

Santa Clara County ARES/RACES Standard Outpost Configuration

Updated for SCCo Packet Installer v163D (Outpost 3.8.0.7)

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Overview

This document covers the standard configuration for Outpost used by Santa Clara County ARES/RACES. It is recommended that a copy of this document be kept with the packet station to aid in quickly setting/verifying the standard configuration.

The “Preparation” section covers the information you’ll need before you start.

The “Station Set Up/Verification” section covers the basic steps to configure your station to use your call sign, TNC and preferred BBS. The process involves five steps:

1. Set/Verify the station ID
2. Set/Verify your TNC settings
3. Set/Verify the BBS
4. Set/Verify the global message number
5. Verify your configuration choices

The “Connection Check” section covers the process for performing an initial connection check on the air. You should perform this check to verify that the above setup is working properly.

The “Creating and Using Outpost Profiles” section provides helpful hints for successful use of profiles for managing multiple sets of configuration choices.

“Appendix A” covers all standard Outpost settings for the Santa Clara County network. Installation or reinstallation of Outpost will set these values in the default “Outpost” profile. Use it to verify that all Outpost configuration options are properly set. Be sure to verify any user-created Outpost profiles because new features are added and some defaults change over time.

Technical Support: If you have any difficulty with the procedure in this document, you can get technical support from our user group. Visit:

<https://www.scc-ares-races.org/data/packet/packet-technical-support.html>

Preparation

In preparation for configuring Outpost, you need three pieces of information:

1. Your station ID
2. The type of TNC you will be using
3. The call sign of the BBS to which you will connect

To determine your station ID:

- You need your FCC call sign
- If (and only if) you are configuring the Outpost station for your agency's EOC or other agency location, you also need a tactical call sign, description, and message number prefix. These will be assigned by your agency. If you do not know the correct tactical call sign information to use, consult your EC.

To determine the call sign of the BBS to which you will connect:

- View the "SCCo Packet Tactical Calls" packet bulletin or view the "BBS Assignments" section of the <http://www.scc-ares-races.org/freqs/packet-freqs.html> web page
- Look for your agency or city name and find the call sign of the primary BBS assigned to you. This is the BBS you should use. Note the call sign of the Secondary BBS. This BBS is used if the primary BBS is not available.

Station Set Up/Verification

Start Outpost. Use the information in the sections that follow to navigate the Outpost menus and set or verify configuration options.

Step 1: Set/Verify Your Station ID

- Go to: Setup > Station ID > Identification
- Legal:
 - User Call Sign:
 - Select the appropriate existing FCC call sign from the pull-down list or press “New” to create a new entry
 - For a new entry, enter the FCC call sign of the station
 - User Name: Verify or enter your full name
 - Message ID Prefix: Verify or enter a three-character ID, such as your initials, call sign suffix, or something similar. Note: This is a REQUIRED field.
- Tactical: If (and only if) you are configuring Outpost for your agency's EOC or other location which has been assigned a tactical call, then:
 - Check the box next to "Use Tactical Call for all BBS interaction"
 - Tactical Call Sign:
 - Select an existing tactical call sign from the pull-down list or press “New” to create a new entry.
 - For a new entry, enter the six-character tactical call sign you were assigned
 - Additional ID Text: Verify or enter a description associated with the tactical call sign
 - Message ID Prefix:
 - For agency EOCs: Verify or enter the three-character tactical ID assigned to your agency
 - For other tactical call signs: Verify or enter the three-character value assigned by your agency (usually, the last three characters of the tactical call sign)
 - Note: This is a REQUIRED field.
- Make sure "Show this form on startup" is checked
 - This will remind you of the ID you are using when Outpost starts up and helps to avoid mistakes
- Press OK when done

Examples:

1) Individual

Station ID is N6MEF

Identification | BBS Logins | Signatures

Current Profile: Outpost

Legal

User Call Sign: N6MEF

User Name: Michael Fox

Message ID Prefix: MEF (3 Characters max)

Transmit PST: ☐

Tactical

☐ Use Tactical Call for all BBS interaction

Tactical Call Sign: <Choose/Create(New) Tac Call>

Tactical Name:

Message ID Prefix: (3 Characters max)

☐ Show this form on startup

2) Tactical Call Sign for Agency EOC

Station ID is N6MEF as XNDEOC

Identification | BBS Logins | Signatures

Current Profile: Outpost

Legal

User Call Sign: N6MEF

User Name: Michael Fox

Message ID Prefix: MEF (3 Characters max)

Transmit PST: ☐

Tactical

☒ Use Tactical Call for all BBS interaction

Tactical Call Sign: XNDEOC

Tactical Name: Xanadu Emergency Operations Center

Message ID Prefix: XND (3 Characters max)

☐ Show this form on startup

3) Tactical Call Sign at Field Location

Station ID is N6MEF as XNDFS1

Identification | BBS Logins | Signatures |

Current Profile: Outpost

Legal

User Call Sign: N6MEF New

User Name: Michael Fox Delete

Message ID Prefix: MEF (3 Characters max)

Transmit PST: ☐

Tactical

☒ Use Tactical Call for all BBS interaction

Tactical Call Sign: XNDFS1 New

Tactical Name: Xanadu Fire Station 1 Delete

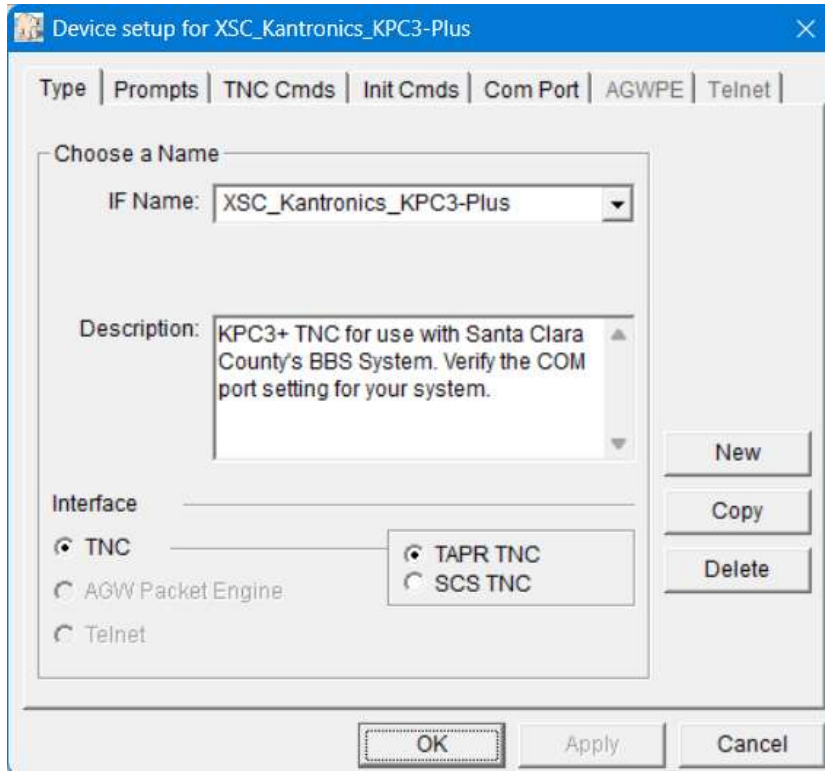
Message ID Prefix: FS1 (3 Characters max)

☐ Show this form on startup OK Apply Cancel

Step 2: Set/Verify Your TNC Settings

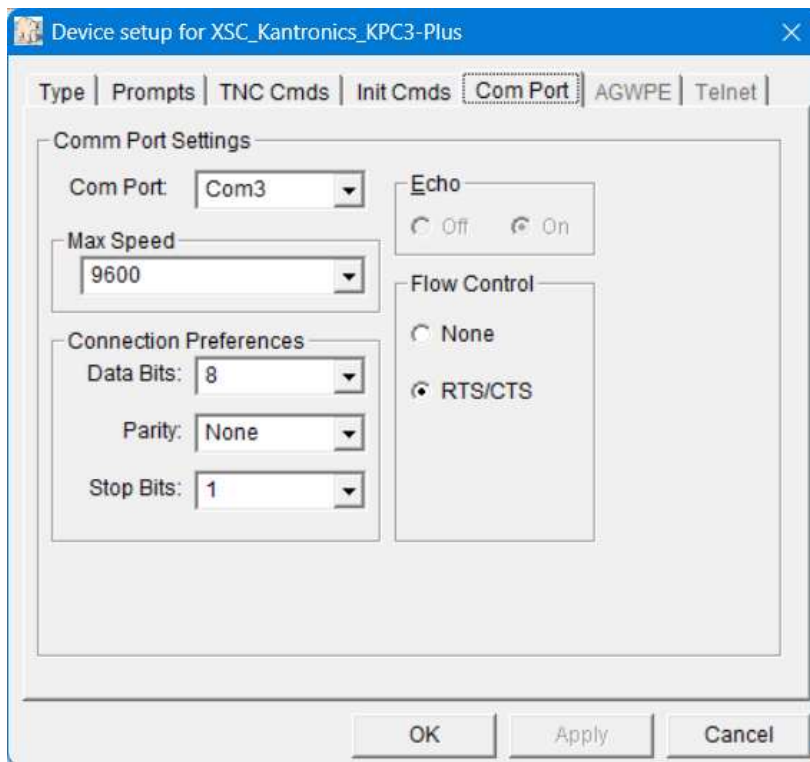
- Go to: Setup > Interface
- On the Type tab:
 - Interface Name: Select one of the pre-configured SCCo “XSC” TNC types. The SCCo setups include preconfigured TNC command lists which optimize throughput on the radio channel.

Example:

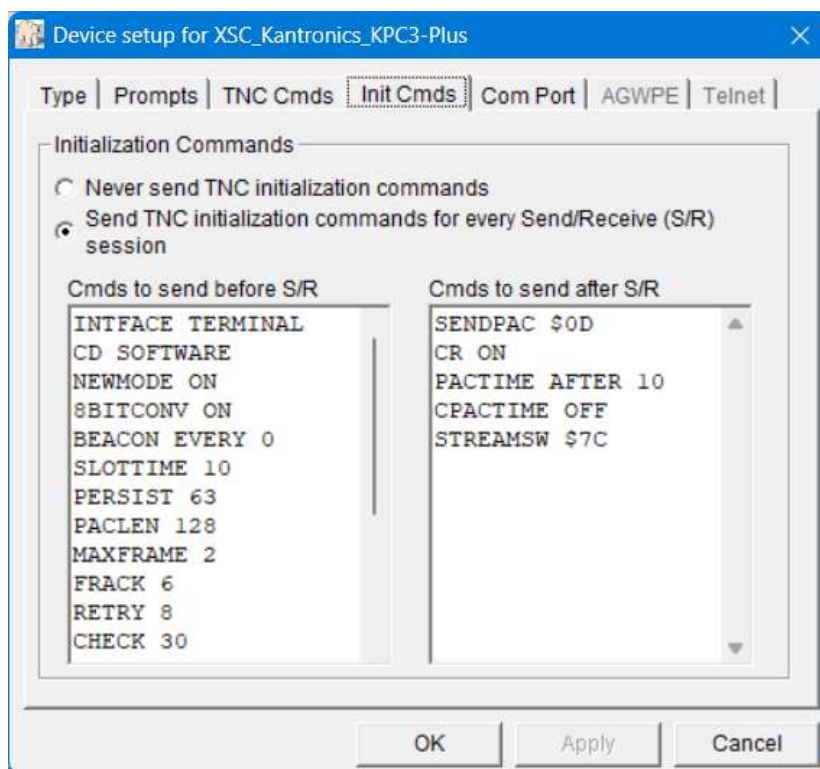


For serial port TNCs:

- On the "Comm Port" tab, verify:
 - Comm Port: Select the port to which the TNC is connected.
NOTE: Outpost will list valid Comm Ports that it finds on your PC.
 - Max Speed: Select the speed used by your TNC (usually "9600")
 - Data Bits: Always leave data bits set to "8" and make sure your TNC is set to 8 bits
 - Parity: Set to the value used by your TNC (usually "None")
 - Stop Bits: Set to the value used by your TNC (usually "1")
 - Flow Control: Always leave flow control set to "RTS/CTS"

Example:

- On the "Init Cmds" tab, verify:
 - "Send TNC initialization commands for every Send/Receive session" is selected
 - A list of commands is present under "Cmds to send before Send/Receive" and under "Cmds to send after Send/Receive"
 - Note: These commands have been preconfigured to match your TNC to the ideal parameters for the Santa Clara County network. These settings can improve your throughput by a factor of 5 times or more. For more information about what each of these commands does, see the "Standard TNC Parameter Settings" document on the packet page of the Santa Clara County website:
 - <http://www.scc-ares-races.org/data/packet>

Example:**For software TNCs (AGWPE):**

- Follow the software developer's instructions.

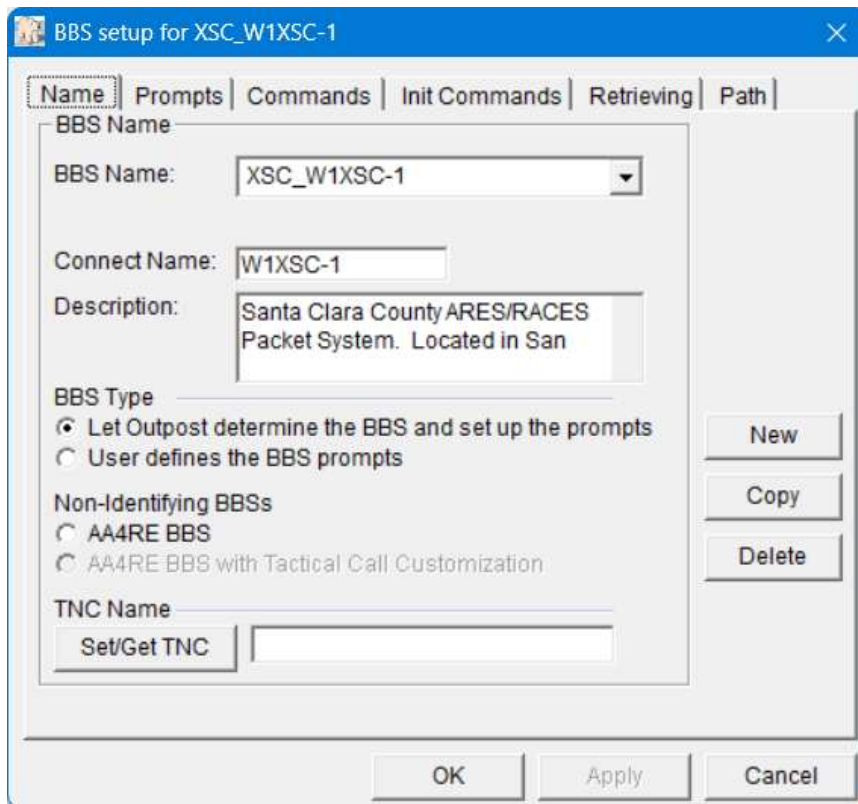
For Telnet:

- Instructions will be provided separately to sites with a high-speed connection capable of supporting telnet.

Step 3: Set/Verify the BBS

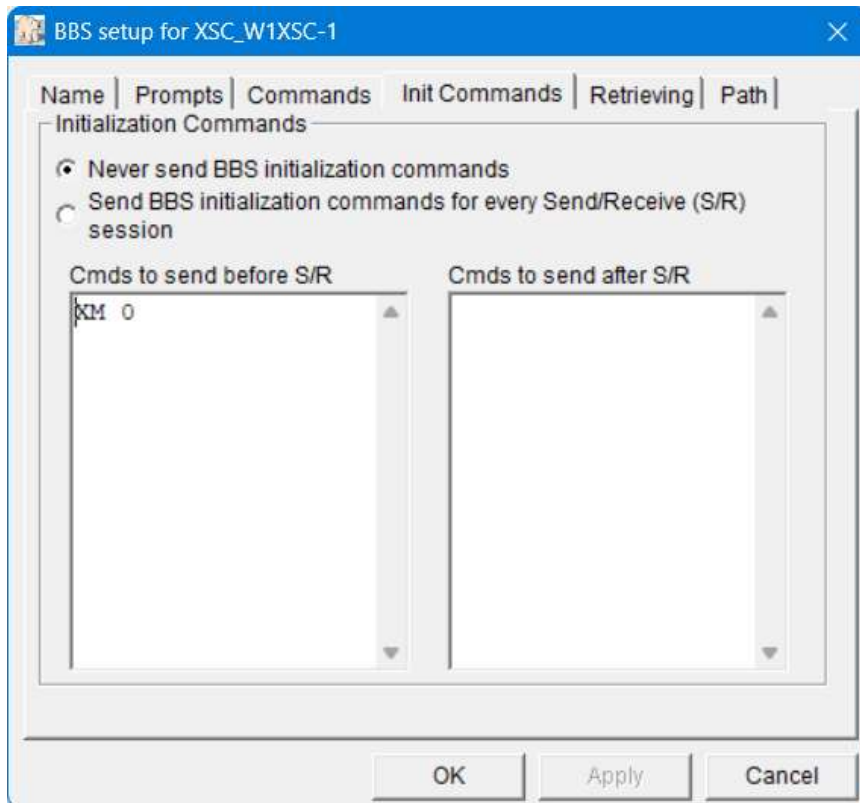
- Go to: Setup > BBS
- On the Name tab:
 - Select the preconfigured SCCo BBS assigned to your city or agency. For information on which BBS to use, visit the Packet Frequencies and BBS Listing page of the Santa Clara County web site: <http://www.scc-ares-races.org/freqs/packet-freqs.html>. The "BBS Assignments" section identifies the primary and secondary BBS assignments for each city/agency.

Example:

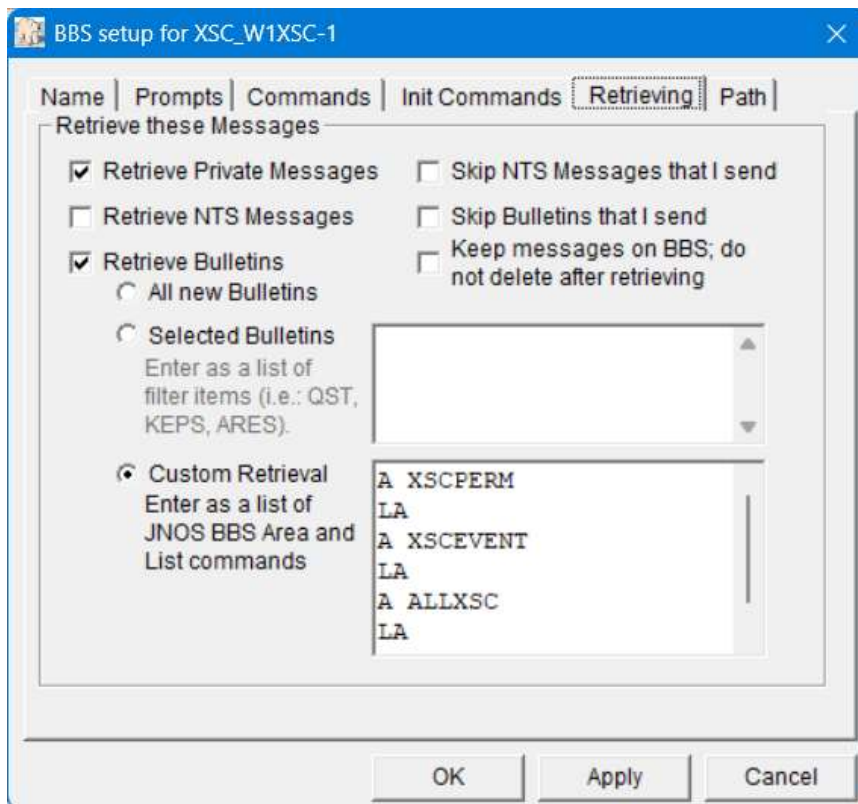


If you always will use the same TNC to connect to this BBS, then you can use the Set/Get TNC button to associate that TNC with this BBS. Doing so will automatically select the TNC when the BBS is selected.

- On the “Init Commands” tab, verify:
 - “Send BBS initialization commands for every Send/Receive session” is selected
 - “Cmds to send before Send/Receive” contains “XM 0” (zero)

Example:

- On the “Retrieving” tab, verify:
 - “Retrieve Private Messages” is selected
 - “Retrieve Bulletins” is selected
 - “Custom Retrieval” is selected, and the following commands are listed:
 - A XSCPERM
 - LA
 - A XSCEVENT
 - LA
 - A ALLXSC
 - LA

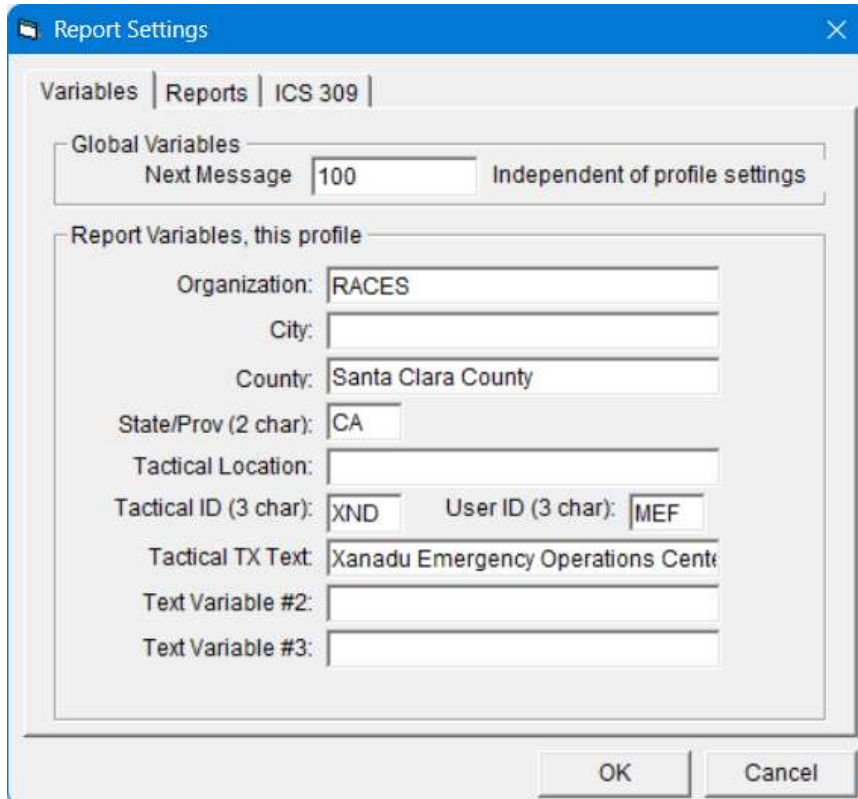
Example:

This will list and download any unread notices from the XSCPERM and XSCEVENT mailboxes.

Step 4: Set/Verify the Global Message Number

- Go to: Tools > Report Settings
- Under the Variables tab:
 - Enter the “Next Message Number” you wish to use for the next message

Example:



The screenshot shows the 'Report Settings' dialog box with the 'Variables' tab selected. The 'Global Variables' section has 'Next Message' set to '100' and 'Independent of profile settings' checked. The 'Report Variables, this profile' section contains the following fields:

Field	Value
Organization	RACES
City	
County	Santa Clara County
State/Prov (2 char)	CA
Tactical Location	
Tactical ID (3 char)	XND
User ID (3 char)	MEF
Tactical TX Text	Xanadu Emergency Operations Center
Text Variable #2	
Text Variable #3	

At the bottom of the dialog are 'OK' and 'Cancel' buttons.

Step 5: Verify Your Configuration Choices

- Look at the status line at the bottom of the Outpost main window and confirm that your Station ID, Tactical Call Sign (if any), BBS, and TNC are listed as you have just selected.

Example:

This example shows:

- Legal call sign = N6MEF
- Tactical call sign = XNDEOC
- BBS = XSC_W1XSC-1
- TNC = XSC_Kantronics_KPC3-Plus



Connection Check

It is strongly advised that you confirm operation of the system before you need to use it for a drill, event or real incident.

Check two-way communication with the BBS:

1. Connect your radio, TNC and PC.
2. Turn on PC, TNC and radio, in that order, to reduce the chance of spurious transmissions.
3. Tune the radio to the correct frequency for the BBS you have selected.
4. Compose a New message to yourself and press Send. The message should now be in your Out Tray.
5. Press Send/Receive to initiate a BBS session and cause the message to be sent to the BBS.
6. Press Send/Receive again to initiate a second BBS session to receive the message from the BBS.
7. View the message in the In Tray.

If you have difficulty communicating with the TNC, you can check connectivity manually, as follows:

1. From Outpost, select **Tools > Interactive Packet > Serial / Comm Port**.
2. Verify the Ipserial.exe program starts.
3. If you have already configured the Comm port in Outpost, you can transfer the settings to Ipserial. Select **Tools > Get Comm Port Settings from Outpost**. Otherwise, select **File > Comm Port Settings** and configure the Comm port as described above.
4. In the Ipserial main window, press **Connect** to connect to the TNC.
5. Verify the TNC prompt is displayed (**cmd:**).
6. Type "help" or other TNC commands to verify two-way communication with the TNC.
7. You can also try to manual connect to your BBS with the TNC "connect" command
8. Exit Ipserial when you are finished.

If you are using the AGW Packet Engine (software TNC), you can check connectivity manually, as follows:

1. From outpost, select **Tools > Interactive Packet > AGW Packet Engine**
2. Verify the lpagwpe.exe program starts.
3. Select **File > AGWPE Settings** and enter the appropriate values.
4. In the ipagwpe main window, press **Connect** to connect to the software TNC.
5. Try to manually connect to your BBS.
6. Exit lpagwpe when you are finished.

That's it. Thanks for helping to keep the network operating smoothly!

Creating and Using Outpost Profiles

Outpost profiles are a powerful way to manage multiple set of Outpost settings. Each profile contains all the settings in the Tools menu. They also contain the selection of User ID, BBS, and Interface (TNC), but not the configuration details of the User ID, BBS or Interface. Users can create multiple profiles, each containing multiple differences in settings. By switching profiles, multiple settings are changed with one click.

But with great power comes great responsibility! The SCCo Packet Installer always resets the default “Outpost” profile with the current county standard settings (defined in Appendix A). But the installer does NOT update user-defined profiles. This means that newly added configuration options or changes to the configuration standard will NOT appear in user-defined profiles. Users need to manually update each of their user-defined profiles to be consistent with the county standard settings. Therefore, if used improperly, profiles can create more work than they save.

Here are a few general recommendations for successful use of profiles:

- If you want to switch between your call sign and a tactical call sign, don’t use a profile to do that. Instead, check the “Use Tactical Call ...” box on the Setup > Identification dialog box.
- If you want to switch BBSs or TNCs, don’t use a profile to do that. Instead, select the BBS or TNC on the pull-down menu in the Setup > BBS or Setup > Interface dialog boxes, respectively (Hint: Once you use a BBS+TNC configuration, it is listed in the Most Recently Used list at the bottom of the File Menu. This is a selectable list).
- If you need to apply settings which are different from the county standard, then create your own user-defined profile. This leaves the default “Outpost” profile with the default settings as a readily available reference and preserves your user-defined profile during software upgrades. (But it also means your user-defined profile needs to be checked manually after software upgrades!)
- Use profiles when you need to switch between multiple sets of settings in the Tools menu.
- If you create your own profiles, then ALWAYS review ALL settings in ALL profiles after Outpost software upgrades to make sure they are consistent with the county standard (or differ only where intended).

Appendix A: Standard Outpost Settings

All users of the Santa Clara County packet network are expected to install Outpost and PacFORMS with the integrated SCCo Packet Installer. The integrated installer sets all the defaults to optimize the usage of the shared radio channel for all users. You can use the information in this appendix to better understand these settings and to verify that all your Outpost settings are set per the county standard.

Tools > Send/Receive Settings

Automation	Automation ☐ Manual. Initiate each send/receive session manually. ☐ Send a message immediately when it is complete Send/Receive Button Setup ☐ Send/Receive
Receiving	When Receiving Messages ☐ Play this sound on arrival: []
Printing	Automatically print during the Send/Receive Session ☒ AutoPrint ☐ Print received messages ... ☐ Print sent messages ... ☐ Print DELIVERY and READ receipt messages ☒ Print message headers
Notifications	During the Send/Receive Session ☒ N0: Application errors ☒ N1: Problems that need immediate attention to proceed ☒ N2: Unexpected BBS disconnect problems ☒ N3: Other non-critical issues ☒ Play this sound on notification: [sound136.wav]
Other	During the Send/Receive Session ☒ Show the TNC session Window during Send/Receive ☒ Show the Connection Status during Send/Receive Session

Tools > Message Settings

New Msgs	Setting up a new message ☐ (*) Set default to PRIVATE ☐ Create and send NTS messages as Private messages ☐ Default Destination (Not recommended. This usually results in the user forgetting to check the To: field and sending messages to the wrong address.)
Msg Numbering	Outbound Message Identification: ☒ Add Message Number to Subject Line (*) with hyphenation ... ☒ Add message number suffix [P] ☐ Add message number separator Inbound Message Identification (Local ID) ☒ Assign a local message number to inbound messages ...
Replies/Fwds	Replies and Forwards ☐ (*) Set default to PRIVATE for replies or forwards ☒ Close original message on reply or forward
Receipts	Tracking Messages ☐ Always request a Delivery Receipt ☐ Always request a Read Receipt Auto-Receipts ☒ Auto-Delivery Receipt ☐ Auto-Read Receipt
Deleting	Deleting Messages ☒ Prompt before permanently deleting a message

Adv	External Message Service Settings [X] Automatically start the Opdirect External Message Service Open a locally created PacFORMS message in its native program, if the message is newly submitted (*) Never if the message was previously submitted (*) Prompt Open a received PacFORMS message in its native program (*) Always
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Tools > Report Settings

Variables	Global Variables Next Message Number: <pick an appropriate number> Report Variables, this profile <enter values as appropriate>
Reports	No recommendation
ICS 309	Automation (*) No Automation (initially) Note: We recommend that you experiment with the ICS 309 functionality before turning on automation. Once you're comfortable with configuring the ICS 309, automation can help ensure that you always have a recent printed copy of the log, even if your PC crashes. Other ICS 309 Fields Task ID: <incident activation number> Task Name: <incident name>

Tools > Log Settings

Log Settings	Options ☒ L1: Send/Receive Session window logging ☐ L2: Send/Receive Interface data trace ☐ L3: Send/Receive diagnostic trace ☐ L4: Main program diagnostics trace
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Tools > General Settings

Startup	Program Startup ☒ Show Station ID form on startup ☒ PC Time Check: At startup Custom Folder Labels Folder 1: SCC Notices Folder 2: <as needed> Folder 3: <as needed> Folder 4: <as needed> Folder 5: <as needed>
Addressing	Hierarchical Address Settings ☐ Use hierarchical address Continent parameter in validation
Profiles	Global Settings Save Profile Changes when switching profiles or exiting Outpost (*) Prompt Note: If you use “Never”, it must be set after all other changes have been made, or else the user will not be prompted to save the changes.
Printing	Forms Printing ☒ Use Copy Names for manual printing Copy Names (use a separate line for each Copy Name) <copy name 1> <copy name 2> ... ☐ Turn on PDF Spooler (should be on) NOTE: if grayed out, PdfToPrinter program is missing or not installed)

Miscellaneous	Miscellaneous Recently used configuration list: [8] entries [X] Auto-print with message headers [] Outpost prompts before exiting
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