

The logo is a circular emblem with a red outer ring containing the text 'EMERGENCY COMMUNICATIONS' at the top and 'RADIO AMATEUR OPERATIONS' at the bottom. The inner blue circle features a satellite, a laptop, a radio tower, and a lightning bolt. The acronym 'A.C.S.' is written in large yellow letters at the bottom of the inner circle.

Pinellas ACS

Hurricane Amaranth Exercise

After-Action Report and Improvement Plan

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Pinellas ACS Training Officer

5/19/2022



Agenda

- Exercise Objectives
- Exercise Evaluation
- After-Action Report
- Improvement Plan



Pinellas ACS Hurricane Amaranth Exercise Objectives



- Meet communication objectives defined by Pinellas County
- Stage a HSEEP compliant communications exercise
- Train Pinellas ACS communicators in skills needed during the approach, landfall, and aftermath of a tropical cyclone
- Evaluate individual player performance against AUXCOMM and ARES® Position task book requirements



Pinellas ACS Hurricane Amaranth Exercise

Exercise Objectives



Overarching Pinellas County Exercise Objective

“The Pinellas County EOC will establish and maintain multi-agency and multi-jurisdictional communications and coordination during a hurricane response in accordance with Pinellas County’s Comprehensive Emergency Management Plan.”

- Pinellas ACS Created 8 exercise objectives to demonstrate compliance with the overarching Pinellas County Objective
 - Organizational Capability Targets
 - Critical Tasks
 - Documented in Exercise Evaluation Guides (EEG)



Pinellas ACS Hurricane Amaranth Exercise

Exercise Objectives



- ACS objectives distribute between three venues
 - Pinellas County EOC Radio Room
 - Emergency Evacuation Shelters
 - Incident Communication Centers (ICC)



Pinellas ACS Hurricane Amaranth Exercise

Detailed Exercise Objectives – EOC Radio Room



- **Objective 1:** Establish and maintain voice VHF radio networks that support the exchange of information between the EOC and simulated emergency evacuation shelters.
- Exchange tactical and formal message traffic with Pinellas ACS Radio Operators located at
 - **Objective 2:** Simulated emergency evacuation shelters using voice VHF radio networks.
 - **Objective 8:** Simulated ICCs using VHF and 800-MHz voice and VHF Winlink data networks.
- **Objective 3:** Establish and maintain VHF/UHF radio and telephonic voice landline networks that support resource management and tactical message exchanges between
 - Pinellas County municipalities
 - Deployed ACS resources
 - Pinellas County EOC
- **Objective 4:** Exchange tactical and formal message traffic with the state of Florida EOC
 - Amateur voice and Winlink digital radio networks
 - SHARES voice and SHARES Winlink digital radio networks
 - EMnet, MSAT, and TracStar voice satellite networks.

ICC – Incident Communication Centers
SHARES – SHARed RESources



Pinellas ACS Hurricane Amaranth Exercise

Detailed Exercise Objectives – Emergency Evacuation Shelters



- **Objective 1:** Establish and maintain voice VHF radio networks that support the exchange of information between the EOC and simulated emergency evacuation shelters.
- **Objective 2:** Exchange tactical and formal message traffic with Pinellas ACS Radio Operators located at the Pinellas County EOC using voice VHF radio networks.
 - Status Reports
 - ICS 213 messages



Pinellas ACS Hurricane Amaranth Exercise

Detailed Exercise Objectives – Incident Communication Centers



- **Objective 5:** Emplace, configure, operate, and maintain deployable satellite ground stations that provide services to collocated emergency management personnel
 - High speed internet
 - Cellular phone
 - Voice over Internet Protocol (VoIP) phone services
- **Objective 6:** Emplace, configure, and maintain deployable Communications Command Centers (CommandRunner™) that provide the following services
 - VHF/UHF amateur radio voice and data networks
 - 700 and 800 MHz public safety networks
- **Objective 7:** Emplace, configure, and maintain deployable Communications Command Centers that provide the following services to collocated emergency management personnel
 - High speed ethernet and Wi-Fi internet service
 - VoIP telephone service to co-located emergency management personnel by using a commercially available cellular service Wide Area Network (WAN) backhaul capability.
- **Objective 8:** Establish and maintain VHF/UHF amateur radio and 800 MHz Public Safety voice and data networks that support resource management and tactical message exchanges between
 - Deployed ACS resources
 - Pinellas County municipalities
 - Pinellas County EOC.



Agenda

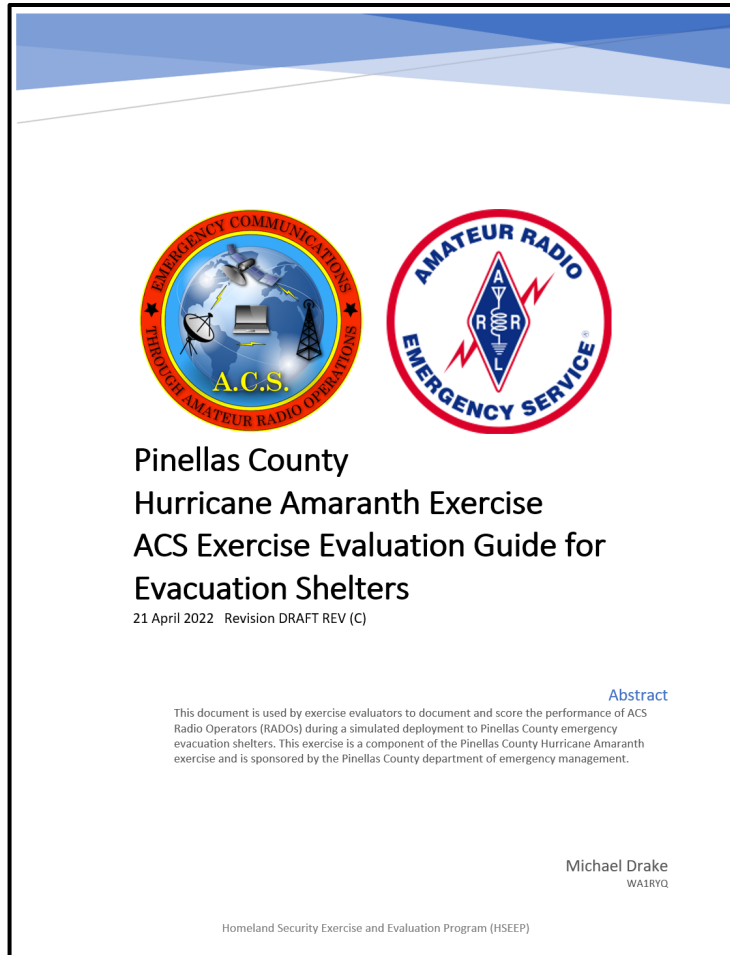


- Exercise Objectives
- Exercise Evaluation
- After-Action Report
- Improvement Plan



Pinellas ACS Hurricane Amaranth Exercise

Exercise Evaluation Guides (EEG)

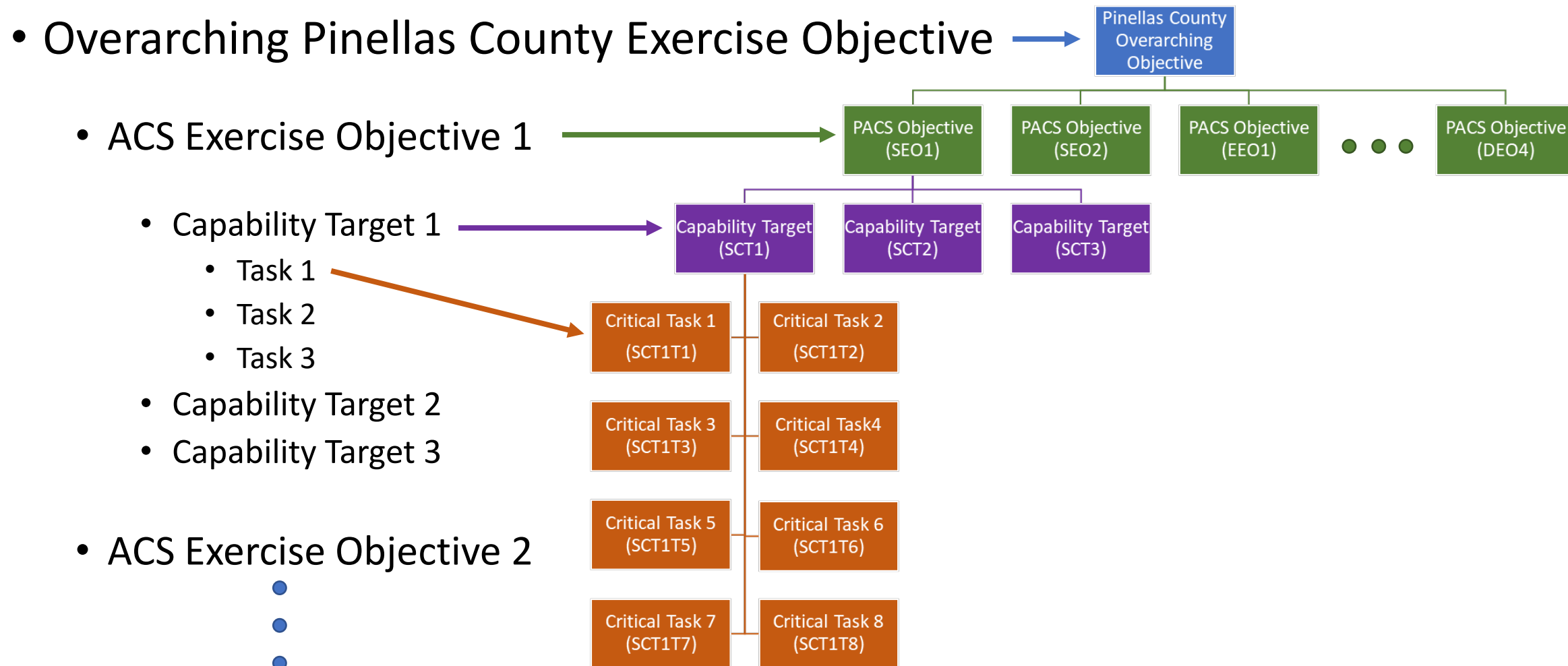


- One EEG created for each Venue
 - Evacuation Shelters
 - EOC Radio Room
 - Incident Communication Centers
- ***List of tasks required to complete each exercise objective***
- Used by exercise evaluators
 - Document issued uncovered during exercise
 - Determine where additional training may be required
 - Identify shortfalls in plans, SOPs and Job aids



Pinellas ACS Hurricane Amaranth Exercise

Exercise Evaluation Guides





Pinellas ACS Hurricane Amaranth Exercise

Exercise Evaluation Guides – Example



- **Exercise Objective (SEO1):** During a simulated hurricane activation of the Pinellas County EOC, the Pinellas County ACS will establish and maintain voice and Winlink digital VHF radio networks that support the exchange of information between the EOC and simulated emergency evacuation shelters. Network establishment, network management, resource deployment, and demobilization will be performed in accordance with ACS standard operating procedures.
- **Capability Target (SCT1):** Within 2 hours of ACS Activation, establish a VHF radio voice network that supports the exchange of information between **TBD** Pinellas County emergency evacuation shelters and the Pinellas County EOC. Network communications is maintained for the duration of a 72-hour incident.
 - **Critical Task 1 (SCT1T1):** ACS RADO obtains, assembles, and prepares material for a personal and position related Go-Kit that will support a 72-hour activation.
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 -
 -
 - **Critical Task 8 (SCT1T8):** ACS RADO sends and receives message traffic, both tactical and formal, with the EOC using a VHF voice radio network
- **Capability Target (SCT2):** Within 2 hours of ACS Activation, establish a VHF radio Winlink data network that supports the exchange of information between **TBD** Pinellas County special needs emergency evacuation shelters and the Pinellas County EOC. Network communications is maintained for the duration of a 72-hour incident.



Pinellas ACS Hurricane Amaranth Exercise

ACS Exercise Evaluation Guide - Sample



Organizational Capability Target (SCT1).

Within 2 hours of ACS Activation, establish a VHF radio voice network that supports the exchange of information between **TBD** Pinellas County emergency evacuation shelters and the Pinellas County EOC. Network communications is maintained for the duration of a 72-hour incident.

Table I. Capability Target 1 - EEG Score Sheet

Task ID	Critical Task	AUXC PTB Item	Observation Notes and Explanation of Rating	Target Rating
SCT1T1	ACS RADO obtains, assembles, and prepares the material for a personal and position related Go-Kit that will support a 72-hour activation period.	2a.1, 2a.2, 2a.3, 2a.4	This task will not be evaluated during the May 2022 Pinellas County Hurricane Amaranth Exercise.	N/A
SCT1T2	When notified of ACS activation (Pinellas Alert, Email, text, or phone), the ACS RADO notifies the ACS RO that he or she is available for activation and accepts evacuation shelter assignment.		Many of the ACS members listed in the Everbridge system did not acknowledge receipt of the text or email alerts.	S
SCT1T3	On an as needed basis, ACS RADO obtains shelter radio kit from EOC.			P
SCT1T4	ACS RADO obtains incident specific information regarding the deployment from ACS RO/ Deputy RO (deployment location, duration, time of arrival, ICS 204, ICS 205, etc.)	2b.1, 2b.2	Documentation provided to each shelter team following Operational Briefing.	P
SCT1T5	ACS RADO installs and configures shelter radio equipment at emergency evacuation shelter.			P



Pinellas ACS Hurricane Amaranth Exercise

ACS Exercise Evaluation Guide – Scoring



Performed without Challenges (P)	The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.
Performed with Some Challenges (S)	The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.
Performed with Major Challenges (M)	The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.
Unable to be Performed (U)	The targets and critical tasks associated with the core capability were not performed in a manner that achieved the objective(s).



Pinellas ACS Hurricane Amaranth Exercise

ACS Exercise Evaluation Guide – Scoring

No problems or issues identified



Performed without Challenges (P)	The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.
Performed with Some Challenges (S)	The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. <i>However, opportunities to enhance effectiveness and/or efficiency were identified.</i>
Performed with Major Challenges (M)	The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) , but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities ; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.
Unable to be Performed (U)	The targets and critical tasks associated with the core capability were NOT performed in a manner that achieved the objective(s).

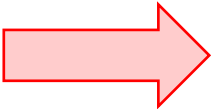
Only minor problems or issues identified



Major problems or issues identified



Unable to perform mission





Agenda



- Exercise Objectives
- Exercise Evaluation
- After-Action Report
- Improvement Plan



Pinellas ACS Hurricane Amaranth Exercise

After-Action Report and Improvement Plan – Appendix A



All the Artifacts produced by Pinellas County and each ACS communication teams during the exercise.



Pinellas County Hurricane Amaranth Exercise ACS After Action Report and Improvement Plan – Appendix A

19 May 2022 Revision DRAFT REV (A)

[Abstract](#)

Appendix A of the Pinellas County Hurricane Amaranth Exercise, ACS After Action Report and Improvement Plan (AAR/IP) contains the artifacts produced by Pinellas County and each ACS communication teams during the exercise.

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Homeland Security Exercise and Evaluation Program (HSEEP)

- Incident Action Plans
- Exercise Check-in / Check-Out Forms
- Pinellas County Alerts
- Shelter Team Exercise Artifacts
- Incident Communication Center Artifacts
- Pinellas County EOC Radio Room Artifacts
- Individual Artifacts
- Acronyms and Abbreviations



Pinellas ACS Hurricane Amaranth Exercise

After-Action Report and Improvement Plan



- **Exercise Overview**

- Applicable Documents

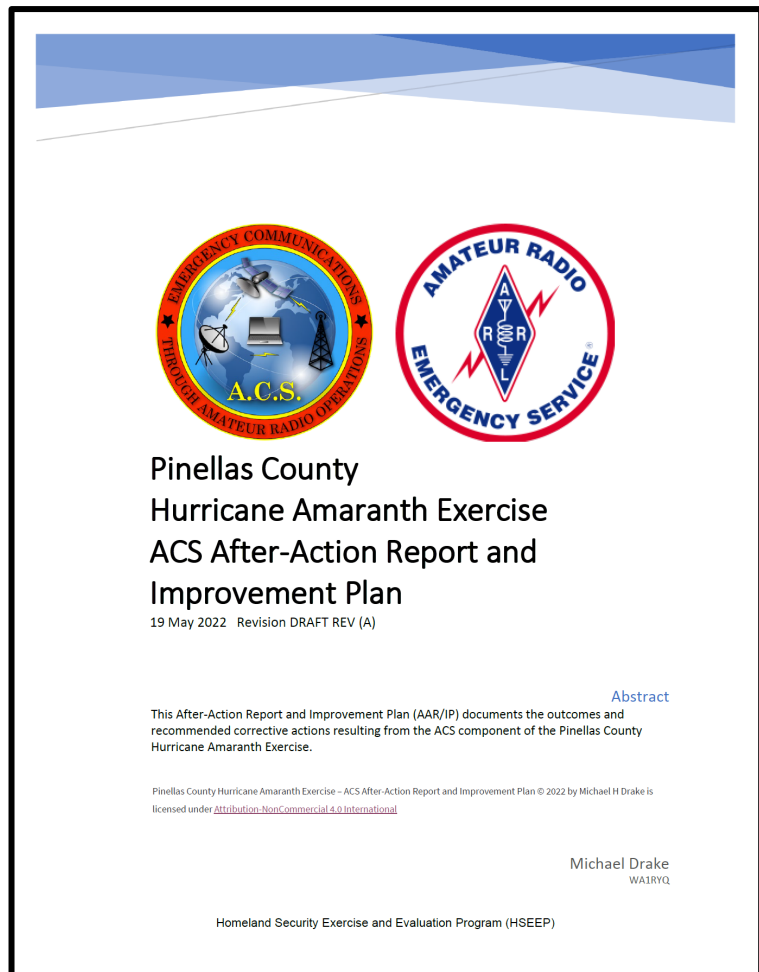


- **Analysis of Capabilities**



- **Improvement Plan**

- Acronyms and Abbreviations





Pinellas ACS Hurricane Amaranth Exercise

After-Action Report – Exercise Overview



1.1 SUMMARY OF EXERCISE ACTIVITIES AND OUTCOMES

This section of the document details the significant events, activities, and outcomes that took place during the exercise.

1.1.1 Participation

Twenty-three individuals participated in the exercise.

- a. Nineteen of the twenty-three participants were assigned to the exercise venues. These venues consisted of six simulated emergency evacuation shelters, two Incident Communications Centers, and the EOC radio room. All the exercise venues were located on the Pinellas County Public Safety Complex.
- b. Two participants served as general exercise controllers.
- c. Two Pinellas County risk management team members participated as safety controllers/evaluators.

1.1.2 Message Processing

One major objective of the exercise was to demonstrate our ability to exchange both formal and informal message traffic. ACS demonstrated this objective by exchanging **Twenty-nine** messages between the EOC radio room, the emergency evacuation shelters, the ICCs, and the state of Florida Watch Office.

- a. **Twenty-three** messages were exchanged during operational period two.
 - (1) Ten informal messages.
 - (2) Ten formal ICS 213 messages were exchanged using a voice net.
 - (3) Three formal ICS 213 messages passed via Winlink.
- b. An additional **Six** messages were exchanged during operational period three.
 - (1) Three formal Winlink ICS 213 messages were sent to the state of Florida Watch Office. One message was sent via telnet, one using HF Amateur radio and a Pactor modem, and the third using an HF SHARES system and a Pactor modem.
 - (2) All three messages sent to the state of Florida Watch Office were acknowledged. The state of Florida Watch Office responded with informal Winlink messages sent to the Pinellas County EOC.



Pinellas ACS Hurricane Amaranth Exercise

After-Action Report – Exercise Overview



1.1.3 Pinellas County Municipality Communication Tests

Another major objective was to perform connectivity tests with the twenty-nine Pinellas County Municipalities. The ICC teams were able to contact **Twenty** of the **Twenty-nine** Pinellas County municipalities by using VoIP phone and/or the county's 800MHz P25 radio system.

The ICC teams uncovered several discrepancies in the municipality contact list that the county will work to resolve.

1.1.4 State of Florida Communication Tests

During operational Period Three, 1500 to 1730, the EOC team performed connectivity tests with the state of Florida Watch Office.

- a. The team successfully contacted the state of Florida EOC using both the **MSAT Satellite** and **SLERs** systems. As previously mentioned, the EOC team was able to exchange information with the state using three different Winlink modes.
- b. The EOC team found that the **EMnet** satellite system at the state of Florida EOC location was inoperative. The EOC team was able to demonstrate that the Pinellas County site was operational by performing an Echo test with the **EMnet** satellite system tech support team.
- c. The EOC team successfully deployed the **Trac-Star** antenna system on the roof the Public Safety Complex; however, it was unable to acquire the satellite. After contacting the **Trac-Star** customer support staff it was determined that several software upgrades were needed to the Pinellas County System and this issue is currently being worked to resolution.



Pinellas ACS Hurricane Amaranth Exercise

After-Action Report – Exercise Overview



1.1.5 Logistics

All equipment used in the exercise, except for individual hand-held transceivers, was distributed to the players by Pinellas County and returned without shortfalls after the exercise.

A few logistics problems were encountered during operational period two.

- a. When unpacking one of the shelter radio kits at a simulated shelter, the shelter team found that the kit was missing a radio power cable. Once notified of the shortfall, a replacement cable was delivered to the impacted shelter.
- b. Upon arrival at the simulated shelter locations, three shelter teams found that the Alternating Current (AC) power was inoperative. Once notified of the problem, an electrician was called to repair the problem. The impacted shelter teams made use of available hand-held transceivers (HT) to continue the mission and exchange traffic with the EOC.



Pinellas ACS Hurricane Amaranth Exercise

After-Action Report – Performance Summary



Table I. Exercise Performance Summary

Objective ID	Objective Title	Capability Target ID	Performance Rating		
			Shelter	EOC	ICC
SEO1, EEO1	Evacuation Shelters – Establish and Maintain VHF Communications	SCT1, ECT3	S	S	
		SCT2, ECT4	S	S	
		ECT8		S	
		SCT3	S		
SEO2, EEO4	Exchange Message Traffic Between EOC and Shelters (SEO2/EEO4)				
EEO2	Establish and Maintain County-Wide Communications (EEO2)	ECT1		S	
		ECT2		S	
EEO3	Establish and Maintain Communications with state of Florida EOC (EEO3)	ECT5		S	
		ECT6		S	
		ECT7		S	
DEO1	SatRunner™ CRD™ Emplacement and Configuration (DEO1)	DCT1			S
		DCT2			S



Pinellas ACS Hurricane Amaranth Exercise

After-Action Report – Performance Summary



Table I. Exercise Performance Summary

Objective ID	Objective Title	Capability Target ID	Performance Rating		
			Shelter	EOC	ICC
DEO2	CommandRunner™ CRD™ Emplacement and Radio Configuration (DEO2)	DCT3			S
		DCT8			S
DEO3	CommandRunner™ CRD™ Emplacement and Internet Configuration (DEO3)	DCT4			S
DEO4	CommandRunner™ CRD™ RF network establishment and Maintenance	DCT5			S



Pinellas ACS Hurricane Amaranth Exercise

After-Action Report – Analysis of Capabilities

- Exercise Objective 1

- Capability Target 1

- **Strengths**

- Strength 1: The good things that ACS did during the exercise.

- Strength 2:



- **Areas for Improvement**

- Area for Improvement 1: Summary statement of problem, gap, or issue observed during exercise

- **References:** List of documents, plans, procedures applicable to improvement area

- **Analysis:** Detailed description of problem, gap, or issues. Provides root cause if known.

- Area for Improvement 2:





Pinellas ACS Hurricane Amaranth Exercise

After-Action Report – Analysis of Capabilities - Example



3.1.1 Organizational Capability Target (SCT1/ECT3)

Within 2 hours of ACS Activation, establish a VHF radio voice network that supports the exchange of information between **TBD** Pinellas County emergency evacuation shelters and the Pinellas County EOC. Network communications is maintained for the duration of a 72-hour incident.

3.1.1.1 Strengths

The partial capability level can be attributed to the following strengths.

- a. **Strength 1:** Each ACS member participating in the exercise acknowledged the receipt of the text and email alerts issued by the Everbridge system notified the ACS Radio Officer (RO) of his or her intent to participate in the exercise.
- b. **Strength 2:** Both the EOC radio room and deployed shelter teams exchanged informal message traffic accurately and without issue.
- c. **Strength 3:** When teams encountered shore power problems at several simulated emergency evacuation shelter sites, each team seamlessly



3.1.1.2 Areas for Improvement

The following areas require improvement to achieve the full capability level.

- a. **Area for Improvement 1:** The use of message precedence and handling instructions was not always consistent with established procedures.
 - (1) **Reference:** Pinellas County ACS/ARES® Emergency Communication Plan and Standard Operating Procedures
 - (2) **Analysis:** In some cases, the message handling instructions (HX) code “**E**” was mistaken for a message precedence field indicating EMERGENCY. This resulted in the incorrect use of the Test EMERGENCY precedence during message transactions.





Agenda



- Exercise Objectives
- Exercise Evaluation
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- Improvement Plan



Pinellas ACS Hurricane Amaranth Exercise Improvement Plan



- Developed specifically for Pinellas ACS
- 28 Areas for Improvement
- Recommended Corrective Actions
 - One or more for each improvement item
 - Current Status of Corrective Action (Open / Closed)



Pinellas ACS Hurricane Amaranth Exercise

Improvement Plan – Sample



Table II. Improvement Plan

No	Capability ID	Area for Improvement	Corrective Action	Status
1	SCT1, ECT3	1. The use of message precedence and handling instructions was not always consistent with established procedures.	1. Incorporate message precedence and handling instructions into weekly training net curriculum.	Open
			2. Add message exchanges to monthly drills. Place emphasis on message precedence and handling instructions.	Open
			3. The net control station should create an audio record of the net. The audio record can be used post exercise as a training aid and to better document network activity.	Open
			4. Create new laminated job aid sheets for radiograms. Add to all shelter radio kits.	Open



Pinellas ACS Hurricane Amaranth Exercise

Conclusion



- Documents Posted on PACS Web Site
 - Exercise Plan
 - Exercise Evaluation Guides
 - After-Action Report and Improvement Plan
 - After-Action Report and Improvement Plan – Appendix A
- Membership Review
 - Exercise participants download, review, and provide comments



Back-up