

Mountains of Misery Ham Radio Communications Plan

This plan is based on lessons learned over the club participating in this event for several years. We also conducted testing in September of 2013 and April 2014.

Bring your own water, food, snacks, chair and canopy to get out of the elements. You are responsible for your own comfort.

Tactical call signs will be used. For example: RS5/AJ4HJ.

Most of these stops are near the road and you need to be visible to auto traffic and bike traffic. You should wear a safety vest. These can be purchased at Wal Mart for under \$12.00.

Do not get involved in any disputes with the riders. Let the marshal or stop coordinator handle it.

Keep your messages short and to the point. Use plain language.

Emergency traffic will take priority.

FREQUENCIES

All rest stops will use 146.910 except for BDM which will use the 146.805

Please have the following programmed into you radio:

146.910 - offset 77 tone

441.950 + offset 107.2 tone. BACKUP

146.805 - Offset 107.2 tone . The tone is new so even if you have 146.805 already in be sure to add the tone.

146.580 simplex

RS8 – An HT works fine for simplex to net control and is the only stop that an HT is acceptable. An HT will also work for the 146.910 and 441.950. A 50W mobile and a mag mount would be preferred.

RS7 – a mag mount and a 50W mobile rig will be required. Simplex to net control and the rec center works. This station will relay rec center traffic to net control via simplex in the event the repeaters fail. 146.910, 441.950 can be worked easily.

RS6

A high gain collinear such as a Diamond X-300, Comet GP6, MFJ1524. These are dual band 2m 440 and offer a gain of approximately 4.5dbi on 2m and 7.2dbi on 440.

50 watts is required for a good signal to net control.

A mast to raise the antenna to 15' to 20' is also needed. Both the 146.910 and 441.850 are accessible from RS6 and simplex direct to net control works.

RS5 Simplex to net control is not possible. A relay to RS4 via simplex will work if needed. 146.910 and 441.850 are easily worked with a mag amount and a mobile rig.

RS4-146.910, 441.950 easily worked with a mag amount and mobile rig. In case of having to use simplex, a 2m440 3/5 element beam is needed along with a 5/8 wave 2m/440. Simplex to net control is solid using these antennas. A mast to raise the antenna is 15' to 20' is also needed. Because RS4 is the only link for RS5 if simplex is used the above antennas will be required at RS4.

RS3 - A mag mount or trunk lip mounted antenna and a 50W mobile rig works well for the 146.910 repeater. Backup 146.805

RS2- A beam antenna to the Covington 146.805 works best. 50W mobile rig. Should also have a portable mast. The primary repeater will be 146.910

RS1- A mag mount and a 50 mobile should work with the RS1. Full quieting on 146.910 or 441.950

BDM - 50W mobile radio and ground plane antenna, such as Diamond X50, on a mast or mag mount.

Newport Rec center

146.910 or 441.950 both work well and net control can copy full quieting. For simplex, the best option is to relay through RS7. Even with a beam, simplex direct to net control is scratchy.

Net control - Diamond X50A or equivalent and a 2M beam. 2) 50W mobile radios

2 masts with antenna raised 20' to 30'

For All Rest Stops:

All coax lengths should be kept to 50 feet or less

All coax should be good quality low loss cable such as RG8, RG213

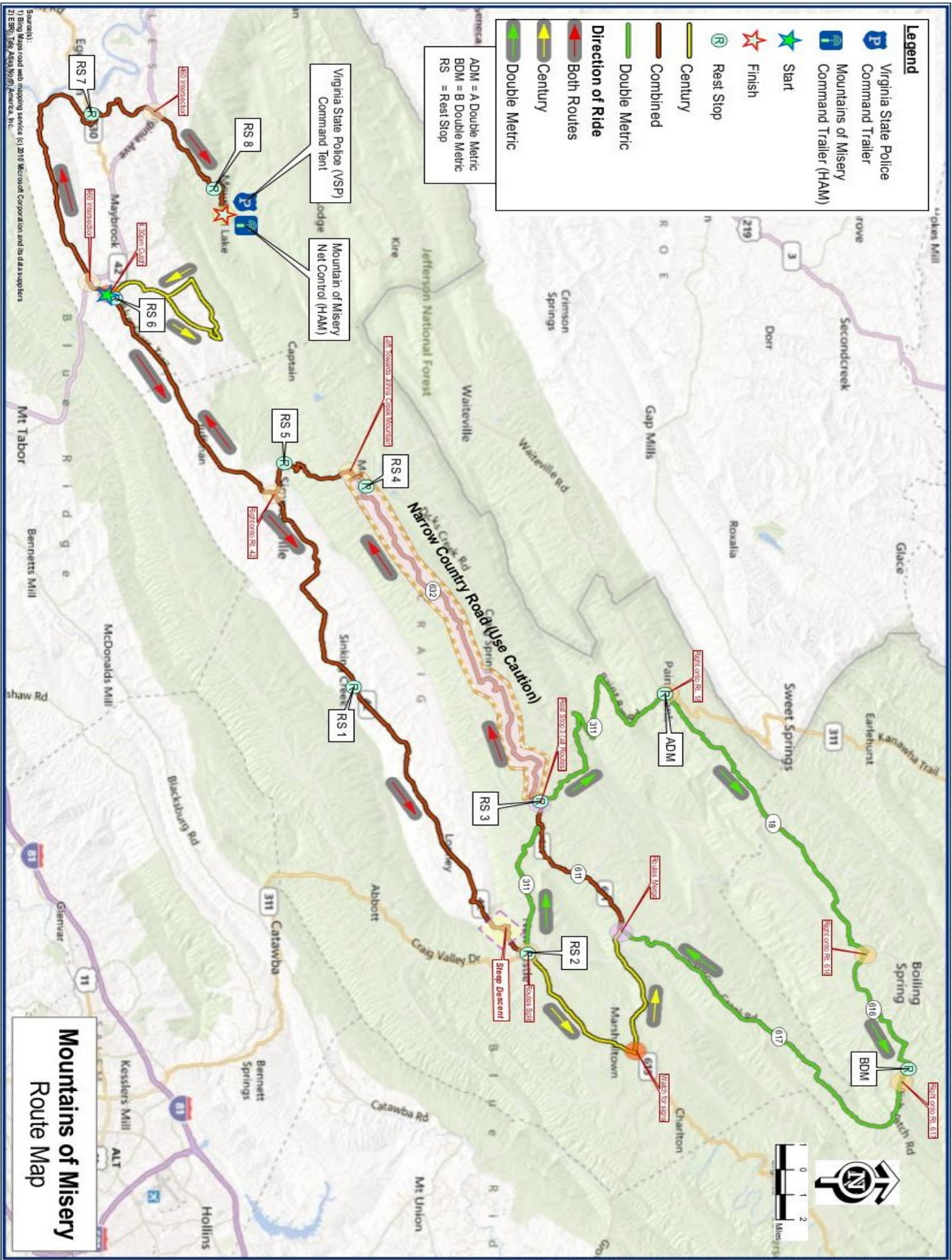
Thanks for your time and effort. Any questions call me 540 838 1033 or email dannywylam@gmail.com

Danny Wylam AI4RC

Legend

- Virginia State Police Command Trailer
- Mountains of Misery Command Trailer (HAM)
- Start
- Finish
- Rest Stop
- Century
- Combined
- Double Metric
- Direction of Ride
- Both Routes
- Century
- Double Metric

ADM = A Double Metric
BDM = B Double Metric
RS = Rest Stop



**Mountains of Misery
Route Map**

Source:
Map data from Google Maps (© 2015 Microsoft Corporation and its data suppliers)
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