

# Tips For The Next Time in Packet (DRAFT)

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Author: Mark Laubach, K6FJC, SCC ARES/RACES ADEC/DCRO

This document is a personal view of the author based on observations and is intended to provide some preparation suggestion for radio operators taking part in future packet operation activities.

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## Introduction

SCC ARES/RACES held an annual Communications Exercise and SET on Saturday, 09 October 2021 in Edith Morley Park in Campbell, California. This document will not go into the details of the event, they can be found and reviewed via the [scc-ares-races.org](http://scc-ares-races.org) website. Rather, this document looks at the Packet Operations portion of the exercise from the viewpoint of the Packet Manager and is based on actual observations at this event. This document was created to suggest some general and specific tips for preparation for maintaining enjoyment and a satisfying experience at a future packet event. To group suggestions, an individual's preparation can be broken into the following segments:

- Pre-Event Preparation
- Mobilization and Pre-Set Up
- Set Up and Operation
- Close Down, Archiving, and Tear Down
- The End

## Pre-Event Preparation

### Checklists

For SCC ARES/RACES checklists are in your future. If a checklist is provided for your position assignment – please follow it and check off items as you complete them. If you have access to a prepared checklist before an assignment, print it, read it, and ask any questions ahead of time. At the event check off items as you complete them.

- I now know that SCC ARES/RACES checklists are in our future

Suggestion: when scheduled, the SCC Country Monthly Packet Message Passing exercise offers an opportunity to sign up for the event and indicated you intend to use your alternate packet station. If you do select this option, a recommendation is to create a check-list for all the items and other details for setting up your equipment at another location, whether it is the kitchen table, garage, nearby park, etc.

### Maintaining and Building Experience and Practice

Quoting Yogi Berra: “In theory there is no difference between theory and practice - in practice there is”. You get your theory in attending and reading the SCC Packet training courses and you get your practice operating a packet station when completing class homework and exercises, but mainly when participating at county or city exercises and real events. You are on your own for what you practice between events and maintaining practice routines is key.

On a periodic basis, here are some suggestions (you get to choose the period):

<input type="checkbox"/>	Review all Packet Operations training material under <a href="#">ARES/RACES Training Courses</a> , including the material located under “Course Materials” for each course. Look for updated material and refresh yourself on key points and operation
<input type="checkbox"/>	Participate in the <a href="#">weekly packet practice</a>
<input type="checkbox"/>	Participate in the <a href="#">monthly packet message passing exercise</a> when offered
<input type="checkbox"/>	Quarterly: tear down your home packet station and set it up somewhere as if you were going to bring your own equipment to an event. Check cable and replace any aging batteries. Test, refresh, replace, perform any Outpost and OS updates needed if you don’t do these regularly. Send plain-text and all forms messages to yourself, freshen up all notices, etc. If you don’t have your own packet stations, borrow one (from your city?) or simply study up on the SCC county packet station standard configuration. .
<input type="checkbox"/>	Create a checklist of <u>all</u> items in your packet station that you need to bring for an assignment. Include any backup equipment, power, cables, etc.
<input type="checkbox"/>	Make sure your 2-hour and 12-hour Go-Kits are up-to-date and ready to go. Freshen up anything that may have expired, including forms. Note: consider a small Philips screwdrivers and CR2032 (or BR2032) battery for a KPC 3+ TNC as well as what you need for your own packet station TNC if different.
<input type="checkbox"/>	Study up on the diagnosis and remedy of common packet station problems or errors. Include any new material from classroom training and the SCC packet discussion group.
<input type="checkbox"/>	Take advantage of any new periodic training that may be offered.
<input type="checkbox"/>	Challenge yourself: try sending and receiving messages, notices, and PacketItForms without using Outpost (see the <a href="#">Packet Ops Type II course training</a> for KPC 3+ commands and JNOS commands.)
<input type="checkbox"/>	Have a USB thumb drive reserved for packet files. You may need one need one to copy the files created during the Close Down, Archiving, and Tear Down procedure. Additionally, you may want to have a copy of the following items are your USB drive: Outpost installation file, Putty install file, favorite text editor file (e.g. Notepad++) backup copy of your C:\SCCo Packet and C:\PackItForms directories and the documentation files listed in the next section.

## Documentation

Having all SCC documentation is a good thing. Having the most current SCC documentation is the best thing. For Packet Operators, the following “most current” documentation is suggested:

<input type="checkbox"/>	<a href="#">“Performance Standards and Best Practices”</a>
<input type="checkbox"/>	<a href="#">Go-kit checklists for 2-hour and 12-hour</a>
<input type="checkbox"/>	<a href="#">“Standard Outpost Configuration Instructions”</a>
<input type="checkbox"/>	<a href="#">“Standard Packet Message Subject Line”</a>
<input type="checkbox"/>	<a href="#">“Standard Packet Check-In/Out Message”</a>
<input type="checkbox"/>	<a href="#">County Packet BBS frequency list, primary/secondary City assignments, city EOC tactical calls</a>
<input type="checkbox"/>	<a href="#">“RACES Recommended Form Routing Cheat Sheet”</a> (this is your messaging best friend, know it well)
<input type="checkbox"/>	<a href="#">“Outpost Users Guide, Basics”</a>
<input type="checkbox"/>	All XSCPERM BBS notices downloaded and stored in an “SCC Notices” special folder in Outpost
<input type="checkbox"/>	If you are going to ask for a packet credential evaluation: <a href="#">“Credentialing Program Handbook”</a>

## Equipment Familiarization and Knowledge

Having equipment is one thing (and a good thing!!). Knowing how to best operate it is another also diagnosing and fixing problems. The following is suggested for maintaining familiarization and knowledge:

<input type="checkbox"/>	Know the User manual for your packet radio(s) and hand-held radio (reminder that for credentialing, all packet operators need to be current with P3/F3/Type IV radio familiarity and equipment at least once each year). Radio “mini-manuals” are also good if they are complete.
<input type="checkbox"/>	Even if you are using your own non-KPC 3+ TNC, know the county standard KPC 3+ basic commands as per Kantronics KPC-3 Plus user manual Rev H:
<input type="checkbox"/>	Cabling and adapters: power, RS-232C to computer, data port to your or different radio
<input type="checkbox"/>	Hard Reset (aka: “the last thing to do”)
<input type="checkbox"/>	Calibration / Equalization (verify as part of if the BBS doesn’t hear you all the time)
<input type="checkbox"/>	Know how “To get out of KISS mode”
<input type="checkbox"/>	Demonstrate personal HT radio familiarity for Type IV Communicator knowledge, without using documentation or assistance.
<input type="checkbox"/>	Demonstrate dual-band and/or mono-band mobile radio familiarity as per P2 knowledge, without using documentation or assistance.

## Following Directions and Don’t Skip Details

Just a reminder to read things thoroughly and don’t skip over the details, especially with new material. SCC ARES/RACES presents a lot of details in our training, practice/exercise, and reference materials that we encourage you to get to know via taking the training, via practice, and by exploring the [scc-ares-races.org](http://scc-ares-races.org) website. This material is already known, available in advance, and you just need to maintain familiarity with it. However, when you participate in a new event or are dispatched to a serving agency for mutual aid, instructions and details will likely be new and require some patience.

- At a new event, time and patience is needed to thoroughly review instructions and note all the details

## Mobilization and Pre-Set Up

Mobilization includes the time to pack up your vehicle, travel to and assignment, and arrive at the assigned event and check into the local Staging process. Pre-Set Up includes the activities required after being processed through the local staging process and receiving your position location assignment. If you are bringing your own equipment this includes moving your equipment from your vehicle to your assigned position location.

### Mobilization

You are getting ready for being a deployed as a packet operator:

- A known event that you have signed up for as a participant (SCC exercise or public service event, etc.) that is scheduled in the “near” future
- A real-world event has happened, you have been released from your city and you are ready and available as a packet operator for assignment
- You are simply practicing for either of the above two scenarios (recommended on a periodic basis)

Be prepared for deployment and for packing up your vehicle:

<input type="checkbox"/>	Get out your checklist created above in “Maintaining and Building Experience and Practice”
<input type="checkbox"/>	Assemble all the equipment in your own hot-staging area – check that everything is there. Make sure you can set up your equipment from dis-assembled to “ready for Check-In” in the time frame allocated for your intended assignment.
<input type="checkbox"/>	For your computer/laptop/pad/surface running Outpost – make sure you are on the latest version of Outpost and/or latest version of OS, etc. Make sure your batteries hold a charge for full operation for a least an hour.
<input type="checkbox"/>	Download / refresh any BBS notices prior to departing home: XSCPERM, XSCEVENT, any city notices. NOTE: be prepared to know how to configure Outpost for XSCEVENT and City notices before leaving home.
<input type="checkbox"/>	Prepare Outpost for a new event. Follow the steps in “Archiving event documentation” section in the Packet Operators Type III Part B training course. Suggested steps:
<input type="checkbox"/>	Select your SCC Notices folder then <b>Export &gt; File</b> , then “This Folder” and save to a separate file
<input type="checkbox"/>	<b>Export &gt; File</b> then “All Folders” and backup all your folders (you can import these back later)
<input type="checkbox"/>	Delete all Outpost messages: <b>File &gt; Delete All Messages</b>
<input type="checkbox"/>	Restore your SCC Notices folder: <b>File &gt; Import</b> and enter the name of your separate file used above
<input type="checkbox"/>	Reminder: make sure any radio/TNC batteries you need are completely charged, tested (they haven’t worn out). Make sure these batteries hold a charge for a least an hour – longer is preferred but not required.
<input type="checkbox"/>	Pack your vehicle and check things off as you load them on your checklist
<input type="checkbox"/>	Don’t leave anything behind at your home – they may not have replacements at your assignment.

### Pre-Set Up

If you are bringing your own equipment, Pre-Set Up is the time needed to move your equipment to your assigned position location and be ready to start Set Up. If you are using local equipment that is packed up (i.e., packet station-in-a-box) this is the time to locate the box(es) and identify all equipment: radio, TNC, computer, cables, antenna, coax cables, etc. before beginning to connect the equipment together. If you are using a local packet station, this is the time to find your position and identify familiarize yourself with all the equipment required for the position.

## Know Your Set Up Time

Set Up is the time to assemble, connect, power, etc. your equipment prior to being ready to Check-In to the packet net. This includes: 1) setting up your station including all safety precautions, 2) configuring Outpost, 3) refreshing any XSC and city notices, and 4) verifying you can send packet messages to yourself with the assigned BBS. We recommend trying to complete your Set Up within the following times:

<b>Operator Type – equipment (setup type)</b>	<b>Time for Set Up, verify, download any XSC EVENT or City Notices (max minutes) from assignment start time **</b>	<b>Time to Check-In from End of Set Up (max)</b>
P2 – own equipment (field station, w/pop-up)	30	+5 minutes
P2 / P3 – own equipment (assigned table space)	20	
P2 / P3 – station “in a box” (assigned table space)	20	
P2 / P3 – existing station (already set up)	5 to 10	

**IMPORTANT:** the above times are suggestions as individual times will certainly vary. If you are scheduled for a real event or an exercise where an Operational Period is specified, you need to have your packet station set up in advance and be ready to “check in” to the packet net at the start of the Operational Period. Knowing how long it takes you to set up your equipment is required. If you are using someone else’s equipment (e.g., an EOC’s packet station) and you will be the first to use it for the event, you need to arrive with sufficient lead time to attend all briefings and have the packet station ready to go at the start of the Operation Period.

## XSCPERM, XSC EVENT, and City Notices

\*\* **“Set-up, Verify, and download any XSC EVENT and City Notices”** should include:

<input type="checkbox"/>	Setting / verifying your FCC call sign
<input type="checkbox"/>	Setting / verifying your assigned Tactical call sign and message ID prefix ( <b>Setup -&gt; Station ID</b> )
<input type="checkbox"/>	Setting / verifying your assigned primary BBS ( <b>Setup -&gt; BBS</b> ) and corresponding transmit radio frequency
<input type="checkbox"/>	Setting / verifying your TNC and Com Port parameters ( <b>Setup -&gt; Interface</b> )
<input type="checkbox"/>	Setting / verifying Outpost “Next Message” number ( <b>Tools -&gt; Report Settings -&gt; Variables</b> )
<input type="checkbox"/>	Setting / verifying Outpost BBS retrieving commands for XSCPERM, XSC EVENT, and city notices. Either check/download all city notices or the one for your specific assignment; e.g. ALLXSC versus XND@XSC
<input type="checkbox"/>	Suggestion: setup an Address Book entry with fully specified recipient, e.g. XNDEOC@w1xsc.ampr.org

**When you send your Check-In, verify that it was received before moving to Operation:**

<input type="checkbox"/>	Send your Check-In message
<input type="checkbox"/>	Confirm your Check-In message has been received by the DELIVERED receipt, if not troubleshoot

## Operation “flying the packet station”

### Normal Processing

You are processing 3<sup>rd</sup> Party Messages (mostly PacketItForm and some plain text messages) and Operator-to-Operator messages, e.g., check-in, check-out, health and welfare, and other non-3<sup>rd</sup> Party messages. Prepare for the following:

- |                          |   |
|--------------------------|---|
| <input type="checkbox"/> | Send messages following county message handling procedures. If you are unclear about Message Handling or ICS TO: addresses refer to the <a href="#">Recommended Radio Routing “cheat” sheet</a> .   |
| <input type="checkbox"/> | You are always sorting messages handed to you by Handling Order and Date/Time. <u>I</u> mmEDIATE messages <u>MUST</u> interrupt any lower order messages in progress, all <u>P</u> riority messages should be sent before <u>R</u> outine messages. More details on <u>I</u> mmEDIATE message handling are below. |
| <input type="checkbox"/> | Receive and print messages. Deliver to the appropriate person (runner, supervisor, directly to ICS position)  |
| <input type="checkbox"/> | Know how to resend messages in Outpost. See the <a href="#">Packet Operations Type III Part B</a> update for 2021.  |
| <input type="checkbox"/> | Know the differences between the “P”, “M”, and “R” packet message ID suffixes and when to use them.   |
| <input type="checkbox"/> | Maintain a separate ICS-309 for each net as well as if you are passing packet message without Outpost.  |
| <input type="checkbox"/> | You are a FAX machine. Unless changed and initialed by the message creator, send all typos exactly as is in the message – do not “auto-correct” spelling.   |
| <input type="checkbox"/> | If you find that the Situation Severity is not filled in, e.g. on an old SCC form and the Handling Order is, simply use the same Severity level as the Handling order level; If “Immediate” then “Emergency”, etc.  |

### Immediate Message Handling Reminders

If you are handed any ImmEDIATE message(s) you need to do the following for packet ASAP:

- |                          |   |
|--------------------------|---|
| <input type="checkbox"/> | Interrupt any lower order messaging creation currently in progress. (if needed hit SAVE and go back and edit/send the message later). If you are already typing in an <u>I</u> mmEDIATE finish it. Then sort any <u>I</u> mmEDIATE in-hand messages by date/time.   |
| <input type="checkbox"/> | Create the <u>I</u> mmEDIATE message/form and enter all information as quickly as possible (without making any additional typos). Enter/finish all <u>I</u> mmEDIATE messages you have in your hands now.   |
| <input type="checkbox"/> | Let your supervisor know (if available) that each <u>I</u> mmEDIATE message is in progress to each <recipient>  |
| <input type="checkbox"/> | Perform a “SEND Only” in Outpost and send all queued messages. ( <b>Actions -&gt; Send Only</b> )   |
| <input type="checkbox"/> | While the “SEND Only” is in progress or just completed, your supervisor should contact the recipient(s) via a no-delay voice method (e.g. Command net, phone, etc.) and let them know they need to retrieve an <u>I</u> mmEDIATE message from their BBS. If you have no supervisor, make the no-delay voice contact yourself. |
| <input type="checkbox"/> | Confirm that the <u>I</u> mmEDIATE message was delivered by the intended receipt (e.g. DELIVERED receipt is correct). If you have a supervisor, let them know the <u>I</u> mmEDIATE Message was Delivered.  |

## Close Down, Archiving, and Tear Down

You will need to close down your packet station at some point. Do so after receiving direction/permission from your supervisor or other management.

Note: the Archiving steps below are new to the [Packet Operations Type III Part B](#) course this year. They are here as a reminder of the new procedures for making a packet station ready for the next use.

### Close Down

<input type="checkbox"/>	Contact your supervisor / manager and request to close down your packet station
<input type="checkbox"/>	When ready, send a proper Check-Out message for your tactical assignment
<input type="checkbox"/>	Start closing your paperwork – except your packet ICS-309
<input type="checkbox"/>	Confirm that the Check-Out message was delivered (e.g. DELIVERED receipt is correct)
<input type="checkbox"/>	Process any other additional messages you may have received while waiting for the DELIVERED confirmation.
<input type="checkbox"/>	Finalize your ICS-309 for the packet station, it should include the DELIVERED receipt for the Check-Out as well as any additional messages you needed to process after Check-Out, including DELIVERED receipts.

### Archiving

<input type="checkbox"/>	Create a printable message listing for this event using Outpost <b>File &gt; Save All</b> . Save to a file on your computer. [Eval check item]
<input type="checkbox"/>	Create a <u>message archive</u> using Outpost <b>File &gt; Export &gt; All Folders</b> . Save to a file on your computer. [Eval check item]
<input type="checkbox"/>	Reset Outpost for the next event <b>STOP</b> – do not proceed until you have created the <u>message archive</u> in the previous step. <b>STOP</b> – do not proceed until you have permission from the Packet Manager. (they may have other instructions for you). Upon permission to continue with the reset: <ul style="list-style-type: none"><li><input type="checkbox"/> Archive the SCC Notices folder using <b>File &gt; Export &gt; This Folder</b>. Save to a file on your computer.</li><li><input type="checkbox"/> Delete all messages using Outpost <b>File &gt; Delete All Messages</b>. Answer “Yes” at the prompt.</li><li><input type="checkbox"/> Import the SCC Notices folder using <b>File &gt; Import</b> from your saved file. Verify and/or move as needed in to a custom folder “SCC Notices”</li></ul>
<input type="checkbox"/>	If requested by the Supervisor, copy the above files unto your’s or their USB thumb drive.

### Tear Down

<input type="checkbox"/>	If you are leaving an existing station, follow the supervisor or position binder instructions for close down.
<input type="checkbox"/>	For your own equipment or station-in-a-box, tear down and pack up in less time than it took you to set up.

## The End

Just for your own experience with this document.

- I have read and check-ed off all items.

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