



Monthly Packet Message Passing Exercise Review

Period: 02/15/2023 09:00 to 02/22/2023 17:00



Santa Clara County ARES®/RACES/CRU

Last Updated: 23 Feb 2023

Author: Mark Laubach K6FJC

ARES and Amateur Radio Emergency Service are registered service marks of the American Radio Relay League Incorporated and are used by permission.

Messages Passed

Approximate number counts from the Xanadu EOC ICS-309 (as of Wed.):

Facilities assigned (total):	22
Participating / staff:	17 / 3
Content Messages exchanged *:	
Form ICS-213 / Routine	43
AhFacStat	26
Courtesy	0
Packet BBS reachability survey CSV	24
Check-In/Out	47

Happy New Year and thank you for participating in this exercise!!!!

- * Excluding DELIVERED 322. Overall including DELIVERED 604 messages

Exercise Objectives

- Based on SCC documentation
 - SCCo ARES/RACES Packet Operations - Type III, Part A and Part B courses
 - How to Send a Packet Message with Outpost - 09/19/2013
 - Standard Packet Message Subject Line - 02/22/2023
 - Standard Packet Check-in/Out Message - 09/25/2023
 - Outpost Users Guide, Basics; Version 3.4 | July 2020
 - RACES Recommended Form Routing Cheat Sheet [Rev: 19-Feb-2023]
- Exercise simulated 3rd party and operator-to-operator messages
 - Check-In and Check-Out using new form
 - XSCEVENT and XND@XSC City Notice retrieval
 - ICS-213
 - XSC Allied Health Facility Status
 - Handwritten formal messages
 - “Structured” CSV form survey

How did we do in general?

- Handwritten forms still produce some “interesting” results
- Some “soft” and “hard” fax machine errors
- ICS Reference message number!!!!
 - 9 Facilities forgot for first ICS-213
- BBS Survey CSV produced some interesting discussion material
- Allied Health Facility report also produced some interesting discussion material

- **Always the same reminder:**
 - If you get a Delivered receipt message back and no other messages, compare the Subject: line of the message you just sent against the instructions/directions/form content
 - If you suspect a problem email the Instructor promptly

- All in All – another mutual learning experience!

The Allied Health Facility Assignment:

Greetings,

You are receiving this email as you have signed up for the SCC Packet Message passing exercise that opens at 09:00 today (Wednesday). This exercise continues for one week and closes on next Wednesday at 17:00.

The process begins by sending a properly formatted Check-In message to the Xanadu City EOC using the tactical information that has been assigned to you below. Follow the directions in notice(s) and each received message from XNDEOC. Send a correct response message to continue the process and you will receive the next message in the flow of this exercise. A message with the subject containing "Thank you" will contain your last assignments. **Simulated Scenario for this month's exercise:** Xanadu County has experienced a county-wide earthquake. Hospital facilities are near capacity. Allied Health Facilities are being staffed to provide patient offload from hospitals. You are assigned as a packet operator at an allied health agency facilities activated for this event.

Your tactical number: 71
Your From ICS Position: Radio Operator
Your From Location: "Allied Health Facility 71", can be shortened to "Facility 71". (this is also your Tactical Name for check-in/check-out)
Your Tactical Call Sign is: XND071
Your message prefix is: X71
Starting message number: your_choice
Incident Name: Xanadu County Evacuation Event
Activation Number:
(also ICS-309 Task#) XND-23-0215P
Your BBS: Use your normal primary/secondary. There is no simulated-down BBS for this exercise
Your facility location: Use the nearest major intersection to your home
Xanadu County EOC mailbox: XNDEOC@W1XSC.ampr.org (primary)
XNDEOC@W4XSC.ampr.org (secondary)
XND EOC activation period: From Wednesday, 02/15/23 09:00 until Wednesday, 02/22/23 17:00
You signed up as a: Primary_Station_test

There will be Zoom "Office Hours" held next Wednesday from 19:30 to 21:30. Conference details will be sent in a separate email. The agenda for this call will be to review an overall exercise "score card" and to interactively review any issues, problems, and to answer any questions.

How'd we do: Notices

- XSCEVENT
 - This time: made an assignment – most facilities responded
- XND@XSC
 - Put a different assignment in the city notice – will discuss BBS survey separately.
 - Responding to this assignment was required to move ahead
 - Most every facility did this

How'd we do: Starting Status

- Check-in Ack & Welcome
- URL "handed to you" method explained
- Reminder on DD, HH, MM replacements
- Added +time instructions
- Assignment for operational conditions
- Note about "<" and ">" notes to you
- Note about expected response from EOC, Same in XSCEVENT notice.

Check-In acknowledge to the Xanadu County Packet Net for this month's message passing communication exercise. You have these guidelines and assignments:

1) Please make sure each message you send has this somewhere in the message content:

**** This is exercise traffic ****

2) This month's practice will simulate forms being handed to you by your manager available as PDF via URL.

- a) After they "hand" you the form(s), they walk away and are not available for updates/corrections.
Reminder: you are a FAX machine
- b) You may need to complete the form using the Radio Routing Cheat sheet and your best judgement.
- c) They don't know about Guideline 1) for stating drill traffic in the message, you will need to add to any form missing this. Add to an appropriate field within the form.

3) In any messages you are asked to transmit:

- a) If you see an "XX" (double-X), replace the XX with your assigned tactical number.
- b) Replace any "DD" with the actual day value that you are transmitting the form for the exercise.
- c) "HH" and "MM" with current 24-hour clock hour value and the current minutes value
- d) If you see a "+time" add the correction to the current time. For example, if the form has "HH:MM+3h", use your current time plus 3 hours, or "08/DD/2022+tomorrow", would be enter tomorrow's date for the DD replacement.

4) Please prepare and send a routine ICS-213 to Operations at Xanadu County EOC describing your facilities operational conditions for your packet station:

Make and model of radio(s), power output, coax cable type, length of coax, make/model of antenna, and the height of the antenna above ground.

Use the Subject: Facility XX packet station

Note: you will not receive a direct response to this message. Use your delivered receipt as indication it was received by the Xanadu County EOC. Hint: city notice

5) This exercise may put some notes into the forms for various fields. A note to you is bracketed by "<" and ">" signs. For example, you may see:

"<enter your simulated field post address>"

Simply, replace the brackets and the note text with the requested text for that field.

ICS-213 for Facility XX packet station

- Good go.
- As mentioned, many left Reference field blank
- Pretty consistent responses

Packet BBS reachability survey

from XND@XSC notice

Assignment:

Xanadu County EOC would like to survey for BBS reachability at each staff allied health facility. Please download the following prepared CSV form and fill out the survey contents. Directions are in the file:

https://xanadu-county.org/20230215/20230215_bbs_survey.csv

Return the entire file as CSV content in a plain text message:

Subject: Packet BBS reachability survey for Facility XX CSV

To: XNDEOC@w1xsc.ampr.org; survey@xanadu-county.org

- This was a mutual learning experiment to answer some questions:
 - Can a served agency create a form for specific information gathering when a PacketItForm does not yet exist?
 - Does a CSV form provide this?
 - Can this form be processed automatically without operator intervention?

Packet BBS reachability survey

Question 1

- Can a served agency create a form for specific information gathering when a PacketItForm does not yet exist?
 - Simple answer: Yes! But,
 - Likely the served agency will need some assistance from the radio operator or radio room staff to understand what is available in packet messaging
 - They may state they have an information gathering need and we'll have a suggestion
 - We'll also have experience on how the radio operator processes it
 - Not sure this will ever really be used - provides an interesting practice scenario for us nonetheless

Packet BBS reachability survey

Question 2

- Does a CSV form provide this: it is workable, so Yes
- Intent of this exercise was to create a “structured” CSV form
 - “structured” is a temporary label, intent that this is not “ad-hoc” and up to the packet operator.
- Create something that has the flavor of a PackItForm, but is processed using a generic spreadsheet editor and not a crafted browser page
 - PackItForm provides better management of field content
 - Better instructions, value checking, drop-down suggestions, etc.
 - Hard to directly edit the packet message text
 - And it looks like the real form (mostly)
 - CSV forms are very simple, burden is on the author to provide instructions that will produce the result they want back
 - Form and content consistent with their expectations
 - Row, column, i.e., cell positions need to be preserved
 - They may not have all the experience they need
 - Will be a continual mutual learning process

Packet BBS reachability survey

Comment on size of messages containing forms

- A comment was raised during the Zoom call
- PackItForms
 - Use the least amount of information to send a form
 - Form structure/view known in advance at both ends
 - Form fields are assigned an index/id number
 - Only those form fields with content are include in the message
- CSV Forms
 - Form structure is included in the CSV file but not tied to known form in a browser
 - Instructions are also included
 - All rows and cells must be transmitted

Packet BBS reachability survey

Question 3

- Can this form be processed automatically without operator intervention?
 - Probably yes, but caveats
 - Depends on knowledge and skill of the form's author to foresee things in a programmatic way
 - Depends on socialized training for the packet author to maintain both packet message content and form structure
 - Can we pull this off reliably given editing the message text is completely open and we're all human and volunteers?

Packet BBS reachability survey

The intent

- Structured to look similar to a PackItForm
 - Indicate where form begins and ends with label so that recipient knows how to interpret the content:

```
StartForm,bbs-1,,
```

```
....
```

```
EndForm,bbs-1,,
```

- Provides human labeling and programmatic potential
- Like PackItForm addon content:

```
!SCCoPIFO!
```

```
#T: form-ics213.html
```

```
#V: 3.9-2.2
```

```
....
```

```
!/ADDON!
```

- Rows/columns are an equivalent to field numbers/values
- Also: ICS To/From and Handling information at top of the form
- Also: send copy to an Internet email address

Packet BBS reachability survey

How did it work?

- Pretty good
- Most facilities filled out as hoped
- Some didn't do the "<" ... ">" replacement as directed in the Check-In acknowledge message, one didn't do the XX replacement
- Some got creative with contents:
 - Extra lines explaining where the CSV content was: not needed, entire message content was expected to be csv text to permit an Outpost File -> Save As, No headers directly to a file without editing.
 - Also, programmatic processing might not be able to handle unknown extra ad hoc text lines
 - One added extra fields
 - Wonder what PackItForms would do if extra unexpected stuff? we have an example of one crashing during this exercise due to misplacement of "**** this is exercise traffic ****" text.
- Didn't have time to write a script and produce statistics.

Packet BBS reachability survey

Surprises

- Some surveys indicated 5 or 10 watts.
 - For these facilities, how then are you not creating a hidden node problem?
- One facility indicated every BBS was their primary
 - Only one BBS can be your primary, probably the same as your city
- One facility removed the Form delimiter lines, e.g.,
 - StartForm,bbs-1,, and EndForm,bbs-1,,
 - This broke things at the recipient
- Comments on transmit power in zoom call
 - Using the lowest power, e.g. from a handheld or lowest power on a transceiver, will likely create a hidden node when other stations are using the same BBS
 - Having the best receive gain is better than having the most transmit power
 - Aim to maximize antenna gain and height above ground
 - Dual band handhelds may have different “high power” output on different bands
 - E.g. 5W on 2M, but may be less on 70cm
 - Check your radio specs (HT or Mobile) regardless

Packet BBS reachability survey

Summary

- All in all, quite well
- PackItForms with Outpost does a good job of dissuading folks from editing the message body directly. CSV content leaves it all open.
- Not sure how much this will or can be used in the future
- Maybe socialize further
 - Future exercises
 - Packet operator training
 - Potential forms author guidelines

XSC Allied Health Facility Report

- The exercise was contrived to use this form
- If the MHJOC building is trashed and there is no staff in any departments (they were all transferred into the Xanadu County EOC organization) is the MHJOC open?
 - **NO**
- Radio Cheat Sheet comes in to play:

To Location **	To ICS Position **
If open: MHJOC Else: County EOC	EMS Unit -or- Public Health Unit Else: Medical Health Branch Else: Operations Section

** For actual EOC activations, use the default To Location and To ICS Position(s) as indicated, unless told otherwise by the message originator.
For an ARES/RACES exercise or training event, use the information given for that event, e.g. "Xanadu EOC" may be specified instead of "County EOC", etc.

XSC Allied Health Facility Report

Comments on if the MHJOC was open

- During Zoom call, discussion suggested
 - In future make it very clear that the MHJOC is closed, otherwise
 - Accept MHJOC as an ICS TO Location in addition to County EOC

XSC Allied Health Facility Report

- PackItForms adds the “Update” and “Complete” options.
 - The EOC handwritten form doesn’t have these
 - Author intended as an Update
 - Packet Operator has to use their judgement
 - Do we provide guidance? Yes! Is this used anywhere else? Yes!
- From the XSC OA Jurisdictional Status Form & PackItForm:

Report Type	<u>Required.</u> <ul style="list-style-type: none">• Update: Normal mode. Recipient should only replace fields in WebEOC that are entered here. Other fields should retain their current values. To tell the recipient to clear a text field in WebEOC, write “{CLEAR}” in the field. To append to existing data in a WebEOC text field, write “{APPEND}”, followed by the text to be appended.• Complete: <u>Use with caution.</u> An empty field here tells the recipient to clear the field in WebEOC. Use this to replace all fields in WebEOC with the data provided here, or to report on current status of all WebEOC fields.
--------------------	---

- Question for those that selected Complete or filled text fields that were blank: did you throw away information from a prior report filing? Likely yes.

XSC Allied Health Facility Report Update vs Complete

- Discussion during Zoom call
- We did know going into the practice, that PackItForms has an Update and a Complete radio button, and one option must be selected
- There are no such checkboxes on the paper form
- There are no instructions, like on the XSC OA Jurisdiction Status form, for stating the procedures for Update/Complete
- DEC will discuss with OEM staff to determine if the Update and Complete are appropriate for EOC processing of this form and the PackItForm or paper form will be adjusted.

XSC Allied Health Facility Report

- Two people having different but similar last names, have the same first name? Perfectly fine.
 - Salley Preston
 - Salley Peterson

ICS-213 Grid Failed On Generator

- This went pretty well
- Many facilities simply typed upper case, other followed case

POWER FAILED, GENERATOR OK FOR 10 HOURS FROM THIS TIME. NEED FUEL. SEPARATE EOC213RR HAS BEEN SENT, WE MAY NEED PATIENT TRANSFER ASSISTANCE IF FUEL DOESN'T ARRIVE IN TIME. CURRENT PATIENT COUNTS ARE: SKILLED NURSING 35, ASSISTED LIVING 25, SUR-ACUTE 10, ALZ/DEMENT 4.

- Some facilities got carried away with caps

POWER FAILED. GENERATOR OK FOR 10 HOURS FROM THIS TIME. NEED FUEL. SEPARATE EOC213RR HAS BEEN SENT, WE MAY NEED PATIENT TRANSFER ASSISTANCE IF FUEL DOESN'T ARRIVE IN TIME. CURRENT PATIENT COUNTS ARE: SKILLED NURSING 35, ASSISTED LIVING 25, SUR-ACUTE 10, ALZ/DEMENT 4.

- Since we are to practice as if the real event. If SCC OEM was our served agency what would Dana Reed think?
- Some soft fax issues, e.g. Netwetter instead of Nedwetter.

ICS-309s

- Packet ICS309
 - Nicely done for packet
 - Mostly task name issues
 - Manual operators – thanks for the extra effort
- Reminders for Outpost ICS309 Communications Log:
 - From Step 4) in the “you have been released message”:
 - Do not exclude anything from the report
 - Sort by the first sort option of "DateTime"
 - Use this as the Task Name:

"Xanadu County Earthquake, Facility XX".
 - Reminder to use the activation number for Task#.

Event Posting Conundrum

- SCCo event listings only permits daily events, not ones that last a week.
- So, my desire is to keep the posting in the "current events" list and not force late-comers to search for "past events"
- After the events starts on the 3rd Wednesday, I will slide the event to the following Tuesday.
- Will probably also add a note in the description stating that the practice is currently in progress, or something like that.

Summary

Again, nice practice for this go!

Next practice will be March 15th 2023, 3rd Wednesday

- Event already posted for signup
- Scenario: T.B.D., but be ready to model being activated and mobilizing to a drill. Yes, includes ICS-214 practice.

Next UP: Exercise Scorecard

- Reminder, there is no pass or fail
- The scorecard is a tool for indicating areas for improvement
- Will color all MHJOC To's Green.