear, let Tom know via the email address below.**
2. A few other things to contemplate:
  - a. In order for your mobile(or mag-mount) antenna to work properly, you need a good ground plane. If your car/truck has a sunroof or the roof/hood is made of aluminum, you will not have a good ground plane, which limits your transmit efficacy.
  - b. 2m ham band communications are finicky sometimes. What that means is that you may have to move your vehicle's location as little as 10' and you will improve your transmission quality. If at first you aren't getting through to net control, move around within your operating area until you find a good location.
  - c. In some of the areas, crossbanding may be an option, if your radio has that capability AND you are proficient at using this method. We discourage the use of cross-banding. Realize that crossbanding will add some delay in keying the repeater. Don't speak too soon or your message will be cut off. If you don't have your squelch(s) set properly you will have a "hot mic" situation and your radio will constantly key the repeater.
3. Please arrive at rally volunteer registration with your radios programmed to the repeater and simplex frequencies(to be published separately from this document) that will be utilized during the rally.
4. The LSPR organizing committee has purchased a couple loaner Yaesu FT-2980 radio and antenna setups. The intent is to loan them to licensed ham radio operators who don't have their own minimum equipment. Contact the radio team at volunteer registration or Tom if you would like to borrow a radio.
5. The formal communications plan with more details will be published on the website in the near future.
6. Questions, contact Tom, [KE8TPT@gmail.com](mailto:KE8TPT@gmail.com).