Ride to End ALZ Action Plan

Sunday, May 15, 2022

Mission

Provide continuous radio communications and locations telemetry for the [Ride to End ALZ](#) from 06:00 to 18:30 on Sunday, May 15, 2022.

- Provide continuous communications support for the ALZ ride (served agency)
- Provide continuous location telemetry information for SAG Vehicles
- Operate directed net to expedite message handling
- Teach good operating practices by example

The ride organizers have plenty of staff to support the riders. Our job is communications! We will pass messages for ride staff. Unless you're assigned as a dual-role SAG driver/radio operator, don't attempt to provide rider assistance. Allow the ride staff to do their job, so we can do our job to the best of our abilities.

Hours of Operation

Net Control

Loudoun County EOC 06:00 to 18:30 (or until event officially complete)

Race Command

Morven Park 06:00 to 18:30 (or until event officially complete)

Support and Gear (SAG) Vehicles

Mobile 06:00 to 18:30 (or until event officially complete)

Rest Stops

Rest Stop 1 Waterford Elementary School 06:30 to 10:00
Rest Stop 2 Lovettsville Library 07:00 to 12:00
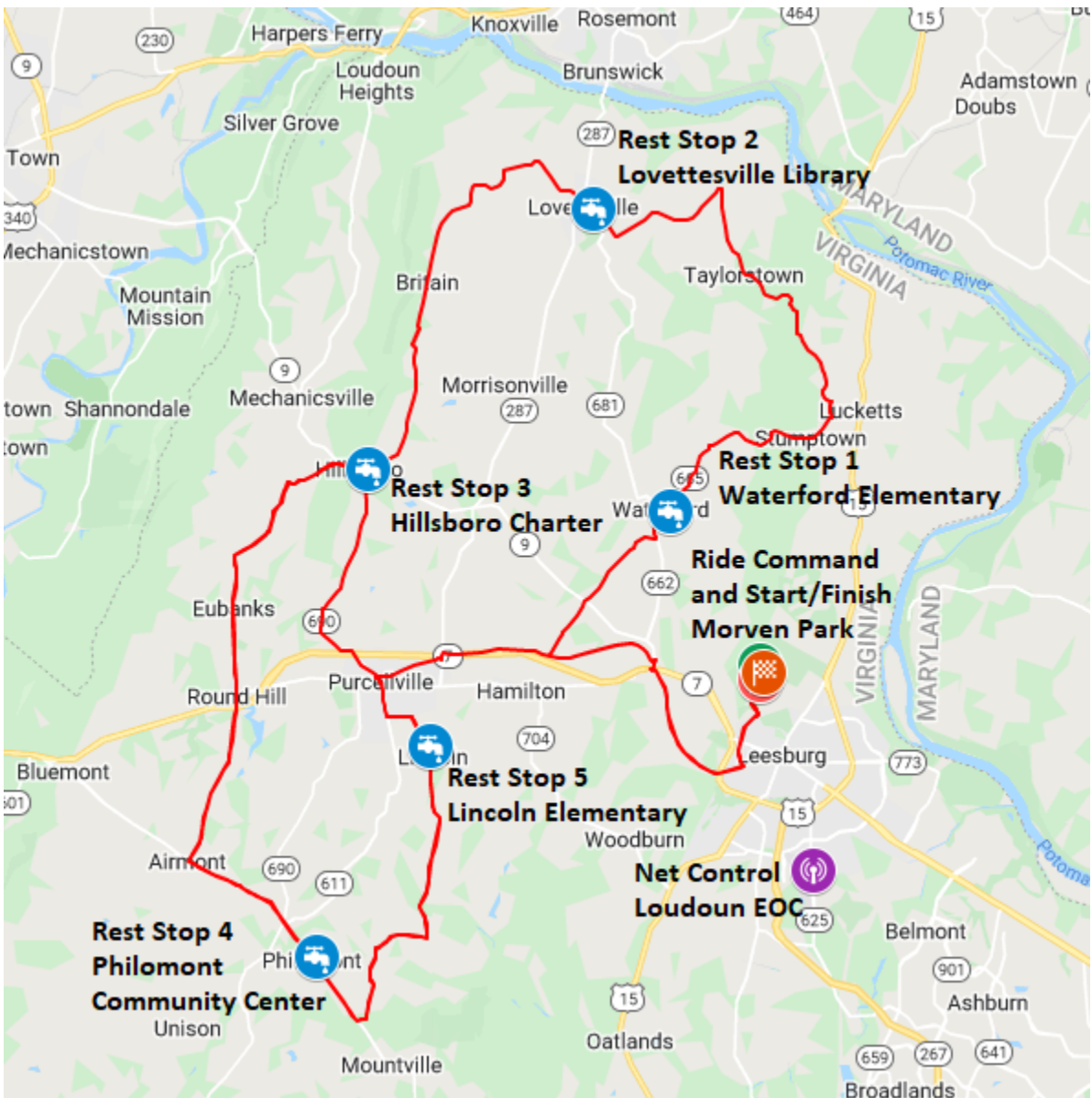Rest Stop 3 Hillsboro Charter School 07:30 to 16:15
Rest Stop 4 Philomont Community Center 08:00 to 16:45
Rest Stop 5 Lincoln Elementary School 08:30 to 16:45

Event Timeline and Operations

06:00	- Net Control operators report to Loudoun EOC - Ride Command and SAG operators arrive at Morven Park - Hand out loaner equipment as required by SAG operators - Operators meet with ride staff and setup equipment
06:30	SAG vans move to positions at staging locations
06:30	- Net Control opens net on ALPHA channel - Ride Command and SAG stations check into net, conduct radio check
06:30	Rest Stop 1 operators report to Waterford Elementary School, meet with on-site ride staff and setup equipment
06:45	Rest Stop 1 station check into net, conduct radio check
07:00	- Ride Start announced by Race Command to Net Control - Rest Stop 2 operators report to Lovettsville Library, meet with on-site ride staff and setup equipment
07:15	Rest Stop 2 station check into net, conduct radio check
07:30	Rest Stop 3 operators report to Hillsboro Charter School, meet with on-site ride staff and setup equipment
07:45	Rest Stop 3 station check into net, conduct radio check
08:00	Rest Stop 4 operators report to Philomont Community Center, meet with on-site ride staff and setup equipment
08:15	Rest Stop 4 station check into net, conduct radio check
08:30	Rest Stop 5 operators report to Lincoln Elementary School, meet with on-site ride staff and setup equipment
08:45	Rest Stop 5 station check into net, conduct radio check
Race Start	Race Command station notifies Net Control of official race start
Duration	- Each Rest Stop and Race Command reports first and last riders - Each Rest Stop checks out with Net Control when station closes - Net Control station manages traffic between locations as required - Net Control station roll call all stations at 15 minute intervals if net is quiet
Race End	- Race Command station notifies Net Control station of official race finish - Net Control station closes net

Maps

Google Map for Radio Operators	https://www.google.com/maps/d/u/0/edit?mid=1dRvUtlHyvhJ9PXTkEMPZzw5_j2MTy0_7&usp=sharing
Event Organizer Maps for Riders	https://act.alz.org/site/DocServer/2022_RTEA_Nations_Capital_-_100_Mile.pdf
Live Map During Event	https://aprs.fi/

Location Details

Tactical Call	APRS ID	Location	Lat/Long
Net Control		Loudoun County EOC 801 Sycolin Rd, Leesburg, VA 20175	39.08237, -77.55344
Race Command		Morven Park Carriage House 17195 Southern Planter Ln, Leesburg, VA 20176 *Use 17638 Southern Planter Ln for GPS navigation via Old Waterford Rd to avoid road closures*	39.14157, -77.57279
Rest Stop 1		Waterford Elementary School 15513 Loyalty Rd, Waterford, VA 20197	39.18654, -77.60645
Rest Stop 2		Lovettsville Library 12 N Light St, Lovettsville, VA 20180	39.27428, -77.63590
Rest Stop 3		Hillsboro Charter School 37110 Charles Town Pike, Purcellville, VA 20132	39.19867, -77.72005
Rest Stop 4		Philomont Community Center 36592 Jeb Stuart Rd, Philomont, VA 20131	39.05685, -77.73952
Rest Stop 5		Lincoln Elementary School 18048 Lincoln Rd, Purcellville, VA 20132	39.11837, -77.69666
SAG 1	ALZSAG-1	SAG Vehicle 1	Mobile
SAG 2	ALZSAG-2	SAG Vehicle 2	Mobile
SAG 3	ALZSAG-3	SAG Vehicle 3	Mobile
SAG 4	ALZSAG-4	SAG Vehicle 4	Mobile
SAG 5	ALZSAG-5	SAG Vehicle 5	Mobile
SAG 6	ALZSAG-6	SAG Vehicle 6	Mobile
SAG 7	ALZSAG-7	SAG Vehicle 7	Mobile
SAG 8	ALZSAG-8	SAG Vehicle 8	Mobile

Frequency Plan

Channel	Output	Input	Tone	Location	Linked	Purpose
ALPHA	447.7750	442.7750	107.2	Bull Run Mountain	NERA*	Main Calling Net *
	442.7250	447.7250	107.2	High Knob Mountain		
BRAVO	145.1850	144.5850	103.5	Inova Loudoun Hospital		Working Channel
BRAVO-S	145.1850	145.1850	103.5	Simplex		Fallback if repeater fails
CHARLIE	442.1375	447.1375	DMR	Inova Loudoun Hospital		Command Alternate**
APRS	144.3900	144.3900	NONE	APRS		Location Telemetry

* Two ALPHA repeaters are linked. Use whichever frequency performs best at your location.

** Alternate channel for race command and planning team, not required for SAG or Rest Stops
Talkgroups: Loudoun ARES: TS 2 TG 315107, Local 2: TS 2 TG 2, Local 9: TS 2 TG 9
Use local talkgroups only

Operator Assignments and Contact Information

Position	Operator 1	Operator 2	Operator 3
Net Control	Evan Parker, N4UCQ [Phone Redacted] [Email Redacted]	Glenn Fitzpatrick, KB3UFH [Phone Redacted] [Email Redacted]	Rob Hiltner, K4BCN [Phone Redacted] [Email Redacted]
Ride Command	Liz Goodson, K4LIZ [Phone Redacted] [Email Redacted]	Phil Knight, KC3HMY [Phone Redacted] [Email Redacted]	
Rest Stop 1	Cory Goodall, AC1AZ [Phone Redacted] [Email Redacted]	Shawn Erwin, KO4THA [Phone Redacted] [Email Redacted]	Tareck Elass, K9TRE [Phone Redacted] [Email Redacted]
Rest Stop 2	Kevin Maxson, AK2M [Phone Redacted] [Email Redacted]	Andrew Binovi, KC3PZN [Phone Redacted] [Email Redacted]	
Rest Stop 3	Art Feller, W4ART [Phone Redacted] [Email Redacted]	Carl Bergman, W3HBK [Phone Redacted] [Email Redacted]	
Rest Stop 4	Christine Axsmith, KC3CIF [Phone Redacted] [Email Redacted]	Jamie Frank, KC3DCL [Phone Redacted] [Email Redacted]	
Rest Stop 5	John Pancoast, K2WT [Phone Redacted] [Email Redacted]	Brian Madonna, WV8BNM [Phone Redacted] [Email Redacted]	

Position	Operator	Position	Operator
SAG 1	Steve Palmer, KW4SHP [Phone Redacted] [Email Redacted] Solo Driver/Ham	SAG 5	Chris Hawkins, KO4OZJ [Phone Redacted] [Email Redacted] Butch Robertson, [Redacted]
SAG 2	Jack Cochran, WC4J [Phone Redacted] [Email Redacted] Jeff Edwards, [Redacted]	SAG 6	Will Leonard, KG5MAV [Phone Redacted] [Email Redacted] Solo Driver/Ham
SAG 3	Ken Knopp, KC3MIX Cory Knopp, KC3MDX [Phone Redacted] [Email Redacted]	SAG 7	Jim Boughton, AC3H [Phone Redacted] [Email Redacted] Solo Driver/Ham
SAG 4	Ben Emmel, KB3N [Phone Redacted] [Email Redacted] Solo Driver/Ham	SAG 8	Kuki Hansen, KC3CZU [Phone Redacted] [Email Redacted] Bobby Danger, [Redacted]

Checklists

Net Control Operator Gear

Human Equipment
- ☐ Food and drink
- ☐ Notebook and pens/pencils for logging and writing down messages
- ☐ Printed operations plan and route maps (use a binder or staple, so you don't lose pages)
- ☐ Your emergency contact and medical information

Communications Equipment
- ☐ Headphones and Y-splitter (for two operators)
- ☐ Laptop or tablet with mobile internet (if you have it) to monitor APRS positions
  https://aprs.fi/

Rest Stop and Race Command Station Operator Gear

Human Equipment

- ☐ Weather protection (rain or shine)
    - ☐ Tarp, temporary tent, poncho, umbrella, etc.
- ☐ Folding table (surface for radio, writing log) and chairs, if not working from vehicle
- ☐ Velcro, bungee cords, Bongo-ties, zip-ties, etc. to hold things down
- ☐ Miscellaneous tools
- ☐ Food and drink
- ☐ Ice and cooler
- ☐ Notebook and pens/pencils for logging and writing down messages
- ☐ Printed operations plan and route maps (use a binder or staple, so you don't lose pages)
- ☐ Your emergency contact and medical information
- ☐ Identifying signs for your vehicle; print a couple copies of the last page of this plan to tape in your windows if you don't have a magnet or other sign

Communications Equipment

- ☐ Dual Band VHF/UHF Radio – preprogrammed and ready to go.
- ☐ Good antenna (better than your rubber ducky: J-Pole, mag-mount, etc)
- ☐ Coax cables
- ☐ Antenna mast or vehicle mount
- ☐ Connector adapters (SMA, PL239, SO239, BNC)
- ☐ Headphones or earpiece
- ☐ Batteries fully charged to last all day (can be your vehicle) and full tank of gas
- ☐ Power cables and/or adapters
- ☐ Laptop or tablet with mobile internet (if you have it) to monitor APRS positions
  https://aprs.fi/

SAG Vehicle Operator Gear

Human Equipment

- ☐ Food and drink
- ☐ Small notebook or clipboard and pens/pencils for notes (something you can use in a car)
- ☐ Printed operations plan and route maps (use a binder or staple, so you don't lose pages)
- ☐ Your emergency contact and medical information

Communications Equipment

- ☐ Dual Band VHF/UHF Radio – preprogrammed and ready to go.
- ☐ Good antenna (temporary mag-mount)
- ☐ Headphones or earpiece
- ☐ Batteries fully charged to last all day
- ☐ Vehicle power adapter (auxiliary port / cigarette lighter plug)

Net Operations

Net Start at 06:30 and Station Check-Ins

- ☐ Start on the primary calling channel for the net
- ☐ NCS announce the net
- ☐ NCS remind everyone to:
    - ☐ Use CHANNEL IDs on the air, rather than frequencies
    - ☐ Use TACTICAL CALL SIGNS
    - ☐ PAUSE for one second between transmissions to allow for emergency break-ins
    - ☐ Key up, then PAUSE for one second before speaking
    - ☐ Use good procedure: LISTEN. THINK. CALL.
        - LISTEN for traffic on frequency.
        - THINK about information to be conveyed.
        - CALL the station you want: "{{Tactical Call}}, this is Net Control."
- ☐ Communications signal test:
    - ☐ NCS call each station in turn on the primary channel
    - ☐ NCS acknowledge each station in turn and give a signal report
        - Give reports simply: GOOD AUDIO, WEAK AUDIO, or NO AUDIO
        - Guide operator to improve signal as needed: close-talk the mic, improve antenna, increase power, etc.
    - ☐ Repeat on alternate channel

Regular Net Operation (Duration of Event)

- ☐ The best net is a quiet net: no chatter or ragchewing.
- ☐ Use the recommended voice communication procedure: LISTEN. THINK. CALL.
    - LISTEN for traffic on frequency.
    - THINK about information to be conveyed.
    - CALL the station you want: "{{Tactical Call}}, this is Net Control."
- ☐ PAUSE for one second between all transmissions to allow stations with emergency or priority messages to break in. Wait for the repeater reset timer beep. (This applies to Net Control, too!)
- ☐ Keep all transmissions SHORT and to the POINT.
- ☐ If the net calling channel has been quiet for a while (more than 15 minutes), NCS does a quick roll call by TACTICAL CALL SIGN to ensure that all stations have working stations.
- ☐ Give FCC station ID {{Your FCC Call}} at the end of every sequence of transmissions

> **In case of emergency, CALL 911 first then notify Net Control as soon as possible.**

APRS Position Telemetry

Track locations via
- https://aprs.fi/ (works well on mobile browsers)
- MyAPRS app on Apple or
- APRSDroid app on Android

If programming your radio for APRS beaconing, use the following settings:

- **Call Sign / ID** ALZSAG-# (number based on assignment)
- **Comment** Your FCC Call Sign
- **Symbol** van /v

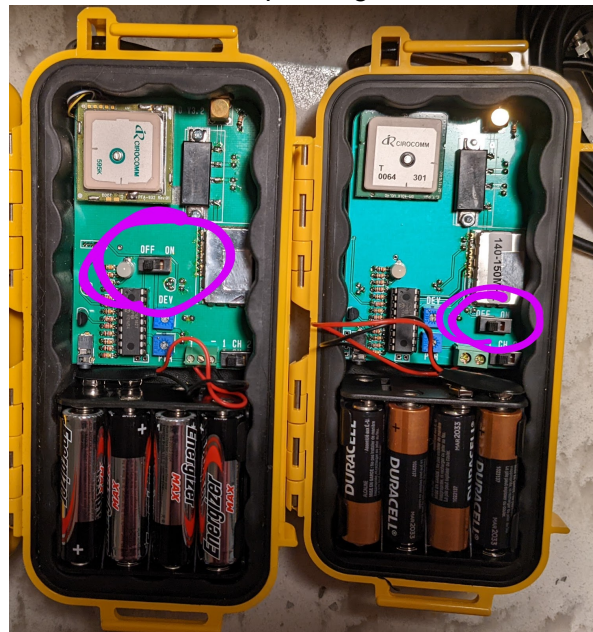If you're operating from a SAG and your radio doesn't support APRS, we'll provide a pre-programmed loaner Byonics MicroTrak AIO all-in-one APRS transmitter and mini mag mount antenna. Pickup from ride command at 6AM.

> **DO NOT REMOVE ANTENNA WHILE BYONICS TRANSMITTER POWERED ON!**
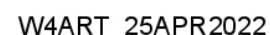> **Transmitting without an antenna will destroy the device.**

Power Switch Location
Different location depending on version

On Air Best Practice

COMMUNICATE
[Everyday best practice.]

Listen!
Make sure the frequency is clear.
Know what is going on!

Think!
GET NEEDED INFO!

Connect before PTT!

WARNING
MOUTH OPERATES FASTER THAN BRAIN

Call!
"YOU" this is "ME," over.
"NET CONTROL" this is "MILE 94," over.

► Speak up – close to mic.   Speak clearly.

► PLAIN LANGUAGE.   No Q-codes. No 10-codes.

► Repeat back critical information!

► Leave 1 second gap for others to break in.

► ITU phonetics for station ID, also words and names not easily understood.

THIS GUY IS FALLING! THIS GUY IS FALLING!

"Boy, he must think we're pretty stupid to fall for that again."

ITU PHONETIC ALPHABET:

A – alfa (AL-fa)
B – bravo (BRAH-voh)
C – charlie (CHAR-lee)
D – delta (DELL-tah)
E – echo (ECK-oh)
F – foxtrot (FOKS-trot)
G – golf (GOLF)
H – hotel (HOH-tell)
I – india (IN-dee-ah)
J – juliet (JEW-lee-ett)
K – kilo (KEY-loh)
L – lima (LEE-mah)
M – mike (MIKE)
N – november (no-VEM-ber)
O – oscar (OSS-cah)
P – papa (pah-PAH)
Q – quebec (key-BECK)
R – romeo (ROW-me-oh)
S – sierra (SEE-air-rah)
T – tango (TANG-go)
U – uniform (YOU-nee-form)
V – victor (VIK-tah)
W – whiskey (WISS-key)
X – x-ray (ECKS-ray)
Y – yankee (YANG-key)
Z – zulu (ZOO-loo)

0 – zero (ZAY-roh)
1 – one (WUN)
2 – two (TOO)
3 – three (TREE)
4 – four (FOWER)
5 – five (FIFE)
6 – six (SIX)
7 – seven (SEVEN)
8 – eight (AIT)
9 – nine (NINER)

DECIMAL POINT – decimal (DAY-SEE-MAL)
FULL STOP – stop (STOP)

W4ART 25APR2022

Emergency Contact Information

Name:_____

Home Information:

Home Address:_____

Phone Number:_____

Primary Emergency Contact

Contact Name:_____

Relationship:_____

Phone Number:_____

Secondary Emergency Contact

Contact Name:_____

Relationship:_____

Phone Number:_____

Additional Information (Voluntary)

Allergies (Food, Medication, Insects, Etc.):_____

_____

_____

Medical Alert(s):_____

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AMATEUR RADIO COMMUNICATIONS