Winlink Peer-to-Peer Message

1 Introduction/Overview

These instructions provide details on how to prepare, send, and receive a Winlink Peer-to-Peer (P2P) message. Different options are presented that include a message with <u>or</u> without an attached form, as well as sending the P2P message directly to the destination operator <u>or</u> utilizing an intermediate RMS Gateway relay.

2 Creating A New Message

Click **Message** from the menu options at the top of the main *Winlink Express* window. From the list of options, click **New Message**. The *Enter a new message* window will open as shown in Figure 1.



Figure 1. Creating a New Message.

VERY IMPORTANT! A Winlink Peer-to-Peer (P2P) message must be both <u>created</u> as a P2P message and then <u>sent (and received)</u> using P2P communications mode (e.g., Packet P2P) session.

2.1 Option 2A: Composing A Simple P2P Message without an Attached Form

In the **To:** field, enter the callsign of the operator you are sending the P2P message to. For a simple test P2P message, it is highly recommended <u>not</u> to include more than one addressee.

For Reference: If more than one Winlink address is entered in the **To:** field, Winlink will create a separate message for each recipient in your Outbox.

In the **Subject:** field, provide a short description of the message.

In the body of the message, enter the written narrative of the message you are sending.

Message Destinatio (Use Only One Add	on Callsign dressee) ssage - X
Ch S <i><u>P</u> Gree</i>	or ct Template Attachments Post to Outbox Spell Check Save in Drafts From: ITE Send as: Peerto-Peer Message Request message receipt Set Defaults Winlink Message Radio-Only Message Peerto-Peer Message Peerto-Peer Message Peerto-Peer Message Peerto-Peer Message Peerto-Peer Message Send as Peer-to-Peer Message etings via Winlink Peer-to-Peer using my radio!

Figure 2. Setting Up and Composing a Simple P2P Message.

As shown in Figure 2, it is important to Select **Peer-to-Peer Message** from the pull-down menu for the type of message to be sent. When you are satisfied that all of the information is correct and ready to send, click **Post to Outbox**.

It is generally not easy to go back and make changes to a message once it has been posted to the Outbox, so it is recommended to thoroughly review your message before posting.

2.2 Option 2B: Composing a P2P Message *with an Attached Form*

If attaching the Winlink Check-In Form, refer to the separate *Message with Winlink Check-In Form* instructions (File: MessageCheckInForm_V1.5) for details on completing a Check-In form. Otherwise, complete any other attached form (e.g., Field Situation Report) to the best of your abilities. Take this opportunity to complete as much of the form as possible.

3 Selecting P2P Communications Mode

Once your message has been posted to the *Outbox* and ready to send, you will need to open a communications mode session. For a P2P message, set the communications mode to **Packet P2P** (or other P2P communication mode), and then click **Open Session** as shown in Figure 3.

Winlink Express 1.6.4.0 - KM6RTE		-		×
KM6RTE - Settings Message Attachments Move To: Saved Items - Delete Open Session:	Packet P2P	~	Logs	Help
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Figure 3. Selecting the Packet P2P Communications Mode.

4 Completing P2P Session Window

You will need to complete the *Packet Peer-to-Peer Session* window differently depending on whether you are communicating directly with your destination operator <u>or</u> using an intermediate digipeater relay station.

4.1 Option 4A: Direct Communications with the Other P2P Station

In the *Packet Peer-to-Peer Session* window, from *Connection type* pull down, select **Direct**, and then type in destination operator (e.g., KM6RTE) as shown in Figure 4. This will send a direct ("P2P") message to that operator using a single "hop".

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Figure 4. Example of Peer-to-Peer Session Window for Direct Station Communications.

4.2 Option 4B: Using Intermediate RMS Gateway ("Digipeater") Relay Station

If you want to send your message to an operator that you can't directly communicate with (e.g., too far away), you can utilize a closer, nearby Winlink RMS Gateway station as a relay, provided it 1) is close enough for you to communicate directly with, and 2) operates on the same frequency (e.g., 145.090 MHz) as the destination station. Your message will be forwarded from the nearby station (acting as a relay) on to the destination operator using a double "hop".

In the *Packet Peer-to-Peer Session* window, from *Connection type* pull down, select **Digipeater**, and then type in the callsign of the destination operator (e.g., KM6RTE) and full callsign (i.e., with Callsign"-XX") of the relay station as shown in Figure 5.

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*** Starting peer-to-peer packet session *** Initializing Kenwood TM-D710 A-Band; port COM7; 9600 baud *** Initialization complete *** Opening serial port COM7; 9600 baud; Kenwood TM-D710 A-Band *** Ready	way Callsign-XX)

Figure 5. Example of Peer-to-Peer Session Window Using Intermediate Digipeater Relay Station.

Shown in Figure 6 are the locations of Winlink RMS Gateway stations generally available (but not always operating) in Orange County that can support relaying P2P messages. They operate on a county-coordinated frequency and should be available for countywide exercises, drills and emergency events provided they can be reached from your location and are operational.



Figure 6. Approximate Locations of Just Some of the Winlink RMS Gateways That Can Support P2P Communications as Relay Stations.

Key to the ability of Winlink RMS Gateways to act as P2P relays is these stations use a county-coordinated frequency (i.e., 145.090 MHz [Primary, to/from Loma Ridge] and they have selected "Enable Digipeat" functionality in the RMS Packet software that runs the Gateway.

5 Sending Your Message

In order to make sure that there isn't ongoing traffic on the frequency, please make sure that you listen to the frequency 10 - 15 seconds to ensure that it is clear before clicking **Start** to send your message through your radio. If you are successful in connecting with the Winlink Station and you have a message in your **Outbox**, Winlink will start to transmit it. You will see a series of WinLink station dialog messages appear in the session window, and once your message is sent (and/or one is received), the session will end with: "*** **Disconnected at 2024 ...**"

6 Receiving a Reply Message

If you're expecting an incoming message, it is important to keep your P2P session window <u>open and active</u> while waiting for an incoming message. This will make it easier for the reply station to "push" the reply message back to you.

However, if your P2P session window is closed (not recommended), you will need to open a P2P session again to check for any incoming messages. If the sending operator has prepared a reply message and it is sitting in the sending operator's outbox and they have a P2P session active, you can "pull" the reply message to you by explicitly starting a P2P session with that station.

Depending on the level of message traffic and activity at the operations station, please allow up to 20 minutes (or longer) for an acknowledgement reply message to be sent back to you. Shorter response times are anticipated, however due to the unknown level of traffic, it is difficult to anticipate expected response times.

6.1 Option 6A: Direct Communications with the Other P2P Station

To check on an incoming reply message, open the *Packet Peer-to-Peer Session* window again with same settings as before, and after checking that the frequency is clear, select **Start**.

If you are successful in connecting, you will see a set of Winlink station dialog messages, including that an incoming message was received (or not, if it hasn't been sent yet), and the session will end with: *"*** Disconnected at 2024 ...*"

6.2 Option 6B: Using Intermediate Digipeater Relay Station

To check on an incoming reply message utilizes a relay station (e.g., reply to a message that you sent out using a relay station), open the *Packet Peer-to-Peer Session* window again with same settings as you used before with the destination station and relay station identified. After checking that the frequency is clear, click **Start**. This will enable the relay station to connect to your station and "push" the reply message to you.

If you are successful in connecting, you will see a set of Winlink station dialog messages, including that an incoming message was received (or not, if it hasn't been sent yet), and the session will end with: *"*** Disconnected at 2024 ...*"

Congratulations, you've successfully sent and received a Winlink P2P message.