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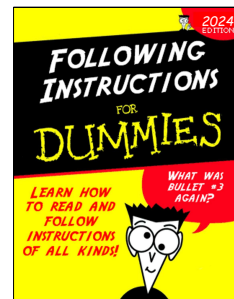
Packet Type II



Santa Clara County ARES®/RACES/ACS
Last Updated: 17 October 2024

Housekeeping

- Introductions
- Pen/pencil & paper
- Cell phones on silent or vibrate
- Side conversations
- Questions
- Breaks
- Restrooms
- In case of emergency
- No wandering or exploring other areas of the building.



Overview: Packet Classes

Packet Type III, Part A

- Role of the Packet Operator
- Packet Network Overview
- Packet Network Components
- Packet Station HW & SW
- Accessing the Network
- Standard Workflow

Packet Type III, Part B

- Packet Operations
- Diagnosing Setup Problems
- Selecting a BBS
- Creating Messages
- Event Documentation
- Productivity Hints
- Exercises

Packet Type III, Part A+

- Packet Operations Self-Paced Exercise workbook

Packet Type II: Advanced Techniques, such as County EOC Packet Station Setup & Operations, Operating without Outpost.

Learning Objectives

At the end of this class, you should be able to:

- Understand the setup and operation of the county EOC radio room packet station
- Set up and use a terminal program to access a BBS
- Without Outpost...
 - Connect to a JNOS BBS
 - Send and receive plain text messages with BBS commands
 - Send and receive PackItForms with BBS commands

A Note on receiving Class Credit

To get credit for this class, there are 3 things that you need to do:

1. Attend the classroom session.
2. Complete the evaluation by Saturday, one week after the class. See the instructions at the end of this material.
3. Complete a short exercise by Saturday, one week after the class.

Fictitious Examples

- We use fictitious call signs in this presentation to avoid SPAM

- W6XRL4: Herman Munster



- XNDEOC: City of Xanadu Emergency Operations Center



What about Xanadu?



- Xanadu received lasting fame in the western world thanks to the Venetian explorer Marco Polo's description of it in his celebrated book *Travels* (c. 1298).
- Distant and mysteriously lost Xanadu, thus, came to represent a place of mystery, splendid luxury and easy living.
- Fortunately, you get to visit Xanadu only during Packet classes and Packet exercises.
- Only use an XNDxxx tactical call that has been specifically assigned to you for an exercise or training event and then only for the duration of that event, including any homework follow-up.
- **PLEASE NEVER USE** XNDxxx tactical calls during any other time. Instead, use one of your City's extra tactical calls for practice (with your EC's permission, of course).



How to process high volume traffic efficiently

COUNTY EOC PACKET STATION SETUP & OPERATIONS

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Packet Net Operations at County EOC

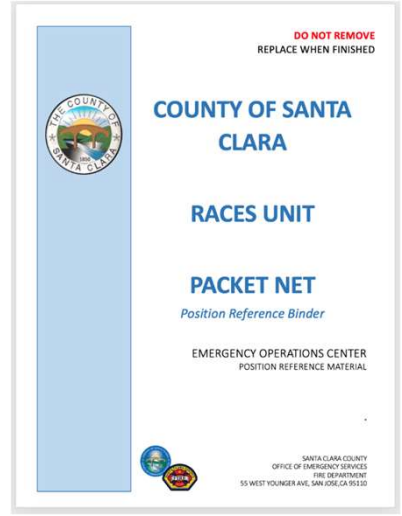
- County message handling can be non-stop action
- Have separate send & receive stations
- Learn to use the automation
 - Automated polling every 5 minutes by Telnet
 - Automated ICS 309 Logging
- Watch message handling order
- Move the messages to the Traffic Manager as quickly as possible
- Balance outgoing and incoming traffic
- Follow the *SCCo Radio Room packet procedures*

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SCCo Packet Net Reference Binder

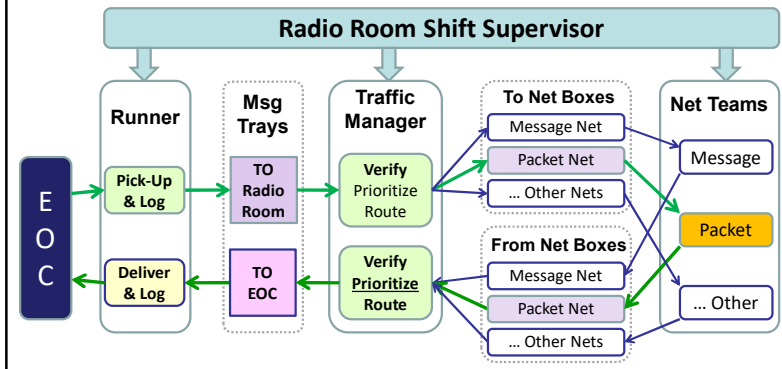
What's inside

- There is a "standardized" binder for every position in the SCC EOC, including *each position in the RACES radio room.*
- General content includes:
 - activation and operation
 - end-of-shift and demobilization
 - Packet-specific activities



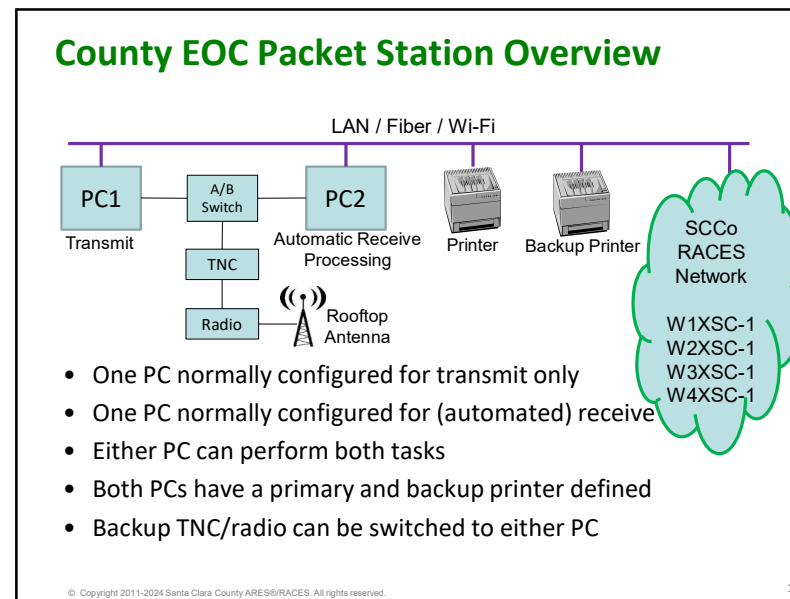
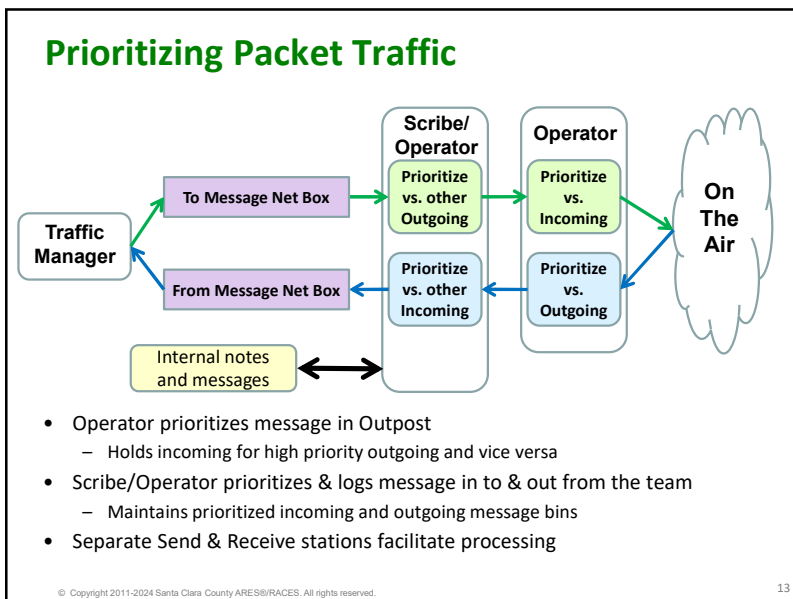
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County Radio Room Traffic Routing



- For small, low traffic events, radio room supervisor may also perform the traffic manager role

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- ### Its all about control with Text Commands
- Simple text commands control the **TNC**
 - **MYCALL** *callsign* = set the TNC's Mycall command to your *callsign*
 - **CD** *software* = set **C**arrier **D**etect mode to software
 - **C** *callsign* = **C**onnect to station *callsign* (ax.25 address)
 - Simple text commands control the **BBS** mailbox
 - **SP** *address* = **S**end a **P**rivate message to an *address*
 - **LA** = **L**ist **A**ll messages in this area (mailbox)
 - **R** *n* = **R**ead message number *n*
 - Outpost simply automates the process of typing the commands to the TNC (to connect) and then to the BBS (to send/receive messages)
 - Watch the Outpost session window to see what it's doing
 - View the Outpost transaction log later to see what it did
 - Actions > View Outpost Data Directories > logs > transactionYYMMDD.log
- © Copyright 2011-2024 Santa Clara County ARES®/RACES. All rights reserved. 16

Sidebar: Outpost Logs

From Outpost: *Actions > View Outpost data directory > logs*

The image shows two Notepad windows side-by-side. The left window, titled 'session211015.log - Notepad', displays a log of session events including 'Using Call Sign KN6PE', 'Using TNC setup XSC_Kantronics_KPC3-Plus', 'Using BBS setup XSC_MIXSC-1', 'TncCheck: TNC is ok', 'TncInit: Complete as KN6PE', 'BbsConnect: connected to MIXSC-1 as user KN6PE', 'Bbs is JNOS', 'BbsDeleteMsgs: Done', 'BbsSendMsgs: Done', 'BbsGetMsgs: Done', and 'BbsDisconnect: BBS Session closed'. The right window, titled 'transaction211015.log - Notepad', shows a terminal session with commands like 'cmd:D', 'cmd:BEACON EVERY 0 (disabled)', 'cmd:ECHO on', 'cmd:my KN6PE', and 'cmd:non off'. Below the logs is a 'Log Settings' dialog box with 'Options' checked and 'L1: Send/Receive Session window logging' selected. A green arrow points from the 'Log Settings' dialog to the text 'FYI...Log Settings has L1 selected by default Optional: select L2 for additional info'.

FYI...Log Settings has L1 selected by default
Optional: select L2 for additional info

Everything Can Be Done Manually

- Why would I want to/need to?
 - Outpost is not installed or installed incorrectly; no administrative access to PC
 - Browse the BBS to read bulletins
 - Gain deeper understanding of how packet radio works
 - Perform clean up or diagnostic activities on your setup or to maintain the BBS
- All you need is a terminal emulator program
 - Suggested: PuTTY (free download) <https://www.putty.org/>
... or just do an Internet search for "PuTTY"
 - But any terminal emulator will do ...
- The following examples will use PuTTY
 - Select and copy: highlight/select (not <ctrl>C)
 - Paste: Right-click (not <ctrl>V)

Note!

Summary of Steps to be Discussed

- What you need to know to operate without Outpost
- Setting up PuTTY for BBS access (serial)
- The connection basics
 - Start of shift: Configure optimized TNC settings
 - Per session: Using you FCC call sign, -OR-
 - Per session: Using a tactical call sign (plus your FCC call sign)
 - End of shift: Restore default TNC settings
- Managing Messages on JNOS
 - Access user and bulletin areas (mailboxes)
 - Read a message
 - Send a message
- Reading notices and bulletins on JNOS
- Working with PacketForms

What you need to know

Operations without Outpost

1. Connect Parameters
2. TNC Standard Settings and Manual Workflow
3. TNC User Commands
4. TNC Init Settings
5. BBS User Commands
6. BBS Init Settings

1. Three Connect Parameters

Operations without Outpost... need to know

- **Call Sign or Tactical Call of the user**
example : W6XRL4
XNDEOC
- **TNC Comm Port Settings**
example : COM3,9600,8,N,1
COM5,9600,7,E,1
- **BBS Connect Name**
example : W1XSC-1
W3XSC-1

2. TNC Standard Settings

Operations without Outpost ... need to know

- SCCo RACES determined the optimum TNC parameters for our BBS system that significantly improves message traffic throughput.
- Document contains parameters for both **Outpost** and **Manual** sessions. Details of each parameter are explained.
- See: <https://www.scc-ares-races.org/data/packet/index.html> → Application Notes → Standard TNC Parameter Settings

... and specifically, the section titled: *Standard TNC Settings for Manual BBS Sessions*

2. TNC Standard Settings

Operations without Outpost ... need to know

The screenshot shows the 'Santa Clara County ARES®/RACES' website. The main navigation includes Home, Services, Operations, Data, Credentials, Training & Events, Reference, and About. The 'Packet BBS Service' section is highlighted, with sub-links for Overview, Service & Network, County Standard, Software, App Notes, Reference, News, and Support. A 'Packet BBS Service Notices' box contains two items: a 2024-01-29 release of the SCCo Packet Installer v102M and a 2024-01-21 update to the Standard Packet Check-in/Out Message Instructions. The 'Overview' section describes the BBS service. The 'Service and Network Info' section includes a 'Packet BBS Service Description'. The 'Application Notes' section lists various configuration and set-up instructions. A 'Table of Contents' for the 'Standard TNC Parameter Settings for Santa Clara County Packet Network' document is shown on the right, with a green arrow pointing from the 'Standard TNC Parameter Settings' link in the navigation menu to the document's TOC.

2. TNC Standard Settings

- Complete manual ops info
 - Start of Shift
 - Each message
 - End of Shift
- TNC-specific Commands

The screenshot shows the 'Standard TNC Parameter Settings for Santa Clara County Packet Network' document. The title is 'Standard TNC Parameter Settings for Santa Clara County Packet Network' with a revision date of 11-Oct-2022. A 'Table of Contents' is displayed, listing various sections and their page numbers. A box highlights the following sections: 'Standard TNC Settings for Manual BBS Sessions' (page 13), 'Manual Operations Workflow' (page 13), and 'TNC Commands for Manual Operations' (page 16). The document is identified as 'Page 1 of 34'.

3. Eight TNC user commands

Operations without Outpost (Kantronics KPC-3+)

- HELP** [command]
When entered alone, lists all available commands. With a command, provides details on that specific command.
- MYCALL** xxxxxx
Tells the TNC what its' call sign is.
- CONNECT** call1 [via call2, call3, ...]
Call1 = Call sign of the station to be connected to. Adding "via call2..." connects to the BBS by digipeaters.
- CONVERS**
Puts the TNC into Conversational mode. Then, whatever you type is immediately transmitted.
- <ctrl>C**
Puts the TNC into Command Mode. Then, enter TNC commands at the prompt.
- RESTORE DEFAULT**
Resets the TNC to the factory default settings; performs the AUTOBAUD routine. Defaults INTface to NEWUSER. Hard reset can be triggered by temporarily removing the battery.
- INTFACE** [TERM | ...]
When set to TERMinal, the full command set of the TNC is available.
- XMITLVL** [value]
Displays or sets the TNC's transmit drive level

4. TNC Init Settings

Operations without Outpost ... need to know

- Go to the "Standard TNC Settings for Manual BBS Sessions"
- Follow instructions in "Manual Operations Workflow"
- Use the "TNC Commands for Manual Operations" appropriate for your particular TNC

TNC Type	Manual Ops: Start of Shift	Manual Ops: End of Shift
Kantronics KPC-3+	INTERFACE TERMINAL MONITOR OFF CD SOFTWARE NEWMODE ON SBITCONV ON BEACON EVERY 0 SLOTTIME 10 PERSIST 63 PACLEN 128 MAXFRAME 2 FRACK 6 RETRY 8 CHECK 30 TXDELAY 40 XFLOW OFF STREAMSW OFF STREAMSW \$00	STREAMSW \$7C

5. Eight BBS user commands

https://scc-ares-races.org > Data Networking > Packet BBS > Reference > JNOS BBS Information

Santa Clara County ARES/RACES

Home Operations Data > Packet Training and Events Reference FAQ October 20, 2018

JNOS Packet BBS Information

Overview

The Santa Clara County BBS network uses the JNOS BBS software. This includes W1XSC, W2XSC, W3XSC, W4XSC, W5XSC, and W6XSC.

JNOS User Information

- Mailbox User Commands [from Appendix A of the JNOS Commands Manual] (PDF - 61 KB)

JNOS Sysop Information

- JNOS 2.0 web site
 - JNOS Release Notes
 - JNOS Commands Manual
 - JNOS Downloads
 - The simplest way to get started is to use the JNOS Installer (see section "Installers for JNOS")
 - You will need to compile the installer. Links to the installer source file and instructions are provided.
 - You'll also need to compile the JNOS program. Links to the source files, instructions and release notes are provided.
- nos-bbs - TAMR JNOS mailing list
 - This is where all JNOS issues are discussed. Any JNOS sysops should be on this list.
- NOSites - TCP/IP over Packet Radio - An Introduction to the KAQ Network Operating System, by Ian Wade, G3NRY (PDF - 22 MB)
 - 356 pages, ISBN 1-897649-00-2
 - Occasionally available in paperback from Amazon and other book sellers. Posted here with permission from the author.
 - This is the definitive book on JNOS and a must-have for any JNOS sysop. The picture on page 144 is particularly helpful for understanding how messages and addresses are handled.

[Web Site Home Page](#)

JNOS User Manual - Appendix A

APPENDIX A

JNOS MAILBOX USER COMMANDS

The following commands are available to the users connected to the mailbox. This file is available separately as whosmbox.txt.

AREA

The Area command lists the mail areas that contain messages you may read.

A gives a short listing, whereas
AF gives a full listing with descriptions (if available)
AM shows areas that have new mail since you last zapped off.

To read messages in one of the areas, type "A *area_name*". You will then be told how many new, not previously listed messages there are in this area. You can send mail to any of the listed areas as "A *area_name*".

BYE

The Bye command is used to exit from the JNOS BBS. This will close your mailbox file and remove any messages that you have deleted with the R[emove] command.

CONNECT

The Connect command has the following modes :

```

[connect] [port] [callsign] [digipipeater] - - -
connects to station callsign on interface port, possibly via digipeaters
digipeater... (note the use of "via" is optional)
[connect] [node]
connects over netrom to a remote node with node as either node-call or node-alias
[conv] {channel}
This (if available) puts you in converse mode. This is a roundtable discussion feature. The channel allows specifying the conference channel you wish to join. Channel default is 0.
[download] [/i] [path_name]/filename
Sends a plain ASCII text file.
[em]
Download the word (message of the day) which is otherwise unavailable once you get into the box.

```

Page 1111

5. Eight BBS user commands

Operations without Outpost ... need to know

- HELP** [command] or ?
When entered alone, generates a summary of available commands. With a command as a parameter, provides details on that command.
H List = shows all the List command options and what they do
- LIST**
L = by itself will display the headers for all *unread* messages, if any.
LA = List ALL messages, both *read* and *unread*
LM = Lists MY messages addressed to me
L> addr = Lists all messages that have "addr" in the *To:* field of the message
- READ #**
= The message number to be displayed.
- KILL #**
= The message number to be deleted.
- AREA** [Area_name]
A = Lists all available bulletin areas.
AF = Gives a full listing with descriptions of areas.
A area_name = moves you to that area. Then use the List and Read commands to view messages.

5. Eight BBS user commands

Operations without Outpost ... need to know

6. **SEND** [option] <dest_address>
S[P] = Send Private; *example:* SP w6xrl4@w5xsc.ampr.org
SB = Send Bulletin; *example:* SB xsctest
SC = Send Copy; to multiple destination addresses
 example: SC w6xrl4@w5xsc.ampr.org
 (BBS then prompts with Cc: for all other addresses)
7. **BYE**
 Disconnects from the BBS
8. **XM #**
 displays or sets the page length for viewing messages

6. BBS Init Settings; Page Length

Operations without Outpost ... need to know

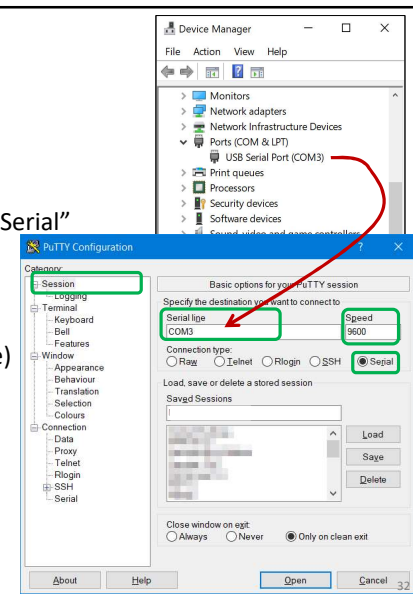
- The BBS “XM” command displays or sets the page length
 - **XM** = displays the current page length setting
 - **XM 24** = sets the page length to 24 lines
 - **XM 0** = turns off pagination (required when using Outpost)
- If a page length is set, message listings, messages and other content longer than the page length are paused and a “More (N=no)?” prompt is shown.
 - Press <ENTER> to see the next page; ‘n’ to stop
 - Good for reading content on the screen
 - BUT... will cause Outpost to hang if not set back to XM 0
- Note: The SCCo Packet Installer includes **XM 0** in the BBS Init Commands for all SCCo BBSs. Outpost will send **XM 0** as soon as it connects to the BBS so message output is never paused.

SETTING UP PUTTY FOR BBS ACCESS

Serial Access Setting up PuTTY

1. Select the **Session** tab
2. Select Connection Type = “Serial”
3. Enter the Com Port
 - Verify with Windows Device Manager
4. Enter the Speed (baud rate)

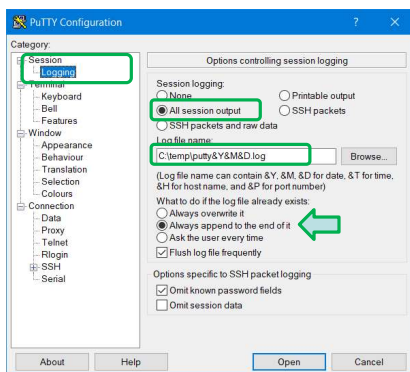
NOTE: Not all TNCs use 9600,8,N,1 as the configuration. All fields must match what you actually have set in your TNC.



Set up Session Logging

Setting up PuTTY

- Next, click on the **Session > Logging** tab
- Set Session Logging to
 - All session output
- Set up a **log file name**
NOTE: &H does not work on Windows
- ... if the file exists:
 - Always append to the end



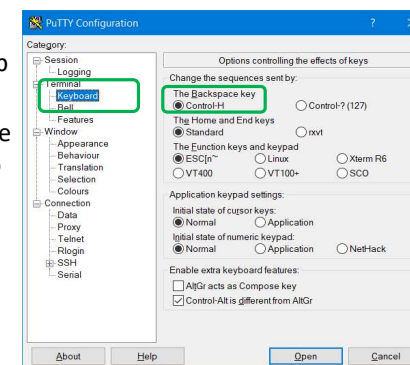
Why do logging at all?

- During manual operations, it is easy to lose track of what is going on.
- Logging creates a history of your manual interactions and a reference if you ever need to go back and check if you got it all right.

Change PuTTY's Backspace Key

Setting up PuTTY

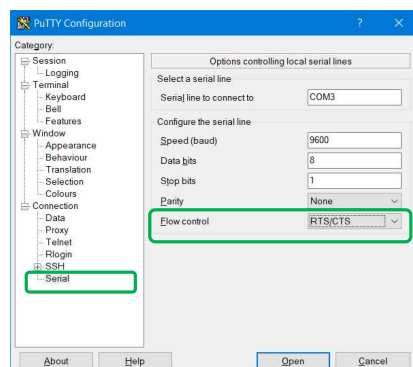
- Next, click on the **Terminal > Keyboard** tab
- The PuTTY default does not send the backspace key code that the KPC-3+ expects. To correct this:
- Set the Backspace key option to **Control-H**



Serial Access

Setting up PuTTY

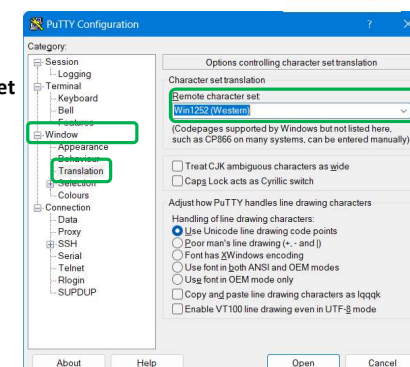
- Next, click on the... **Connection > Serial** tab
- Set Flow control to **RTS/CTS**



Character Set change

Setting up PuTTY

- Next, click on the... **Window > Translation** tab
- Change **Remove character set** to **Win1252 (Western)**
 - This change matches the default setting in PacketForms
 - PuTTY's default is UTF-8, which works poorly with JNOS and non-ASCII characters.

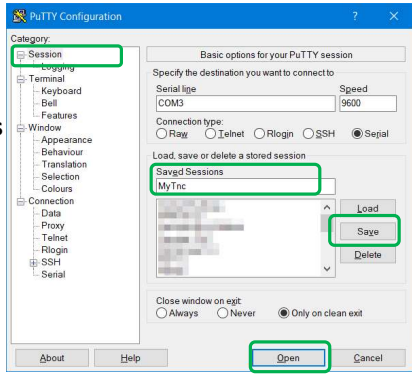


Name it, Save it, and Open it

Setting up PuTTY

- 15. Finally, click on the... **Session** tab
- 16. Give this connection a name in **Saved Sessions**
- 17. Press **Save**
- 18. Press **Open** to open the connection

NOTE: If you ever change any setting, remember to press **Save!**



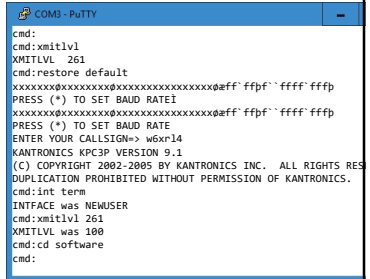
THE CONNECTION BASICS

Start of Shift: Configure TNC settings

The connection basics

- TNC settings affect overall performance
 - Start with the factory defaults
 - Make other settings for efficient use of the BBS
- To be **absolutely positively certain** that **all** TNC settings are at the **current** SCCo standard values, at the TNC prompt, perform the following:

1. cmd: **XMITLVL** (for KPC-3+) to display the existing transmit level <value>
2. cmd: **INT Term** (just in case)
3. cmd: **restore default**
4. **PRESS (*) TO SET BAUD RATE**
5. Enter your call sign
6. cmd: **INT Term**
7. cmd: **XMITLVL <value>**
8. cmd: **cd software**
9. Apply SCCo standard TNC settings for **manual** operations



Start of Shift: Configure TNC settings

The connection basics

- Outpost configures the TNC at the start of each Send/Receive session
- For manual operation, you only need to send these commands once, at the start of your shift

NOTE: Manual Ops commands are slightly different from the Outpost list of commands.

TNC Type	Manual Ops: Start of Shift	Manual Ops: End of Shift
Kantronics KPC-3+	INTERFACE TERMINAL MONITOR OFF CD SOFTWARE NEWMODE ON \$BITCONV ON BEACON EVERY 0 SLOTTIME 10 PERSIST 63 PAXLEN 128 MAXFRAME 2 FRACK 6 RETRY 8 CHECK 30 TXDELAY 40 XFLOW OFF STREAMEV OFF STREAMSW \$00	STREAMSW \$7C

Start of Shift: Configure TNC settings

The connection basics

- Create and save a text file with the “Start of Shift” and “End of Shift” TNC commands.
CAUTION: Do NOT cut-and-paste directly from the PDF into your terminal emulator; *it doesn't always work.*
****Best practice:** copy the commands first into a text editor (Notepad), save it, and then copy-and-paste from there into your terminal program.
- To send the “Start of Shift” TNC commands,
 - Connect to the TNC with PuTTY
 - Select and copy the entire “Start of Shift” command list from the text file
 - Paste it into Putty (right-click) at the TNC cmd: prompt.

```

New Text Document.txt - Notepad
File Edit Format View Help
--- KPC-3+ Start of Shift ---

INTERFACE TERMINAL
MONITOR OFF
CD SOFTWARE
NEWMODE ON
8BITCONV ON
BEACON EVERY 0
SLOTTIME 10
PERSIST 63
PAcLEN 128
MAXFRAME 2
FRACK 6
RETRY 8
CHECK 30
TXDELAY 40
XFLOW OFF
STREAMEV OFF
STREAMSW $00

--- KPC-3+ End of Shift ---

STREAMSW $7C
    
```

During the Shift: FCC Call Sign Session

The connection basics

- On the TNC:
 1. Set **MYCALL** to your FCC call sign
 2. **CONNECT** to the BBS / mailbox service (SSID=1) on W5XSC
 3. Connected message from TNC
- On the BBS:
 4. BBS says it is a JNOS BBS, version is 2.0k.1.xsc.2, with options
 5. You have no messages
 6. BBS Prompt: You are on message #0
 7. You type “**B**” (bye) to terminate the BBS session
The BBS drops the connection
- On the TNC:
 8. Disconnected message from the TNC
 9. TNC is ready for the next command

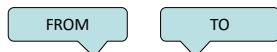
```

1 cmd:mycall w6xrl4
2 cmd:c w5xsc-1
3 cmd:*** CONNECTED TO W5XSC-1
4 [JNOS-2.0k.1.xsc.2-B1FHIM$]
5 You have 0 messages.
6 (#0) >
7 b
8 *** DISCONNECTED
9 cmd:
    
```

Note: All SCCo BBSs have a 2 minute Inactivity Timer!

FCC Call Sign Session – On the Air

The connection basics



```

AX25: W6XRL4->W5XSC-1 CONNECT
AX25: W5XSC-1->W6XRL4
DATA: [JNOS-2.0k.1.xsc.2-B1FHIM$] .You have 0 messages..(#0) >.
AX25: W6XRL4->W5XSC-1
DATA: b.
AX25: W5XSC-1->W6XRL4 DISCONNECT
    
```

Note: Protocol codes have been removed

- FROM and TO addresses of all packets contain legal call signs
- Both stations are meeting the FCC identification requirements with every packet (more than required)

During the Shift: Tactical Call Sign Session

The connection basics

- On the TNC:
 1. Set **MYCALL** to your **tactical** call sign
 2. **CONNECT** to the mailbox service (SSID=1) on W5XSC
 3. Connected message from TNC
- On the BBS:
 4. BBS says it is a JNOS BBS, version 2.0k.1.xsc.2, with IHM\$ options
 5. You have no messages
 6. BBS Prompt: You are on message #0
 7. You type “**B**” (bye) to terminate the BBS session
The BBS drops the connection
- On the TNC:
 8. Disconnected message from the TNC
 9. Enter **CONVerse** mode, and then type in at least your FCC call sign, press enter to transmit
 10. Enter **Ctrl-C** to return to Command Mode.
TNC is ready for the next command

```

1 cmd:mycall xndeoc
2 cmd:c w5xsc-1
3 cmd:*** CONNECTED TO W5XSC-1
4 [JNOS-2.0k.1.xsc.2-B1FHIM$]
5 You have 0 messages.
6 (#0) >
7 b
8 *** DISCONNECTED
9 cmd:conv
10 This is w6xrl4
    
```

Note: All SCCo BBSs have a 2 minute Inactivity Timer!

Tactical Call Sign Session – On the Air

The connection basics



```
AX25: XNDEOC->W5XSC-1 CONNECT
AX25: W5XSC-1->XNDEOC CONNECT
DATA: [JNOS-2.0k.1.xsc.2-B1FHIM$].You have 0 messages.(#0) >.
AX25: XNDEOC->W5XSC-1
DATA: B.
AX25: W5XSC-1->XNDEOC DISCONNECT
AX25: XNDEOC->CQ
DATA: This is w6xr14.
```

Note: Protocol codes have been removed

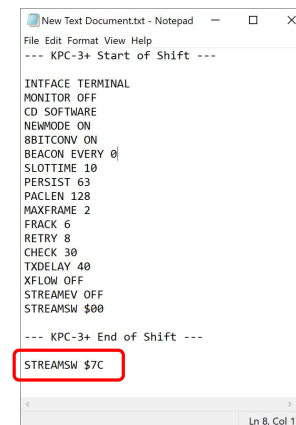
The extra converse mode packet lets you identify your station XNDEOC as FCC call sign W6XRL4

- XNDEOC is not a legal call sign
- Keep session under 10 minutes and use ID process at the end of session to satisfy the FCC requirements.

End of Shift: Restore TNC settings

The connection basics

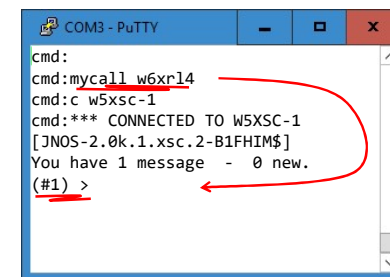
- After the BBS session has disconnected, you should be back to the TNC command prompt, usually: cmd:
- When your shift is finished and before you pack up the gear or turn it over to someone else, return the TNC to “normal” settings
- Cut-and-paste the “End of Shift” Send/Receive settings into PuTTY at the TNC command prompt



MANAGING MESSAGES WITH JNOS COMMANDS

BBS Connect & Login

- Ready to connect to BBS
- Set your call (FCC or tactical) in the TNC for login
cmd: MYCALL W6XRL4 Or cmd: MYCALL XNDEOC
- Connect
cmd: C W5XSC-1
- JNOS gets login info from MYCALL
- No login prompt needed



HELP

JNOS Commands

- Basic commands can be seen with HELP command

```

COM3 - PuTTY
Area: w6xr14 (#1) >
help
For a brief listing of all commands, type ?
To get help for a specific command, enter 'h command',
The following commands have help descriptions available for them:

alias      area      bye      connect  convers  download
escape     finger   help     iheard   info     iproute
jheard     kill     list     mboxuser nodes     nroutes
operator   ping     ports    query    read     register
send       telnet   upload   verbose  what     xpert
zap

Area: w6xr14 (#1) >

```

HELP <command>

JNOS Commands

- Help with the command will give a detailed explanation

```

COM3 - PuTTY
Area: w6xr14 (#1) >
help area
The Area command will list the mail areas that contain messages
you may read. It also moves you to those areas. You must be in
an area before you can read messages in that area.

A will give a short listing, whereas
AF will give a full listing with descriptions (if available).
A <areaname> moves you to that area.
AF <areaname> will give more info about just that area (if available).
AN will show areas that have new mail since you last logged off.

To read messages in one of the areas, type 'A <areaname>'
You will then be told how many new, not previously listed messages
there are in this area.
You can send mail to any of the listed areas as 'S areaname'

Area: w6xr14 (#1) >

```

AREA

JNOS Commands

- Messages are organized in **AREAS**
 - Your mailbox is an area
 - Bulletins: xsccperm, xsccvent, xsccstest are each their own AREA

A[rea] gives a short listing, whereas ...

```

COM3 - PuTTY
Area: w6xr14 (#1) >
area
Current message area is: w6xr14

Available areas are:

w6xr14
xsccperm  xsccvent  xsccstest  alllocal
allxsc    allbay    allnca     allca     allwusa   allusa
allnoam   allmw

Type AF to get description of areas.
AF <name> tells more about that area.

Area: w6xr14 (#1) >

```

AREA

JNOS Commands

AF gives a full listing with descriptions (if available)

```

COM3 - PuTTY
Area: w6xr14 (#1) >
af
Current message area is: w6xr14

Available areas are:

w6xr14    Your private mail area

# Santa Clara County Op Area Shared Mailboxes
xsccperm  Operation, Configuration and other Permanent Info (To: <xsccperm>)
xsccvent  Emergency Incident and Public Service Event Info (To: <xsccvent>)
xsccstest Test and Training (To: <xsccstest>)

# General Bulletin Areas by Distribution
alllocal  All categories, this BBS only (no distribution) (To: <cat>@local)
allxsc    All categories, Santa Clara Co distribution (To: <cat>@xsc)
allbay    All categories, SF & Monterey Bay distribution (To: <cat>@bay)
allnca    All categories, Northern California distribution (To: <cat>@nca)
allca     All categories, California distribution (To: <cat>@ca)
allwusa   All categories, Western USA distribution (To: <cat>@wusa)
allusa    All categories, USA distribution (To: <cat>@usa)
allnoam   All categories, North America distribution (To: <cat>@noam)
allmw     All categories, Worldwide distribution (To: <cat>@mw)

# <cat> A short (max 6 char) category like "equake", "flood", "wx", ...
Area: w6xr14 (#1) >

```

How to address a SCCo Notice

How to address a generic bulletin. Note the different format

AREA Example

JNOS Commands

- Change areas to read SCCo bulletins
 - “area xsctest” – changes to the “xsctest” area
 - “L” or “LA” – lists or lists all bulletins in that area
 - “area <callsign>” – returns you to your own area

```
COM3 - PuTTY
cmd:c w5xsc-1
cmd:*** CONNECTED to W1XSC-1
[JNOS-2.0k.1.xsc.2-B1FHIMS]
You have 2 messages - 2 new.
Area: w6xr14 (#1) >
area xsctest
You have 1 message - 1 new.
Area: xsctest (#1) >
1
Mail area: xsctest
1 message - 1 new

St. # TO FROM DATE SIZE SUBJECT
> N 1 xsctest xndeoc Nov 3 2627 Bulletin for Packet Type II Classro
Area: xsctest (#1) >
a w6xr14
Area: w6xr14 (#1) >
You have 2 messages - 2 new.
Area: w6xr14 (#1) >
```

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53

LIST

JNOS Commands

- Displays a list of the messages from the current mailbox (or "area")
 - L - by itself will display the headers for all unread messages, if any.
 - LA - list all messages, read or unread

```
COM3 - PuTTY
cmd:c w5xsc-1
cmd:*** CONNECTED to W1XSC-1
[JNOS-2.0k.1.xsc.2-B1FHIMS]
You have 2 messages - 2 new.
Area: w6xr14 (#1) >
1
Mail area: w6xr14
2 messages - 2 new

St. # TO FROM DATE SIZE SUBJECT
> N 1 w6xr14 xndeoc Nov 2 454 XND-133P_0/R_Jelly Donut Request
N 2 w6xr14 xndeoc Nov 2 443 XND-132P_0/R_Jelly Donut Delivery No
Area: w6xr14 (#1) >
```

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54

READ

JNOS Commands

- R[ead] #
- R[ead] <msg_number_or_range>
- To read a specific message, you may either type “R #” or just the number by itself. RM will display all unread messages, sequentially.

```
COM3 - PuTTY
St. # TO FROM DATE SIZE SUBJECT
> N 1 w6xr14 xndeoc Nov 2 454 XND-133P_R_Jelly Donut Request
N 2 w6xr14 xndeoc Nov 2 443 XND-132P_R_Jelly Donut Delivery No
Area: w6xr14 (#1) >
r 2
Message #2
Date: Mon, 2 Nov 2017 21:00:05 PDT
From: xndeoc@w5xsc.ampr.org
To: w6xr14
Subject: XND-132P_R_Jelly Donut Delivery Notification

Donut will be delivered by 9AM
Area: w6xr14 (#2) >
```

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55

KILL

JNOS Commands

- The **KILL** command allows you to delete messages from your mailbox
 - K[ill] <message_number>
- At least one message number must be supplied. The message numbers you can select from can be displayed with the "L[list]" command.
- Messages will not disappear until you disconnect and connect again

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56

SEND

JNOS Commands

- The send (S) or send private (SP) command allows you to enter a message and send it to a user
 - S[P] <user>@<domain>** where
 - <user> = recipient's name
 - <domain> = <bbscall>
 - <bbscall>.ampr.org
 - internet domain
- Send an SCCo specific Notice
 - SB < NoticeArea | <category>@<distribution>**
 - SCCo Notices: SB < NoticeArea >
 - General purpose bulletins: SB <category>@<distribution>
 - As above, but ANY <user> may read the message from the mailbox. The < NoticeArea > may be...
 - xscperm
 - xscevent
 - xsctest

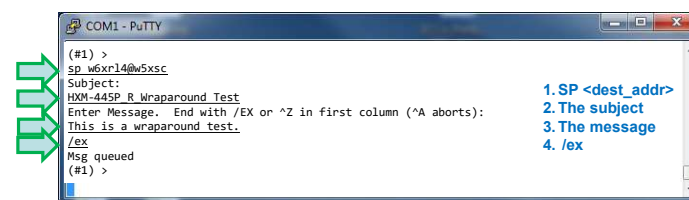
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57

Send a Message from the Keyboard

JNOS Commands

- Connect to the BBS using a terminal program
- Use these BBS commands
 - SP <user>@<domain>** – Send a message to a user at a specific domain.
 - When prompted, enter an SCCo standard subject
 - When prompted, type the body of message
 - When done, on the next line, add **/EX** and press **<Enter>**



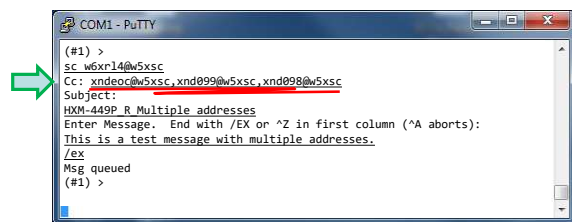
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58

Send Copy

JNOS Commands

- The send copy command allows you to enter a message and send it to multiple users
 - SC <user>@<domain>**
- Enter the send copy command with one address
- JNOS responds with **"Cc:"**
 - Enter other addresses to receive a copy, separated with commas



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59

BYE

JNOS Commands

- When you are all done with the BBS, disconnect from the BBS
 - B[ye]**
- On disconnecting
 - Outgoing messages will be processed
 - Deleted (killed) messages will be removed

Don't Forget!!!
All SCCo BBSs have a
2 minute inactivity timer!

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60

FYI... Manual message basics

Troubleshooting Hint

- Knowing how manual packet works will help you **troubleshoot problems**.
- Sending to one destination address:

```

1  sp <dest_address>
2  <subject_line>
3  <message_line 1>
   :
   <message_line n>
4  /ex<enter>
    
```

```

File Edit Format View Help
sp XND014@W1XSC
XND_1021M_R_Weather Heads up
To: Xanadu Station 14
From: County Fire
Please double-check the status of all
equipment and confirm its deployment
readiness.
Weather forecast calls for high winds
and lightening tonight through
Sunday.

An official request for this
information will follow.
/ex
|
    
```

- After the SP command, the BBS prompts for the subject, then the message.
- Once the ***ENTIRE*** message sequence is created, highlight and copy all of it and then paste it into PuTTY at the BBS Prompt.

FYI... Manual message basics

Troubleshooting Hint

- Knowing how manual packet works will help you **troubleshoot problems**.
- Sending to multiple addresses:

```

1  sc <dest_address>
1A <other_addresses>
2  <subject_line>
3  <message_line 1>
   :
   <message_line n>
4  /ex<enter>
    
```

```

File Edit Format View Help
sc XND014@W1XSC
XND015@W1XSC, XND071@W1XSC, XND083@W1XSC
XND_1022M_R_Weather Heads up
To: Xanadu Stations 14, 15, 71, 83
From: County Fire
Please double-check the status of all
equipment and confirm its deployment
readiness.
Weather forecast calls for high winds
and lightening tonight through
Sunday.

An official request for this
information will follow.
/ex
|
    
```

- After the SC command (Send Copy), the BBS prompts with a CC: for additional destination addresses.
- Once the ***ENTIRE*** message sequence is created, highlight and copy all of it and then paste it into PuTTY at the BBS Prompt.

FYI... Manual message basics

Saving the message


- There are reasons to save the message before sending it
 - You have copy for your records.
 - You can save all your messages before sending them.
 - Avoids having to re-enter the message if something goes wrong.
- Where you save the message is up to you. But:
 - If this is your PC, then save them anywhere where you can find them.
 - If this is a shared PC, then create a directory on the C: Drive.
- For instance: your directory structure could look like this:
 - C:\MyMessages
 - C:\MyMessages\XND-24-1009T (activation number)
- Use the message subject as the name of the file.

BUT... Manual PacketForms will do a lot of this for you!

READING BULLETINS ON JNOS

Bulletin Review

Bulletins



- Bulletins are messages intended for a broad audience
- The SCCo BBSs support two types of bulletins:
 - **Notices** are a special type of bulletin specific to Santa Clara County
 - Only distributed to SCCo BBSs (W*XSC)
 - SCCo uses 3 special categories for specific content
 - General **Bulletins** are globally compatible, used for everything else
 - User-defined *category* (e.g.: “equake”, “ARES”) identifies content
 - User-defined *distribution* controls how widely it is distributed (e.g.: “XSC”, “BAY”, “NCA”, etc.).
- Regardless of the bulletin type, when configured in Outpost, Outpost will automatically download them

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SCCo Notice Areas

Bulletins

NOTICE

- SCCo ARES/RACES has three special **notice** categories:
 - **xscperm**
 - Used for notices that do not expire
 - examples: standard county procedures
 - **xsc event**
 - Notices posted here automatically expire after 8 days
 - examples: Drills, public service events, incidents, other activations
 - **xsc test**
 - Good for user testing; automatically expires after 1 day
 - **allxsc**
 - Where you can write city and jurisdiction notes
 - Notices posted here automatically expire after 8 days

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General Bulletins Overview

Bulletins

- Bulletins are messages that are intended for broad readership
- Bulletins content varies from amber alerts and earthquake reports to jokes and recipes
- Bulletin sender controls how widely the bulletin is distributed
 - Can be as narrow as “local” (this BBS only)
 - Can be as wide as “ww” (worldwide!)
- In JNOS, bulletins are sorted into shared areas (mailboxes) for easier reading

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General Bulletins – Why Do They Matter?

Bulletins

- Standard way to distribute information between BBSs of all types throughout the world
- Use them for fun or for emergency communications
- Use them for distributing information to broader areas:
 - Santa Clara County
 - San Francisco Bay area
 - Northern California
 - All California
 - And wider ...
- Example:
 - During the 2009 cable cut, information about anticipated service restoration times were distributed via bulletins by a ham who had information from the telecom carrier

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General Bulletin Addresses

Bulletins

- Address format: **category@distribution**
- **Distribution**
 - A six-character or shorter keyword which defines how widely the bulletin will be distributed
 - Sender picks from a pre-defined list
 - Acceptable distributions:
 - local Local BBS only
 - xsc XSC Operational Area (Santa Clara County)
 - bay San Francisco and Monterey Bay area
 - nca No. California (generally north of the Tahachapi Mountains)
 - ca California
 - wusa Western USA (generally, West of the Mississippi River)
 - usa United States of America
 - noam North America (Canada, USA, Mexico, ...)
 - ww worldwide

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69

General Bulletin Addresses (continued)

Bulletins

- Address format: **category@distribution**
- **Category:**
 - A six-character or shorter description of the main topic of the bulletin.
 - Sender picks the category based on the contents of the bulletin
 - Example categories:
 - amber – Amber alerts
 - equake – Earthquake reports
 - flood – Flood reports
 - tech – technical topics, schematics, discussion
 - mtv, cup, sjc, etc. – City bulletins
 - humor or humour – jokes, stories, etc.
 - Any category works on our SCCo BBSs because we sort bulletins by distribution, not category
 - Uncommon/unusual categories may be held on other BBSs until the sysop decides where it should go

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70

General Bulletin Addresses (continued)

Bulletins

- Example bulletin addresses:
 - mtv@xsc
 - City of Mountain View information for distribution to all BBSs in Santa Clara County
 - flood@bay
 - Information about flooding for distribution to all BBSs in the San Francisco and Monterey Bay areas
 - equake@nca
 - Information about an earthquake for distribution to all BBSs in Northern California
 - swpc@ww
 - Space Weather Prediction Center reports for distribution to all BBSs worldwide
 - humour@ww
 - Variety of jokes and funny stories

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71

Reading General Bulletins

Bulletins

- Use a terminal program like PuTTY
 - Read only the bulletins of interest
 - Be selective when listing and reading
- Read bulletins just like mail
 - Find out what areas are available
 - AREA
 - Select a bulletin area
 - AREA <area_name>
 - List bulletins
 - LA (list all)
 - L> <category_name> (where category_name matches the messages' To: field, ex: **equake@ww**)
 - Read a bulletin
 - R #

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72

General Bulletin Example

Bulletins

1. Use "A" to change area to "allww"
 2. Wow, that's a lot!
 3. Set page length
XM 24
 4. List All
 5. JNOS pauses
 - <Enter> to continue
 - <N> to stop
- Note, there are multiple categories in the list
 - wp
 - tech
 - swpc
 - equake
 - ...

```

cmdic w5xsc-1
cmdic>** CONNECTED to W5XSC-1
[JNOS-2.0j,7r.XSC32.1-1RMF]
You have 4 messages - 3 new.
(#1) >
a allww
180 messages - 180 new
(#1) >
xm 24
la
Mail area: allww
180 messages - 180 new
St. # TO FROM DATE SIZE SUBJECT
> N 1 wp@vw g0tez Jan 1 5679 Balloons ?
N 2 cz@vw g0tez Jan 2 10405 RE:Time Zones, etc.
N 3 wp@vw va3hra Mar 14 1434 WP Update
N 4 today@vw n0kfq Mar 14 3027 Today in History - Mar 14
N 5 swpc@vw ck2aa Mar 14 4745 Geophysical Alert Message (WPU)
N 6 swpc@vw ck2aa Mar 14 2944 Report of Solar-Geophysical Activit
N 7 equake@vw ck2aa Mar 14 1967 SOUTHWEST OF AFRICA
N 8 swpc@vw ck2aa Mar 14 3811 Daily Space Weather Indices
N 9 pic@vw ja8am Mar 15 1939 7+ FARS07 OPS info
N 10 wp@vw w5mcc Mar 15 1237 WP Update
N 11 wp@vw kb0ak Mar 15 1328 WP Update
N 12 wp@vw n3icf Mar 15 2259 WP Update
N 13 wp@vw nidot Mar 15 1104 WP Update
N 14 swpc@vw ck2aa Mar 15 1723 Solar Region Summary
N 15 EbbLog@vw gb7ow Mar 15 7408 FBSLOS 10/2016 * GB7OW BBS *
N 16 swpc@vw ck2aa Mar 15 2508 Solar and Geophysical Activity Summ
N 17 wp@vw w6kzf Mar 14 1159 WP Update
N 18 wp@vw act4r Mar 15 1429 WP Update
N 19 equake@vw ck2aa Mar 15 1938 STRAIT OF GIBRALTAR
N 20 wp@vw wa5eoc Mar 15 1440 WP Update
N 21 tech@vw g8my Mar 15 1946 Flashing LED lamp driver
N 22 humour@vw gm3yew Mar 15 4974 Jokes 15/3
N 23 tech@vw g8my Mar 15 4204 LED Bike Light
More (M#m)?
  
```

Filter the General Bulletins

Bulletins

- JNOS command L> will filter the list by To: address
 - Example: L> category
 - ... will list only bulletins where the To: address contains category
- Example: list all earthquake bulletins

```

(#1) >
l> equake
Mail area: allww
180 messages - 179 new
St. # TO FROM DATE SIZE SUBJECT
N 7 equake@vw ck2aa Mar 14 1967 SOUTHWEST OF AFRICA
N 19 equake@vw ck2aa Mar 15 1938 STRAIT OF GIBRALTAR
N 47 equake@vw ck2aa Mar 16 1967 PULAU-PULAU BANGIHE, INDONESIA
N 96 equake@vw ck2aa Mar 18 1942 SANTA CRUZ ISLANDS
N 109 equake@vw ck2aa Mar 19 1990 ANDREANOF ISLANDS, ALEUTIAN IS., AL
N 114 equake@vw ck2aa Mar 19 2015 ANTIGUA AND BARBUDA REG, LEeward IS
N 148 equake@vw ck2aa Mar 20 2007 NEAR THE EAST COAST OF KAMCHATKA, R
(#1) >
  
```

Read General Bulletins Like Messages

Bulletins

- Read using the R # command

```

(#1) >
l> equake
Mail area: allww
180 messages - 179 new
St. # TO FROM DATE SIZE SUBJECT
N 7 equake@vw ck2aa Mar 14 1967 SOUTHWEST OF AFRICA
N 19 equake@vw ck2aa Mar 15 1938 STRAIT OF GIBRALTAR
N 47 equake@vw ck2aa Mar 16 1967 PULAU-PULAU BANGIHE, INDONESIA
N 96 equake@vw ck2aa Mar 18 1942 SANTA CRUZ ISLANDS
N 109 equake@vw ck2aa Mar 19 1990 ANDREANOF ISLANDS, ALEUTIAN IS., AL
N 114 equake@vw ck2aa Mar 19 2015 ANTIGUA AND BARBUDA REG, LEeward IS
N 148 equake@vw ck2aa Mar 20 2007 NEAR THE EAST COAST OF KAMCHATKA, R
(#1) >
r 96
Message #96
Date: 18 Mar 16 13:13:00 GMT
From: ck2aa@ck2aa.sal.ury.socm
To: equake@vw
Subject: SANTA CRUZ ISLANDS
Path: N6RME:CK2SA
From: CK2SA@CK2SA.SAL.URY.SOCM
To : EQUAKE@VW
-- PRELIMINARY EARTHQUAKE REPORT --
Region: SANTA CRUZ ISLANDS
Geographic coordinates: 12.4875, 166.531E
Magnitude: 5.5
Depth: 42 km
Universal Time (UTC): 18 Mar 2016 12:49:15
Time near the Epicenter: 18 Mar 2016 17:49:15
Location with respect to nearby cities:
159 km (117 mi) NW of Sola, Vanuatu
343 km (212 mi) NNW of Luganville, Vanuatu
611 km (378 mi) NNW of Port-Vila, Vanuatu
794 km (492 mi) ESE of Honiara, Solomon Islands
More (M#m)?
  
```

But, what about PackItForms?



Submitted for your approval...

THE
PACKET
ZONE

- You just arrived at **XND Fire Station 14** to take over as Packet Operator. This is great... Your first MAC assignment!
- As you enter, the last shift Packet Op rushes past you saying...
"there's a couple of ICS 213's on the desk to be sent!"
- At least you won't be bored.
- Over your shoulder, you hear him yell back...
"Oh yeah, I could never get Outpost to work after IT updated Windows... and they just left."
- The PC is running; you click the Outpost icon... Error; and you have never seen this error before ☹️
- OK, deep breaths. You know what to do, right?

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79

Manual PackItForms

Fortunately, PackItForms is a message creation system designed to work with both Outpost or as a **standalone** solution for forms-based messages.

- **Enhanced standalone message management, including:**
 - Manages setting up and using user and tactical IDs
 - Takes care of message numbering
 - Includes a Plain Text message form
 - Creates a standalone ICS-309 log
 - Creates copy-ready text (all BBS commands) to paste into PuTTY
 - Easy message saving
- **What's the same**
 - Tight integration with Outpost
 - Supports all PackItForms
 - Formats a standard packet form for sending
 - Processes a received packet form

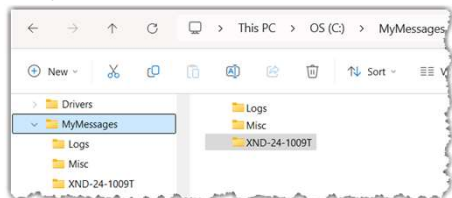
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80

Get ready for Manual PackItForms

Things to do before you get started:

1. Create a directory where you will save your messages.
 - Consider a naming convention that is relevant for your assignment, examples:
 - C:\MyMessages\XND-24-1009T (by activation number)
 - C:\PacketMessages\2024-10-09 (by date)
 - C:\Xanadu_Station_14 (by assignment)
2. Identify a starting message number
 - Assigned to you or your choice; PackItForm will append an **M** for **Manual** to make it unique.



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81

Manual PackItForm messages

Manually create and send a PackItForm message

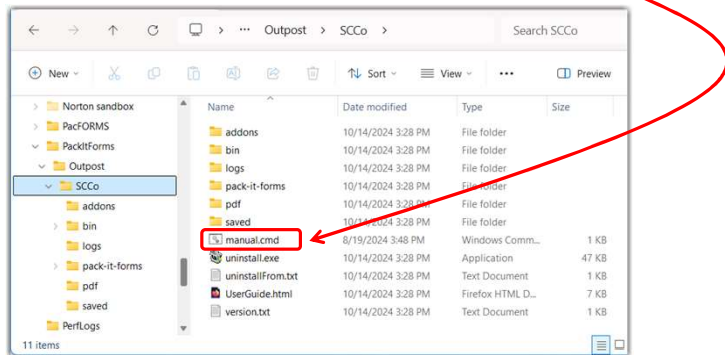
1. Run PackItForms with the *manual.cmd*
2. Set up your user ID, tactical ID, and other fields
3. Pick and fill in a PackItForm
4. Create the packet message
5. Send the message with PuTTY
6. Save a copy of the message

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82

1. Running manual PackItForms

1. Open your File Explorer and navigate to C:\PackItForms\Outpost\SCCo
2. Find the file **manual.cmd**, and double-click on it



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83

2. Set up manual PackItForm

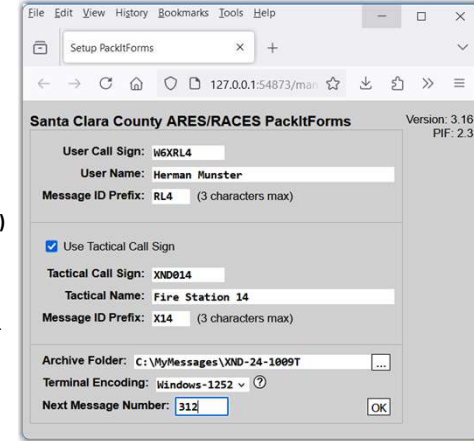
Setup Page

Setup loads whenever you start up manual PackItForms.

3. Fill in or update all fields:
 - Your user information
 - Tactical Call information
 - Select your Archive Folder (**messages are saved here**)
 - Select Terminal Encoding
 - Next Message Number

FYI... The Next Message Number will increment automatically.

4. Press **OK** when done

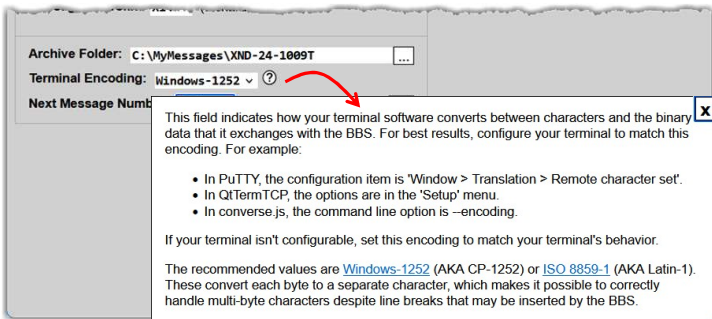


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84

2. Set up manual PackItForm Terminal encoding?

- Press the Terminal Encoding ? help icon for details...



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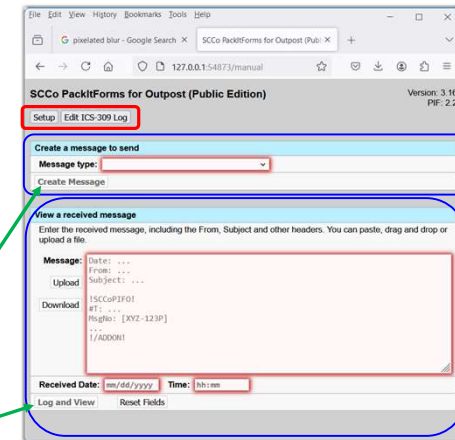
85

3. Pick and fill in a form

Home Page

Consists of 2 sections and a series of controls:

- **Setup button:** Opens the Setup page.
- **Edit ICS-309 Log:** lets you make updates to the manual ICS-309 Log.
- **Create a message to send.** Choose a PackItForm message, then press **Create Message**
- **View a received message.** Paste in a received message, then press **Log and View**



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86

3. Pick and fill in a form

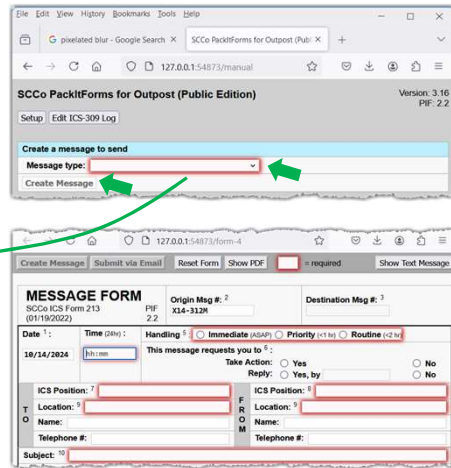
Home Page

5. From the dropdown menu, select a PackItForm,

- plain text
- XSC Check-In/Out Message
- XSC ICS-213 Message
- XSC EOC-213RR Resource Request
- XSC OA Jurisdiction Status
- XSC OA Shelter Status
- XSC Allied Health Facility Status
- XSC RACES Mutual Aid Request

then:

6. Press **Create Message**
The PackItForm opens with the usual fields filled in.



3. Pick and fill in a form

Creating a message

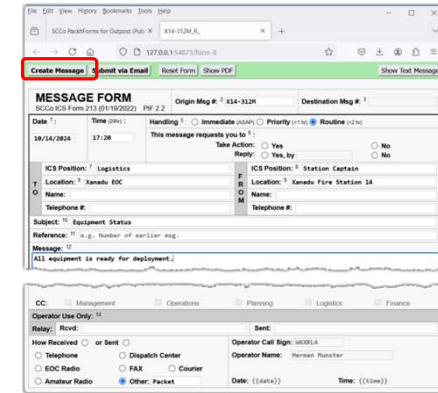
On the selected PackItForm,
7. Fill in the form as usual.

NOTE: The Message ID is set with the **M** suffix;

Origin Msg #: 2
X14-312M

PackItForms takes care of this for you.

8. When done, press **Create Message**



4. Create the packet message

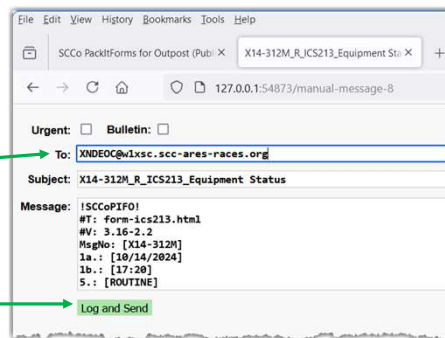
Message Page

On the Message Page,

9. If needed, check the box if this message is **Urgent** or a **Bulletin** .

10. In the **To:** field,
• enter the Destination address
• multiple addresses, separate with commas.

11. When done, press **Log and Send**



4. Create the packet message

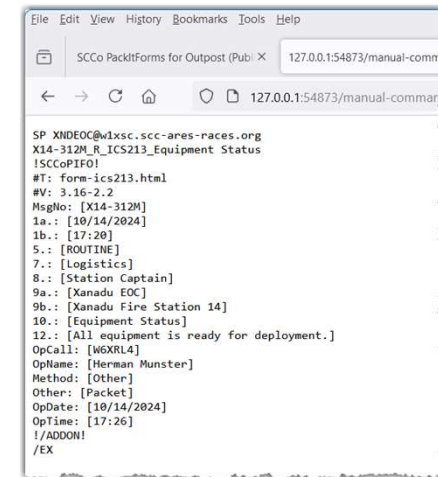
BBS Command Page

The complete packet-ready text is ready for sending.

12. Copy the text. Put your mouse cursor in the text area, and then either:

- From the browser menu, **Edit > Select All**
Edit > Copy
-- or enter --
- **<ctrl>A <ctrl>C**
(same as the menus)

Reminder: PackItForm creates a properly formatted Subject line... do not change this!



5. Send the message

What are the Steps?

13. Make sure you previously copied the packet message from the **BBS Command Page** (previous page)
14. Start PuTTY
15. Connect to the BBS
16. Once at the BBS prompt:
 - Put the cursor in the PuTTY text area after the BBS prompt, and then
 - Mouse **right-click** to paste in the message.

The complete packet-ready text is pasted into PuTTY and will start being transmitted to the BBS.

Reminder:

All SCCo BBSs have a 2-minute inactivity timer!

5. Send the message

BBS Command Page

```

SP XNDEOC@ixsc.scc-ares-races.org
X14-312M_R_IC5213_Equipment Status
!SCCOPIFO!
#T: form-ics213.html
#V: 3.16-2.2
MsgNo: [X14-312M]
1a.: [10/14/2024]
1b.: [17:20]
15.: [ROUTINE]
17.: [Logistics]
18.: [Station Captain]
19a.: [Xanadu EOC]
19b.: [Xanadu Fire Station 14]
10.: [Equipment Status]
12.: [All equipment is ready for deployment.]
OpCall: [W6XR4]
OpName: [Herman Munster]
Method: [Other]
Other: [Packet]
OpDate: [10/14/2024]
OpTime: [17:26]
!/ADDON!
!/EX
    
```

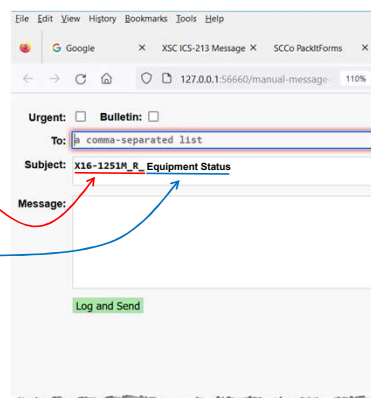
PuTTY Screen

```

(#1) >
SP XNDEOC@ixsc.scc-ares-races.org
X14-312M_R_IC5213_Equipment Status
!SCCOPIFO!
#T: form-ics213.html
#V: 3.16-2.2
MsgNo: [X14-312M]
1a.: [10/14/2024]
1b.: [17:20]
15.: [ROUTINE]
17.: [Logistics]
18.: [Station Captain]
19a.: [Xanadu EOC]
19b.: [Xanadu Fire Station 14]
10.: [Equipment Status]
12.: [All equipment is ready for deployment.]
OpCall: [W6XR4]
OpName: [Herman Munster]
Method: [Other]
Other: [Packet]
OpDate: [10/14/2024]
OpTime: [17:26]
!/ADDON!
!/EX
TO: XNDEOC@ixsc.scc-ares-races.org
Subject:
message. End with /EX or AZ in first column
(AA aborts)
Msg Queued
(#1) >
    
```

A note on manual plain text messages

- Yes, PackItForms does support manual Plain Text message sending and receiving.
- After picking plain text message from the **Home Page**, the **Message Page** opens up.
- Message ID and Handling order are filled in, **DO NOT REPLACE THIS!**
- Fill in...
 - To: destination packet address
 - the rest of the Subject text
 - Your plain text message
- Finally, press **Log and Send**
- The rest of the send process is the same.



Manual PackItForm messages

Receiving messages

1. Receive messages from the BBS using PuTTY
2. Save the message
3. Once you have the message saved, delete the message off of the BBS (use the **Kill #** command)

Note: All SCCo BBSs have a 2-minute inactivity timer!

Receive manual messages

PuTTY Screen

```

COM10 - PuTTY
(#1) >
r 1
Message #1
Date: Mon, 14 Oct 2024 19:30:51 PST
From: xndx14@wixsc.ampr.org
To: xndeoc@wixsc
Subject: X14-312M_R_ICS213_Equipment Status

!SCCoPIFO!
#T: form-ics213.html
#V: 3.11-2.2
MsgNo: [X14-312M]
1a.: [10/14/2024]
1b.: [17:20]
5.: [ROUTINE]
7.: [Logistics]
8.: [Station Captain]
9a.: [Xanadu EOC]
9b.: [Xanadu Fire Station 14]
10.: [Equipment Status]
12.: [All equipment is ready for deployment]
Rec-Sent: [sender]
OpCall: [W6XRL4]
OPName: [Herman Munster]
Method: [Other]
Other: [Packet]
OpDate: [10/14/2024]
OpTime: [17:26]
!/ADDON!
(#1) >

```

PackItForm Home Page

The screenshot shows the 'View a received message' section of the PackItForm Home Page. The message headers and body are visible, matching the text shown in the PuTTY screen. The 'Message' field contains the full text of the message, including the headers and the body text.

1. Receive a packet message

Suppose at XNDEOC... Outpost is not used.

1. Connect to the BBS with PuTTY and retrieve a message
2. List the message headers with LM
3. Read the message with R # (message number)

You recognize Message #1 is a PackItForm message

4. Highlight all text from Date: to !/ADDON! (inclusive)
 - In PuTTY, selecting text copies it to the clipboard

NOTE: This manual process handles both *PackItForms* and *plain text* messages. Both can be processed by pasting them into the Home Page.

COM10 - PuTTY

```

COM10 - PuTTY
(#1) >
r 1
Message #1
Date: Mon, 14 Oct 2024 19:30:51 PST
From: xndx14@wixsc.ampr.org
To: xndeoc@wixsc
Subject: X14-312M_R_ICS213_Equipment Status

!SCCoPIFO!
#T: form-ics213.html
#V: 3.11-2.2
MsgNo: [X14-312M]
1a.: [10/14/2024]
1b.: [17:20]
5.: [ROUTINE]
7.: [Logistics]
8.: [Station Captain]
9a.: [Xanadu EOC]
9b.: [Xanadu Fire Station 14]
10.: [Equipment Status]
12.: [All equipment is ready for deployment]
Rec-Sent: [sender]
OpCall: [W6XRL4]
OPName: [Herman Munster]
Method: [Other]
Other: [Packet]
OpDate: [10/14/2024]
OpTime: [17:26]
!/ADDON!
(#1) >

```

The screenshot shows the 'View a received message' section of the PackItForm Home Page. The message headers and body are visible, matching the text shown in the PuTTY screen. The 'Message' field contains the full text of the message, including the headers and the body text.

2. Recover the PackItForm message

Home Page

Back at the Browser, get back to the **SCCo PackItForms** tab

5. Put your cursor in the "View a received message" section and enter **<ctrl>V** or **Edit > Paste** to paste in the received message.
6. Press **Log and View**.
 - This entry is logged to the ICS 309
 - The received PackItForm is opened in its PackItForm.
 - A copy of the message is saved
7. Once the PackItForm is opened, print and hand it off for delivery.

Home Page

Back at the Browser, get back to the **SCCo PackItForms** tab

5. Put your cursor in the "View a received message" section and enter **<ctrl>V** or **Edit > Paste** to paste in the received message.
6. Press **Log and View**.
 - This entry is logged to the ICS 309
 - The received PackItForm is opened in its PackItForm.
 - A copy of the message is saved
7. Once the PackItForm is opened, print and hand it off for delivery.

The screenshot shows the 'View a received message' section of the PackItForm Home Page. The message headers and body are visible, matching the text shown in the PuTTY screen. The 'Message' field contains the full text of the message, including the headers and the body text.

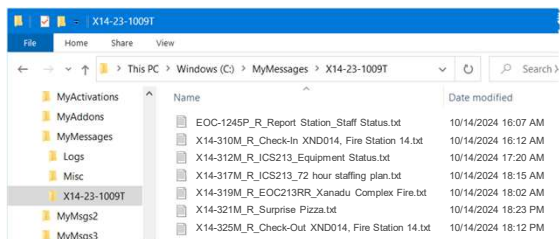
Sidebar: A Note on Outpost tags

- Messages sent from Outpost occasionally have "tags" inserted in messages that you might see.
- Some of the more common tags are:
 - IRRR! Request Read Receipt
 - IRDR! Request Delivery Receipt
 - ISCCoPIFO! This is a PackItForm message
 - !/ADDON! The end of a PackItForm or other Addon message
 - !UG! Mark message as urgent (lists as RED in the Outpost listing)
- PackItForms will ignore many Outpost tags that it sees and they will not show up in the message.

What about the saved messages?

- Take a look at your C:\MyMessage\X14-24-1009T\ manual message directory (or whatever you named it).
- The message’s Subject field is used for the file name.
- Clicking on the “Name” column header sorts messages by file name.
- Clicking on the “Date Modified” column header sorts by file timestamp.
- These views can help with managing your messages.

Submit a copy of this directory with your paperwork when done.



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99

What about the ICS 309?

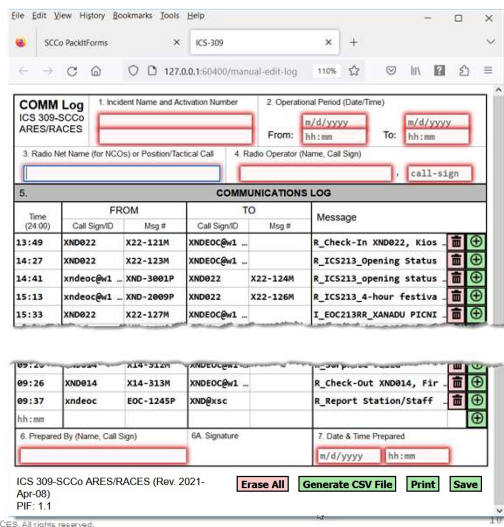
- Manual PackItForms comes with its own ICS 309 Log, similar to what Outpost does.
- From the PackItForm **Home Page**, when you click on **Log and View**, you write a new ICS 309 Log entry for this message.
- From the PackItForm **Home Page**, when you click on **Edit ICS-309 Log**, you open the ICS 309 form for editing and printing.

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100

What about the ICS 309?

- All fields are editable.
- Required fields are highlighted in RED.
- Deletes this line from the Comm Log
- Adds another line as a manual entry.
- **Erase All** – clears the form. Also, **Undo Erase All** – restores the form.
- **Generate CSV File** – creates a .csv file of the Comm Log.
- **Print** – prints the Comm Log to the selected printer.
- **Save** – Saves any changes you made.



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Manual packet operations; not many changes

This is a *tool change*, not a *process change*

- 1. First Shift...**
 - a. Show up, request a safety and assignment briefing
 - b. Find a workspace for your packet operations
- 2. Initial station setup...**
 - a. Find, assess, and set up the packet station
 - b. equipment check-out
- 3. Packet Operations...**
 - a. Download notices, send yourself a test message
 - b. Send the formatted check-in message with your Tac Call
 - c. Manage the message flow
- 4. Incoming Shift Change...**
 - a. Request a safety and assignment briefing
- 5. Outgoing Shift Change...**
 - a. Archive the event documentation
- 6. Securing Operations...**
 - a. Send the formatted check-out message with your Tac Call
 - b. Archive the event documentation
 - c. Shutdown

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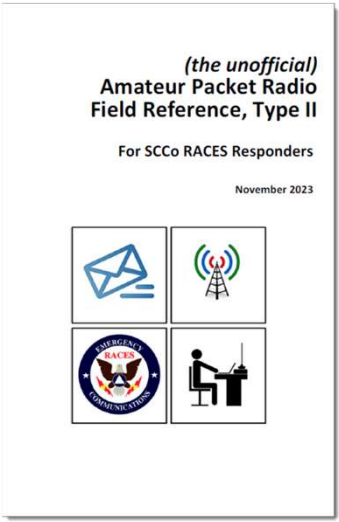
102

Amateur Packet Radio Field Reference, Type II

- Taking a quick look inside

Table of Contents

- 1 QUICK REFERENCE
- 2 INTRODUCTION
- 2.1 PURPOSE
- 2.2 HOW TO USE THIS HANDBOOK
- 2.3 OTHER REFERENCES
- 3 MANUAL PACKET OPERATIONS
- 3.1 TNC COMMANDS
- 3.2 BBS COMMANDS
- 3.3 CONNECTING TO THE TNC WITH PUTTY
- 3.4 START OF SHIFT: CONFIGURE TNC SETTINGS
- 3.5 END OF SHIFT: RESTORE TNC SETTINGS
- 3.6 GETTING READY FOR MANUAL MESSAGING
- 3.7 MANUAL MESSAGE BASICS
- 3.8 SENDING A PACKETFORM MESSAGE MANUALLY
- 3.9 RECEIVING A PACKETFORM MESSAGE MANUALLY
- 3.10 VIEWING SAVED MESSAGES
- 3.11 NOTES ON MANUAL ICS 309 COMM LOG



Could manual packet ops really happen to me?

- Better to be safe than sorry... Build your USB packet thumb-drive now!
- Directories (suggested)
 - x:\Programs
 - Putty installer (<https://www.putty.org/>)
 - Putty standalone executables (<https://www.putty.org/> > Alternative binary files)
 - SCCo PacketForm Directory (C:\PacketForms\Outpost\SCCo)
 - SCCo Packet Installer - <https://www.scc-ares-races.org/data/packet/client-software.html>
 - SCCo PIFO-only Installer (<download_dir>\sccsetup163Cpub_includes\ScCoPIFOsetup3.16pub.exe)
 - Office Libre Portable version (<https://www.libreoffice.org/download/portable-versions/>)
 - x:\SCC Notices
 - downloaded text version
 - Archive of the Outpost SCC Notices directory to reload if necessary
 - x:\TNC Init files
 - text version, seven total
 - x:\Miscellaneous
 - Pre-defined messages to be edited prior to sending
 - x:\MyMessages\<event>
 - Or whatever directory name you choose.
- x:\Docs
 - KPC3 TNC Manuals
 - County References... (<https://www.scc-ares-races.org/data/packet/index.html>)
 - JNOS References
 - Unofficial Packet Radio Field Ref, Type III
 - Unofficial Packet Radio Field Ref, Type II



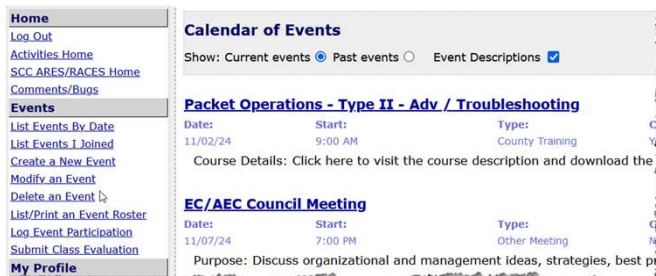
Questions?



WRAP UP

First things first

- Online Class Evaluation
 - Log into <https://www.scc-ares-races.org/activities/events.php>
 - Click “Submit Class Evaluation” in Events



- Submit your evaluation as soon as possible... after 1 week, the form will no longer be available for this class!

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107

Exercise Scenario

- You’ve been dispatched by the *Xanadu EOC* to provide communications for a field location.
 - Your tactical Number: ## (Assigned by your instructor)
 - Your tactical call: XND0## (Assigned by your instructor)
 - Your Message Prefix: X## Where “##” are the last two digits of your tactical call
 - Your assignment Name: Xanadu Post ##
 - Operate using your home city’s primary or secondary BBS.
 - The EOC’s tactical call is XNDEOC on W1XSC
- You arrive at your assignment and set up the station but discover that Outpost on the packet PC does not work! Looks like you need to do all packet operations manually.
- Your assignment was mailed to you ahead of time.

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108

Thank You!

Please complete the Course Evaluation **on or before** next Saturday 9-November!

Please complete the Assignment **on or before** next Saturday 9-November!

Office Hours:

Sunday, 3-November, 3:00p to 4:30p (zoom)
 Wednesday, 6-November, 7:30p to 9:00p (zoom)

If you have questions or feedback about this or other training activities, you can join our packet discussion group.
<https://scc-ares-races.groups.io/g/packet>

Questions, comments, suggestions?
 kn6pe@arrl.net

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109