#### P2P WITH WINLINK EXPRESS

Mark Breakey KB7RHI





## Major Event Has Happened And People Are Getting Pictures Of Damaged Infrastructure

- After a major event, people with cell phones could be getting pics of damaged infrastructure, but due to a damaged cell system, they are unable to send the pictures to anyone, and the roads may be blocked
- Local EOC(Emergency Operations Center) has lost regular communications and staff are seeking ways to get situational information





- You have set up an Ad Hoc packet station in the field
- You have verified a good direct RF path to the EOC or have a digi between the EOC and your packet station that works
- With packet radio and a BT capable laptop you have the ability to send pictures with information of great value from the field to the local EOC
- You are ready to transfer pics from Android phones to your laptop in the field using BT





- Go to the bottom right area of the tool bar on your Windows screen and select the "Show hidden icons" icon which is a ">"symbol pointing up
- Left click once and then select the "Bluetooth Devices" icon
- Go to the middle of the pop menu and select "Receive a File" by left clicking once
- A "Bluetooth File Transfer" window will open up
- Your Bluetooth enabled computer is now awaiting a BT connection



- On the Android phone select the most important pic you feel should be sent first...or the pic that best shows information that the EOC staff is requesting?
- Tap the pic screen and select the BT symbol directly or use the Share symbol which looks like a capital V turned over on its right side to find the BT symbol
- You will now see the "Choose Bluetooth device" view, or be asked to give permission to turn on the BT first on the phone, select "TURN ON" if BT was off





- In the "Choose Bluetooth device" view, you should see available BT devices within range of your phone
- Select the BT discoverable name for your laptop and tap once
- The "Bluetooth File transfer" window will show a connection and a "Receiving..."green status bar will fill with color from left to right showing the status of your file transfer





- The "Bluetooth File Transfer" will now display a "Save the received file" in blue message and the default location for the file will appear
- You can select "Browse" to then select a location for the file to go to
- The default file name will have "IMG" followed by some numbers



- In the file location you selected, then scroll down and locate the newest entry, it will start with "IMG" and some numbers
- Plan to rename the file
- In the location you selected you will now see the new name for your file, this will help eliminate confusing the file other downloads when you are ready to send a pic





#### **Open Winlink And Go To Select New Message**

| Winlink Ex   | xpress 1.5.2 | 1.0 - KB7RH | I     |
|--------------|--------------|-------------|-------|
| KB7RHI       | •            | Settings    | Messa |
|              |              |             | 1     |
| No active se | ssion        |             |       |
|              | System Fold  | lers        | -     |
| Inbox (0 un  | read)        |             |       |
| Read Items   | s (0)        |             |       |



#### New Message Window With Call Sign, Subject, And "Your Message"

| Enter Chief | er a new message |               |                 |               |               |            | t     |
|-------------|------------------|---------------|-----------------|---------------|---------------|------------|-------|
| Close       | Select Template  | Attachments   | Post to Outbox  | Spell Chec    | k Save in Dra | fts        |       |
| From        | KB7RHI           | Send as:      | Winlink Message | ~ [           | Request read  | receipt Se | et De |
| To:         | K7123;           |               |                 |               |               |            |       |
| Cc:         |                  |               |                 |               |               |            |       |
| Subje       | t: Lewisville B  | ridge Damaged | On HWY 503 Ju   | st North Of E | Battle Ground |            |       |
| Attac       | h:               |               |                 |               |               |            |       |
| Yourm       | essage here      |               |                 |               |               |            | ~     |
|             |                  |               |                 |               |               |            |       |
| ers         |                  |               |                 |               |               |            |       |
|             |                  |               |                 |               |               |            |       |
| .8          |                  |               |                 |               |               |            |       |



# New Message Window

- When you open the new message window, it will default to "Send as:"..."Winlink Message"
- Use the drop down menu to select "Peer-to-Peer Message"
- Now you are ready to add your file attachment(picture)
- The top tool bar will have "Attachments" and open up the Attachments window



## Attachment Window First Opened Up, Note "Send as:" Is Now "Peer-to-Peer Message"

| olden  | Close   | Select Template Attachments Post to Outbox Spell Check Save in Drafts                |
|--------|---------|--|
|        | From:   | KB7RHI    Send as:    Peer-to-Peer Message    Request read receipt    Set De         |
|        | To:     | K7123;   |
|        | Cc;     |  |
| Folder | Subject | Lewisville Bridge Demaged On HWY 503 Just North Of Battle Ground                     |
|        | Attach: | Attachments  |
|        | Yourmes | Finished  Add  Edit/Resize-Image  Open/View  Delete  Save-To    File Name  Size (kb) |
| olden  |         |  |
|        |         |  |
| acts   |         |  |
|        |         |  |



## "Select An Attachment" Window Opens Up, Now Find Your Pic And Select It





#### Found A Pic To Send, Clicked On It And The "File name:" Box Populates With The File Name







## "Attachments" Has Your File, Now Need To Resize The File

- Next click on "Open" at the bottom of the window
- The "Attachments" window opens up again, this time with a file name in blue and file size in red
- Select "Edit/Resize-Image"





## Edit Window Open...Now Select "Resize", Pic Is Inside Of A GV-10 MPPT Charge Controller







#### Resize Window Is Now Open







## Enter Your "Desired size (kb)", Selected 30KB Here, Then Click On "Change Size", Then Save







# Edit Window Now Shows At Bottom Of The Window "File size (kb): 30.0", Now Select Save







## "Attachments" Window File Size Is No Longer Red, Now Select "Finished"

| e session             | 🗱 Ente  | r a new message                                  |                      | ×      | Subject |
|-----------------------|---------|--|----------------------|--------|---------|
| O unread)             | Close   | Select Template Attachments Post to Outbox Spell | Check Save in Drafts |        |         |
| tems (0)<br>( (0)     | From:   | KB7RHI V Send as: Peer-to-Peer Message V         | Request read receipt | Set De |         |
| ems (7)<br>Litems (0) | To:     | K7123;   |                      |        |         |
| ed Items (9)          | Cc:     |  |                      |        |         |
| (U)<br>Personal Folde | Subject | t U owievillo Bridgo Domogod On HWV 503 Just Nor | – 🗌 X                |        |         |
|                       | Attach  | Finished Add Edit/Resize-Image Open/View D       | elete Save-To        |        |         |
|                       | Your me | File Name  | Size (kb)            | 1      |         |
|                       |         | IMG_20180509_100013.jpg                          | 30.0                 |        |         |
| Global Folde          | 22      |  |                      |        |         |
|                       |         |  |                      |        |         |
|                       |         |  |                      |        |         |
| Contacts              |         |  |                      |        |         |
|                       |         |  |                      |        |         |
|                       |         |  |                      |        |         |
|                       |         |  |                      |        |         |
|                       |         |  |                      |        |         |
|                       |         |  |                      |        |         |





## "Enter a new message" Window Shows Next To "Attach:" IMG\_20180509\_10013.jpg:"

| Suntam Faldan                | Enter a new message - X Subject   |
|------------------------------|---|
| Inbox (0 unread)             | Close Select Template Attachments Post to Outbox Spell Check Save in Drafts |
| Read Items (0)<br>Outbox (0) | From: KB7RHI V Send as: Peerto-Peer Message V Request read receipt Set De   |
| Sent Items (7)               | То: К7123;  |
| Deleted Items (9)            | Ca  |
| Drafts (0)<br>Personal Fold  | Subject: Lewisville Bridge Damaged On HWY 503 Just North Of Battle Ground   |
| T Craunal Ford               | Attach: IMG_20180509_100013.jpg;  |
| Global Fold                  |   |
|                              | 13  |
| Contac                       |   |
| Contac                       |   |
| Contac                       |   |





## Message Is Done, Now "Post To Outbox"

- Once your message is done, then put it in the "Outbox"
- You are now ready to connect to another location
- At the main window select "Packet P2P"
- Select connection type, call sign, and push "Start"
- The other station must also have their screen open to Packet P2P
- Practice the process before the need arises







## ACTUAL PICTURE SENT EMAIL OVER RADIO, 10 KB SIZE







## ACTUAL PICTURE SENT EMAIL OVER RADIO, 20KB SIZE





## ACTUAL PICTURE SENT EMAIL OVER RADIO, 30 KB SIZE





## ACTUAL PICTURE SENT EMAIL OVER RADIO, 40 KB SIZE



# 10 KB SIZE BRIDGE DECK PIC





## 20 KB SIZE PIC SENT VIA EMAIL OVER RADIO





## **30 KB SIZE PIC SENT**







