

Winlink setup for VARA FM & HF

8/26/21 last update, advise KH7O for additions/corrections

WINLINK MESSAGE:

(Normal mode everything operational non disaster) Your radio connects to a Radio Message Server (RMS).

The RMS connects by internet to a Common Message Server (CMS) where messages are stored until the recipient connects and downloads messages addressed to them. Winlink uses multiple CMS that synchronize with each other for full redundancy. You can connect to any RMS to send/receive messages since all messages are stored in the central CMS database. (This mode is reliant on radio user being in range of an operational RMS with internet working for connecting to the CMS)

RADIO ONLY MESSAGE:

(Internet failed but you still have access to a RMS)

The Radio-Only mode allows messages to be sent to a designated RMS for storage until it is retrieved by the destination ham that would also have to be in range of the same RMS. And that RMS needs to be enabled to store messages.

PEER TO PEER:

(Internet failed, no RMS reachable) This mode of operation transfers messages directly from the sender to another ham without going through an RMS or a CMS and without the Internet. This is like a "simplex" mode, which requires: Both stations to be on the air at the same time and on the same frequency and in range of each other. **(IF P TO P BY HF YOU MUST ALSO HAVE SAME BANDWIDTH SELECTED SEE PAGE 4)**

VARA SETUP

Settings\Vara setup- WIDE or NARROW, if you are operating as digipeater put in call here

Settings\Vara setup- Callsign & registration

Settings\Sound Card- select USB CODEC for in/out audio unless no adapter used

Settings\PTT-select correct interface (may reboot after change in PTT mode)

NOTE:If using VARA FM 9600 capable radio, you may have to switch back to 1200 for normal voice level from microphone

Normal Operations all functioning



Create message

TO: **(registered winlink call ham#2) or any(email address)**

Send As: **(Winlink Message)**

Post to outbox

Open Session: **(VARA FM / Start VARA)**

Winlink Session

Connection: **Direct**

CALL SIGN of **RMS**

Start

RMS Gateways down- Message directly to another ham both in RF range of each other



Create message

TO: **(callsign ham #2)**

Send As: **(Peer to Peer)**

Post to outbox

Open Session: **(VARA FM / Start VARA)**

Peer to Peer

Connection: **Direct**

CALL SIGN **ham #2** & Same frequency

Start

VARA FM- Sending messages with DIGIPEATERS

Using 1 DIGIPEATER to connect Peer to Peer



Radio stby on same freq as Ham#1
Winlink program running
VARA FM program open
No automatic forwarding

Create message
TO: **(call ham #2)**
Send As: **(Peer to Peer)**
Post to outbox

Open Session: **(VARA FM / Start VARA)**
Peer to Peer
Connection: **Digipeater**
CALL **Ham#2** via Digi **callsign**

Using 2 DIGIPEATERS to connect Peer to Peer



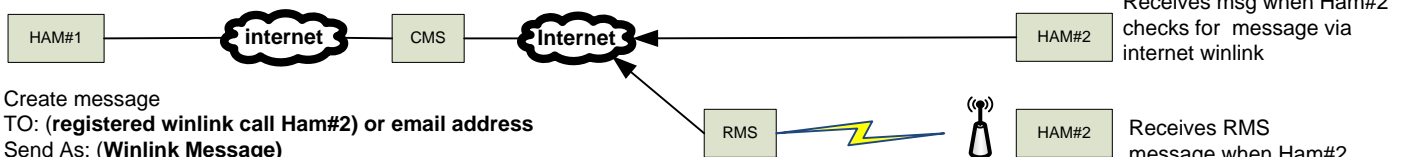
Radio stby on same freq as Ham#1
Winlink program running
VARA FM program open
No automatic forwarding

Create message
TO: **(call ham #2)**
Send As: **(Peer to Peer)**
Post to outbox

Open Session: **(VARA FM / Start VARA)**
Peer to Peer
Connection: **Digipeater**
CALL **Ham#2** via Digi #1, Digi #2

Radio Failure but have Internet Access

Using internet to send messages & internet or RMS to get the message



Receives msg when Ham#2
checks for message via
internet winlink

Create message
TO: **(registered winlink call Ham#2) or email address**
Send As: **(Winlink Message)**
Post to outbox

Open Session: **(Telnet / Start)**

Receives RMS
message when Ham#2
connects to RMS

VARA HF P to P must set correct [BANDWIDTH] to connect

NOTE: BOTH HAMS MUST BE ON SAME BANDWIDTH [2300] OR [500]

ONCE a station changes settings to "accept 500hz connectons" . Then all connectons RECEIVED by that station must be from a station that is transmitting only at 500 hz

IF USING [500] go to VARA (4 Meters screen)

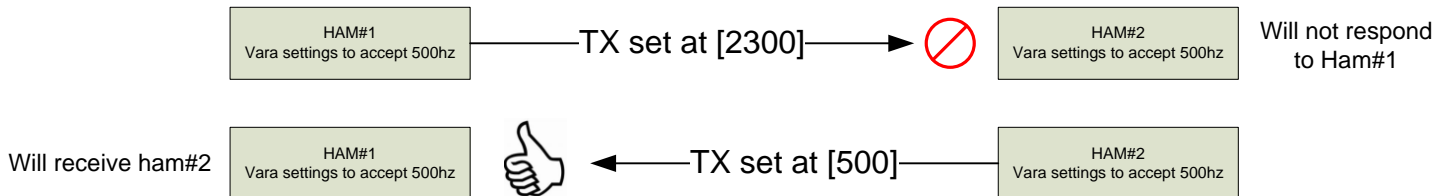
Settings\VARA setup\ check the box "accept 500 hz connections" (AFFECTS your RX BANDWIDTH ONLY)

The only way I could figure out how to change the TX BANDWIDTH was to do following:

See steps below

This is an EXAMPLE of Ham#1 to Ham#2 in a P to P session changing to [500] bandwidth

The screenshot shows the VARA HF Winlink Session interface for a session with call sign KH7O. The interface includes a menu bar (Exit, Settings, Switch to Winlink Session, Channel Selection, Map, Forecast, Best chan., Next chan., Start, Stop, Abort) and a main display area. The main display shows the call sign KH6RX, Center Freq. (kHz) 7103.700, Dial Freq. (kHz) 7102.200, Bearing 030, and Quality 96. A Favorites list shows 'KH6RX @ 7103.700 [2300] (96)'. Below the Favorites list, the status is 'Channel Free In: 0/0 Out: 0/0 BPM: 0/0 Disconnected'. A log window at the bottom shows the following text: '*** Launching VARA TNC', '*** Successfully connected to VARA TNC.', '*** Vara signal bandwidth is 2300 Hz.', '*** This is a registered version of Vara TNC that can operate at full speed.', '*** Using Icom 7300, COM4, 9600 baud', '*** Ready'. Eight numbered callouts point to specific elements: 1) 'Switch to P to P if connecting to HAM#2' points to the 'Switch to Winlink Session' button; 2) 'Put in HAM#2 callsign here' points to the call sign field; 3) 'enter frequency' points to the Center Freq. field; 4) 'add to favorites' points to the 'Add to favorites' button; 5) 'use drop down menu and highlight call sign' points to the Favorites list; 6) 'carefully highlight 2300 and keystroke in 500' points to the bandwidth value in the Favorites list; 7) 'Select' points to the 'Select' button; 8) 'you will see the new bandwidth pop up from step 6, then press add to favorites' points to the 'Add to favorites' button.



Sending WINLINK messages with VARA HF

Normal Operations through Gateway



Create message
 TO: (**registered winlink call ham#2**) or any(email address)
 Send As: (**Winlink Message**)
 Post to outbox

 Open Session: (**VARA HF / Start VARA**)
Winlink Session
 Connection: **Direct**
 CALL SIGN of **RMS**
 Start

Message directly to another ham both in RF range of each other



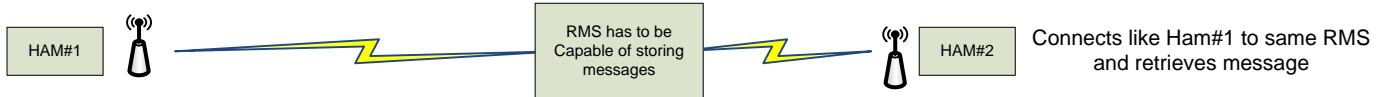
Radio stby on same freq as Ham#1
 Winlink program running
 VARA HF program open
 No automatic forwarding

Create message
 TO: (**callsign ham #2**)
 Send As: (**Peer to Peer**)
 Post to outbox

 Open Session: (**VARA HF / Start VARA**)
Peer to Peer
 Connection: **Direct**
 CALL SIGN **HAM #2** & Same frequency
 Start

BOTH STATIONS MUST BE ON SAME BANDWIDTH, SEE PREVIOUS PAGE TO SET

Internet Out and designated RMS to leave messages to another ham



Create message
 TO: (**callsign Ham#2 that is a registered user with RF path to RMS**)
 Send As: (**Radio Only**)
 Post to outbox

 Open Session: (**VARA FM / Start VARA**)
Peer to Peer
 Connection: **Direct**
 CALL SIGN of **RMS**
 Start

