**Mission**: Provide continuous radio communications for the Reston Bicycle Club on Sunday, August 27, 2017.

**Reference**: Maps and Cue Sheets Published by Reston Bike Club are attached following the text of this document. For sign up, sign up review or modification see web site at SignUpGenius web site.

## Hours of operations:

**Net Control**: 06:00 to 18:00 (or until event officially over)

Rest stops:

Reston Town Center: 06:00 to 17:00 Ashburn (mile 10 and 93): 07:00 to 16:30 Purcellville (mile 48): 08:30 to 14:00 Lovettsville (mile 63): 08:30 to 14:30 Old Mill (mile 80): 09:00 to 15:30

**NOTE:** There will be a bike mechanic/shop at each rest stop.

NOTE: See information in the following pages for the address and other details of each rest station.

#### Procedures:

NOTE: THIS IS A RAIN OR SHINE EVENT. THERE IS A 100% CHANCE THAT THE EVENT WILL TAKE PLACE AND 50% CHANCE OF RAIN WITH WIDELY SCATTERED THUNDER SHOWERS. THE NCS WILL RUN 100% OF THE TIME ON ALL BANDS IN ANY WEATHER INCLUDING A THUNDERSTORM.

Communications will take place on a <u>directed voice net</u>. All communication will be on the primary frequency unless directed by net control to secondary frequencies for the handling of traffic. The net control will be located at the home of John Westerman (W5ODJ). Net control will use the call sign of K4LRG.

The Net **primary frequency** will be **simplex 147.480** MHz, no PL tone.

The net <u>secondary frequency</u> will be N4FSC Repeater - 145.31 MHz (PL 77). The repeater coverage will be validated in the coming weeks. If it is determined that the repeater can not cover the route we will move to simplex as primary and repeater as secondary.

A cross band repeater in Reston provided by Rick Miller (N1RM) will utilize 445.925 MHz using sub-audible tone of 100 Hz for the uplink in Reston to the

simplex 147.480 net frequency. The sub-audible tone is used to reduce interference that is experienced in the Reston Town Center.

**Tertiary Frequency** - The WA4TXE/R Repeater in Leesburg, VA which operates on 146.700 MHz with negative 600 kHz offset and with NO PL tone. Thanks to Dave for the use of his repeater for this event should that be necessary.

In the case that all of these methods do not work NCS will use a list of cell phone numbers to garner support.

Utilization of the APRS system will provide SAG vehicle location information at Net control, Hamilton and Reston Town center. The APRS systems will use 144.390 MHz for its operations. There is a digital APRS repeater and iGATE permanently set up at the QTH of W5ODJ which will cover most of the route. If any of the SAG volunteers would like to use <u>APRS.fi</u> on their mobile phones I am happy to help show you how to set up and use this tool to augment the location information on the maps.

## **Contacting Net Control via the Public Phone Network:**

The primary phone number for the event to get to net control via the public telephone network is: (540) 882-4887.

This phone number will go into a software defined PBX and the caller will be given an announcement and put in to a queue for call handling. Calls are handled first come first served basis, without priority.

There will be 3 phones with multiple line instances at net control. There will be no limit to the number of inbound calls we can field at one time. However, there will only be 2-3 control operators active at any given time.

This phone number has been printed on all the wrist bands and documentation given to each rider participant. This number was active and last tested as of August 14, 2017;

Use this number if all your other communications to net control have failed.

### NOTE:

IN AN EMERGENCY WHERE SOMEONE IS CRITICALLY INJURED OR THEIR LIFE OR THE LIFE OF OTHERS IS THREATENED PLEASE CALL 911 FIRST THEN CONVEY THIS INFORMATION TO NET CONTROL. IF SOMEONE CALLS NET CONTROL WITH A LIFE THREATENING EMERGENCY 911 WILL BE CALLED IMMEDIATELY AND WE WILL COORDINATE EMERGENCY SERVICE THE BEST WE CAN FROM NET CONTROL TO THE SCENE IN QUESTION.

Also note that particularly for locations on the higher elevations along the northern century route, <u>911 calls may get routed by the cell network to Frederick County instead of Loudoun County</u> if you are on a Frederick cell tower which has happened in previous years. The suggestion in the event of making a 911 call, verify you are connected to Loudoun 911 or request transfer to Loudoun 911. This will expedite getting help to you.

#### **ALL OPERATORS:**

Be sure that you can be self sufficient for food and water. I hope that you will be able to receive water at the rest stops and snacks but it is better to be prepared to take care of your needs independently. SAG riders especially need to take food and water with them. SAG riders will be able to take care of rest stop needs when they arrive back at the rest stop after covering their route.

Things to consider that you may want to have on-site at your rest stop:

- ★ Assume it will be raining all day!
- ★ Temporary tent ("soccer mom" type temporary push up) borrow if you do not own
- ★ Pop-up or folding table to operate from
- ★ Electrical tape
- ★ Duct tape
- ★ 3 pound sledge hammer
- ★ Warning flagging for guys
- ★ Rope
- ★ Tarp for sunshade
- ★ Misc tools
- ★ Hammer and nails
- ★ Step ladder
- ★ Chairs to sit upon
- ★ Cushion
- ★ Food and drink
- ★ Notebook for logging
- ★ Printed "Operations Plan"
- ★ Printed route maps

Things to consider for your radio and radio support equipment:

- ★ Good antenna
- ★ Plenty of coax
- ★ Some type of mast with mounting tripod to get antenna off the ground
- ★ Guy ring, guys, and stakes
- ★ Concrete block and rope
- ★ Battery
- ★ Generator
- ★ Laptop
- ★ Internet Access if you can

### Schedule:

Site installations at rest stops should start with 30 minutes earlier than the times given above. When you arrive at your station and are getting set up give network control a call to let them know you are there. Station captains will decide on exact time for setting up their stations at the rest stops which could be earlier than the times given here. Riders will be leaving the town center at 6:30 am. Between 06:00 and 07:00 we will be testing with the various stations providing signal reports and other information. Full net operations will commence at 06:30 in support of the ride. All stations should note during the test period what stations they can receive and provide a report to net control when asked.

# **APRS Operations**

If you do not have APRS gear please give us a heads-up so we can located/allocate equipment for you. If you are a SAG driver/rider we are expecting that you have a full VHF/UHF setup with APRS available to you. APRS gives us the situational awareness that will keep the OTA radio chatter to a minimum.

**APRS Identifier for SAG:** For each SAG driver APRS please encode the APRS identifier using this methodology: APRSID will be RBCSAG-x, where x is your unique number.

**APRS Identifier for BIKE:** For each BIKE driver APRS please encode the APRS identifier using this methodology: APRSID will be RBCBIK-x, where x is your unique number.

NOTE: For FCC compliance please put your call sign in the information part of each APRS packet. Please program your call sign into the message portion of the packet. This is an FCC requirement. All NCS needs to know is the call sign of the APRS device to track it in the system. If your call sign will be non-standard, please let NCS know your call sign prior to the day of the event so we can get them in the system(s).

Follow along: Go to <a href="https://k4lrg.org/aprs.html">https://k4lrg.org/aprs.html</a> for a current map of the event as seen from APRS.

### SAG RIDERS/DRIVERS

See specific information below on when/where/how to meet your driver. I highly recommend that you use the information in the spreadsheet to call your partner rider by phone prior to the event and organize a pick-up spot most convenient to each of you.

NOTE to SAG participants: Mechanic skills are not needed to support the SAG effort. Most times, the rider can fix his/her issue, with a little help from us. Some basic tools would be nice to carry, (allen wrenches, various screwdrivers, small wrenches ,etc). If these don't work, then we pick up the biker and take them to the next rest stop. There is a bike mechanic at each rest stop that can fix the bike, allowing rider to continue. Being a mechanic is not a requirement for LARG people.

Other considerations:

You may want to coordinate in advance with your SAG driver to get permission/access for their vehicle for:

- 1. leg room to park your radio(s),
- 2. temporary magnet mount antenna(s) on roof, and
- 3. 12VDC power (lighter socket, for example). If no power is available (often their socket is already full!), plan on bringing your own
- 4. 3-way lighter socket adaptor (for more holes to poke!), or
- 5. a modest 12VDC battery, in a nice & safe protective box.

SAG participants and associated RBC Member assignments are as follows. **NOTE:** The lists below will be filled out during the last days of the week prior to the event. Until then the definitive list of participants without detailed contact information will be **SignUpGenius**. Please go there for more details until this information is made available.

For contact information for all SAG drivers that we will be using for this event please see the RBC contact document. Print this information and have it handy with this plan so we can reach the SAG drivers by phone as necessary.

### **NET CONTROL**

Net control will establish the net at 06:00 and will begin station check in and testing when they come online. All sites, SAG riders and stations should remain operational until told to secure by net control. It is estimated this time will be before 17:00. In the years 2011 and 2012 it was closer to 16:00.

Net control will be attended by:

POS 1: John Westerman, W5ODJ 703-431-9148

POS 2: Dave Putman, KE4S POS 3: Jim Bryan, KN4AWT

### LOGS:

Each station leader indicated below will keep two logs; one for the operations and one for contacts of anyone interested in what we are doing and how we can reach out to them after the event. Please try to keep them electronically. Scribing paper documents after the event is time consuming and generally doesn't happen.

## **LARG Member Participation**

See information below for all of the details for participation in each station and each SAG.

2016 Rest Stop Hours, Groups Served, and Addresses.

RBC primary contact to LARG: Ed DiMonda, 703-850-0385

#### **Reston Town Center**

06:00 to 17:30; All Groups – mile 0 and finish FULL MECHANICAL FACILITY

## Ashburn

Carolina Brothers BBQ 20702 Ashburn Road Ashburn, Virginia 20147 07:00 to 16:30 All Groups – miles 10, 26, 55.7, 94 FULL MECHANICAL FACILITY

## Hamilton - there is NO Hamilton rest stop this year

**Hamilton Community Park** 

31 W Colonial Hwy Hamilton, VA 07:30 to 13:00

Metric and Century groups - mile 31

**FULL MECHANICAL FACILITY (2015)** 

#### Purcellville

End of the W&OD Trail
Close to the bike shop and Magnolias restaurant.
Exact location TBD
08:30 to 14:00
Century only – mile 48.7
FULL MECHANICAL FACILITY

## Lovettsville

**Lovettsville Community Center** 

57 E. Broad Way
Lovettsville, VA 20180
Ph: 540-822-5284
08:30 to 14:30
Century only – mile 62.4
FULL MECHANICAL FACILITY

## **Old Mill** (Hamilton Station Rd/Irene)

Loudoun Mill 39098 Irene Rd. Hamilton, VA 20158 (540) 338-7161 09:00 to 15:30

Metric and Century groups – miles 42.1, 80.2

### **FULL MECHANICAL FACILITY**

NOTE: in the event of heavy or sustained rain, portions of the Old Mill site are prone to flooding. Site operators should select a location with that in mind or be prepared to relocate or operate from a vehicle.

### **Bike Marshals:**

Generally there are 1-3 licensed hams riding in the race to keep an eye on things from the ground. For details on who the bike marshals are please see the RBC documentation for contacts. Print this information and have it handy with this plan so we can reach the bike marshals by phone as necessary.

## **MAPPING**

If you are interested in mapping the route we will primarily use the web site <u>aprs.fi</u> instead of setting up a full, stand-alone mapping system. The 2015 search/filter string for the ride was roughly:

rbcsag-1,rbcsag-2,rbcsag-3,rbcsag-4,rbcsag-5,rbcsag-6,rbcsag-7,rbcsag-8,rbcbik-1,rbcbik-2,rbcbik-3,rbc-lov,rbc-res,rbc-ash,rbc-ham,rbc-omil,rbc-pur

For 2017 there will be a web site published with all of this information pre-loaded into a map. Keep an eye out for the link.

Feel free to make your old wild-card view list and use it on your own maps. You can choose what you want to view from there.

### SIGNING UP

To be a part of the support team supporting the event please go to this URL, pick a slot you prefer and sign up for the time you have available:

http://www.signupgenius.com/go/20f044daba92ca0ff2-reston

If you have any questions or would prefer that I help you sign up for the even please let me know.

### **EPILOGUE**

One last request: Please take photographs of your station, SAG operation, NCS or anything else you may think might going well on the public web site. We will be putting together a section on the event which will be published to the public. Even if it's one photograph with a few words it will be very beneficial to put on the web.

This document is a work in progress and we put all the details together. Information comes at me daily and as a result these documents will change. Keep an eye out for the changes. New documents will be published with the date of the change so you can always tell if you have the latest document compared to what you have already received.

If you have any questions don't hesitate to contact me. E-mail is fine, but if you need a quick answer please call my phone number given here.

## Above all, Have fun!

In memory Charlie Preston, (K4LJH), Norm Styer (Al2C) and Dale Harrison (K3CN). All were big supporters of this event and ham radio in general. They were our teachers, family and friends. They are missed.