

# Amateur Packet Radio Field Reference

Cupertino ARES/RACES

August 2021



## Table of Contents

<b>1</b>	<b>QUICK REFERENCE</b> .....	<b>2</b>
<b>2</b>	<b>PACKET STARTUP PROCEDURE</b> .....	<b>4</b>
<b>3</b>	<b>OUTPOST PACKET MESSAGE MANAGER</b> .....	<b>6</b>
3.1	APPLICATION STARTUP.....	6
<b>4</b>	<b>ALT911 PACKET MESSAGE HANDLING</b> .....	<b>12</b>
4.1	INTRODUCTION .....	12
4.2	ASK THE RIGHT QUESTIONS.....	13
4.3	CUPERTINO PACKET SETTINGS FOR ALT911 DEPLOYMENTS .....	13
<b>5</b>	<b>CUPEOC OPERATIONS</b> .....	<b>14</b>
<b>6</b>	<b>PACKET DOCUMENTATION</b> .....	<b>14</b>
6.1	CREATE THE ICS 309 COMMUNICATION LOG .....	15
6.2	CREATE AN ARCHIVE OF YOUR MESSAGES.....	15
6.3	CREATE A PRINTABLE LIST OF YOUR MESSAGES.....	15
6.4	RESET (CLEANUP) OUTPOST FOR THE NEXT EVENT.....	15
<b>7</b>	<b>CREATING PACKET MESSAGES</b> .....	<b>16</b>
7.1	PACKET MESSAGE ADDRESSING BASICS.....	16
7.2	FREE-FORM MESSAGE .....	17
7.3	SENDING A TEXT FILE.....	18
7.4	SENDING A SPREADSHEET .CSV FILE .....	19
7.5	RECEIVING A SPREADSHEET .CSV FILE .....	20
7.6	SENDING A PACKItFORM MESSAGE .....	20
<b>8</b>	<b>AMATEUR RADIO PACKET OVERVIEW</b> .....	<b>23</b>

Rev: 210822

## 1 Quick Reference

### County Packet BBS Specifics

#### Frequencies are in MHz

Call Sign	Connect	User Access	NOTES
W1XSC	W1XSC-1	145.750, 223.620, 433.570	Cup <b>PRIMARY</b>
W2XSC	W2XSC-1	145.730, 223.560, 433.590	
W3XSC	W3XSC-1	144.310, 223.540, 433.450	
W4XSC	W4XSC-1	145.690, 223.600*, 433.550	Cup <b>SECONDARY</b>

\*223.600 is primarily for BBS forwarding; O.K. for back-up user access, testing.

#### BBS Locations

Call Sign	Location
W1XSC	San Jose
W2XSC	Crystal Peak (South County)
W3XSC	Palo Alto
W4XSC	Frazier Peak (East of Milpitas)

---

## Cupertino Tactical Calls

### Cupertino OES

CUPCCC	Citizen Corps
CUPDOC	Citizens Corps DOC
CUPDPW	DPW/Service Center
CUEOC	EOC
CUPMRC	Med Reserve Corps
CUPOPS	Field Ops
CUP911	CUP ALT91
CUP469	Comm 469 PSCV

### ARKs

CUPMVA	Monta Vista ARK (Z1)
CUPRSA	Regnart Sch ARK (Z2)
CUPGGA	Garden Gate ARK (Z3)
CUPLSA	Lawson Sch ARK (Z4)

CUPDZA	DeAnza ARK (Z5)
CUPCSA	Creekside ARK (Z6)
CUPMRA	Montebello Ridge ARK
CUPSCA	Stevens Canyon ARK

### City Parks & Rec

CUPBBF	Blackberry Farm
CUPCMP	Cali Mill Plaza
CUPCSP	Creekside Park
CUPFRP	Franco Park
CUPHOP	Hoover Park
CUPJOP	Jollyman Park
CUPLVP	Linda Vista Park
CUPMRP	McClellan Ranch Park

CUPMEP	Memorial Park
CUPMVP	Monta Vista Park
CUPPOP	Portal Park
CUPSBP	Sterling Barnhard Park
CUPSSP	Somerset Square Park
CUPTOP	Three Oaks Park
CUPVAP	Varian Park
CUPWIP	Wilson Park
CUPQLN	Quinlan Center
CUPSEN	Senior Center

### Public Safety

XSCSWS	Sheriff, West Side
XSCF71	Cupertino Fire
XSCF72	Seven Springs Fire
XSCF77	Monta Vista Fire

### Local Services

CUPSAN	Cup Sanitary District
CUPWVS	West Valley Community
SJWEOC	San Jose Water
CUPSH[1-6]	Cupertino Shelters [1-6]

### Neighborhoods

CUPFRM	The Forum
--------	-----------

### Ad-hoc Addresses

CUP001 through CUP009

---

## SCCo Tactical Calls

### Santa Clara County OEM

XSCEOC	SCCo EOC, 55 W Younger Ave, San Jose
XSCRCT	SCCo RACES Communications Trailer
XSCRUL	SCCo RACES Unit Leader
XSCRRO	SCCo RACES (Chief) Radio Officer

### Santa Clara County Communications

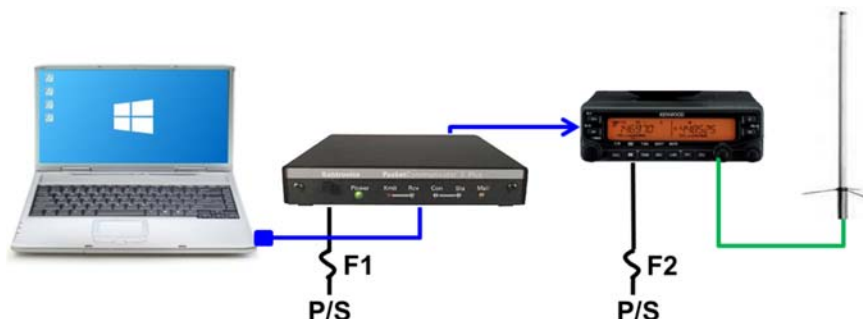
XSC911	SCCo 911 Dispatch
XSCCOM	SCCo Communications Center, 2700 Carol Dr, San Jose
XSCCIT	SCCo Communications Interoperability Trailer

See these SCCo RACES Packet Notices for all SCC configured Tactical Calls:

1. SCCo Packet Tactical Calls
2. SCCo XSC Tactical Calls

## 2 Packet Startup Procedure

This is a four-step process for confirming the operational state of a packet station.



**1. Connections:** Confirm that all packet components are correctly cabled.

- \_\_\_\_\_ 1. Laptop; Serial USB Adaptor (serial comm port may exist on older laptop models and is an alternative connection).
- \_\_\_\_\_ 2. TNC
  - a. To PC: Serial modem cable to Serial USB Adaptor, or USB cable for newer KPC3+
  - b. To Radio: custom data cable; depends on the TNC and radio connection.
  - c. Power: fused, connected to battery or power supply
- \_\_\_\_\_ 3. Radio
  - a. To TNC: custom data cable (see above)
  - b. To Antenna: coax connected to antenna
  - c. Power: fused, connected to battery or power supply

**2. Power Up:** Apply power. Verify all devices are correctly powered up.

- \_\_\_\_\_ 4. Laptop boots up, battery is charged or power adaptor plugged in
- \_\_\_\_\_ 5. TNC: Apply power, verify Power LED lights up; Verify the fuse LED is NOT lighted (indicates a blown fuse).
- \_\_\_\_\_ 6. Radio: Apply power, verify radio turns on

**3. Equipment Settings:** Confirm all equipment settings. This occurs prior to starting Outpost.

- \_\_\_\_\_ 7. Use a laptop terminal program (Ipserial.exe, PuTTY.exe) to verify Comm Port Settings.
- \_\_\_\_\_ 8. TNC Settings:
  - a. Check Comm Port settings
  - b. TNC: cmd: `int terminal`
  - c. TNC: cmd: `CD Software`

- \_\_\_\_\_ 9. Radio set to the frequency for the selected BBS
- a. Tone set to NONE
  - b. Offset set to NONE
  - c. Squelch is open
  - d. Radio is set to high power
  - e. Correct side of the radio is selected for packet (depends on the radio)

#### 4. Outpost Application Settings

- \_\_\_\_\_ 10. Laptop Application (see Section **Error! Reference source not found.**  
**Error! Reference source not found.**)
- a. Station ID is set to your FCC Call Sign
  - b. Tactical Call is set per your operational instructions
  - c. PC Time is checked to be the correct time
  - d. BBS is set to the required BBS
  - e. TNC is set to the TNC type you are using
  - f. Other Outpost configurations

## 3 Outpost Packet Message Manager

### 3.1 Application Startup

1. **Start Outpost.** Look for the Outpost icon on the PC desktop, and double-click on it.
2. The **Station ID Form** opens.



Outpost SCC

Station ID is W6XRL4 as XNDEOC

Identification | BBS Logins | Signatures |

Current Profile: Packet Class

Legal

User Call Sign: W6XRL4 New

User Name: Herman Munster Delete

Message ID Prefix: RL4 (3 Characters max)

Tactical

☒ Use Tactical Call for all BBS interaction

Tactical Call Sign: XNDEOC New

Additional ID Text: Xandau EOC Delete

Message ID Prefix: XND (3 Characters max)

☐ Show this form on startup OK Apply Cancel

- a. Use the **User Call Sign** dropdown to select your call sign. If your FCC call sign is not listed, press **New** and fill in all fields. Verify the User Fields are filled in as follows:

User Call Sign:	< your call sign >
User Name:	< your name >
Message ID Prefix:	<Last 3 chars of your call sign>

- b. Press **Apply** when Done.
- c. Use the **Tactical Call Sign** dropdown to select your tactical call. If your assigned Tactical call is not found, press **New** and fill in all fields. Verify the Tac Call Fields are filled in as follows:

User Tactical Call:	<input checked="" type="checkbox"/> CHECKED.
Tactical Call Sign:	< per your assignment >, 6 characters
Additional ID Text:	Short description of the location
Message ID Prefix:	< Usually, the first or last 3 characters of your tactical call, or your call sign>

- d. Press **OK** when done. The Outpost main form will open.

3. **Set up the TNC.** From Outpost, select **Setups > TNC Settings**.

- a. On the *Type* tab, select the Device Name, such as **XSC\_Kantronics\_KPC3-Plus**, or whatever TNC you have.

The screenshot shows the 'Device setup for XSC\_Kantronics\_KPC3-Plus' dialog box with the 'Type' tab selected. The 'Interface Name' dropdown is set to 'XSC\_Kantronics\_KPC3-Plus'. The 'Description' field contains the text: 'KPC3+ TNC for use with Santa Clara County's BBS System. Verify the COM port setting for your system.' The 'Interface Type' section has three radio buttons: 'TNC' (selected), 'AGW Packet Engine', and 'Telnet'. On the right side, there are 'New', 'Copy', and 'Delete' buttons. At the bottom are 'OK', 'Apply', and 'Cancel' buttons.

- b. On the *Comm Port* tab, select the PC Comm Port to which the TNC is connected. Only existing Comm Ports will be listed.

The screenshot shows the same dialog box with the 'Comm Port' tab selected. The 'Comm Port' dropdown is set to 'Com3'. The 'Max Speed' dropdown is set to '9600'. The 'Connection Preferences' section has three dropdowns: 'Data Bits' set to '8', 'Parity' set to 'None', and 'Stop Bits' set to '1'. The 'Echo' section has two radio buttons: 'Off' (selected) and 'On'. The 'Flow Control' section has two radio buttons: 'None' (selected) and 'RTS/CTS'. At the bottom are 'OK', 'Apply', and 'Cancel' buttons.

- c. For KPC3: do not change any fields on any other tabs.  
d. Press **OK** to Save your settings.

4. **Set up the BBS.** From Outpost, select Setups > BBS Settings.
  - a. On the Name tab, select the primary BBS Name for your city. If that BBS is not available, select your secondary BBS.

**BBS setup for XSC\_W1XSC-1**

Name | Prompts | Commands | Init Commands | Retrieving | Path

BBS Name: XSC\_W1XSC-1  
 Connect Name: W1XSC-1  
 Description: Santa Clara County ARES/RACES Packet System. Located in San Jose.  
 BBS Type: ☒ Let Outpost determine the BBS and set up the prompts  
                   ☐ User defines the BBS prompts  
 Non-Identifying BBSs: ☐ AA4RE BBS  
                               ☐ AA4RE BBS with Tactical Call Customization  
 TNC Name: Set/Get TNC XSC\_Kantronics\_KPC3-Plus

New  
 Copy  
 Delete  
 OK Apply Cancel

- b. Set **BBS Type** to “**Let Outpost determine...**”
  - c. Press **Set/Get TNC** to reopen the TNC Settings form, and press **OK** from that form. This links the TNC to this BBS.
  - d. Do not change any fields on any other tabs.
  - e. Press **OK** to Save your settings
5. **Confirm your settings.** Check the bottom of the Outpost main form and confirm you see your Station ID, Tactical Call, BBS, and TNC listed as you have just set up.

SCC Notifications  
 HOW-TO's

Items: 4 Unread: 0 W6XRL4 as XNDE0C --XSC\_W1XSC-1 --XSC\_Kantronics\_KPC3-Plus



6. **Other SCC Outpost Settings (Installer v160).** While there are several settings that can be made in Outpost, the following are the default settings for operating in the SCC County BBS system.

**NOTE:** For Alt911 deployments, see *Section 4.3 Cupertino Packet Settings for ALT911 Deployments* for specific settings.

#### Setup > Station ID

Tab	Option	What to set
Signature	<input type="checkbox"/> Insert a signature for <call> in all messages [ ]	Optional

#### Setup > BBS

Tab	Option	What to set
Retrieving	<input checked="" type="checkbox"/> Retrieve Private Messages	Checked
	<input type="checkbox"/> Retrieve NTS	Unchecked
	<input checked="" type="checkbox"/> Retrieve Bulletins	Checked
	<input type="radio"/> All new Bulletins <input type="radio"/> Selected Retrieval <input checked="" type="radio"/> Custom Retrieval	A XSCPERM LA A XSCEVENT LA A ALLXSC L> CUP
	<b>NOTE:</b> Add the last 2 lines as shown	
	<input type="checkbox"/> Skip NTS Messages that I send	Unchecked
	<input type="checkbox"/> Skip Bulletins that I send	Unchecked
	<input type="checkbox"/> Keep messages on BBS, do not delete after retrieving	Unchecked

#### Tools > Send/Receive Settings

Tab	Option	What to set
Automation	<input checked="" type="radio"/> Manual – Initiate Send/Receive sessions manually.	Checked
	<input type="checkbox"/> Send a message immediately when it is complete	Unchecked
	Send/Receive Button Setup <input checked="" type="radio"/> Send/Receive	Checked
Receiving	<input type="checkbox"/> Play this sound on arrival:	Unchecked
Printing	<input type="checkbox"/> Auto print	Unchecked
	<input type="checkbox"/> Print received messages	No preference
	<input type="checkbox"/> Print received, sent messages	
	<input checked="" type="checkbox"/> Print with message headers	Checked
	<input type="checkbox"/> Print Delivery, Receive Receipts	Unchecked
Notifications	<input checked="" type="checkbox"/> N0 through N3	Check All
	<input checked="" type="checkbox"/> Play this sound... [sound136.wav]	Checked
Other	<input checked="" type="checkbox"/> Show the TNC session form during Send/Receive	Checked

- a. Press **OK** to Save your settings.

## Tools > Message Settings

Tab	Option	What to set
New Messages	<input checked="" type="radio"/> Set default to Private	Checked
	<input type="checkbox"/> Create and send NTS messages as private	Unchecked
	<input type="checkbox"/> Default destination [ _____ ]	Unchecked
Message Numbering	<input checked="" type="checkbox"/> Add Message number to subject line <input checked="" type="radio"/> With hyphenation	Checked
	<input checked="" type="checkbox"/> Add Message Number Prefix	Checked
	<input type="checkbox"/> Add message number separator	Unchecked
	<input checked="" type="checkbox"/> Assign a local message number to inbound messages.	Checked
Replies / Forwards	<input checked="" type="radio"/> Set default to private	Checked
	<input checked="" type="checkbox"/> Close original message on reply or forward	Checked
Receipts	<input type="checkbox"/> Always request a Delivery Receipt	Unchecked
	<input type="checkbox"/> Always request a Read receipt	Unchecked
	<input checked="" type="checkbox"/> Auto-Delivery Receipt	Checked
	<input type="checkbox"/> Auto-Read Receipt	Unchecked
Deleting	<input checked="" type="checkbox"/> Prompt before permanently deleting a message	Checked
Adv	<input checked="" type="checkbox"/> Automatically start Opdirect Message Capture System	Checked
	Opening a locally created PacFORM... <input type="radio"/> Never <input type="radio"/> Prompt <input type="radio"/> Always	Never
	If the msg was previously submitted <input type="radio"/> Never <input checked="" type="radio"/> Prompt <input type="radio"/> Always	Prompt
	Opening a received PacFORM... <input type="radio"/> Never <input type="radio"/> Prompt <input checked="" type="radio"/> Always	Always

- Press **OK** to Save your settings.
- Exit and restart Outpost to ensure the **Adv** Opdirect settings take effect.

## Tools > Report Settings

Tab	Option	What to set
Variables	Global Variables: Next Message Number [ ### ]	Next Msg Number
	Organization:	"Cupertino ARES"
	County:	"Santa Clara County"
	All other fields at your discretion	Optional
ICS309	<input checked="" type="radio"/> No Automation	Checked
	Task ID:	Activation No.
	Task Name:	Event Name
	Radio Operator Name:	See Station ID Form
	Station ID:	See Station ID Form

- a. Press **OK** to Save your settings.

### Tools > Log Settings

Tab	Option	What to set
	<input checked="" type="checkbox"/> L1: Send/Receive Session Window Logging	Checked
	<input type="checkbox"/> L2: Interface Data Logging	Unchecked
	<input type="checkbox"/> L3: Diagnostic Logging	Unchecked

- a. Press **OK** to Save your settings.

### Tools > General Settings

Tab	Option	What to set
	<input checked="" type="checkbox"/> Show Station Identification Form on Startup	Checked
	<input checked="" type="checkbox"/> PC Time Check, at startup...	Checked
	Custom Folder labels:	Recommended All others are optional.
	Folder 1 [ XSC Notices ]	
	Folder 2 [ ]	
	Folder 3 [ ]	
Addressing	<input type="checkbox"/> Use hierarchical address Continent parameter in validation.	Unchecked
Profiles	Save profile changes when switching profiles... <input type="radio"/> Always (original Outpost behavior) <input checked="" type="radio"/> Prompt (avoids unintentional changes) <input type="radio"/> Always (best for shared stations with presets)	Prompt
Miscellaneous	<input checked="" type="checkbox"/> Auto-Print with Message Header	Checked
	Recently used configuration list [ ] entries	8

- a. Press **OK** to Save your settings.

### Tools > Script Settings

Tab	Option	What to set
	<input type="checkbox"/> Run this script on startup [ ]	Unchecked
	<input type="checkbox"/> Run this script on exit [ ]	Unchecked
	<input checked="" type="radio"/> Send/Receive runs standard process	Checked

- a. Press **OK** to Save your settings.

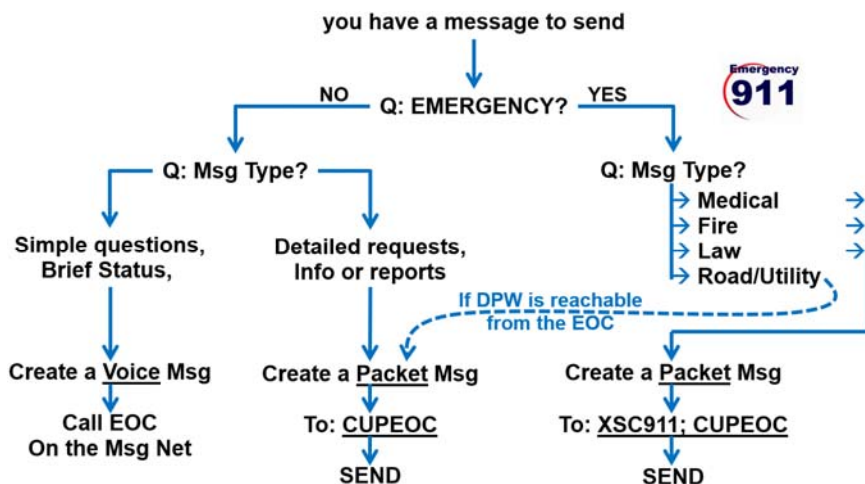
7. **Connection Test.** Verify connectivity with the BBS. From the Outpost Main Menu tool bar, press **Send/Receive**. Verify that the Send/Receive Session Window opens. When done, verify that it closes without error.

## 4 ALT911 Packet Message Handling

### 4.1 Introduction

**Description:** This procedure describes how packet operators will handle the intake of emergency requests from the field and transmission to Santa Clara County Communications for dispatch.

- Process**
1. Set up Packet for Emergency Use.
  2. Ask the right questions, gather the right information. Ensure you have enough information for County Comm to create an actionable and dispatchable event.
  3. Create the message. Use the Alt-911 message form to record all information, then load it into the **Alt911** packet program.
  4. Address it to the right place:
    - a. For emergencies – Medical, Fire, Law:  
To: **XSC911; CUPEOC**
    - b. For emergencies – City Public Works (LGOV):  
To: **CUPEOC**
    - c. For non-emergencies (requests, questions):  
To: **CUPEOC**



---

## 4.2 Ask the right questions

1. First, determine if this really is an emergency?
  - If this is a real emergency (medical, fire, law), then pass as a 911 message to County Comm
  - If this is a real emergency (local access or road problem), then pass to the Cupertino EOC.
  - If this is a non-emergency request, question, or information, then pass it to the Cupertino EOC.
2. Ensure you have enough information for 911/County Comm for them to create an actionable and dispatchable event.

---

<b>911 Requests</b>	<b>What does 911/County Comm minimally need to know?</b>
<b>GET THIS FIRST:</b>	<ul style="list-style-type: none"><li>• Location of the problem (address)</li><li>• Reporting Person's (RP) name, contact phone number</li><li>• When did you last see the problem? (hours, minutes)</li></ul>
<b>Medical Assistance:</b>	<ul style="list-style-type: none"><li>• Age: How old is the person?</li><li>• Gender: Male or Female</li><li>• Medical problem (difficulty breathing, unconscious, severe bleeding, etc.)</li></ul>
<b>Fire Report:</b>	<ul style="list-style-type: none"><li>• What is burning (Car, building, etc.)</li><li>• Are there any people inside?</li><li>• What is happening now (everyone is safe/trapped, heavy smoke, etc.)</li></ul>
<b>Law Report:</b>	<ul style="list-style-type: none"><li>• Type of problem (suspicious person, fight, accident, break-in, etc.)</li><li>• What is happening now (suspicious car on street, heard broken glass, etc.)</li></ul>
<b>Local Gov't:</b>	<ul style="list-style-type: none"><li>• Type of problem (tree/pole down, water main break, etc.)</li><li>• What is happening now (road is blocked, power line arcing, street flooding, etc.)</li></ul>

---

---

## 4.3 Cupertino Packet Settings for ALT911 Deployments

The following settings are in addition to or a replacement of the settings listed elsewhere in this guide. From Outpost, make the following changes:

### Tools > Send/Receive Settings

Tab	Option	What to set
Automation	<input type="radio"/> Schedule a Send/Receive Session every [ 10 ] minutes.	Checked
	<input checked="" type="checkbox"/> Send a message immediately when it is complete	Checked

## 5 CUPEOC Operations

### Before the Event

- \_\_\_\_\_ 1. Familiarize yourself with the **C469-Packet-Procedures.pdf**.
- \_\_\_\_\_ 2. Set up all ISA Report Templates.
- \_\_\_\_\_ 3. Set up all ISA recipient Address Book entries.

### During an Activation – Comm Van

- 4. Follow **C469-Packet-Procedures.pdf**.

### During an Activation – Remote CUPEOC

For specific activations, the **CUPEOC** Packet Station must be established from a remote / home location until C469 is in place and operational. To operate as the remote CUPEOC station, proceed as follows:

- \_\_\_\_\_ 5. **Set your Tactical Call.**  
From Outpost, select **Setup > Station ID**.

Tab	Option
<b>Station ID</b>	<input checked="" type="checkbox"/> Use Tactical Call
	Tactical Call Sign: [ <b>CUPEOC</b> ]
	Additional ID Text: [ <b>Cupertino CA EOC</b> ]
	Message ID Prefix: [ <b>CUP</b> ]

- \_\_\_\_\_ 6. Press **OK** to Save your settings.
- \_\_\_\_\_ 7. Send County EOC a standard Check-in Message:  
  
**To:** **XSCEOC**  
**Subject:** <MsgNbr>\_R\_Check-In **CUPEOC, Cupertino EOC**  
**Body:** Check-In **CUPEOC, Cupertino EOC**  
Present are:  
[ List of FCC call signs and full names, one per line.  
Include Shift Supervisor, NCO, your name ]
- \_\_\_\_\_ 8. Notify Net Control when CUPEOC Packet station is operational.
- \_\_\_\_\_ 9. Notify Shift Supervisor or Net Control of any event-specific County Notices.
- \_\_\_\_\_ 10. Pass Packet Traffic as directed by the Shift Supervisor.

## 6 Packet Documentation

Whether it be an exercise or a real activation, when its all over, there are 2 things that need to be done:

- 1. Submit all documentation to your jurisdiction's Documentation Unit for archiving.
- 2. Reset Outpost for the next deployment

---

## 6.1 Create the ICS 309 Communication Log

Follow these steps to produce the Packet ICS 309:

1. From Outpost, go to **Tools > Report Settings**, 3rd tab, "Other ICS309 Fields." Enter all fields. These fields automatically flow to the ICS309 Form. Then...
2. From Outpost, go to **Forms > ICS 309 Communication Log**. Note all header fields are filled in.
3. Select **Period** Tab. Select **Range**, set the **From:** and **To:** to the date/time range for when the event occurred.
4. Select **Content** Tab. Put '**Delivered**' (no quotes) in this field to exclude Delivery Receipts.
5. Select **Output** Tab. Check the formats you want printed. Multiple options are ok.

**NOTE:** If you do not have a printer, then select the **Microsoft Print to PDF** printer to produce a .pdf file.

6. Press **Build Data Set**, then press **Print**.

---

## 6.2 Create an Archive of your messages

1. From Outpost, **File > Export**, then select either "**This Folder**" (for the folder shown) or "**All Folders**" (for your entire system). Use meaningful file names. This creates an Outpost readable file that later can be imported back in to restore your messages to their original folders.

---

## 6.3 Create a printable list of your messages

1. From Outpost, **File > Save All**.
2. This will create an Ascii formatted file of all messages in the current folder with a Page Break embedded between each message. Use meaningful file names.
3. Repeat this step for any other folder where event messages were created and stored.
4. At some future time, this file could be printed to generate one message per page. Or, because the messages are in a .txt file, any one could be copied and pasted into another note pad, and printed for reference.

---

## 6.4 Reset (cleanup) Outpost for the next event

1. Make sure you do all 3 of the things above.
2. Go to **In Tray**, click on the first message, scroll down, Shift-Click on the last message to highlight all messages, then press **Delete**. Repeat for **Sent**, **Archive**, **Draft**, and any other folders in which you put event messages that were just backed up.
3. Keep the contents of the folder "XSC Notices." These messages are for reference and prevents Outpost from downloading them again.
4. In the **Deleted** Folder, highlight all and delete from the Deleted Folder.
5. Hand off all logs and files to the EOC Documentation Unit.

## 7 Creating packet messages

### 7.1 Packet message addressing basics

Addressing a packet message requires 2 types of addresses:

1. What individual do you want to receive the message?
2. What packet station can deliver it to the individual?

We want to "embed" our message below into a packet message with additional addressing information

From: Ops, Xanadu Fire ICP  
To: Ops, Xanadu EOC  
Subj: ICP Staffing Summary

~~~~~  
~~~~~  
~~~~~

Signed,  
Dave Miller Ops Chief



BBS: W1XSC-1  
From: XNDFS1  
To: XNDEOC  
Subj: XND47823P: ICP Staffing Summary

From: Ops, Xanadu Fire ICP  
To: Ops, Xanadu EOC  
Subj: ICP Staffing Summary

~~~~~  
~~~~~  
~~~~~

Signed,  
Dave Miller Ops Chief

### 1. Packet Address Header

The packet address header gets the message to the correct packet station.

**BBS:** The "store and forward" mail drop where this message is sent. **Automatically filled in.**

**From:** Tactical call of your packet station. **Automatically filled in.**

**To:** Destination station

**Subject:** Outpost automatically sets the Message ID in the subject line. You need to fill in the rest of the subject text.

Use the SCC **Standard Subject Line Format** as follows:

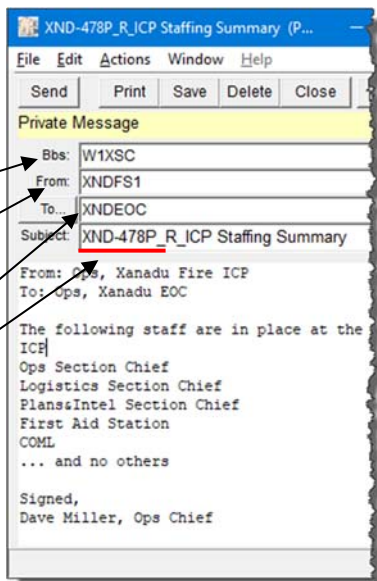
<SenderMsgNbr>\_<HandlingOrder>\_<MsgSummary>

XND-478P\_R\_ICP Staffing Summary



Short description of the contents of the message  
R=routine, I= Immediate, E = Emergency

3-character message prefix, a hyphen, a "P", and a message number





## 2. Recipient Address and Message

To ensure the message gets to the right person, fill in the rest of the message.

**Subject:** Fill in the rest of the subject line after the Message ID.

### Message Body

**From:** Whom is the message from? Include the ICS position or function.

**To:** To who do you want to receive the message? Include ICS position or function.

**Message** Fill in the message details.

**Signature:** Put whom the message is from.

The screenshot shows a message window with the following fields and content:

- Bbs:** W1XSC
- From:** XNDFS1
- To:** XNDEOC
- Subject:** XND-478P\_R\_ICP Staffing Summary
- Message Body:**

From: Ops, Xanadu Fire ICP  
To: Ops, Xanadu EOC

The following staff are in place at the ICP]

Ops Section Chief  
Logistics Section Chief  
PlanssIntel Section Chief  
First Aid Station  
COML  
... and no others

Signed,  
Dave Miller, Ops Chief

## 7.2 Free-Form Message

1. From Outpost's main window, press the **New** button to create a new message. A blank message form opens.
2. The **BBS:** and **From:** fields are filled in with the BBS and From Station call sign or tactical call that were previously defined.
3. Fill in the **To:** field with the call sign or tactical call of the station to receive this message.
4. Complete the **Subject:** text. Add a message description after the Message ID characters (**XND-862P** in this example).

The screenshot shows a message window with the following fields and content:

- Bbs:** W1XSC-1
- From:** W6XRL4
- To:** XNDNET
- Subject:** XND-862P\_R\_Need Network Status
- Message Body:**

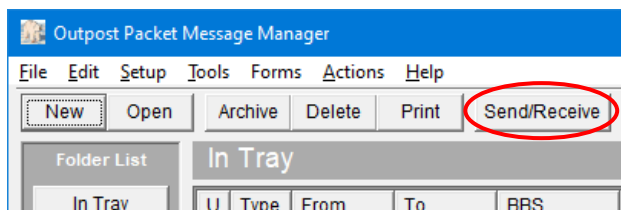
To: Net Admin

Please report on the status of the network,

Signed,  
Herman M, W6XRL4

**NOTE!** Not adding any additional subject line detail (Handling Order and message summary) will delay processing your message on the receiving end.

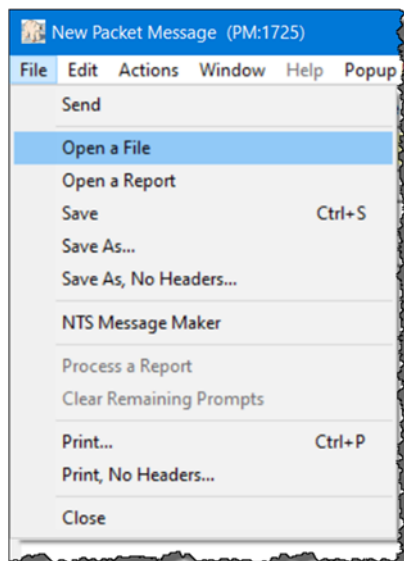
5. Enter the body of the message.
6. Press **Send** when done.
7. From Outpost, press **Send/Receive** to connect and send the message to the BBS.



### 7.3 Sending a text file

The text of the message can originate from a text file created elsewhere. To import a message from a text file, do the following:

1. From the Outpost main form, click on the **New** button.
2. Select **File > Open a File**.  
Navigate to the directory where the file resides and select the file. Press **OK**.
3. The text will be loaded into the Message area.
4. The message Subject is set to the text file name.
5. Press **Send** when done.
6. From Outpost, press **Send/Receive** to connect and deliver the message to the BBS.



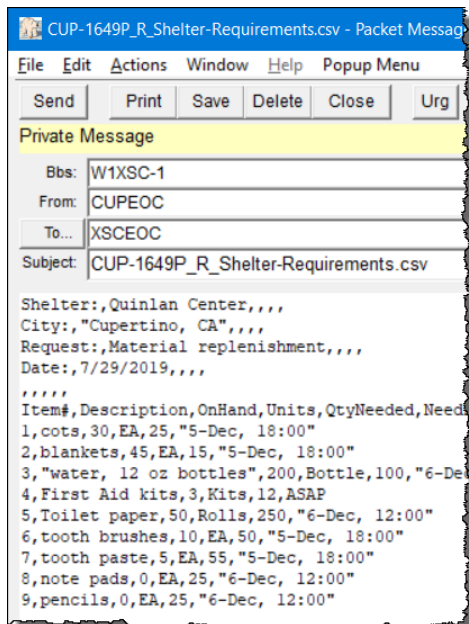
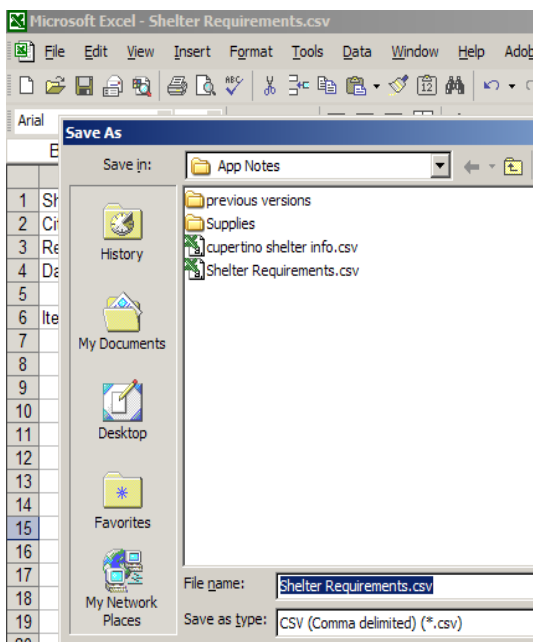
## 7.4 Sending a spreadsheet .csv file

Attempting to send a standard spreadsheet file will cause Outpost, the BBS, or both, to hang because of embedded binary content in the spreadsheet.

However, most spreadsheet applications support a way to export spreadsheet data into one or more ASCII formats that are compatible with Outpost.

This approach works with many spreadsheet packages.

1. Once the spreadsheet is created, move a copy of it to the PC where Outpost resides.
2. At the Outpost PC, open the spreadsheet, press **File->Save As** from the spreadsheet menu.
3. Change the "Save as Type" to "Comma Delimited (\*.csv)". Press **Save**. A file with a \*.csv extension is created.
4. Back at Outpost, press **New** to open a new message form.
5. Press **File->Open** from the Outpost message menu.
6. Change the "Files of Type" to "All files (\*.\*)".
7. Change the directory to where the \*.csv file is located, select the file, and press **Open**. The \*.csv file is copied into the body of the message.
8. Take a look at this example on the right. Note that all fields are separated by commas, and fields with embedded commas are surrounded by quotes.
9. When done, press **Send** to move the message to the Out Tray.



- From Outpost, press **Send/Receive** to connect to the BBS and send the message.

**NOTE!** The file name is set automatically as part of the message Subject. This will come in handy at the receiving end. Also, in the above example, note that the user added a “\_R\_” to indicate the Priority.

---

## 7.5 Receiving a spreadsheet .csv file

Continuing with the above example, proceed to recover the file as follows:

- At the receiving station, once the message arrives, open the message.
- Press **File->Save As** from the Outpost message menu.
- The file name will default to the message’s subject with the correct ‘csv’ file extension. Press **Save**. Close the message.
- Open your spreadsheet program.
- Press **File->Open** from the Excel menu. Change the “Files of Type” to “Comma Delimited (\*.csv).” Locate the file saved by Outpost. Press **Open**.
- The entire message is brought into the spreadsheet. Delete any header lines that show up in the file.

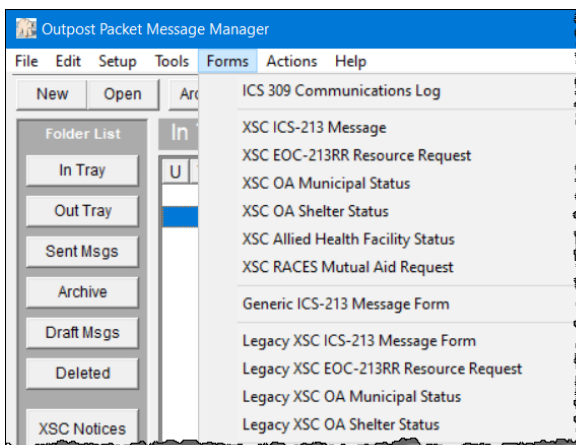
---

## 7.6 Sending a PackItForm message

*For Santa Clara County EOC use only.  
Not for use within Cupertino.*

- PackItForms are browser-based, fill-in-the-blank, html message forms used within Santa Clara County.

To open the forms from Outpost, go to the Forms Menu, and choose the desired form.



Form name	Purpose
<b>Standard Santa Clara County PackItForms</b>	
XSC ICS-213 Message Form	Send a message from the cities/agencies to Santa Clara County EOC, or other

	jurisdictions within the county.
XSC EOC-213RR Resource Request	PackItForms version of the Santa Clara County Resource Request Form.
XSC OA Municipal Status	Report city status and incidents
XSC OA Shelter Status	Report shelter status
XSC Allied Health Facility Status	Report skilled nursing facility status
XSC RACES Mutual Aid Request	Request RACES resources

Other Forms	
ICS 309 Communications Log	Creates a standard ICS 309 Comm log report based on packet messages sent. Different report options let you customize the data and look and feel. Run this report at the end of your shift.
Generic ICS-213 Message Form	This form is a program that can run on a remote PC on the same subnet as Outpost. See the ICS-213mm Message Manager User Guide for details.
Legacy PacFORMS	Replaced by PackItForms

- For City-to-County packet messages, use the above SCCo RACES PackItForms or free-form messages.
- Run PackItForms from Outpost to ensure several of the default fields are automatically filled in.
- Select the PackItForm to use; the form opens in a browser.

The screenshot shows a web browser window displaying the 'XSC ICS-213 Message' form. The browser's address bar shows the URL '127.0.0.1:55365/form-1'. The form itself has a blue header with navigation buttons like 'Submit to Outpost', 'Submit via Email', 'Show Data Message', 'Reset Form', and 'Show PDF'. Below the header, the form is divided into several sections. The 'MESSAGE FORM' section includes fields for 'Sender's Msg #', 'My Msg #', and 'Receiver's Msg #'. The 'Date' field is set to '11/19/2019'. The 'Time' field is set to '(24 hr clock) hh:mm'. The 'Situation Severity' section has three radio button options: 'Emergency (e.g. life threat)', 'Urgent (e.g. property threat)', and 'Other (all others)'. The 'Message Handling Order' section has three radio button options: 'Immediate (as soon as possible)', 'Priority (less than one hour)', and 'Routine (more than one hour)'. The 'Message Requests You To' section has two radio button options: 'Take action' and 'Reply'. The 'ICS Position' section has two fields: 'ICS Position: 7' and 'ICS Position: 8'. The 'Location' section has two fields: 'Location: 9a' and 'Location: 9b'. The 'Name' section has two fields: 'Name:' and 'Name:'. The 'Telephone #' section has two fields: 'Telephone #:' and 'Telephone #:'. Several fields are highlighted in red, indicating they are required.

### Completing the PackItForm

- Required fields are all highlighted in **RED**.

- When all required fields are filled in, the top banner turns **Green** and the controls are enabled. When done, press the **Submit to Outpost** button at the top to pass this message to Outpost.

The screenshot shows a web browser window titled 'XSC ICS-213 Message'. The address bar shows '127.0.0.1:55365/form-1'. The top navigation bar is green and contains buttons: 'Submit to Outpost' (circled in red), 'Submit via Email', 'Show Data Message', 'Reset Form', and 'Show PDF'. Below the navigation bar is the 'MESSAGE FORM' section. It includes fields for 'Sender's Msg #', 'My Msg #', and 'Receiver's Msg #'. The form is divided into several sections: 'Date' (11/19/2019), 'Time' (10:08), 'Situation Severity' (Emergency, Urgent, Other), 'Message Handling Order' (Immediate, Priority, Routine), 'Message Requests You To' (Take action, Reply), 'ICS Position' (Operations), 'Incident Commander', 'Location' (Xanadu EOC), and 'Name' (Xanadu Fire Station / ICP). The 'Submit to Outpost' button is highlighted with a red circle.

- The form data is extracted, formatted, and transferred to Outpost where it is loaded in a message form and opened.

**NOTE!** If you don't see the message form, then check the Windows Tool Bar for a new highlighted Outpost icon.

- Fill in the **To:** field. All other fields are disabled.
- When done, press **Send**.
- From Outpost, press **Send/Receive** to send the message.

The screenshot shows a message window titled 'XND-861P\_R\_ICSC213\_ICP Staffing Summary (PM:551)'. The window has a menu bar with 'File', 'Edit', 'Actions', 'Window', and 'Help'. Below the menu bar are buttons: 'Send', 'Print', 'Save', 'Delete', 'Close', 'Urg', and 'Pvt'. The message body is a 'Private Message' from 'XNDEOC' to 'W1XSC-1'. The subject is 'XND-861P\_R\_ICSC213\_ICP Staffing Summary'. The message content is as follows:

```

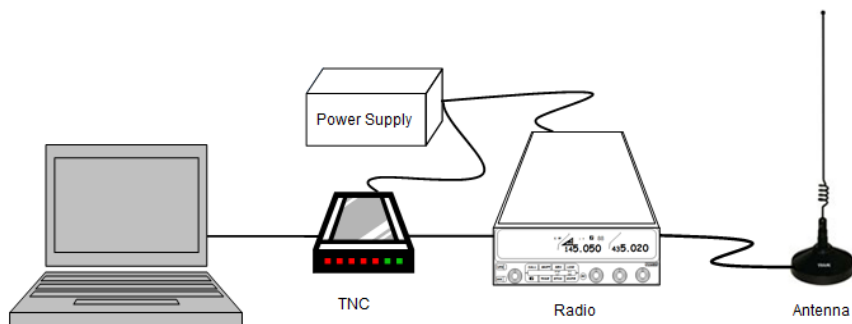
!SCCoPIFO!
#T: form-ics213.html
#V: 2.17-2.1
MsgNo: [XND-861P]
1a.: [11/19/2019]
4.: [OTHER]
5.: [ROUTINE]
1b.: [10:08]
7.: [Operations]
8.: [Incident Commander]
9a.: [Xanadu EOC]
9b.: [Xanadu Fire Station / ICP]
10.: [ICP Staffing Summary]
12.: [The following staff is in place at Xanadu F
Rec-Sent: [sender]

```

## 8 Amateur Radio Packet Overview

### What is Ham Radio Packet?

- Amateur packet radio is one of many digital modes that hams can use.
- Packet Radio is used to transmit digital data by radio or other wireless communications links.
- Packet radio can send to or retrieve “mail” from a packet Bulletin Board System (BBS).



### Typical Packet System

- Computer: Runs the packet software that communicates with the BBS.
- TNC: Terminal Node Controller; the interface between your radio and your computer (similar to a telephone modem).
- Radio: Set to the frequency of the BBS and other packet stations.
- Antenna: Connected to the Radio.
- Power Supply: Powers the Radio and TNC; could also be a battery.

### Why use Packet Radio?

1. BBSs allow messages to be stored, retrieved, or forwarded throughout the connected BBS network.
2. The recipient does not need to be on line to get the message, meaning that messages can be retrieved at the recipient's convenience.
3. Packet is ideal for passing lists of material, addresses, instructions, or complex words (e.g. pharmaceuticals or chemicals)
4. We would use packet radio for the same reasons we would use internet email: message accuracy, delivery, and the ability to handle message complexity.
5. The Santa Clara County Emergency Management Association (EMA) knows that our local communications infrastructure **WILL FAIL** during an earthquake and **expects** Ham Radio to enable the response and speed the recovery. Packet Radio is part of the response.

