Ventura County Area 2 ACS/ARES®
Outpost Configuration Instructions

Definitions

BBS - Bulletin Board System

EOC - Emergency Operation Center

Outpost - Outpost Packet Message Manager (OPMM) is a Windows-based packet message client that lets you send and receive packet messages with almost any Amateur Radio Bulletin Board System (BBS) or TNC Personal Mail Box.

Outpost was designed for the Amateur Radio ARES/RACES packet user community. The thinking behind it was to create an intuitive, easy-to-use program that lets ARES/RACES organizations focus on the "message," not the "medium," as they pass digital message traffic to and from an Operational Area BBS. Read more at: **www.outpostpm.org**

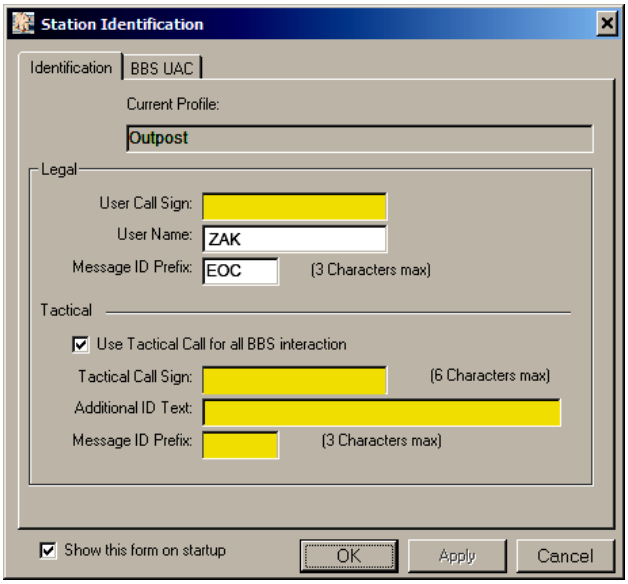
Packet - Packet radio is a particular digital mode of Amateur Radio ("Ham" Radio) communications which corresponds to computer telecommunications. The telephone modem is replaced by a "magic" box called a terminal node controller (TNC); the telephone is replaced by an amateur radio transceiver, and the phone system is replaced by the "free" amateur radio waves. Packet radio takes any data stream sent from a computer and sends that via radio to another amateur radio station similarly equipped. Packet radio is so named because it sends the data in small bursts, or packets. From the article by Jones, Greg, WD5IVD. "Introduction to Packet Radio" **https://www.tapr.org/pr_intro.html**

TNC - Terminal Node Controller

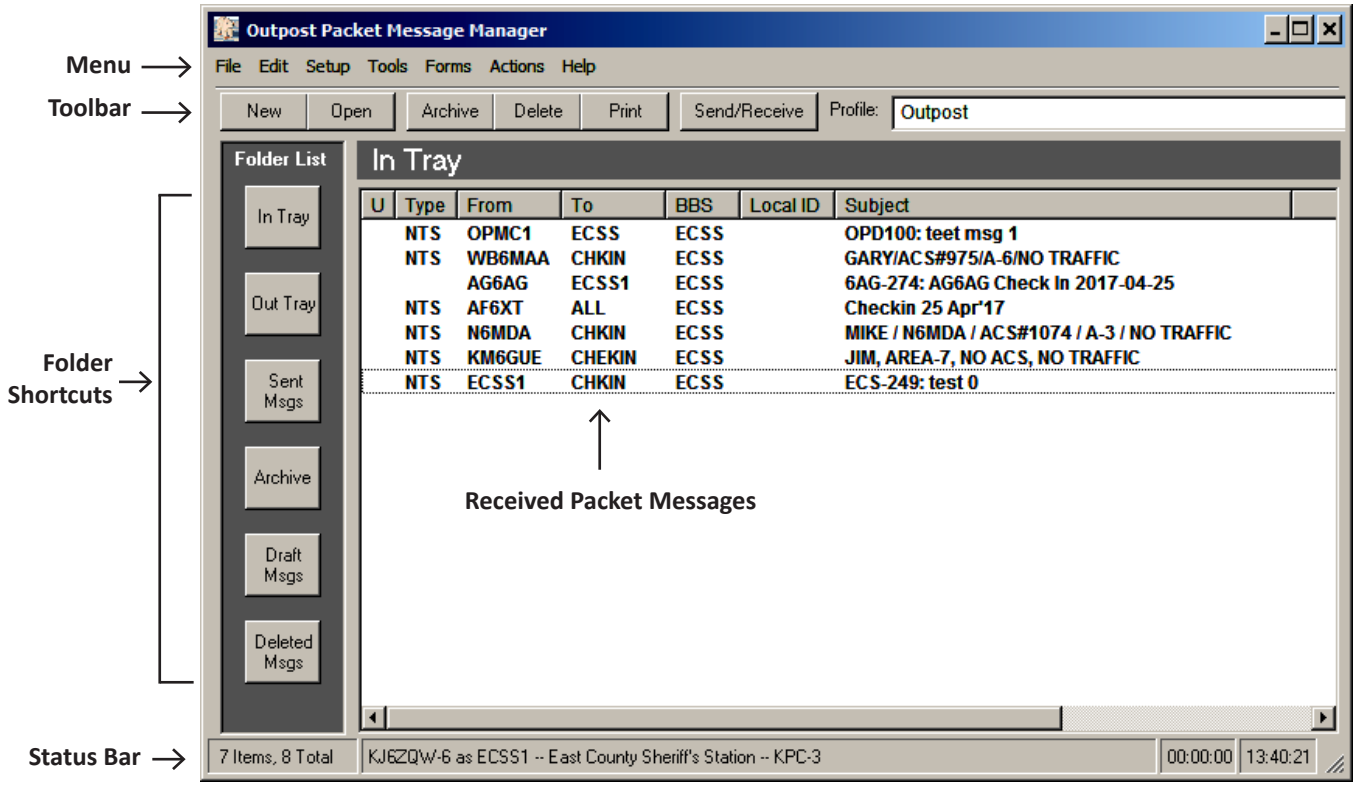
Note: *The intent of this document is to be a guide for configuring Outpost software for an ACS/ARES Area 2 Emergency Operation Center. For anyone interested in learning more about the packet radio digital mode, many resources are available on the internet by simply searching for "Outpost Packet Message Manager" and "packet messaging."*

Step One: Setup or Verify your Station ID

1. Find the Outpost Packet Message Manager icon on the desktop and double-click it. 
2. Outpost will start up and display the screen pictured on right.
3. Look at the Packet Chart in the back of this document to find the Call for your EOC. Enter it in the **"User Call Sign"** box.
4. **"User Name"** For Area 2 EOCs is "Zak."
5. **"Message ID Prefix"** is "EOC."
6. Check the box titled **"Use Tactical Call for all BBS interaction."**
7. Refer to Packet Chart for your EOC's 6 character Tactical Call. Enter it in the **"Tactical Call Sign"** box. Leave **"Additional ID Text"** blank.
8. Enter the first three letters of the EOC tactical call in the **"Message ID Prefix."**
9. Press apply, then OK when done.

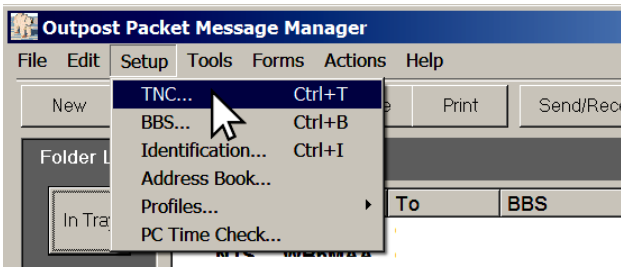


The main Outpost Message Manager window will open as displayed below.
This window is where you will manage messages and control Send/Receive sessions.



Step Two: Setup or Verify your Terminal Node Controller (TNC) Setup

1. From the menu bar, select “Setup, TNC.”

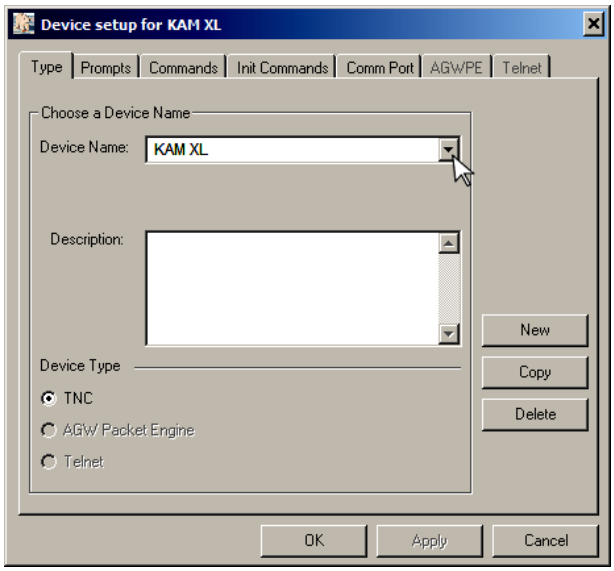


2. Look at the front panel of your Kantronics Terminal Node Controller to find the model name.

   Choose the model in the **“Device Name”** pull-down list that matches what you have.

   If your device name isn’t on the list, click “new” and enter your device name in the “Device Name” box. For instance, KPC-3, KPC-3+, KAM XL. etc.

   At the bottom of the window, Device Type is “TNC.”



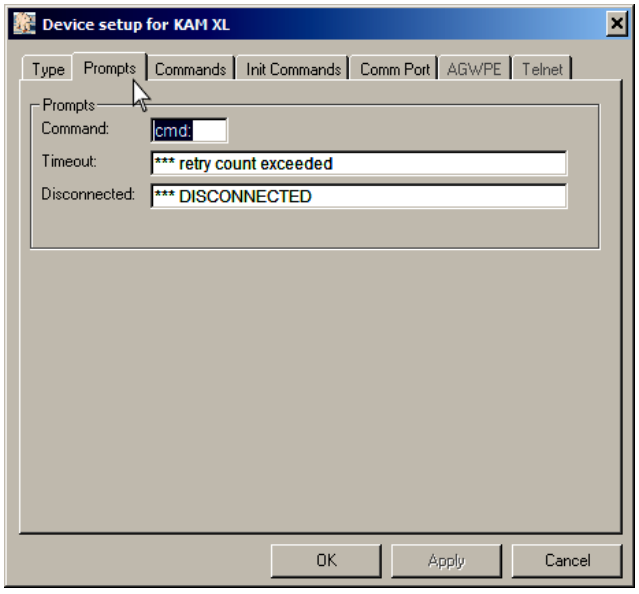
3. Click on the “Prompts” tab.

   Use the default settings:

   Command: **cmd**

   Timeout: *****Retry count exceeded**

   Disconnected: *****DISCONNECTED**



("Step Two: Setup or Verify your Terminal Node Controller (TNC) Setup" continued)

4. Click on the "Commands" tab.

   Use the default settings:

   Mycall: **my**

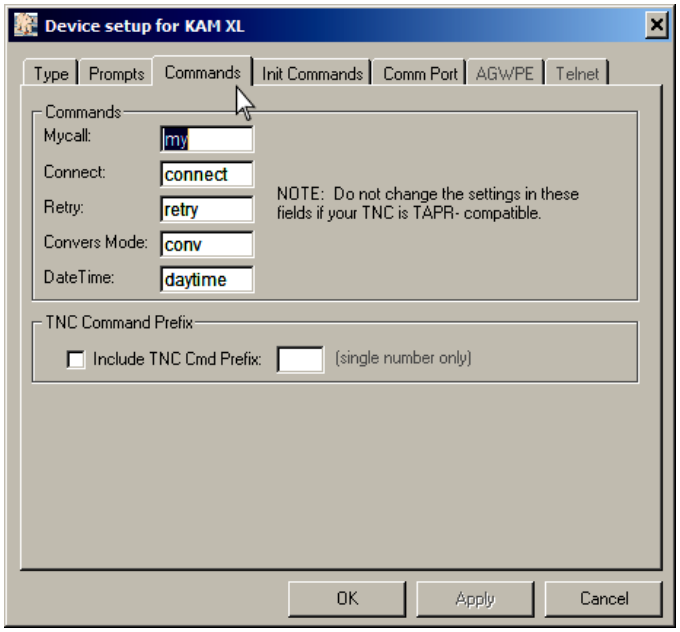
   Connect: **connect**

   Retry: **retry**

   Convers Mode: **conv**

   DateTime: **daytime**

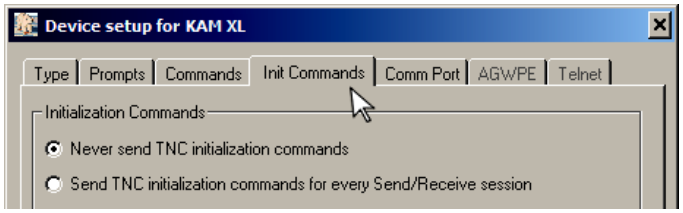
   TNC Command Prefix: leave this blank.



5. Click on the "Init Commands" tab.

   Use the default setting:

   "**Never send TNC initialization commands**"



6. Click on the "Comm Port" tab.

Comm Port Settings:

Comm Port: **Com1**

Max Speed: **9600**

Connection Preferences:

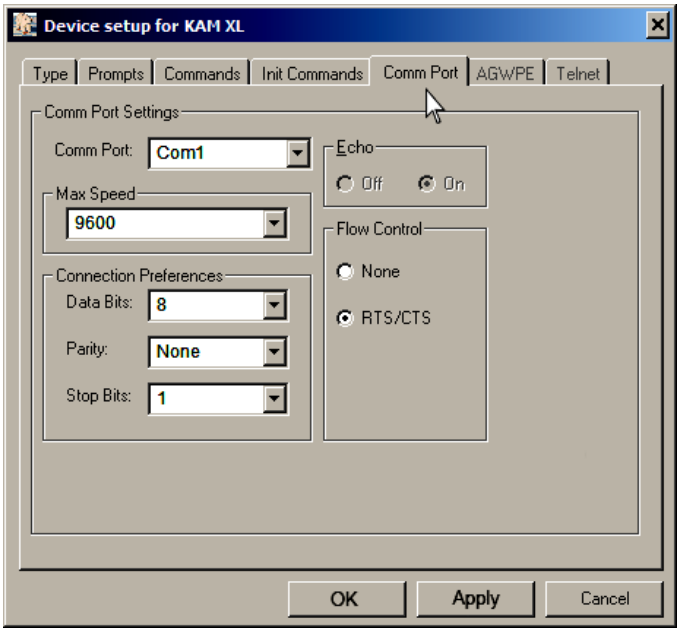
Data Bits: **8**

Parity: **None**

Stop Bits: **1**

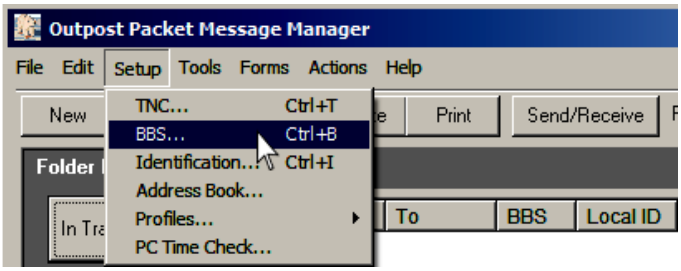
Flow Control: **RTS/CTS**

When finished setting up the device, click "Apply" at the bottom of the window, then click "OK."



Step Three: Setup or Verify your BBS (Bulletin Board System)

1. From the menu bar, select “Setup, BBS.”

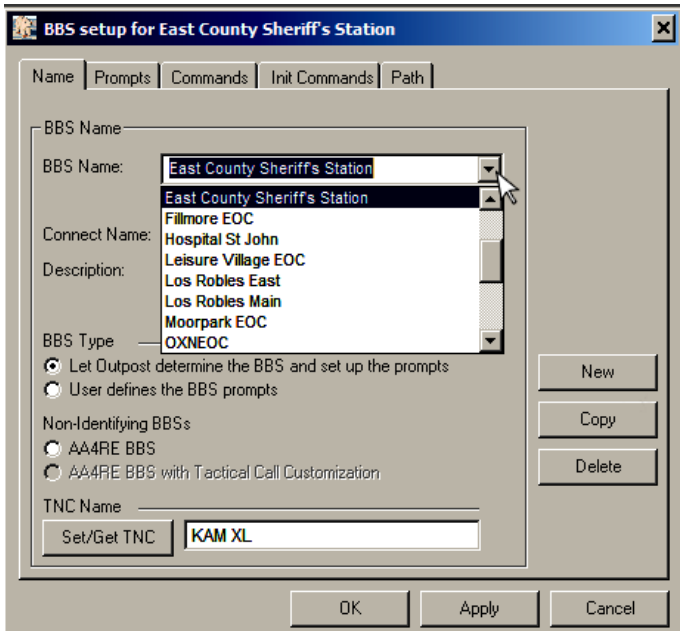


2. From the BBS Name pull-down menu, select the BBS assigned to your EOC (Emergency Operations Center.)

   When you select one of the pre-configured BBS’ from the list, all other choices in this window will be populated.

   Click “Apply” at the bottom of the window and go to step 3 on the next page.

   If your EOC BBS isn’t in the list, click the “New” button on the right side of the window and follow the instructions below.



Define a new BBS

(Refer to the Packet Chart in the back of this document for the following information.)

Friendly Name: Is the packet chart **LOCATION**

Connect Name: Is the packet chart **PBBS**

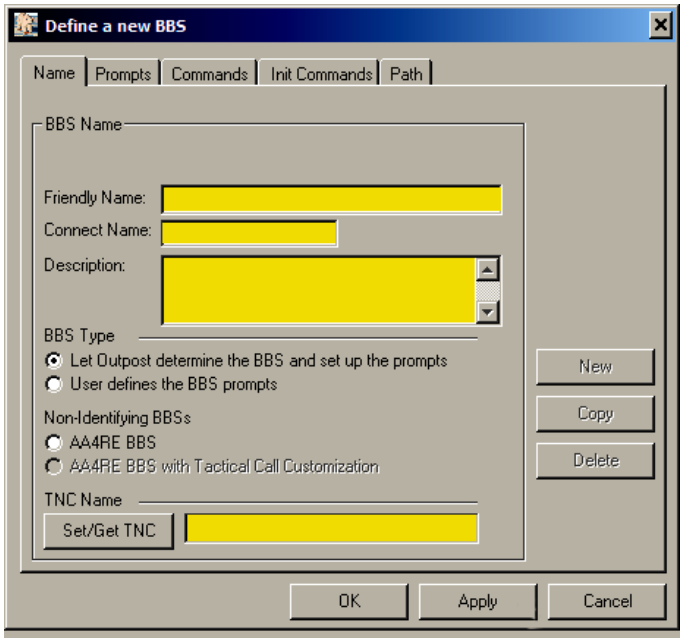
Description: Keep it simple and obvious.

BBS Type: **“Let Outpost determine the BBS and setup the prompts”**

Non-Identifying BBs: Leave blank

TNC Name: Click the “Set/Get TNC” button.

A new window, shown on the next page, will open.



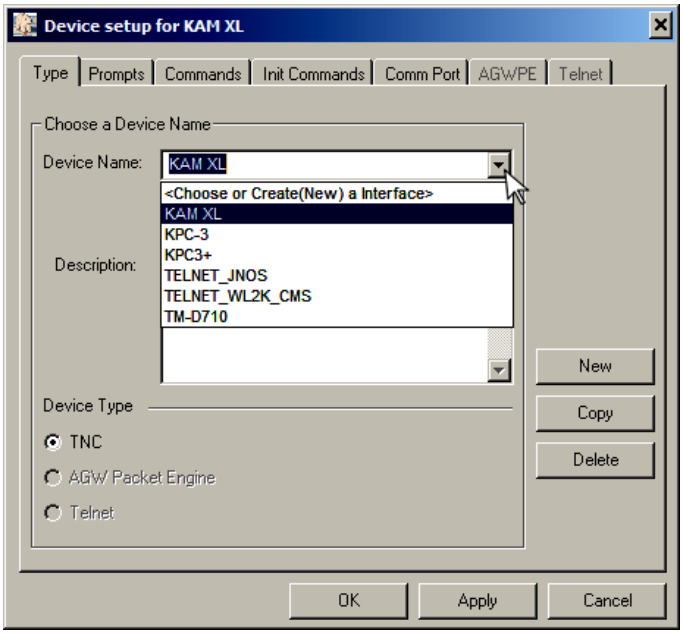
(Define a new BBS continued)

Under "Choose a Device Name," click the "Device Name" pull down menu arrow.

Choose your TNC's model name in the menu.

Make sure the "TNC" radio button under "Device Type" is selected, then click "Apply."

Go to number 3 at the bottom of this page.



If your TNC model name isn't in the list, click the "New" button on the right side of the window and follow the instructions below.

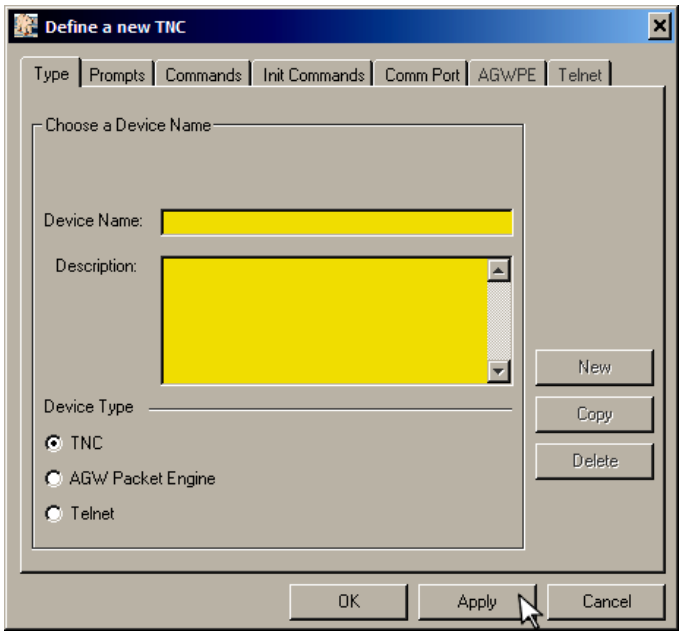
Defining a new TNC:

In the "Device Name" window, type the model of your TNC.

Type a brief description in the "Description" window. For example, "East County Sheriff's Station dual frequency TNC."

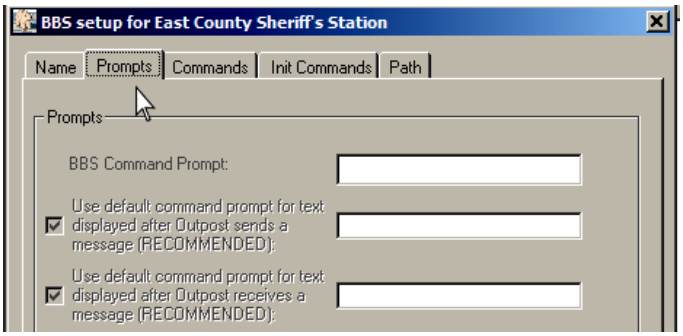
Make sure the "TNC" radio button under "Device Type" is selected, then click "Apply."

Go to number 3 below.



("Step Three: Setup or Verify your BBS" continued)

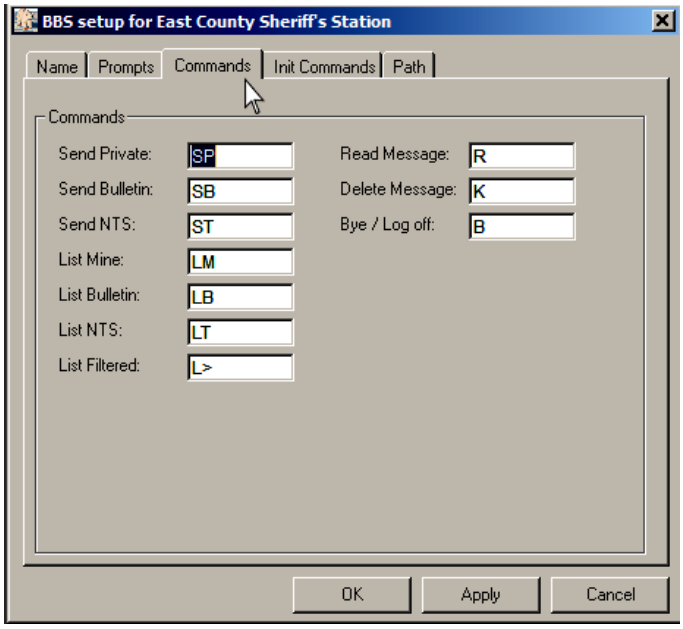
3. Click on the "Prompts" tab.
   Unless the BBS is operated manually, this tab should have no entries.



4. Click on the “Commands” tab.

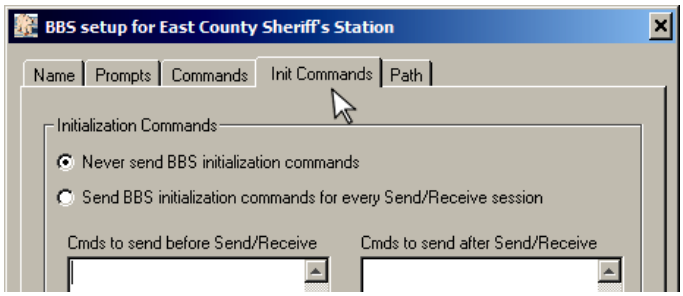
   Use the default settings:

Send Private:	**SP**	Read Message:	**R**
Send Bulletin:	**SB**	Delete Message:	**K**
Send NTS:	**ST**	Bye / Log off:	**B**
List Mine:	**LM**		
List Bulletin:	**LB**		
List NTS:	**LT**		
List Filtered:	**L>**		



5. Click on the “Init Commands” tab.

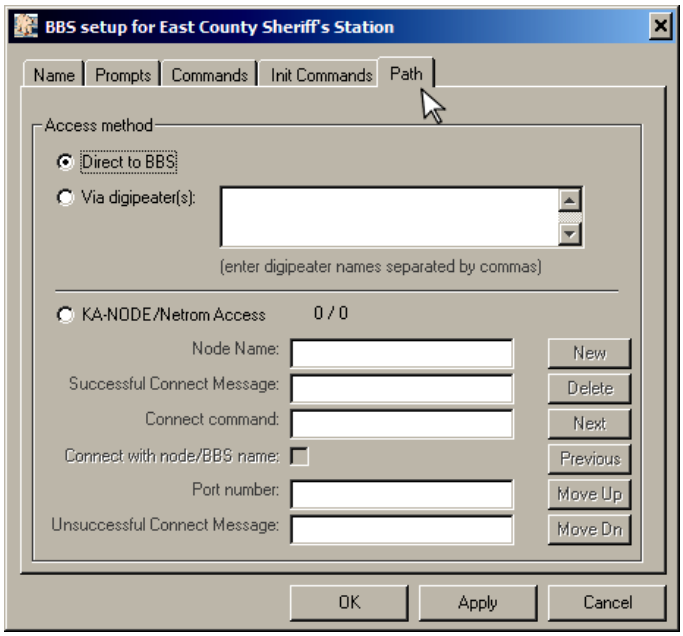
   Select **“Never send BBS initialization commands.”**



6. Click on the “Path” tab.

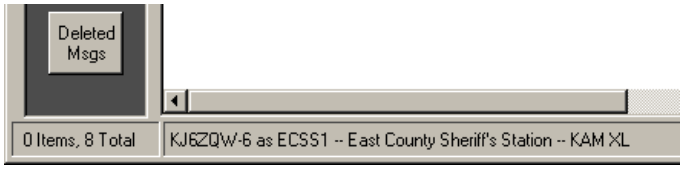
   Since we are configuring the BBS setup for ***YOUR EOC*** or home station terminal node controller (TNC), select “Direct to BBS.”

   At the bottom of the window, click **“Apply,”** then click **“OK.”**



Step Four: Verify your configuration

1. Look at the bottom of the main Outpost Message Manager window. (This screenshot shows the BBS setup for the East County Sheriff Station.)



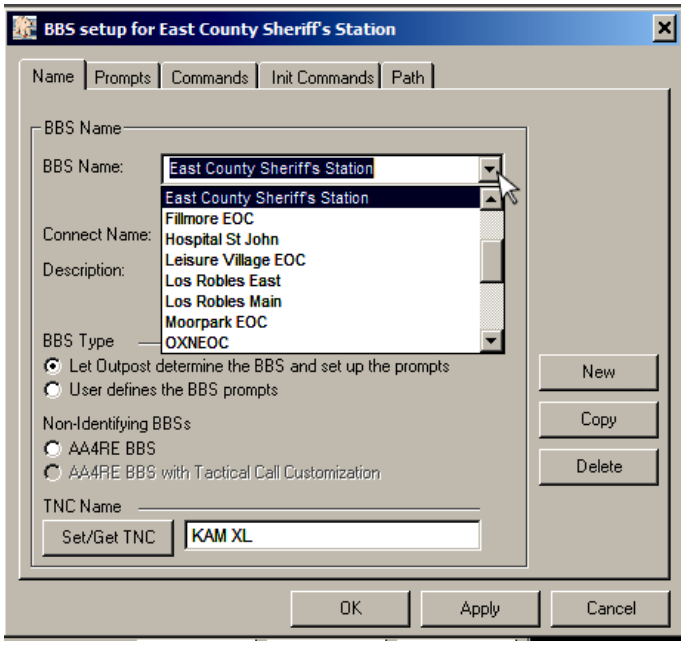
   In this particular screenshot,
   "KJ6ZQW-6" is the East County Sheriff Station call
   "ECSS" is the East County Sheriff Station PBBS
   "East County Sheriff Station" is the Location
   "KAM XL" is the East County Sheriff Station TNC model

Refer to the Packet Chart in the back of this document to verify the configuration is correct for your EOC.

Configure a path from your EOC BBS to another BBS

In order to send packet messages from your EOC to another EOC, your BBS needs a path to follow.

1. Look at the Outpost Message Manager main window. On the top menu, click "Setup," then "BBS." The BBS setup window opens. Click on the "BBS Name" drop down window and choose the name of the destination EOC.

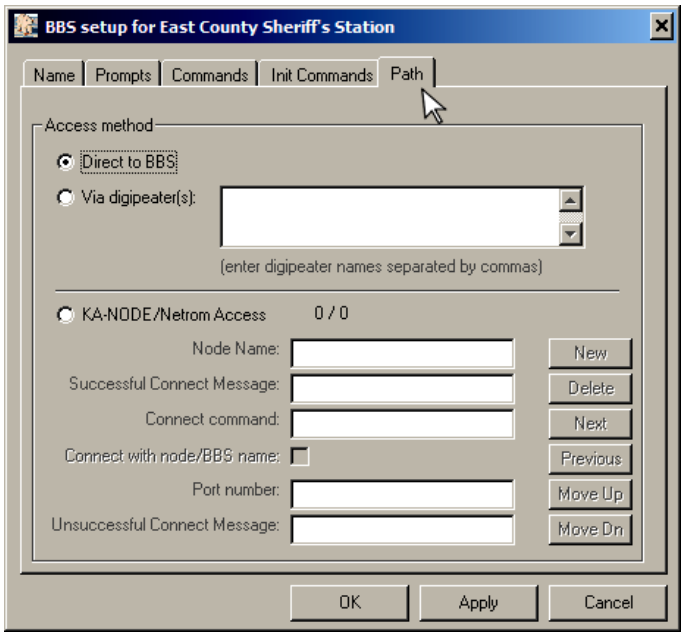


Use the default settings for the next three tabs: "Prompts," "Commands" and "Init Commands."

If the destination EOC BBS isn't in the list, click the "New" button on the right side of the window and follow the instructions starting on page 4.

2. Click on the "Path" tab.
   Since most of the Area 2 EOCs can connect direct to the other Area 2 EOCs, try that path first.
   Access method: **"Direct to BBS."**

   At the bottom of the window, click **"Apply,"** then click **"OK."**



   If you are unable to connect to the other EOC direct, look on the Packet Chart. Find the frequencies for your EOC and the other EOC. They will either be 145.050, 223.580, or both. That will determine which of the following methods will allow you to connect to the other EOC.

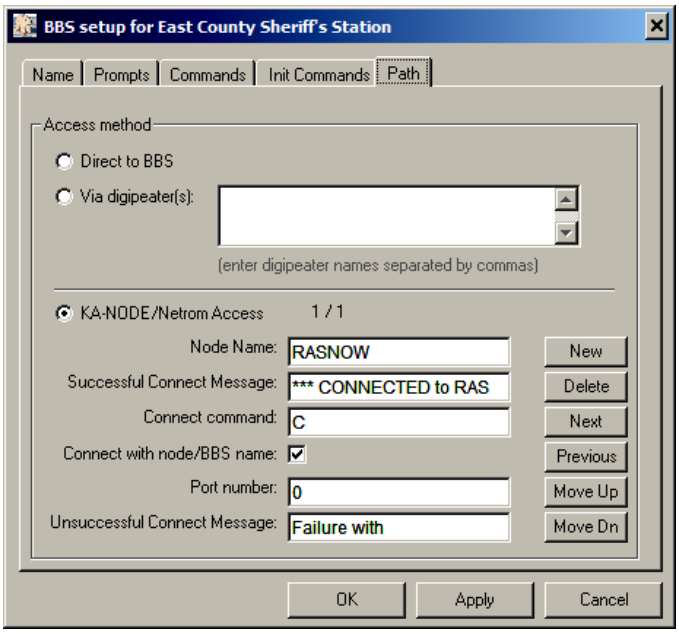
3. Configure a path to an EOC on the 145.050 frequency

Click **"KA-NODE/Netrom Access."** Then enter:

Node Name: **RASNOW**
Successful Connect Message: *****(space)CONNECTED to RAS**
Connect command: **C**
Connect with node/BBS name: **Checked**
Port number: **0**
Unsuccessful Connect Message: **Failure with**

At the bottom of the window, click **"Apply,"** then click **"OK."**

This is the path to the 2 meter 145.050 frequency packet repeater on Rasnow Peak.



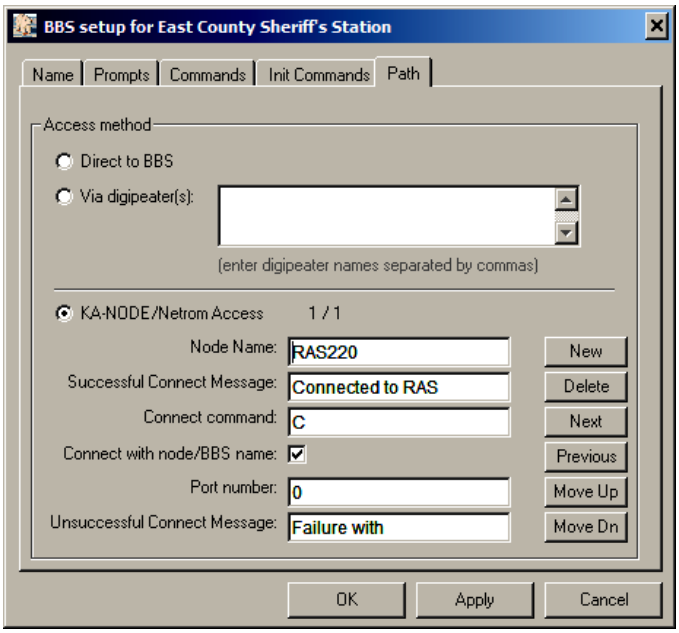
4. Configure a path to an EOC on the 223.580 frequency

Click **"KA-NODE/Netrom Access."** Then enter:

Node Name: **RAS220**
Successful Connect Message: **Connected to RAS**
Connect command: **C**
Connect with node/BBS name: **Checked**
Port number: **0**
Unsuccessful Connect Message: **Failure with**

At the bottom of the window, click **"Apply,"** then click **"OK."**

This is the path to the 1.25 meter 223.580 frequency packet repeater on Rasnow Peak.



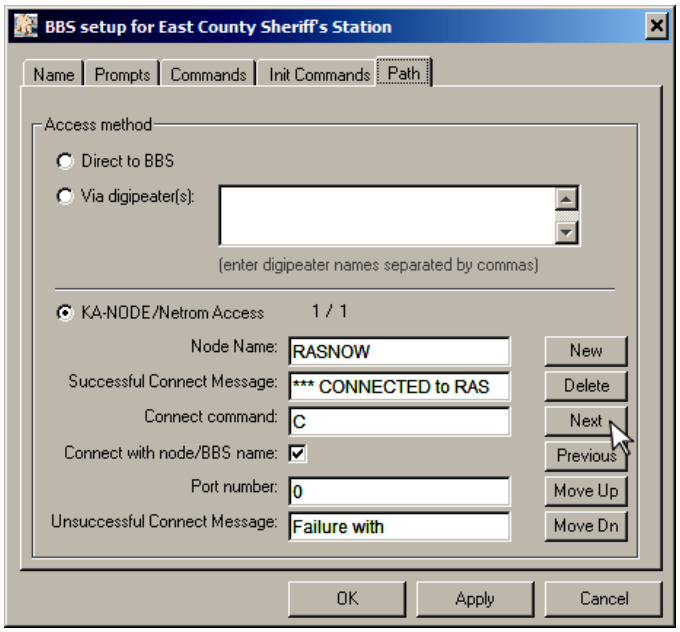
Some EOCs can only receive packet messages on one frequency: 145.050 or 223.580.
If your EOC only has a 2 meter packet radio, and you want to send a message to an EOC that only has a 1.25 meter packet radio (or the other way around,) you'll need to route your packet from one frequency to the other.
Follow the routing instructions on the next page.

Here's how to route from 145.050 to 223.580:

1. In the BBS Setup window, click "Path."
   Click **"KA-NODE/Netrom Access."** Then enter:

Node Name: **RASNOW**
Successful Connect Message: *****(space)CONNECTED to RAS**
Connect command: **C**
Connect with node/BBS name: **Checked**
Port number: **0**
Unsuccessful Connect Message: **Failure with**

In the column of buttons on the right, click "Next."



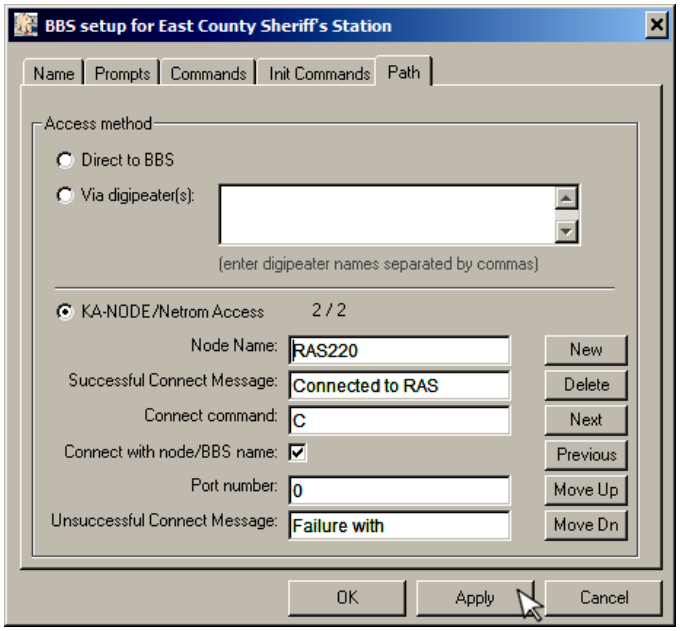
2. Then enter:

Node Name: **RAS220**
Successful Connect Message: **CONNECTED to RAS**
Connect command: **C**
Connect with node/BBS name: **Checked**
Port number: **0**
Unsuccessful Connect Message: **Failure with**

Click "Apply" then "OK."

Your packet message will now go to the Rasnow 2 meter packet repeater,which routes it to the Rasnow 1.25 meter packet repeater, which then routes it to the other EOC's 1.25 meter packet TNC.

Your message is now stored in that EOC's TNC until an operator boots up that EOC's computer, starts Outlook, and clicks "Send/Receive" in the main window toolbar.

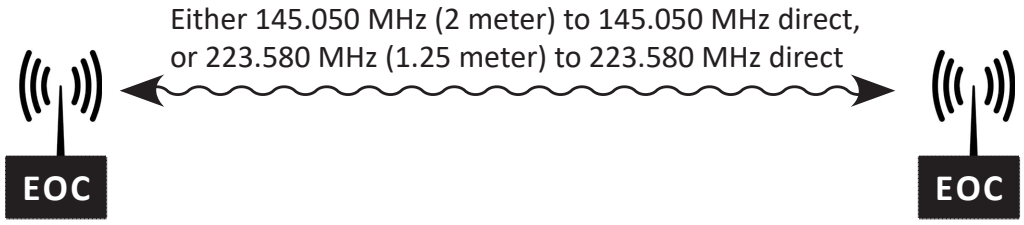


To route from 223.580 to 145.050, just reverse the entries.

Step one will be the "RAS220" entry, step two will be the "RASNOW" entry.

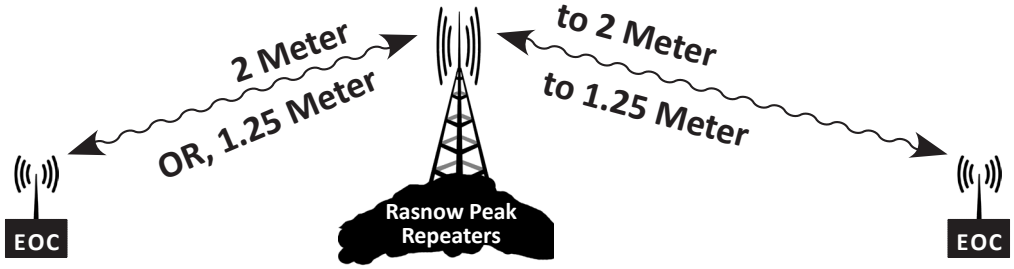
Possible Packet Routing Scenarios for ACS Area 2

1. Direct Route



2. Extending the Range - 2 Meter or 1.25 Meter (220 MHz)

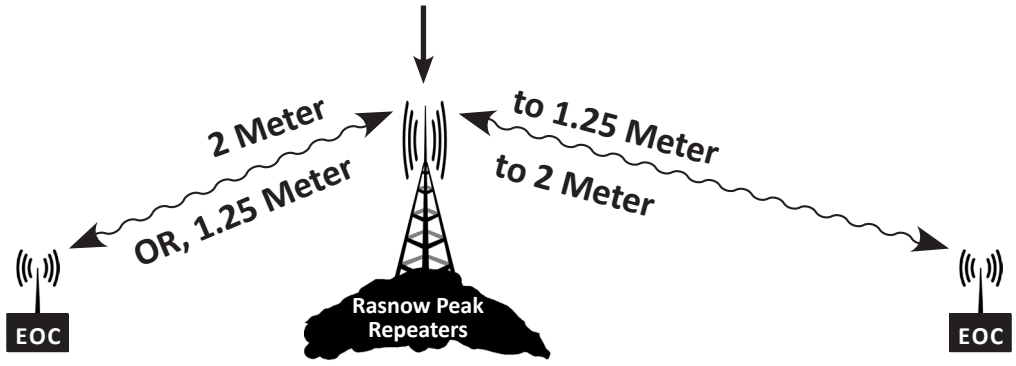
Rasnow Peak has two packet repeaters: one for 2 meter and one for 1.25 meter.
Use the Rasnow Peak Packet repeaters when you can't make a direct connection to another EOC.



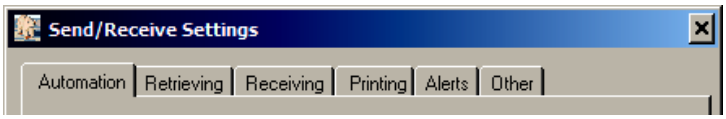
3. Frequency Shifting - 2 Meter or 1.25 Meter (220 MHz)

Rasnow Peak's two packet repeaters can "talk" to each other, so you can use any frequency combination to send your packet message.

The frequency shift happens between the repeaters on Rasnow Peak.



Appendix A
Additional Standard Outpost Settings under “Tools” in the Main Window



Tools > Send/Receive Settings

Automation: Click radio button for “No Automation. Initiate each send receive session manually.”

Retrieving: Select “Retrieve Private Messages, Retrieve NTS Messages, and Retrieve New Bulletins.”
Leave all others unselected.

Receiving: Leave everything unchecked.

Printing: Click radio button for “Print message headers” Leave all others unchecked.

Alerts: Select “N2: Unexpected BBS disconnect Problems” Leave all others unselected.

Other: Select “Show the TNC Session Window during Send/Receive”

Click **“Apply”** then **“OK”** when done.

Tools > Message Settings

New Messages: Click radio button for “Set default to NTS” Leave all others unselected.

Msg Numbering: Select “Add message number to the Subject Line for outbound messages” and click radio button for “with hyphen...”
Leave all others unselected.

Replies/Forwards: Click radio button for “Set default to PRIVATE for replies or forwards” and
“Close original message on reply or forward.”

Tracking: Leave everything unchecked.

Deleting: Check “Prompt before permanently deleting a message”

Adv: Check “Automatically start the Opdirect Message Capture System”
Under “When opening a locally originated PacFORMS message:” Select “Never open in its native program”
Under “When opening a received PacFORMS message:” Select “Never open in its native program”

Click **“Apply”** then **“OK”** when done.

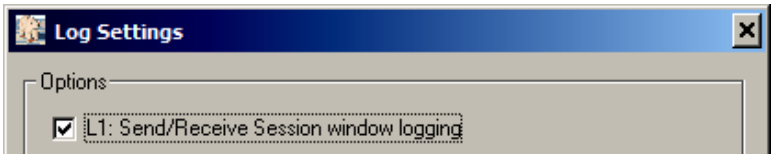
Tools > Report Settings

Variables: Next Message Number: "100"
Report Variables, this profile: "Tactical ID (3 char)" enter the first three letters of your EOC's tactical (see Packet Chart page 10.) "User ID (3char)" enter "EOC"
Leave all other entries blank.

Reports: Leave all entries blank.

ICS 309: Click radio button for "No Automation."

Click **"OK"** when done.



Tools > Log Settings

Options: Click radio button for "L1: Send/Receive Session Window logging."

Click **"OK"** when done.

Tools > General Settings

Program Startup: Check "Show Station ID form on startup"

Miscellaneous: Check "auto-print with message headers"
"Recently used configuration list:" **4** entries

Heirarchical Address Settings: Check "Use hierarchical address Continent parameter in validation (recommended)"

Click **"Apply"** then **"OK"** when done.

Location	Call	PBBS	Node	Tactical	Frequency	Operation
East County Sheriff's Station	**KJ6ZQW-6**	**ECSS**	**ECSSN**	**ECSS1**	**145.050/223.580 MHz**	**24/7**
Thousand Oaks EOC	**KJ6ZQW-7**	**TOEOC**	**TOEOCN**	**TOEOC1**	**223.580 MHz**	**24/7**
Los Robles Hospital-Main	**KJ6ZQW-8**	**HSPLR**	**HSPLRN**	**HSPLR1**	**145.050/223.580 MHz**	**24/7**
Los Robles Hospital-East	**KJ6ZQW-9**	**HSPLRE**	**HSPLREN**	**HSLRE1**	**145.050 MHz**	
California Lutheran Univ EOC	**KJ6ZQW-14**	**CLUEOC**	**CLUN**	**CLUEC1**	**223.580 MHz**	**24/7**
AMGEN EOC	**W6AMG**	**AMGBB**	**AMGND**	**AMG1EC**	**145.050/223.580 MHz**	**24/7**
Oak Park Medea Creek School	**KJ6ZQW-12**	**OPMC**	**OPMCN**	**OPMC1**	**145.050 MHz**	
Oak Park District Office EOC	**KJ6ZQW-13**	**OPDO**	**OPDON**	**OPDO1**	**145.050 MHz**	
Westlake Village City EOC	W6VO	WLVEOC	WLVN	WLVEC1	145.050/223.580 MHz	24/7
Simi Valley Police EOC	W6DQE	SIMEOC	SIMND	SV1EOC	145.050 MHz	24/7
Camarillo EOC	KI6DJO-9	CAMEOC	CAMND	CMEOC1	145.050 MHz	24/7
Leisure Village EOC	KJ6LV	LVEOC	LVND	LVEOC1	145.050 MHz	24/7
Oxnard Police EOC	W6HWK-8	OXNDOC	OXNND	OXEOC1	145.050 MHz	
Ojai Valley EOC	N6FL-1	OJVEOC	OJVND	OJEOC1	145.050 MHz	
Ventura City EOC	KG6JMH-9	VENEOC	VENND	VCEOC1	145.050 MHz	24/7
Ventura County EOC	**KE6NYT-9**	**VCROC**	**ROCND**	**VCROC1**	**145.050/223.580 MHz**	**24/7**
Ventura County ACS Trailer	**W6RH-11**	**AUXCOM**	**AUXNOD**		**145.050/223.580 MHz**	**24/7**
Red Cross Chapter House	K6AVI	REDCHP	REDND	REDEC1	145.050 MHz	24/7
Fillmore EOC	N6VUY-9	FILEOC	FILCA	FIEOC1	145.050 MHz	24/7
Moorpark EOC	KM6B-9	MPKEOC	MPKND	MPEOC1	145.050 MHz	24/7
Simi Valley Hospital	W6KJG	HSPSV	HSPSVN	SV1HSP	145.050/223.580 MHz	24/7
St. Johns Pleasant Valley Hospital	KN6LA-5	HSPPV	HSPPVN	HSPPV1	145.050 MHz	24/7
St. John's Regional Med Ctr	**KI6BQL-7**	**HSPSJ**	**HSPSJN**	**HSPSJ1**	**145.050/223.580 MHz**	**24/7**
Ojai Valley Hospital	N6FL-2	HSPOJ	HSPOJN	HSPOJ1	145.050 MHz	24/7
Community Memorial Hospital	WB6MAA-5	HSPCM	HSPCMN	HSPCM1	145.050/223.580 MHz	24/7
VC Medical Center	K6NE-9	HSPCO	HSPCON	HSPCO1	145.050/223.580 MHz	24/7
Santa Paula Hospital		HSPSP	HSPSPN	HSPSP1	145.050/223.580 MHz	24/7
Rasnow Peak	**KJ6EUS-1**		**RASNOW**		**145.050 MHz**	**24/7**
Rasnow Peak	**KJ6EUS-2**		**RAS220**		**223.580 MHz**	**24/7**