



EXPRESS SCRIPTS®
 Gateway
 Getaway
 Ride 2008

Communicators Reference Guide

NET FREQUENCIES	Primary	Secondary
Alpha		
Bravo		
Charlie		
Delta		
Echo		
Foxtrot		
APRS Trackers		
Incident 1		

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Welcome & Introduction

Thank you for volunteering to be a Bike MS Express Scripts Gateway Getaway Ride communicator! One of the services that we can do as Amateurs is to use our skills, equipment and license to provide public service communications for organizations and in time of need. The fact that you have chosen to help out this year is a testament to the long-term commitment that Amateur Radio has played not only in the development of communications technology but in terms of its service to the better good of all. This year's event communications have been coordinated by the Central Missouri HAM's in cooperation with MS Society and St Louis area HAMs.

Communications Structure

Communications for the 2008 Ride will again use a remote base arrangement for primary net communications. This arrangement has worked flawlessly in past years and while we anticipate no problems-please be patient if we do.

Ride Terrain

The terrain of the Day 1 course is the same as last years' Day 2. There may be some possibility of poor signal conditions in some of the deeper dips but, in general we anticipate little communications difficulty.

Most of the route for Day 2 this year surrounds the city of Columbia, but does include roads with many hills and roads in the river bottoms. While we hope for the best, be prepared to deal with momentary communication outages due to terrain. Please try to be cognizant of your location when transmitting and attempt to find the best possible spot. If you should be in a shadow area try to reposition using your rig's S-meter to guide you and remember that basically we are communicating line-of-sight... so high locations are always favorable.

Net Control will be located in Columbia, off route for both days. Communications at Start/Finish will be manned by a Ham located in the Boone County Fire Protection District Command Vehicle atop the hill. Most of the rest stops are located on favorable terrain but if you are a Rest Stop Communicator and note that your area seems not to have favorable terrain—please make a communications check with Net Control, when appropriate, to determine your ability to communicate effectively; beyond that, please try to communicate concisely and accurately. This can be accomplished by being sure you have all, or as much detail as possible when reporting to Net Control. Finally, have a good time and remember what you are doing is something that only a small fraction of the people that live in the US are capable of doing!

Equipment Requirements

No change from previous years — minimum equipment is a 25W 2m transceiver and magnetic mount antenna, with a 5/8-wave type gain antenna strongly recommended. HT's with an external power amplifier are not advisable due to high instances of failure associated with multiple component interconnections. If you do not have a mobile easily available we will have a few extra rigs, so please don't let equipment availability stop you from helping out.

Hams assigned to mobiles should have a heavy-duty cigarette lighter plug with a "Y" for power source. We will also be wiring as many of the SAG vehicles on Friday as we can. They will have a harness installed that terminates to a standard T-connector that fits most of the newer radios. Just in case some SAGs don't get wired, there will be a limited supply of battery-clip wiring harnesses available. Rest stop stations in most cases should work fine with a standard Amateur Radio mobile installation, although the advice about a minimum 5/8-wave antenna still applies. However, it is suggested that communicators assigned to the rest stops nearest the course ends and on the "Century" route may want to use a portable base station setup such as a 10 to 15 foot mast and base antenna of at least 3dB gain.

Preparing Your Station

Yes, “stuff happens.” But, on the other hand, be sure that everything you bring works as expected before you leave home — don’t be debugging equipment during the event if it can be avoided! If you plan to bring extra equipment or supplies “just in case”, make sure that it, too, is in good order and that all connections are solid.

Frequencies & QSY Procedure

The frequencies which apply to this year’s event are clearly outlined on the front cover of this handbook. Also, note that there are changes to some of the frequencies from years past. Please have your transceiver’s memory programmed with these frequencies before the event.

Remember, net operations are simplex only, unless you are specifically directed to use a repeater.

There is a list of frequencies on the title page of this document. The “Primary” frequency is the main operating frequency, and the “Secondary” frequency is the alternate direct channel for off-net communications when directed by Net Control.

This year, we will again be splitting the net into two segments and there will be two actual NCS stations, one to monitor each frequency. SAGs, Rest Stops and all other resources will be assigned to one of the “Primaries” as a starting frequency. Please be sure to check this when assignments are made. The net is being split to reduce the amount of traffic on a given frequency as last year proved to be a struggle with so many resources on one frequency. Please be sure to monitor your assigned frequency at all times and listen for NCS to possibly ask you to change frequencies. Initial frequency assignments will be based on your initial assigned location, but may be changed based on the needs of NCS. Monitoring both frequencies can be distracting and cause you to miss important traffic on your assigned frequency, please don’t do this. If you are asked to change frequencies, please change as quickly as you can and check in with NCS on your new frequency when they are available. If you are unable to contact NCS on the new frequency, return to your previously assigned frequency and inform NCS.

QSY Order

In the unlikely event that we have to change operating frequencies during the event, NCS will determine the new frequency from the list. But, be sure to listen closely as Net Control may have to direct the QSY to another pair on the list if the “next” frequency is not clear.

Safety and Health First

Be sure your rest stop or mobile setup won’t constitute a hazard to Ride participants or MS volunteers. If you have a portable mast at your rest stop station that requires guying, make sure the mast is well away from traffic (vehicle, bicycle and foot!), and always flag your guy wires. See that your coax isn’t a trip hazard, and RF safety rules apply, too. Assure that any separate antenna is high enough to keep RF radiation directed away from participants and volunteers. Be sensitive to your own health needs, especially if it is warm, stay hydrated — the water and other supplies at the rest stop are for you just as much as they are for the riders. Bring sunscreen — don’t end the day resembling a lobster! Air Bag Warning — operators in mobiles must place transceivers so that they don’t become a projectile if the air bags deploy. If necessary, a safety inspection will be staged each morning, and vehicles with this problem will be taken out of service until fixed!

Net Procedure

Just as much a reminder for the “old hands” as it is info those who may be first timers — **the Bike MS Ride net is a strictly directed net**. This means that radio communications are with the net control station (Net Control) and unless specifically directed otherwise, only with Net Control.

The Bike MS Ride net can get very, very busy at times. With this in mind, follow these guidelines:

1. Know what you are going to say before keying the mic. Don't squander net capacity by thinking on the air.
2. Be brief and to the point! Short 'n' sweet is the rule of the day! There are 40+ mobile stations and 14 fixed point stations, so do the arithmetic — if everybody takes a minute to handle a transaction, which means we can get to each of you about once an hour.
3. Pay attention to net operations so you can know when Net Control is clear to receive your call. Our simplex net means that you are likely to not hear the other side of the exchange. The Net Control operator will let the net know that he/she is clear for new traffic by closing a transaction with his or her call sign.
4. Assume that your transmission has been heard in its entirety. Net Control will ask you to repeat anything that was missed, lost or unclear.
5. Conclude your exchange with your FCC call sign. Use your call at the end of your information to indicate that your traffic is complete.
6. Always stay on and monitor the assigned net frequency unless directed to QSY elsewhere.

Important Reminder of QSY Procedure

When circumstances make station-to-station communications more efficient, you may be directed by Net Control to move to the secondary frequency for this exchange. You do not need to re-contact Net Control to confirm your return to the main frequency. Net Control will assume that you have returned to the main net frequency after your exchange is complete. Please be sure that you do!

Priority or Emergency Communications

All communications are assumed to be “routine” unless we are told otherwise, and Net Control will usually handle the traffic in the order received. The two exceptions are “priority” and “emergency”.

“**Priority**” is limited to health and welfare situations which are serious but not emergencies, and urgent communications from MS managers. Rest stops running out of food or other supplies or a cyclist needing a SAG are routine operations of the event and never constitute “priority”. Calls indicated by the caller as “priority” will be handled when the exchange being currently handled by Net Control is concluded.

“**Emergency**” is obvious — an immediate serious threat to life, health or property. On hearing “emergency”, Net Control will terminate whatever exchange is in process and instruct all stations to hold any further transmissions until notified that the net is clear for normal traffic.

Cross-Banding

Almost without fail, in previous Bike MS Ride events we have had somebody's cross-band repeat fail, glitch or otherwise do something to clobber the main net frequency. So let's make life extra simple — absolutely no cross-banding by anybody.

Assisting MS Volunteers

We hesitate to admit that everything isn't just wonderful all of the time, but we can't ignore that in the past there has been the infrequent disagreement about procedure between MS volunteers and communicators. Often this is the result of misunderstanding of the importance or relevance of information which comes via the radio.

Here are some guidelines to use when resolving differences of opinion:

1. Instructions/procedures from Net Control always supersede previous instructions, including written instructions or procedures set in planning meetings. You are just the messenger, and the Net Control operator is also just a messenger. Instructions coming from Net Control are from MS Society management — not a ham operator — and are to be regarded as the equivalent of being instructed in person by the MS Society manager. On the other hand, be sure that the MS managers at Net Control have whatever they need to make an informed decision. If you or your MS volunteer is having some difficulty relating the recommendation or decision to the immediate situation, please advise accordingly.
2. Rest stops are supplied with what they are going to get at the start and do not get any more supplies. Arguing with Net Control does no good — once they are out of a food item, they are out for the day! The rest stop captain should be aware of this, and shouldn't be asking you to ask. Three exceptions: first is supplies forwarded from closed stops. We may ask for an approximate inventory when a stop is closed to see what can possibly be distributed to later stops. But be warned that certain items popular with the riders, such as bananas and energy bars or drinks, never have "leftovers" and simply cannot be replenished. Second exception is ice since it is so difficult to predict how much is needed at each stop, and when. Third is distribution error. If a rest stop is stocked, say, with 100 jars of peanut butter and no bread, then there was a mistake and it has to be fixed.
3. Please remind rest stop volunteers to be patient with ice requests. Getting around on narrow country roads in the midst of 3000 bike riders is not something done quickly. The laws of physics (and the State of Missouri) aren't going to be bypassed just because Rest Stop X needs ice, so expect at least a 45- to 90- minute wait. The rest stop captain knows this and should be able to plan accordingly.