VARA FM Practical Tailgate Training

August 27, 2024
1300-2000

Part A:

Refer to "Appendix A". Use the ICS-205 to determine what frequencies to use for this training. Refer to "Appendix B" for local VARA FM nodes information.

Contact Net Control on the Primary Repeater for any last-minute updates!
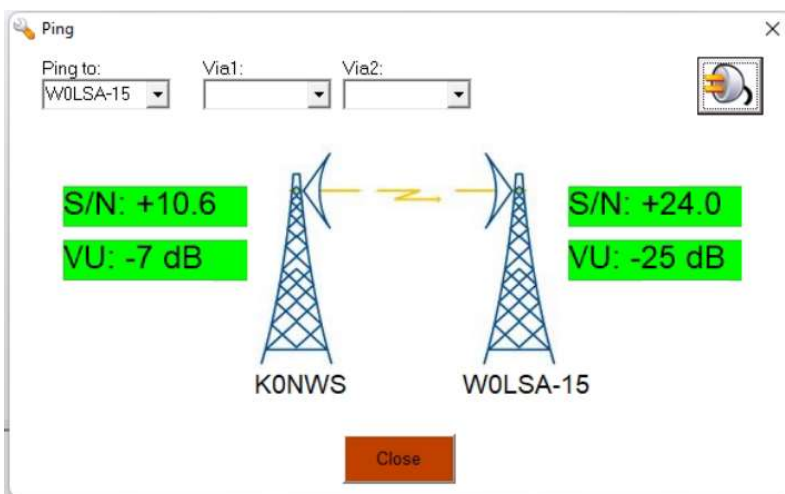
Ensure Audio Drive Levels are correct...

On VARA FM, do a "Drive Level Calibration" to W0LSA-15. This will ensure that your audio TX/RX settings are in the ballpark. Fine tuning can be done later. See sample image below:

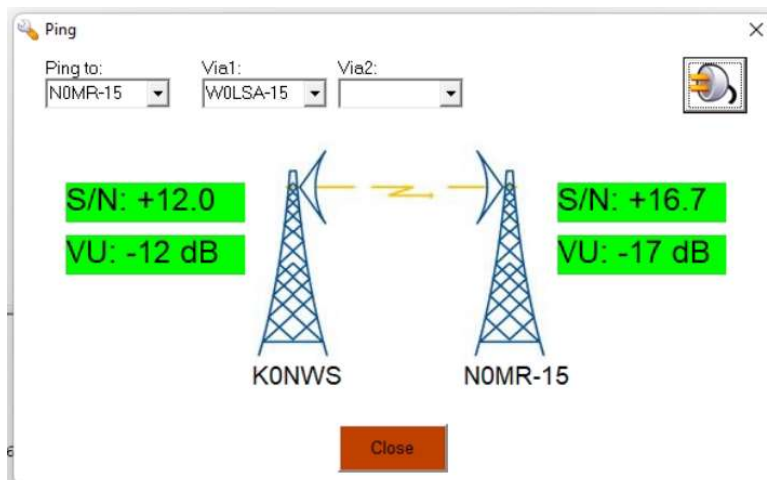**Main Menu >> Settings >> SoundCard... >> Auto Tune button**

Once your Drive (Audio) Levels are "Approved" then perform a VARA FM "Ping" the W0LSA-15 VARA FM Digipeater.

Main Menu >> Ping

VARA FM Practical Tailgate Training...

- Compose and send a **short email** using the W0LSA-10 **Winlink RMS Gateway** at Maple WI:
  - Session Connection: Direct to W0LSA-10
  - Email:
    - To: KC0MKS;kc0mks@gmail.com
    - Cc: AA0AW;aa0aw@chartermi.net
    - Subject: Testing VARA FM Winlink Gateway...
    - Body: Testing Winlink RMS Gateway for VARA FM in Maple WI...
  - Contact Net Control prior to sending.
  - Notify Net Control when sent.
  - Wait for an email reply from Net Control.
- Compose and send a **short email** via **Winlink P2P**:
  - Session Connection: Direct to K0NWS
  - Email:
    - To: K0NWS;AA0AW
    - Subject: Testing VARA FM Winlink P2P...
    - Body: Testing Winlink P2P for VARA FM.
  - Contact Net Control prior to sending
  - Notify Net Control when sent.
  - Wait for a reply email from Net Control.
- Compose and send a **short email** using **Winlink P2P** through a **VARA FM Digipeater**:
  - Session Connection: Digipeater to K0NWS via W0LSA-15
  - Email:
    - To: K0NWS;AA0AW
    - Subject: Testing VARA FM Winlink P2P Digipeater...
    - Body: Testing Winlink P2P for VARA FM Digipeater.
  - Contact Net Control prior to sending
  - Notify Net Control when sent.
  - Wait for a reply email from Net Control.
- **Ping** the **N0MR-15** VARA FM Digipeater using a **VARA FM Digipeater**:
  - Ping to: N0MR-15 via W0LSA-15
  - Contact Net Control prior to sending ping.
  - Notify Net Control when ping is done.

- Compose and send a **short email** using **Winlink P2P** through a **VARA FM Digipeater**:
  - Session Connection: Digipeater to N0MR via W0LSA-15

- o Email:
  - ▪ To: N0MR
  - ▪ Subject: Testing VARA FM Winlink P2P Digipeater...
  - ▪ Body: Testing Winlink P2P for VARA FM Digipeater.
- o Contact Net Control prior to sending
- o Notify Net Control when sent.
- o Wait for a reply email from Net Control.
- Compose and send an email that contains a **USA ICS-213 Form** using **Winlink P2P**:
  - o Session Connection: Direct to K0NWS
  - o Email:
    - ▪ To: K0NWS;AA0AW
    - ▪ Subject: Testing VARA FM Winlink P2P Digipeater...
    - ▪ Body: Testing Winlink P2P for VARA FM Digipeater.
    - ▪ Find the ICS-213 Form and fill it out with data.
    - ▪ Submit the form and post to the outbox.
  - o Contact Net Control prior to sending
  - o Notify Net Control when sent.
  - o Wait for a reply email from Net Control.
- Compose and send an **American Red Cross 213 Form** using **Winlink P2P** and a **VARA FM Digipeater**:
  - o Session Connection: Digipeater to K0NWS via W0LSA-15
  - o Email:
    - ▪ To: K0NWS;AA0AW
    - ▪ Subject: Testing VARA FM Winlink P2P Digipeater...
    - ▪ Body: Testing ARC Form using Winlink P2P for VARA FM Digipeater.
    - ▪ Find the ARC 213 Form and fill out to the best of your knowledge.
    - ▪ Submit the form and post to the outbox.
  - o Contact Net Control prior to sending
  - o Notify Net Control when sent.
  - o Wait for a reply email from Net Control.
- Compose and send a **Local Weather Report Form** using **Winlink P2P** and a **VARA FM Digipeater**:
  - o Session Connection: Digipeater to K0NWS via W0LSA-15
  - o Email:
    - ▪ To: K0NWS;AA0AW
    - ▪ Subject: Testing VARA FM Winlink P2P Digipeater...
    - ▪ Body: Testing WX Form using Winlink P2P for VARA FM Digipeater.
    - ▪ Find the Local Weather Report Form and fill it in as best as possible.
    - ▪ Submit the form and post to the outbox.
  - o Contact Net Control prior to sending
  - o Notify Net Control when sent.
  - o Wait for a reply email from Net Control.
- Compose and send a short email with a **Photo Attachment** using **Winlink P2P**:
  - o Session Connection: Direct to K0NWS
  - o Email:
    - ▪ To: K0NWS;AA0AW
    - ▪ Subject: Testing VARA FM Winlink P2P Digipeater...
    - ▪ Body: Testing photo attachment using Winlink P2P for VARA FM Digipeater.
    - ▪ Take a photo at your current location, including selfie and radio setup if possible.
    - ▪ Reduce the size of the photo to less than 120k (for the purposes of this training, 30k or less).
    - ▪ Attach the photo to the email.

- ▪ Post to the outbox.
  - o Contact Net Control prior to sending
  - o Now would be a good time to incrementally fine tune your sound card levels. Use tiny steps…
  - o Notify Net Control when sent.
  - o Wait for a reply email from Net Control.

Part B:

For this part of the training, you will be on your own! Pack up all your gear and get ready to travel to a "Staging Area." Choose your "Staging Area" location from the below suggestions:

- Old Central High School
- Thompson Hill Rest Area
- Spirit Mountain Parking Lot
- Holy Rosary
- Hawk Ridge

From your new location at a "Staging Area", set up your equipment as before and start all over again from the top! Practice makes (nearly) perfect!

Keep in mind that direct connections to K0NWS and AA0AW may not be possible. Try using a Digipeater…

Have fun!

-Jeff KC0MKS

Appendix A: 10/4 IOPE ICS-205

INCIDENT RADIO COMMUNICATIONS PLAN

Incident Name	Date/Time Prepared	Operational Period Date/Time
10/4 IOPE (InterOPerability Exercise)	8/24/2024 0:10	10/04/2024 06:00-18:00

Ch #	Function	Channel Name/Trunked Radio System Talkgroup	Assignment	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode A, D or	Remarks
1	Voice Repeater								
2	Amateur Radio	ARAC Duluth (Ch 30)	ARES	146.940	103.5	-146.390	103.5	A	Primary Repeater
3	Amateur Radio	NW Wisconsin Duluth (Ch 9)	ARES	145.310	n/a	-144.710	103.5	A	Secondary Repeater
4	Amateur Radio	NW Wisconsin Solon Springs (Ch 13)	ARES	145.490	n/a	-144.890	110.9	A	Secondary Repeater
5	Amateur Radio	TAC4 Maple (Ch 141)	ARES	444.925	110.9	+449.925	110.9	A	Tertiary Repeater
6	Amateur Radio	TAC4 Duluth (Ch 126)	ARES	444.300	103.5	+449.300	103.5	A	Tertiary Repeater
7									
8	Voice Simplex								
9	Amateur Radio	ARES HV-Golf (Ch 93)	ARES	146.595	n/a	146.595	n/a	A	Primary Simplex
10	Amateur Radio	ARES HV-Hotel (Ch 104)	ARES	147.555	n/a	147.555	n/a	A	Secondary Simplex
11	Amateur Radio	ARES HV-Bravo (Ch 81)	ARES	146.415	n/a	146.415	n/a	A	Tertiary Simplex
12									
13	Digital								
14	Amateur Radio	VARA FM Network	ARES	145.690	n/a	145.690	n/a	D	VARA FM (NE MN)
15	Amateur Radio	Winlink VARA FM Gateway	ARES	145.690	n/a	145.690	n/a	D	VARA FM (NE MN)
16	Amateur Radio	Winlink VARA FM P2P	ARES	145.690	n/a	145.690	n/a	D	VARA FM (NE MN)
17	Amateur Radio	Packet Network	ARES	145.010	n/a	145.010	n/a	D	Packet (NE MN)
18	Amateur Radio	Winlink Packet RMS Gateway	ARES	145.010	n/a	145.010	n/a	D	Packet (NE MN)
19	Amateur Radio	Winlink Packet P2P	ARES	145.010	n/a	145.010	n/a	D	Packet (NE MN)
20	Amateur Radio	Winlink VARA HF RMS Gateway	ARES	80m/40m/20m	n/a	80m/40m/20m	n/a	D	VARA HF (World Wide)

Prepared By (Communications Unit):

Amateur Radio: Doug Nelson (DEC), Jeffrey Nast (EC), Ray Barnes (EC), Dave Miller (EC), John Cavanaugh (EC)

Douglas County Fairgrounds   Superior Wisconsin

Douglas County WI   N 46.68358 W 92.10119

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

3/2007

Appendix B: Local VARA FM Stations...

VARA FM Nodes in NE MN and NW WI...

Click here for a map: Amatuer Radio Digital Nodes...

Clubs & Individuals... [Usually active full time]

State	City	Type	Frequency	Call Sign	Essoteric	VARA FM Digipeater	Notes
MN	Knife River	VARA FM P2P	145.690	KC0MKS		KC0MKS-15	KC0MKS - Jeffrey Nast
MN	Two Harbors	VARA FM Winlink P2P	145.690	N0LCR		N0LCR-15	N9OLCR - Lake County RACES/ARES
MN	Virginia	VARA FM Winlink RMS Gateway	145.070	N0SKS-10		???	N0SKS - Kevin Moon
MN	Wales	VARA FM P2P	145.690	N0MR		N0MR-15	

Clubs & Individuals... [Usually active full time]

Location	Type	Frequency	Call Sign	Essoteric	VARA FM Digipeater	Notes
WI	Maple	VARA FM Winlink RMS Gateway	145.690	WOLSA-10		WOLSA-15	WLSAR - Western Lake Superior Amateur Responders