

100AW Performance Rally Group Communications Supplement

The guidelines presented below are an outline of radio operations for all events organized by the 100AW Performance Rally Group. Please read this document in full before an event. For more information, please do not hesitate to contact the Communications Team via email at radio@100aw.org.

Preparing For The Event

Equipment Recommendations

The suggested operating setup as specified by Net Control consists of a 2-meter mobile radio with a minimum power output of 50 watts, fed into a $\frac{5}{8}$ wave mag-mount antenna. While various options exist that meet or exceed these suggestions, the following is the equipment Net Control recommends for most operating circumstances:

- Icom IC-2300h VHF FM Transceiver
- MFJ-1728B Dual-Band Mag-Mount Antenna ($\frac{5}{8}$ wave at 2M)

The equipment listed above is used to test each and every radio marshal position on the stages to ensure that event repeater coverage is adequate. Failure to come prepared with adequate equipment could jeopardize your ability to communicate with Net Control and put the event safety or schedule at risk.

In the event of a failure of your radio or other equipment during the event, Net Control has a loaner pool of radios that are pre-programmed and paired with antennas. These are available in some of the course cars (000, 00) in case the need arises. Inform your Stage Captain or call the Net Control phone number if you would like to borrow one of these units.

In addition to radio equipment, it is best to come prepared to spend each event day out in the woods. Pay close attention to the weather forecast on the days prior to the event; rally races run rain or shine! You will also be required to keep written logs during stages, so adequate light and writing surfaces/equipment are also essential.

Frequencies

Net control will only be monitoring and operating on the published repeaters listed below. When operators are with their stage crew, operations will be on one of the assigned stage simplex frequencies listed below.

It is essential to fully program all frequencies listed below into your radio(s) prior to the event! The use of programming software such as CHIRP is highly recommended, as it can help prevent errors in transcribing data incorrectly. A CHIRP frequency file will be available prior to the event, if you do not receive one, please contact radio@100aw.org for a file.

CHANNEL NAME	FREQUENCY	tone	offset
Potosi	146.835	100 Hz	-0.600 MHz
Salem	146.970	110.9 Hz	-0.600 MHz
100AW PRG	*145.595*	173.8 Hz	-0.600 MHz
Viburnum	147.300	110.9 Hz	+0.600 MHz
Crew A	147.420		
Crew B	147.435		
Crew C	147.510		
Crew D	147.525		
Crew E	147.540		
Crew F	147.555		
Crew G	147.570		
Service / MTC	147.585		
*THIS IS A NON-STANDARD FREQUENCY PAIR! Use caution, as your radio/software will not automatically add an offset. You will need to add/confirm offset manually!			

This event utilizes a linked repeater system, that means that traffic to any of the repeaters above will also be repeated to each of the other repeaters in the list. This ensures that no traffic is missed and that all stations are privy to the same information. When on the stages, use the strongest repeater signal available to contact Net Control, if you do not hear a response, try a different repeater from the list.

While traveling to the event, it is encouraged to test your equipment by checking in on the repeaters as you get close to town. Many of the members of the communications group are monitoring traffic prior to the event and it is a great opportunity to confirm that your setup is working. A member of the communications team should also be present at Volunteer Registration to answer any questions you may have before the event.

During the Event

General Operating Guidelines

On the day of the event, start by monitoring your assigned stage simplex frequency to help coordinate meeting up with your fellow stage crew, you will likely communicate on this frequency while in transit to your assignment and during stage setup. It is helpful to also scan the repeater frequencies just to be aware of how the event is progressing, as long as you can do so without missing radio traffic on your stage simplex frequency.

Once you are in place at your assigned spot, check in with Net Control to ensure that you are able to reach one or more repeaters. Net may ask you to change frequencies, power levels, and/or move locations slightly if you are not heard clearly. As you get established in your spot, if possible, monitor both the stage simplex frequency and Net Control.

After Car 00 passes your location, you should change over to the Net Control frequency. Keep a car count no matter where you are, as often it helps establish if competitors are off course/transit. All communications should take place on the net until Green Light has passed your location (indicating the stage is complete and the road is open). After Green Light has passed, operations will revert back to the stage simplex frequency unless you are communicating with Net Control about an ongoing issue.

Radio Etiquette

Radio operators are advised to keep traffic short and to the point! When passing traffic to Net Control, pause briefly to think about the traffic to be relayed prior to keying up the radio. A brief delay will help you to compose your message and avoid long traffic as you “think out loud” on the radio.

Be mindful of accidental transmissions due to microphones being inadvertently keyed; accidental microphone keying is frustrating for everyone. A good way to help prevent this is to keep your microphone visible at all times, and prevent it from “rolling around” in your seat.

When keying your radio, allow **1 full second** after pressing the microphone push-to-talk switch before speaking. This is to allow the linking system to propagate and key all other repeaters in the network. If it feels uncomfortably long when you key up and wait, you’re doing it right!

Net Control

Net Control will operate as a directed net and will identify using the callsign “K1HAW” (*Kilo –1 – Hundred-Acre Wood*). The primary purpose of the net is to ensure volunteer, competitor, and pedestrian safety during the event. **At no time should scoring information be discussed over the net.**

The directed net will be opened the morning of each event day and will be closed at the conclusion of the stages each evening only once each and every resource has been accounted for and there is no further traffic for the net. Once the net is closed for the day, you are free to use the repeaters for normal radio traffic.

You should always contact Net Control *prior* to conducting communications and wait patiently for them to respond. This may take a while, as traffic is prioritized based on which stages are running and whether or not there are any immediate impacts to schedule or safety. Direct communications between two or more stations over the net must be approved by Net Control.

Tactical Callsigns

All rally positions are issued a tactical callsign that corresponds to their function. All personnel are expected to utilize their tactical callsigns in addition to identifying in accordance with FCC Regulations. After your initial check-in, all subsequent traffic to Net Control should start with your tactical callsign and end with your amateur callsign.

Keep in mind that it is common for your tactical callsign to change during the event. For example, if you are stationed on a stage that is ran twice in a day, your location will remain the same (e.g. “Spectator Alpha”) but the stage number will change (e.g. “Stage 5 Spectator Alpha” rather than “Stage 3 Spectator Alpha”).

Emergency Reporting

Do not hesitate to report situations that may endanger public safety! **The use of the phrase “BREAK BREAK BREAK” indicates that a station has emergency radio traffic.** This type of emergency radio traffic is intended to relate *only* to traffic which involves the safety of life. Non-Rally traffic on stage after Car 0 has passed qualifies as emergency traffic. Stage delays, unexpected spectators during setup, weather status, etc., do *not* qualify.

In the event of an emergency situation, whether it is directly related to the rally or not, names or specific conditions of persons involved shall not be discussed over the radio. All communications to the media or to the public shall be made by the chairman or their delegated public communications officer. Under *no* circumstances should you make statements to the public or the media.

Thank You!

On behalf of the entire Communications Team, thank you so much for taking the time to volunteer for the rally! Those of us who organize the event know how big of a commitment, both in time and money, it takes to attend. We also know that without all of our talented amateur radio volunteers, this event simply would not be possible!

Sincerely,

*Ron Erickson
Communications Coordinator
KEØQIM / K1HAW*