



Packet Operations Post-Class Exercises



Santa Clara County ARES®/RACES/ACS

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This workbook contains exercises intended to help radio operators get practical experience with the material taught in the Packet Operations classes.

If you encounter any difficulties with these exercises, don't struggle. Email the instructor for help if need be, or get help from your classmates or city ARES colleagues.

Red numbers in brackets like [2] are slide numbers in the Packet Operations Type III, Part A class slides where you can find explanations of the relevant topics.

What You Will Need

- A working packet station.
If you do not have one of your own, check whether your city ARES group has stations they can lend out, or whether you can use a station in your city's radio room.
- The primary and secondary BBSes for your city and for some other cities.
That information is at scc-ares-races.org/operations/packet/bbs.
- Your instructor's email address.
You can get this from the pre-class email they sent you.
- A tactical call sign.
This should be assigned to you by your city EC for the period during which you are working on these exercises. (Do not use it after that period ends.) If you are unable to get a tactical call sign from your city EC, contact the class instructor to get a county tactical call sign.

Exercise 1: Test Message on Primary BBS

1. Configure Outpost to use your FCC call sign without a tactical call sign. [40]
2. Configure Outpost to connect to your city's primary BBS. [44]
3. Configure Outpost for your TNC type [45] and COM port [46].
4. Send yourself a test message. [58]

If you don't receive the test message you sent yourself, you cannot succeed with the rest of the exercises. Instead, troubleshoot the problem. Don't hesitate to ask for help.

Exercise 2: Test Message on Secondary BBS

1. Configure Outpost to connect to your city's *secondary* BBS. [44]
2. Send yourself a test message, addressed to your call sign at your *primary* BBS. [58]
3. Configure Outpost to connect to your city's *primary* BBS. [44]
4. Verify that you receive the message sent in step 2.

Exercise 3: Packet Message to Instructor

1. Create a plain text test message. [65]
The subject line should have the message ID followed by “_R_Exercise 3”.
2. Send the message to PKTEST@W1XSC. [58]
3. You should receive a delivery receipt from PKTEST@W1XSC within 24 hours. [75]

Exercise 4: Email Message to Instructor

1. Create a plain text test message. [65]
The subject line should have the message ID followed by “_R_Exercise 4”.
2. Send the message to your instructor's *email* address. [58]
Get this from the pre-class email.
3. Your instructor should send a reply to your packet address within 24 hours.

Exercise 5: Receive Email Message via Packet

1. Using your normal email client, send a message with subject “Exercise 5” to your-call-sign@your-primary-bbs.scc-ares-races.org and to PKTEST@W1XSC.scc-ares-races.org. (Separate the two addresses with a comma.)

WARNING: Make sure it is a plain-text-only message, not a styled message. For example, in Gmail, in the new message window, click on the three vertical dots at the bottom right and choose “Plain text mode.” If your email client does not provide a plain text option (e.g., some versions of Outlook), please skip this exercise. **Styled messages are much too large for packet.**

2. You should receive this message in your packet mailbox, and shortly afterwards, should receive a delivery receipt for your copy of it in your email inbox.
3. You should receive a delivery receipt for the [PKTEST](mailto:PKTEST@W1XSC.scc-ares-races.org) copy of it in your email inbox within 24 hours.

Exercise 6: Send and Receive a Form Message

1. Configure Outpost to use your assigned tactical call sign. [41]
2. Configure Outpost to start with message number 300. [43]
3. Create a new ICS-213 message [67] with the following fields:

5. Handling	Routine
6. To ICS Position	Instructor
7. To Location	Home
10. From ICS Position	Student
11. From Location	<i>your location</i>
14. Take Action	No
15. Reply	No
21. Subject	Exercise 6
23. Message	<i>whatever you like</i>
4. Send the message to [PKTEST@W1XSC](mailto:PKTEST@W1XSC.scc-ares-races.org). [69, 71]
5. You should receive a delivery receipt from [PKTEST@W1XSC](mailto:PKTEST@W1XSC.scc-ares-races.org) within 24 hours. [75]

Exercise 7: Primary and Secondary BBSes

1. Configure Outpost to use your FCC call sign (no tactical call sign). [40]
2. Send at least one of following messages:
 - a. to [SJCTST](#) at San Jose's *primary* BBS
 - b. to [GILTST](#) at Gilroy's primary BBS
 - c. to [LOSTST](#) at Los Altos's primary BBS
 - d. to [MLPTST](#) at Milpitas's primary BBS
3. Send at least one of the following messages:
 - e. to [SJCTST](#) at San Jose's *secondary* BBS
 - f. to [GILTST](#) at Gilroy's secondary BBS
 - g. to [LOSTST](#) at Los Altos's secondary BBS
 - h. to [MLPTST](#) at Milpitas's secondary BBS
4. Configure Outpost to use your city's *secondary* BBS. [44]
5. Send at least one of the following messages:
 - j. to [SJCTST](#) at San Jose's *primary* BBS
 - k. to [GILTST](#) at Gilroy's primary BBS

For each of the above messages, send a plain text test message. [58]

The subject line should have the message ID followed by “_R_Exercise 7x”, where x is the letter from the list above.

You should receive a delivery receipt within 24 hours. [75]

Exercise 8: Sending and Receiving City Bulletins

1. Set up Outpost to receive bulletins for your city. [47]
2. Send a bulletin to your city's bulletin area (e.g., [XND@XSC](#)).
Sending bulletins is just like sending plain text messages [58], except that you click the “**Bul**” button before sending.
Use the subject “[Packet Exercise 8 from your-call-sign](#)”.
(Bulletins do not have message IDs or handling orders.)
3. Next time you connect, you should receive this bulletin as well as any posted by other students in your city. [74] Your instructor will be watching for it as well.

Exercise 9: ICS-309 Communications Log

1. Make Outpost generate an ICS-309 communications log including all messages from these exercises. [84] It's OK if it includes other messages also.
2. Email this ICS-309 communications log to your instructor. This is the final step that earns course credit for completing the exercises.