

Using Radio-only messaging with winlink

There are several differences between using either standard winlink messaging or Post Office messaging and the Radio-only mode.

Configuring winlink for Radio-only messaging

These configurations are done in the winlink settings panel [settings → Hybrid Network Parameters](#)

In order to receive messages by Radio-only, the receiving addressee **MUST** have taken care and identified at least one valid MPS station in winlink ' settings → Hybrid Network Parameters → Message Pickup Stations (MPS)' to enable their own ability to receive RO messages. We have done this for our NVIS stations so for us that is already done. We ask each user to also set this up.

Valid stations for sending and receiving RO messages are seen when the user clicks the 'browse' button beside the MPS entry field.

For all users: It is suggested to configure no more than 2 MPS stations that can usually be reached from your station for reliability. Three can be configured but in the interest of reducing bandwidth usage in the RF bands it is better to have only 1 or 2 instead of more.

If you do not have an MPS designated then any messages addressed to you and sent via RO mode will instead be converted to and delivered as standard winlink CMS messages. If you have specified a valid MPS for your messages they will be forwarded by radio to that station for delivery.

This is also why use of a tactical call sign for the **To:** address is not valid. Since tactical call signs cannot designate an MPS they will always be converted to standard CMS messages and never kept for delivery by RO. (this was identified during our previous weekly winlink event using RO mode)

An additional item of interest for everyone.

On the same screen where the user selects their MPS, there is a field for an email address. If that field contains a valid email address for you, when your MPS receives a message directed to you the system will send email to that address notifying you of the pending message for pickup.

Very importantly, after making any changes in this panel it is necessary to click one of the 2 buttons available to register your changes with the winlink system. Failure to register changes will mean the changes are not known to winlink, even though you may think they are saved in your settings. Changes here MUST be registered with winlink.

Valid stations that can be used to send Radio-only messages or to be selected as your MPS stations

There are a number of stations that run in hybrid mode that may be selected as MPS stations and/or to be used for sending RO messages. Not all stations that you may connect to and send winlink messages run in hybrid mode.

All stations that may be used for sending winlink messages are shown in the `Channel Selection` list after opening a `Vara HF winlink` or a `Vara HF Radio-only` winlink session.

However, you must limit the ones used for Radio-only or your MPS to only a subset of the full list (those shown when you click on the browse button within the `settings → Hybrid Network Parameters` panel). Only those in that browse list are running in hybrid mode and can be used for sending or receiving RO messages.

Creating a Radio-only message

Send as:

Similar to creating a message for Post Office (or any other form of message) the type of message being created must be set. RO messages must be set to Radio-only message in the winlink 'Send as:' box.

To:

This entry **MUST** be a valid winlink address (**VALID CALL SIGN ONLY and NOT a tactical address nor an email address**). Do not use NTXNVIS-CDM as the To: address for any Radio Only messages.

When doing the weekly winlink Wednesday check in using Radio-only mode, please use ONLY these call signs for the To: address. **KD0JPV** or **N4AKL**

(additional call signs may be added but one or both these are required for us to receive the message.)

Sending messages to the tactical call sign when using Radio-only mode results in those messages being converted to CMS and they are NOT delivered Radio-only.

Sending a Radio-only message

Valid Radio-Only modes to be used for check in

We suggest using pactor, ardop, packet, Vara HF, or Vara FM modes for radio only sessions.

Do not attempt to use the telnet radio-only mode. Telnet radio-only seems to connect to RMS Relay and is not usable for the average winlink user. It seems reserved for winlink sysadmins.

One additional note: Post Office messages

Any station running in hybrid mode can be used for sending a Post Office message as well as Radio-only and standard winlink messages. The important thing to remember with Post Office messages is that they are never forwarded and can only be picked up from the receiving station. This means that PO messages intended for our tactical address (NTXNVIS-CDM) or for delivery to either N4AKL or KD0JPV can only be received if they are sent directly to one of our two stations or to one of our MPS stations.

Those stations to be used for Post Office messaging to our NTXNVIS group are **N4AKL** **KD0JPV** or one of our MPS stations **N5TW** **WA5TED** and **KB5LZK**. We are not able to pick up PO messages from any other stations.

This limitation does not apply to Radio-only messages addressed to N4AKL or KI7GJG since the system will forward those to one or more of our configured MPS stations.

Bandwidth concerns

Since Radio-only messages are forwarded by radio to the MPS it may result in several relays between the receiving station and the MPS station. Messages should be very short and concise and ideally should not use the large message templates available in winlink since those may easily mean a difference between 200 bytes and 2500 bytes for each message sent.

When band conditions are poor it may take 5 minutes or more to send a small message and then relaying it several times will multiply the time the band is occupied for that one message. Smaller messages are preferred.

For our purposes and testing/practice the RRI Quick Welfare Message.txt or the RRI Welfare Radiogram.txt templates are small enough to use with Radio-Only but no larger templates should be considered practical.