

Net Check In Using VARA FM Winlink

WW5TOM 20251106

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Software Requirements:

Winlink – <https://winlink.org/>

Downloads - <https://downloads.winlink.org/>

User Programs – <https://downloads.winlink.org/User%20Programs/>

Winlink Express Install -

VARA Products – <https://downloads.winlink.org/VARA%20Products/>

VARA FM

Recommended – VARA HF, VARA Terminal, VARA Chat

Hardware Requirements:

VARA FM – VHF / UHF Radio

VARA HF – HF Radio

Hardware Modem to connect radio to computer –

I am using Digirig – <https://digirig.net/> - I have also used Signalink

Digirig Mobile - \$50

Digirig Cable for “your” radio - \$30

Signalink USB - \$120 (includes cabling) - <https://tigertronics.com/>

Execute the Winlink Express Program -

Assumptions: You have completed Winlink Express Setup

Create Winlink Express Message –

Assumptions: You will be creating a check in message for the ARES of MoCoTx Net.

Enter a new message

Post to Outbox Select Template Attachments Spell Check Save in Drafts Close

From: WW5TOM Send as: Winlink Message Request message receipt Set Defaults

To: MCA-NET;

Cc:

Subject: UHF VARA FM - ARES of MoCoTx Net Check In

Attach:

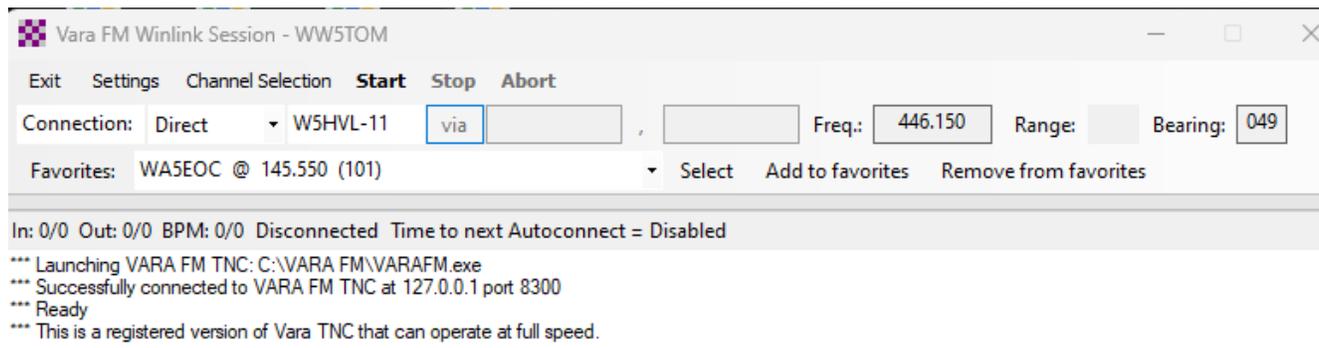
Please check me in to the net.

73, Tom, WW5TOM|

Post your message to Outbox
Connect computer and radio.

Select – Open Session: VARA FM Winlink - Open Session

Open Session:

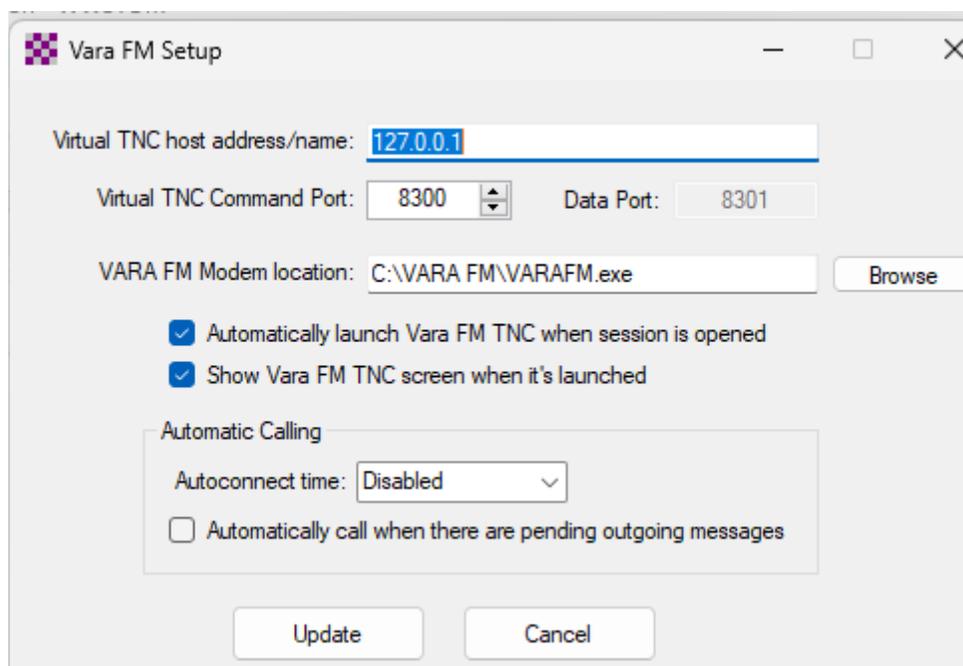


Identify a Winlink Express VARA FM gateway near you by selecting Channel Selection

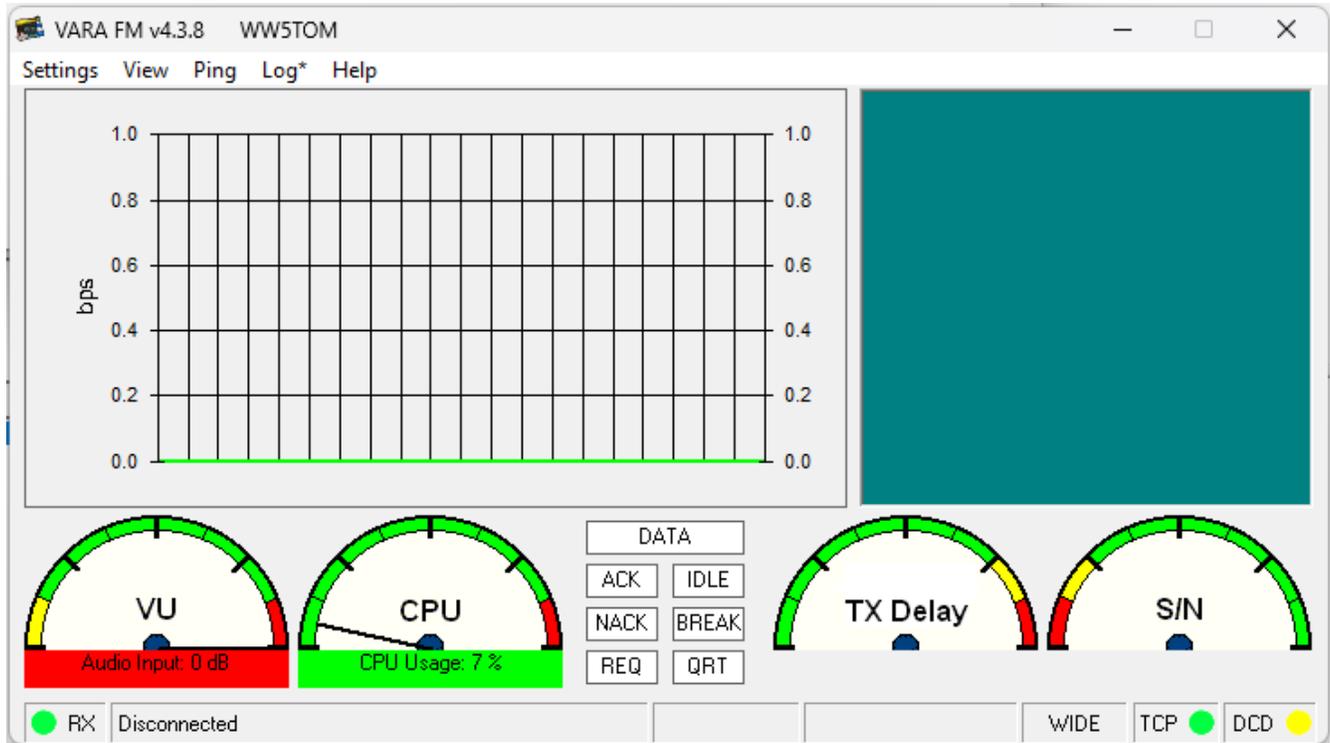
Callsign	Frequency (MHz)	Channel Width	Grid Square	Group	Distance (mi)	Bearing (Degrees)
W5HVL-11	446.150	Wide	EM20GN	PUBLIC	013	049
W0MAC-10	145.090	Wide	EM20FA	PUBLIC	029	170
W0MAC-11	446.150	Wide	EM20FA	PUBLIC	029	170
WB5HJV-10	145.090	Wide	EM20GA	PUBLIC	030	161
KJ5HTK-10	145.050	Wide	EM20LH	PUBLIC	036	104

Set your radio frequency to the identified Simplex Frequency

Start the VARA FM program. You can set VARA FM TNC to start automatically by configuring Settings – VARA FM Setup.



Set radio frequency. Set radio squelch to off.
Set radio volume so Audio Level bounces between Green and Red.

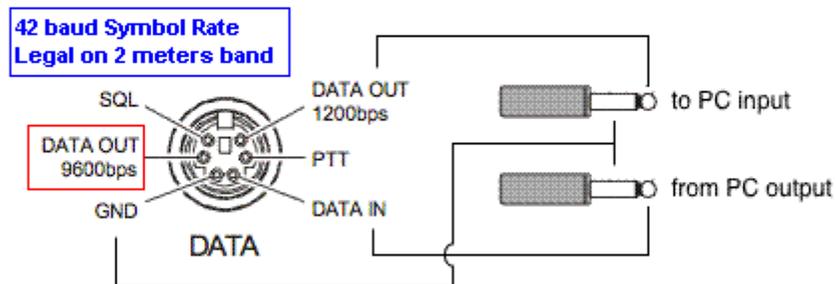


VARA FM Settings -

VARA Setup – A purchased VARA license is NOT required.

The screenshot shows the VARA Setup window with the following configuration:

- TCP Ports:**
 - Command: 8300
 - Data: 8301
 - KISS: 8100
- FM System:** WIDE
- Digipeater:** (empty field)
- Retries:** 2
- Allow VARA check for updates
- KISS interface SysLog
- VARA Licenses:**
 - Call sign: WW5TON, Registration Key: [redacted]
 - Call sign: [redacted], Registration Key: [redacted]
 - Call sign: [redacted], Registration Key: [redacted]
 - Call sign: [redacted], Registration Key: [redacted]

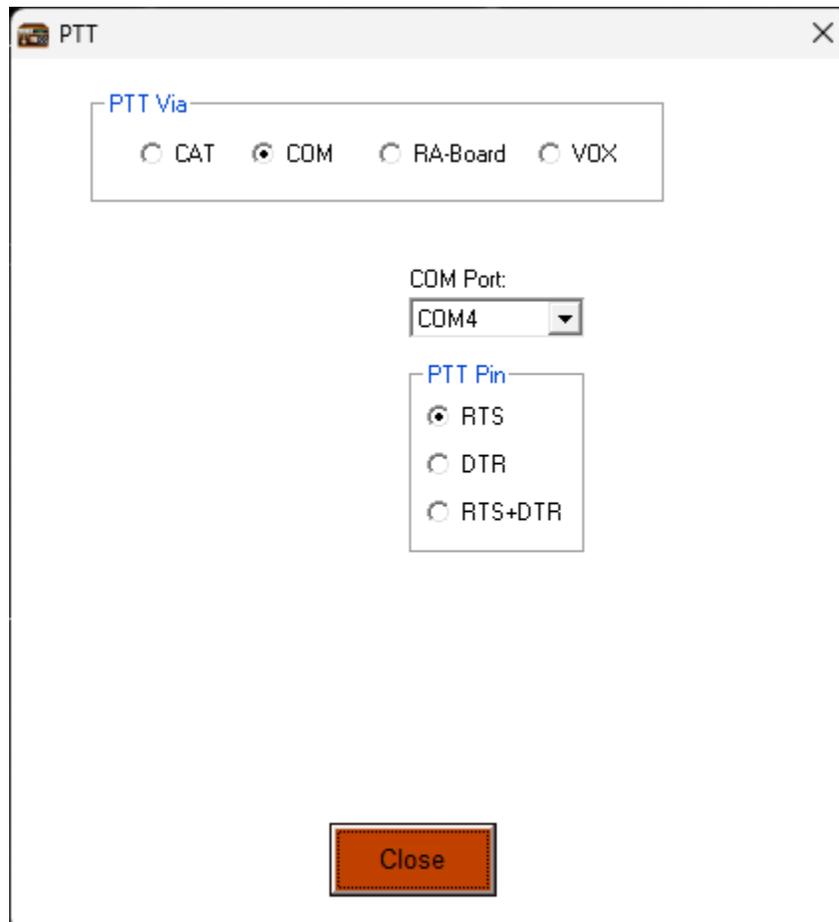


* VARA FM WIDE needs a FM rig set for 9600 Packet operation, with a special soundcard interface (6 kHz BW) connected to rear panel: RA-Board, Signalink "Black" transforms, Modified Signalink (red audio transforms removed), homebrew interface (a simple direct cable)...

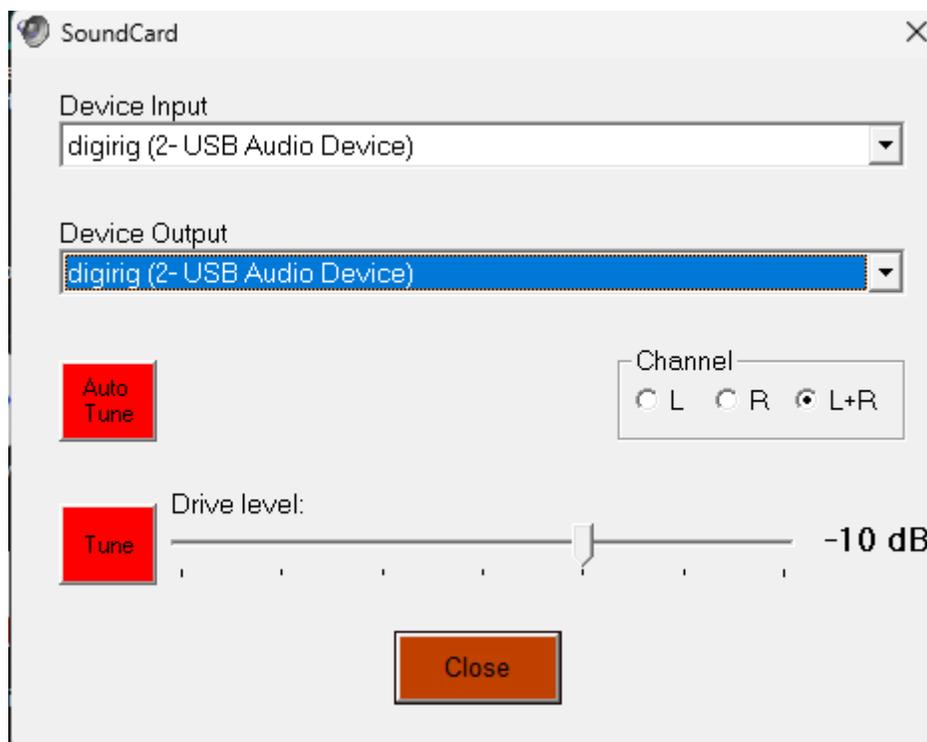
* In other case, you must select VARA FM NARROW

Close

PTT Configuration – required so software can key transmit.



SoundCard – Select the Comm Ports for your Modem.



Test your connection to the VARA FM Gateway selected.

Select Auto Tune – Type the name of the station in the Calibrate Box

Select the electrical plug to start the Auto Tune.

Sending 1 – 10 will be displayed – then Waiting Response.

My connection was approved. Recommendations for adjusting audio levels may be displayed. I have found that the connection will work fine with Yellow Levels.

If you see no Signal – You may need to select a different frequency or try again later.

Calibrate with:
W5HVL-11 

Drive Level: -18 dB

S/N: +25.0 dB

VU: -14 dB

APPROVED

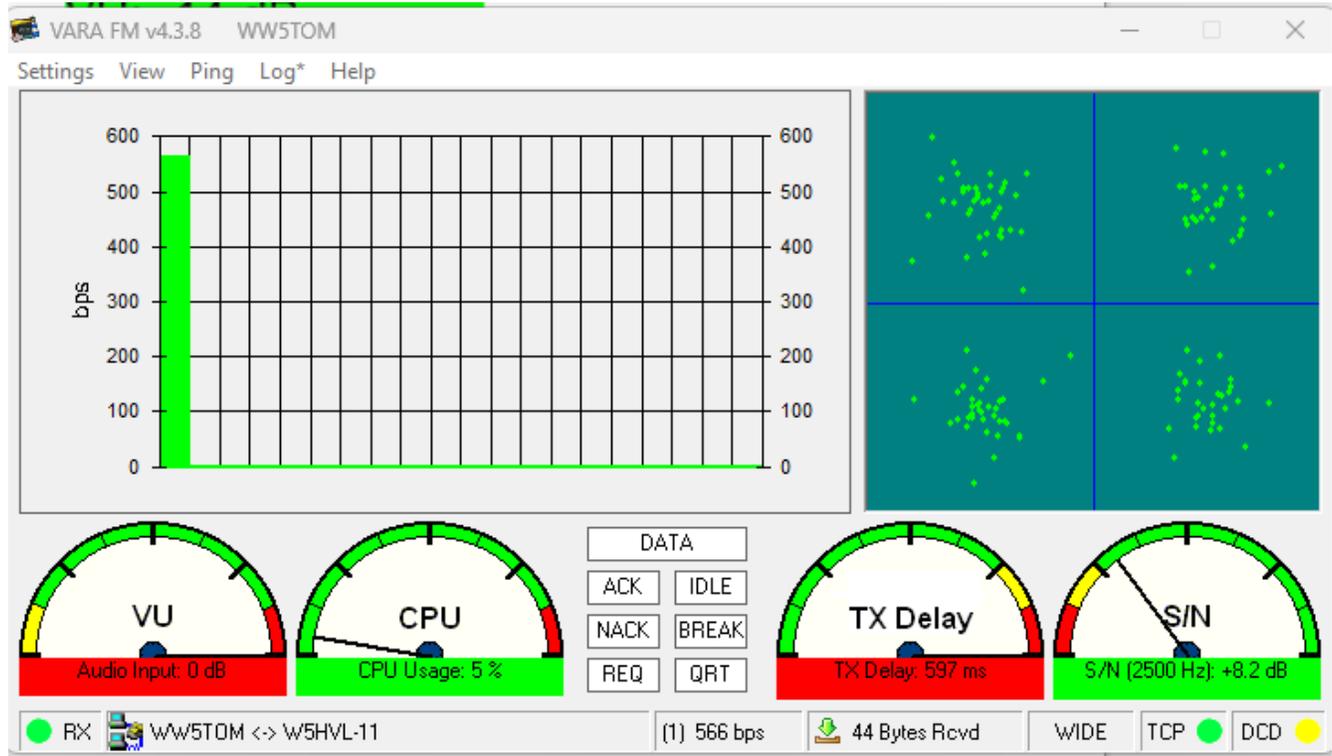
Close

Close Auto Tune window.

Close SoundCard window.

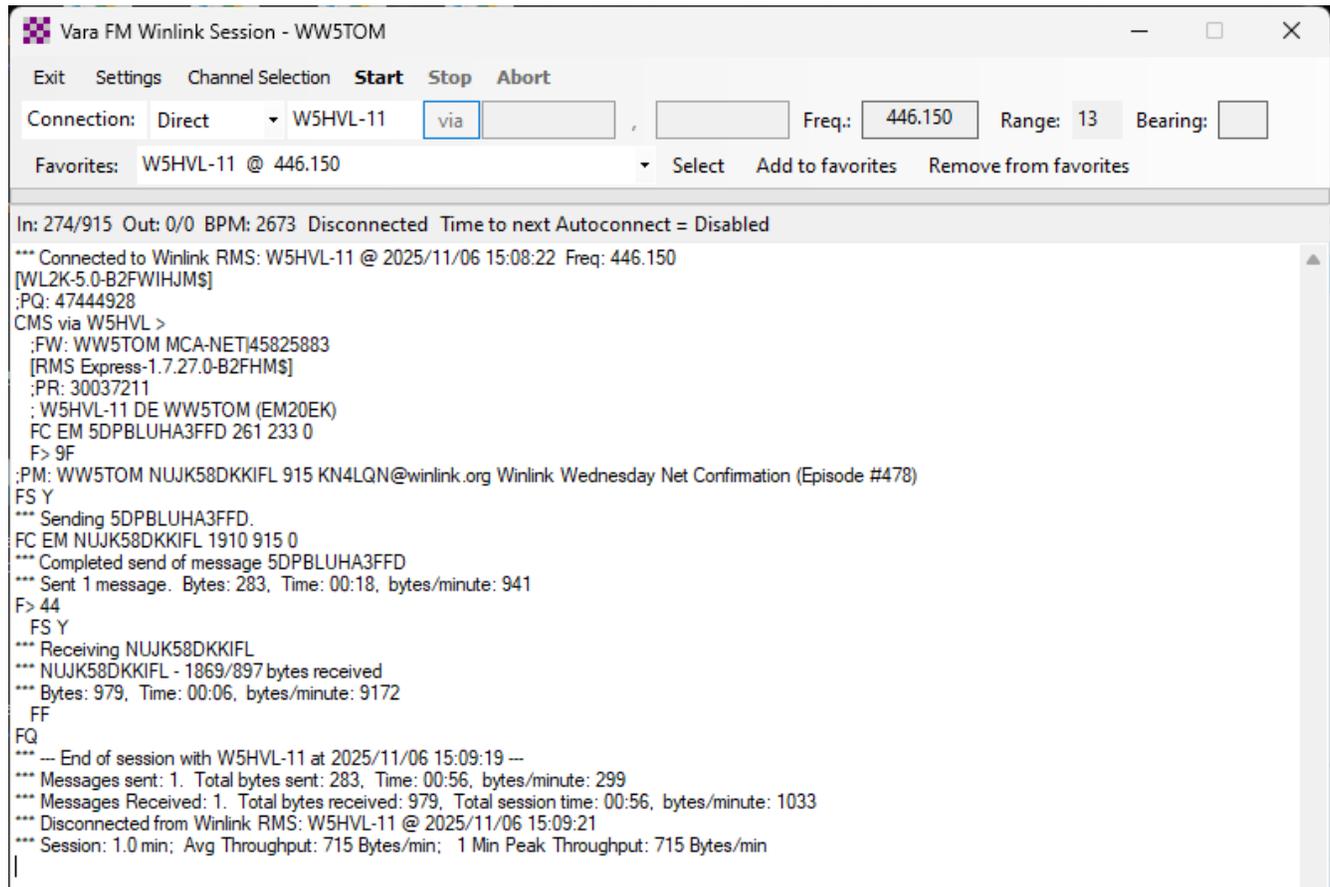
You are ready to send your message via VARA FM.

Monitor the VARA FM TNC Window.
Select Start on the VARA FM Session Window.



You will be able to see the progress of the message transmission.

Message Send completed.



Any questions or comments:
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Tutorials
<https://aresofmocotx.org/tutorials/>