



Pinellas ACS/ARES® After-Action Report - September 2021 Drill

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[Abstract](#)

This After-Action Report captures the observations and recommendations associated with the Pinellas ACS September Training Drill.

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FOREWORD

The purpose of an After-Action Report (AAR) is to evaluate Pinellas Auxiliary Communications Service (ACS) performance during a training drill, exercise, or activation event. It is intended to capture observations and recommendations based on the scope and tasks performed.

This After-Action report is associated with the Pinellas ACS/ARES® September Training Drill. Drills are used to exercise specific operational skills, practice digital and voice network operations, and assess user performance. Each Drill is narrowly focused on a small set of skills and is designed to require one hour or less to complete. Drills are the primary tool used to certify user performance.

Comments, suggestions, or questions on this document should be addressed to Michael Drake, WA1RYQ, email: WA1RYQ@arrl.net.

Record of Changes

REVISION	DESCRIPTION	DATE
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1 SCOPE

This After-Action report is associated with the Pinellas ACS/ARES® September Training Drill. The scope of this drill was limited to practicing Simplex network operations.

Throughout the remainder of this document, The *Pinellas County ACS/ARES® Emergency Communications Plan and Standard Operating Procedure* document will be referred to as the Communications Plan.

2 APPLICABLE DOCUMENTS

2.1 RELATED DOCUMENTS

The following documents are referenced by and form an integral part of this report.

- a. September 2021 – Simplex Drill Operations*
- b. Pinellas County ACS/ARES® Emergency Communications Plan and Standard Operating Procedure*

3 AFTER ACTION REPORT — SIMPLEX MODE OPERATION

This section of the document contains a description of the Drill, its objectives, schedule, and planned resources. The individuals who participated in the drill and the activities and events that took place during the drill are also documented.

3.1 DESCRIPTION

The ACS/ARES® Tactical-Resource Net will be established at **ACTIVATION LEVEL 1** using the primary ACS repeater system, W4ACS. Once the net is established, the drill will begin. The three phases of the drill are listed below.

- **Part 1:** Transition to a county wide simplex net using multiple relays.

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- **Part 2:** Send an announcement to all simplex net participants.
- **Part 3:** Return to the W4ACS repeater system for closing remarks and net deactivation.

The procedures documented in the Communications Plan will be used to activate, transition, and deactivate the net.

3.2 OBJECTIVES

This drill had two objectives.

- Provide training to the membership on Simplex mode operation.
- Identify the appropriate number of relay stations, and practice relaying information between net participants.

3.3 SCHEDULE

September 23rd, 2021 @ 1930 Hrs. Drill duration was scheduled for approximately 1 hour.

3.4 PLANNED RESOURCES

The resources listed below were used during the drill.

- The W4ACS Repeater system.

3.5 PARTICIPANTS

The following eighteen stations participated in the Drill.

WA1RYQ - NCS	W8FQFV - ANCS	KC4SXO	KM4BRQ
KG1AES	KM4DYD	N2DW	N2KBD
KD4MZL	KJ4FXX	KI4RVU	W4PXE
KK4EMN	KJ4RUS@EOC	N4BCK	KO4MRH
KO4NUY	W7WMS		

3.6 SUMMARY OF DRILL ACTIVITIES

The sequence of events and activities associated with the drill are described in the following paragraphs.

- a. The Net Control Station (NCS) announced the beginning of the drill at 1930 hours local using the Pinellas ACS/ARES® net control script for Activation Level 1. The NCS stated that the reason for the activation was a training drill.
- b. Following net check-ins, the NCS directed all stations to change frequency to 146.430 Mhz simplex. This the Pinellas ACS County Wide Simplex Frequency.
- c. The NCS called for net check-ins on the new net frequency. Six stations responded to the call for check-ins; however, only five were deemed to be of sufficient signal strength to reliably exchange traffic with net control.
 - (1) Tier-2 Stations: KC4SXO, W8QFV, KM4BRQ, KJ4RUS, and KD4MZL
 - (2) W7WMS was heard; however, copy was only 40%.
- d. The NCS directed each of the five tier-2 stations, in turn, to call for net check-ins and report back to net control with their list of stations. The stations heard by each tier-2 station are listed below.
 - (1) **KC4SXO**: KI4RVU, N2KBD, N2DW, N2EMN, KG1AES
 - (2) **W8QFV**: KM4DYD, N4BCK, KJ4FXX, W8IM
 - (3) **KJ4RUS**: K04NUY, K04MRH
 - (4) **KD4MZL**: No additional stations heard
 - (5) **KM4BRQ**: No additional stations heard
- e. After the call for tier-2 station check-ins was complete, the NCS, in consultation with the Tier-2 stations determined that no additional stations would be added to the net by performing a Tier-3 check-in.
 - (1) W4PXE was flagged as missing; however, determined to be in/out mobile.

- f. The NCS sent an announcement to all Tier-2 stations, requested that each station acknowledge receipt, and then, in turn, send the announcement to each of their subordinate stations.
 - (1) Announcement: ***“The center of Tropical Storm Sam is located near latitude 11.1 north, longitude 39.7 west”***
 - (2) Several errors were introduced into the announcement during the exchange between Tier-2 stations and subordinate stations. This caused some confusion on the net. Corrections to the announcement were sent and received.
- g. Once the announcement had been acknowledged by all stations, the NCS directed each of the tier-2 stations, in turn, to notify their tier-3 stations to change frequency back to the W4ACS repeater. Once each tier-2 station reported that each of their subordinate stations had acknowledged the net frequency change, the NCS directed all tier-2 stations to change frequency.
- h. Upon return to the W4ACS repeater, the NCS requested and addressed comments and questions.
- i. The NCS then sent a net report message to W8QFV, the PACS net manager.
- j. The NCS closed the net at 2031 hours local time. The Drill duration was 61 minutes.

4 QUESTIONS, COMMENTS, AND RECOMMENDATIONS

The following table contains a summary of the questions, comments and recommendations provided by the membership.

No.	Call Sign	Comments	Response
1	W8QFV	Recommend that the next drill should use 5-Watts or less as in a long-term emergency. This would simulate a serious power outage of three weeks or more. Also recommend that stations use emergency power.	Agree. A future drill will request that all users operate on emergency power (if available) and reduce transmit power to 5 or 10-watts.
2	W7WMS	<p>I felt a bit like an orphan in that you acknowledged me on the first go-round of calls for simplex stations, but indicated my signal was too noisy to effectively serve as a tier-2 station. Since I had checked in with you on simplex, I did not check in with any of the tier-2's; if it was your intent that I should check-in on tier-2 then I misunderstood. Perhaps some guidance on how to handle that situation would be helpful when it arises.</p> <p>Recommended Text: "When checking in stations on simplex, if a station's signal is weak or otherwise difficult to hear, the NCS should direct that station to re-check with one of the tier-2 stations so that it can be called on to serve as a tier-3 relay station if needed"</p>	Agree that we will need to add guidance for the case that you mentioned.

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No.	Call Sign	Comments	Response
3	N4BCK	All net control stations need to remember to read the message traffic slowly enough for operators to copy by hand. I was able to copy more than one net control station and would be able to make corrections, but in a real-world scenario, that might not be the case.	Agree. This topic will be part of our next Weekly training net scheduled for October 5 th , 2021.
4	N4BCK N2KBD	Remember to repeat "This is a drill" (or exercise) frequently enough for a casual listener not to be alarmed. Today's drill should not have alarmed anyone, but future content could.	Agree. I will update all Drill scripts to implement this suggestion.
5	N4BCK	Don't use Q-codes. QSY should not be used. Use change frequency. ICS requires plain language.	Agree. I will update all Drill scripts to implement this suggestion.
6	N4BCK	Message content which could be misunderstood should be spelled phonetically. Specifically, the storm name "Sam" might not have been understood without spelling Sierra Alpha Mike.	Agree. This topic will be part of our next Weekly training net scheduled for October 5 th , 2021. The topic will include the use of all prowords used during messages exchanges.
7	N4BCK	Band and propagation conditions change. I was not able to copy Mike WA1RYQ at the beginning of the net, but I was able to after a short time. This can go the other way as well of course. We might need to update the tier groups if conditions change.	Understood. Will investigate how best to incorporate this suggestion into the simplex net protocol.

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No.	Call Sign	Comments	Response
8	N4BCK	We might want to refer to the tier groups by a tactical name of some kind. It would be easier to say, "Clayton's group prepare to copy message 2:", send the message, then poll for acknowledgements or fill requests.	Will investigate to determine how this might be implemented. "This is KJ4RUS, relay station for net control. All stations in my group..."
9	KC4SXO KJ4RUS	After switching to the simplex frequency, instead of asking for check in could you have just gone thru the list of stations that checked in on the repeater give the station about 10 to 15 seconds and then moved on down thru the list.	I will update the Simplex net script so that the NCS performs a rollcall to determine Tier-2 stations.