

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 text "A.C.S." is written in large yellow letters at the bottom of the inner circle.

Pinellas ACS

Hurricane Amaranth Exercise

Mike Drake

Pinellas ACS Training Officer

4/28/2022



Agenda



- Exercise Objectives
- Scenario
- Schedule
- Site Survey – Deployment locations
- Documentation



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.



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Pinellas ACS Hurricane Amaranth Exercise

Pinellas County Scenario



On May 2, 2022, a cold front moves over the southern Gulf of Mexico. A tropical depression forms, later becoming Tropical Storm Amaranth. The storm strengthens modestly over the next few days, and on May 6, 2022, Hurricane Amaranth makes landfall in Pinellas County as a Category 2 hurricane with winds of 100 mph and surge of 6 – 8 ft.

- Exercise Dates
 - Pinellas County - May 2nd through May 6th
 - Pinellas ACS - May 1st, May 2nd, and May 3rd



Pinellas ACS Hurricane Amaranth Exercise

Detailed Pinellas ACS Scenario



- Exercise Divided into Three Operational Periods
 - The Approaching Storm
 - Sunday May 1st 0900 through Tuesday May 3rd 0730
 - EOC Activation
 - Tuesday May 3rd 0900 through 1330
 - Post Storm
 - Tuesday May 3rd 1500 through 1730

ACS Communication Testing Allocated to May 3rd



Pinellas ACS Hurricane Amaranth Exercise

ACS Operational Period One



- On Sunday May 1st, 2022
 - The National Weather Service issues a bulletin stating that a tropical depression is likely to form in the Southern Gulf of Mexico and that the projected storm track includes Pinellas County.
 - ACS RO notifies ACS membership of Level 3 Activation (*ALERT*) via Pinellas Alert System and ACS Tactical Resource Net is established at level 3
- On Monday May 2nd, 2022
 - A tropical depression forms, later becoming Tropical Storm **Amaranth**. There is a high probability that a hurricane will make landfall within Pinellas County.
 - As the simulated storm intensifies and land fall probability at Pinellas County increases, ACS RO notifies ACS membership of Level 2 Activation (*STAND-BY*) via Pinellas Alert System and ACS Tactical-Resource net is established at level 2.
 - Late on the evening, the ACS RO notifies the membership via Pinellas Alert that ACS will be transitioning to Level 1 activation (*ACTIVATE*) at 0700 on the morning of May 3rd.
- On the morning of Tuesday May 3rd, 2022
 - At 0700, the ACS Tactical-Resource net is established at Level 1.
 - ACS Radio Operators scheduled for deployment report to the EOC.



Pinellas ACS Hurricane Amaranth Exercise

ACS Operational Period Two



- On Tuesday 3rd, 2022
 - Pinellas County orders the mandatory evacuation of zones A, B, and C (simulated); Emergency evacuation shelters are opened; and Incident Communication Center (ICC) equipment is prepositioned.
 - On the morning of May 3rd, 2022, the weather has not yet begun to deteriorate, and ACS team members are able to move between their homes, the EOC, and deployment locations without being impacted by the weather.
 - ACS Operators report to EOC for operational briefing and deployment instructions
 - Up to Six emergency evacuation shelters are opened and staffed by ACS Radio Operators
 - Two Incident Communication Centers are prepositioned and staffed by ACS Radio Operators
 - EOC Radio Room staffed by ACS Operators
 - Teams exchange both tactical and formal message traffic with EOC radio room
 - ICC teams establish satellite and cellular services for collocated Emergency Management personnel
 - Perform communications tests with Pinellas County Municipalities
 - After the storm passes, teams are directed to demobilize and return to the EOC for a Hotwash meeting



Pinellas ACS Hurricane Amaranth Exercise

ACS Operational Period Three



- On Tuesday 3rd, 2022 - Afternoon
 - Hurricane Amaranth departs Pinellas County, and the weather clears sufficiently to allow personnel onto the roof the public safety complex.
 - All internet, cell phone, and land line circuits at the EOC are inoperative requiring the use of Satellite and HF radio circuits for communications with the State of Florida EOC.
 - ACS Radio Operators install the TracStar satellite antenna on the roof of the Public Safety Complex
 - Confirm proper operation of all EOC red phones
 - ACS Radio Operators exchange message traffic with the State of Florida EOC
 - HF Amateur Radio Winlink digital messages
 - SHARES Winlink digital messages
 - EMnet and MSAT systems
 - Following restoration of all services, demobilize and conduct hot wash meeting



Agenda



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- Scenario
- Schedule
- Site Survey – Deployment locations
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Pinellas ACS Hurricane Amaranth Exercise

Exercise Planning – Development Schedule



Date	Time	Personnel	Activity	Location
March 30 th	1700	Planners	Initial Exercise Planning Meeting	EOC
April 4 th	1500	Planners	First distribution of draft EEGs for review and comment.	Home / Email exchange
April 11 th	2000	Planner	Distribution and review of draft ExPlan, Master Scenario Event List (MSEL), and updated EEGs.	Home / Email exchange
April 19 th	1600	Planner	Distribution of ExPlan and Master Scenario Event List (MSEL) for Review	Home / Email exchange
April 19 th	2000	Planners, Controllers, & Evaluators	Planning Meeting – ExPlan and MSEL Review	Zoom
April 21 st	1200	Planner	Distribution and review of Draft IAP material (ICS 204s)	Home / Email exchange
April 21 st	1700	Planners, Controllers, & Evaluators	Exercise Site Survey	Public Safety Complex
April 21 st	1900	All Participants	Initial Exercise Briefing – Player Identification and role assignments	EOC

Date	Time	Personnel	Activity	Location
April 25 th	0930	Planners, Controllers, & Evaluators	Equipment configuration and operability checks	Public Safety Complex
April 26 th	1930	All Participants	Review of Exercise Objects and schedule with all participants	VHF Training Net
April 27 th	1930	Planners, Controllers, & Evaluators	Planning Meeting – Final ExPlan, MSEL, and IAP Review and Approval	Zoom
April 28 th	1600	All Participants	Distribute Exercise plan via email to all participants.	Home
April 28 th	1330	Planners, DEM Staff	Pinellas County Emergency Management Team – PACS Exercise Brief	Public Safety Complex
April 30 th	1930	Planners, Controllers, & Evaluators	Controller and Evaluator Briefing	Zoom



Pinellas ACS Hurricane Amaranth Exercise

Schedule – Day one, Sunday May 1st, 2022



Pinellas County Hurricane Amaranth Exercise Schedule

Day	Time	Activity
05/01/22 Sunday	1130	Tropical Disturbance Situation Report #1
05/02/22 Monday	0800	WebEOC Incident Opened
05/02/22 Monday	0900	EOC Command and General Staff Meeting
05/02/22 Monday	1000	EOC Planning Section Meeting
05/02/22 Monday	1000	EOC Logistics Section Meeting
05/02/22 Monday	1030	EOC Health and Human Services Branch Meeting
05/02/22 Monday	1130	EOC Infrastructure Branch Meeting
05/02/22 Monday	1130	Tropical Depression #1 Situation Report #2
05/02/22 Monday	1300	EOC Emergency Services Branch Meeting
05/02/22 Monday	1400	EOC Recovery Branch Meeting
05/02/22 Monday	1400	Damage Assessment Notifications
05/03/22 Tuesday	0800	Communications System Testing
05/03/22 Tuesday	0800	Damage Assessment Map Opens for Collection
05/03/22 Tuesday	0900	EOC Command and General Staff Meeting
05/03/22 Tuesday	1130	Tropical Storm Amaranth Situation Report #3

Pinellas ACS Hurricane Amaranth Exercise Schedule

Day 1: May 1 st 2022	Personnel	Activity	Location
0900	All Players	StartEx – Begin Operational Period One	
1130	Pinellas EOC Staff	Tropical Disturbance Situation Report #1	Public Safety Complex
1700	All Players	ACS RO notifies ACS of Level 3 Activation	Home
1715	All Players	NCS activates Tactical Resource Net at Level 3	Home
1730	All Players	NCS shuts Down Tactical Resource Net	Home

Alignment of County Master Schedule and PACS Exercise Schedule



Pinellas ACS Hurricane Amaranth Exercise

Schedule – Day Two, Monday May 2nd, 2022



Pinellas County Hurricane Amaranth Exercise Schedule

Day	Time	Activity
05/01/22 Sunday	1130	<i>Tropical Disturbance Situation Report #1</i>
05/02/22 Monday	0800	WebEOC Incident Opened
05/02/22 Monday	0900	EOC Command and General Staff Meeting
05/02/22 Monday	1000	EOC Planning Section Meeting
05/02/22 Monday	1000	EOC Logistics Section Meeting
05/02/22 Monday	1030	EOC Health and Human Services Branch Meeting
05/02/22 Monday	1130	EOC Infrastructure Branch Meeting
05/02/22 Monday	1130	<i>Tropical Depression #1 Situation Report #2</i>
05/02/22 Monday	1300	EOC Emergency Services Branch Meeting
05/02/22 Monday	1400	EOC Recovery Branch Meeting
05/02/22 Monday	1400	Damage Assessment Notifications
05/03/22 Tuesday	0800	Communications System Testing
05/03/22 Tuesday	0800	Damage Assessment Map Opens for Collection
05/03/22 Tuesday	0900	EOC Command and General Staff Meeting
05/03/22 Tuesday	1130	<i>Tropical Storm Amaranth Situation Report #3</i>

Pinellas ACS Hurricane Amaranth Exercise Schedule

Day 2: May 2 nd 2022	Personnel	Activity	Location
1130	Pinellas EOC Staff	Tropical Depression #1 Situation Report #2	Public Safety Complex
1200	All Players	ACS RO notifies ACS of Level 2 Activation	Home
1210-1245	All Players	NCS activate Tactical Resource Net at Level 2. Net is shut down for the night after all players check-in.	Home
1500	Planners, Controllers, & Evaluators	Equipment and venue checks.	Public Safety Complex
2000	All Players	ACS RO notifies membership that ACS Level 1 will be activated at 0700 on May 3 rd .	Home



Pinellas ACS Hurricane Amaranth Exercise

Schedule – Day Three, Tuesday May 3rd, 2022



Pinellas County Hurricane Amaranth Exercise Schedule

Day	Time	Activity
05/01/22 Sunday	1130	<i>Tropical Disturbance Situation Report #1</i>
05/02/22 Monday	0800	WebEOC Incident Opened
05/02/22 Monday	0900	EOC Command and General Staff Meeting
05/02/22 Monday	1000	EOC Planning Section Meeting
05/02/22 Monday	1000	EOC Logistics Section Meeting
05/02/22 Monday	1030	EOC Health and Human Services Branch Meeting
05/02/22 Monday	1130	EOC Infrastructure Branch Meeting
05/02/22 Monday	1130	<i>Tropical Depression #1 Situation Report #2</i>
05/02/22 Monday	1300	EOC Emergency Services Branch Meeting
05/02/22 Monday	1400	EOC Recovery Branch Meeting
05/02/22 Monday	1400	Damage Assessment Notifications
05/03/22 Tuesday	0800	Communications System Testing
05/03/22 Tuesday	0800	Damage Assessment Map Opens for Collection
05/03/22 Tuesday	0900	EOC Command and General Staff Meeting
05/03/22 Tuesday	1130	<i>Tropical Storm Amaranth Situation Report #3</i>

- Schedule Compressed to fit within a single day
 - Pre-storm activation and deployment
 - Communications support during Incident
 - Post-storm communications and demobilization



Pinellas ACS Hurricane Amaranth Exercise

Schedule – Day Three, Tuesday May 3rd, 2022



Day 3: May 3 rd 2022	Personnel	Activity	Location
0700-0730	Controllers, & Evaluators	Controller and Evaluator Briefing. Check-in for final instructions and communications check.	EOC
0700	All Players	NCS activates Tactical Resource Net at level 1 and directs all player to depart for EOC.	Home
0730	All Players	End Operational Period 1	
0800-0900	All Participants	Operational Period 2 Briefing	EOC
0900	All Players	Conclude Operational Period Briefing, Release players for deployment – Begin Operational Period 2.	EOC
0900-0915	Shelter Teams	Distribute shelter radios and depart for Simulated shelters.	EOC, Sim shelters
0900	ICC Teams	Depart EOC for Incident Communications Center	EOC, ICC
0920-1000	ICC Teams	Arrive at ICC, emplace and configure SatRunner™ CRD™	ICC
0930-1000	Shelter Teams	Arrive at Sim shelter location, Set-up equipment, and check-into Shelter net.	Sim Shelters
1000-1030	ICC Teams	Emplace and configure CommandRunner™ CRD™.	ICC

Day 3: May 3 rd 2022	Personnel	Activity	Location
1000-1130	Shelter Teams	Exchange both informal and formal voice message traffic with EOC.	Sim Shelters
1030-1100	ICC Teams	Exchange both informal and formal message traffic with EOC using voice and data nets.	ICC
1100-1130	ICC Teams	Perform communication tests with Pinellas County municipalities.	ICC
1130-1200	Shelter Teams	Demobilize shelter site, pack equipment, return to EOC, and return equipment to Logistics officer.	Sim Shelter, EOC
1130-1200	ICC Teams	Shutdown, pack and ready for transport SatRunner CRD™ and CommandRunner CRD™.	ICC
1200-1215	ICC Teams	Depart ICC location and return to EOC	ICC, EOC
1230-1330	All Participants	Hotwash for Operational Periods one and two	EOC
1330	Operational Period 1 and 2 Players	End Operational Period 2.	
1330-1430	EOC Team B	Break for Lunch	

CRD – Compact Rapid Deployable
 ICC – Incident Communication Center
 NCS – Net Control Station
 RO – Radio Officer



Pinellas ACS Hurricane Amaranth Exercise

Schedule – Day Three, Tuesday May 3rd, 2022



Post Storm Communication Testing

Day 3: May 3 rd 2022	Personnel	Activity	Location
1430-1500	EOC Team B	Operational Period 3 Briefing	EOC
1500	EOC Team B	Conclude Operational Period Briefing – Begin Operational Period 3.	EOC
1500-1530	EOC Team B	Install the TracStar antenna onto the roof of the Public Safety Complex.	Public Safety Complex Roof
1500-1530	EOC Team B	Exchange formal digital message traffic with the State of Florida EOC using amateur and SHARES radio frequencies.	EOC Radio Rm
1530-1600	EOC Team B	Perform satellite communication tests with the state of Florida EOC.	EOC Radio Rm
1530-1600	EOC Team B	Test operational status of all EOC TracStar Red Phones.	EOC
1600-1630	EOC Team B	Deinstall and pack the TracStar Antenna.	Public Safety Complex Roof
1630-1730	EOC Team B	Hotwash	EOC
1730	All Participants	End Operational Period 3 - EndEx	



Agenda

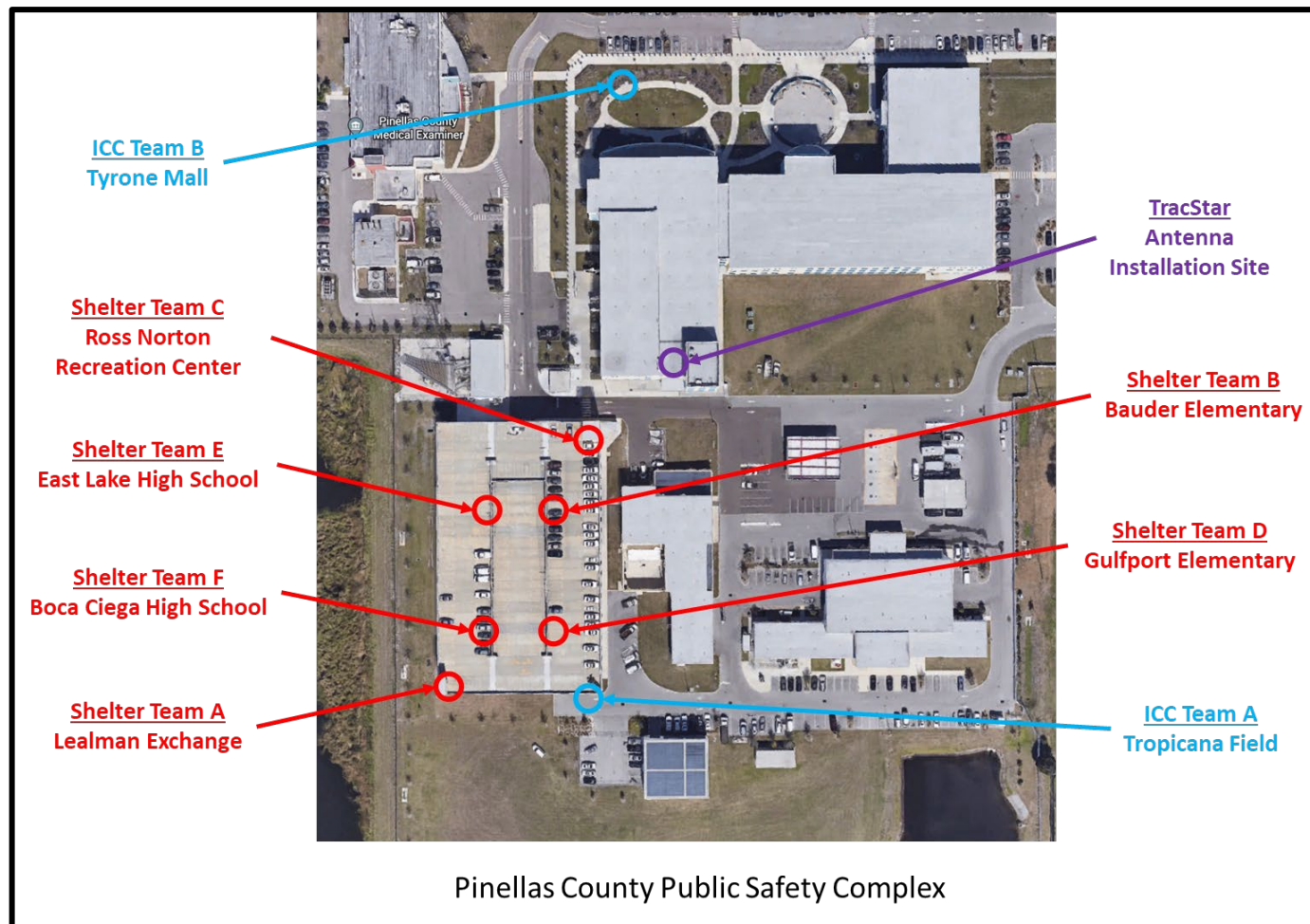


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Pinellas ACS Hurricane Amaranth Exercise

Deployment Locations



- Site Survey Performed on April 21st
- Six simulated shelter locations
 - Top Floor of Parking Garage
 - Staged prior to exercise with tables and chairs
- Two ICC locations
- All deployment sites have access to AC Power



Pinellas ACS Hurricane Amaranth Exercise

Shelter Deployment Locations



AC Power
Outlet



Southwest Corner

AC Power
Outlet



East of Vehicle Ramp



Pinellas ACS Hurricane Amaranth Exercise

ICC Deployment Locations



AC Power
Outlet



Southeast Corner

AC Power
Outlet

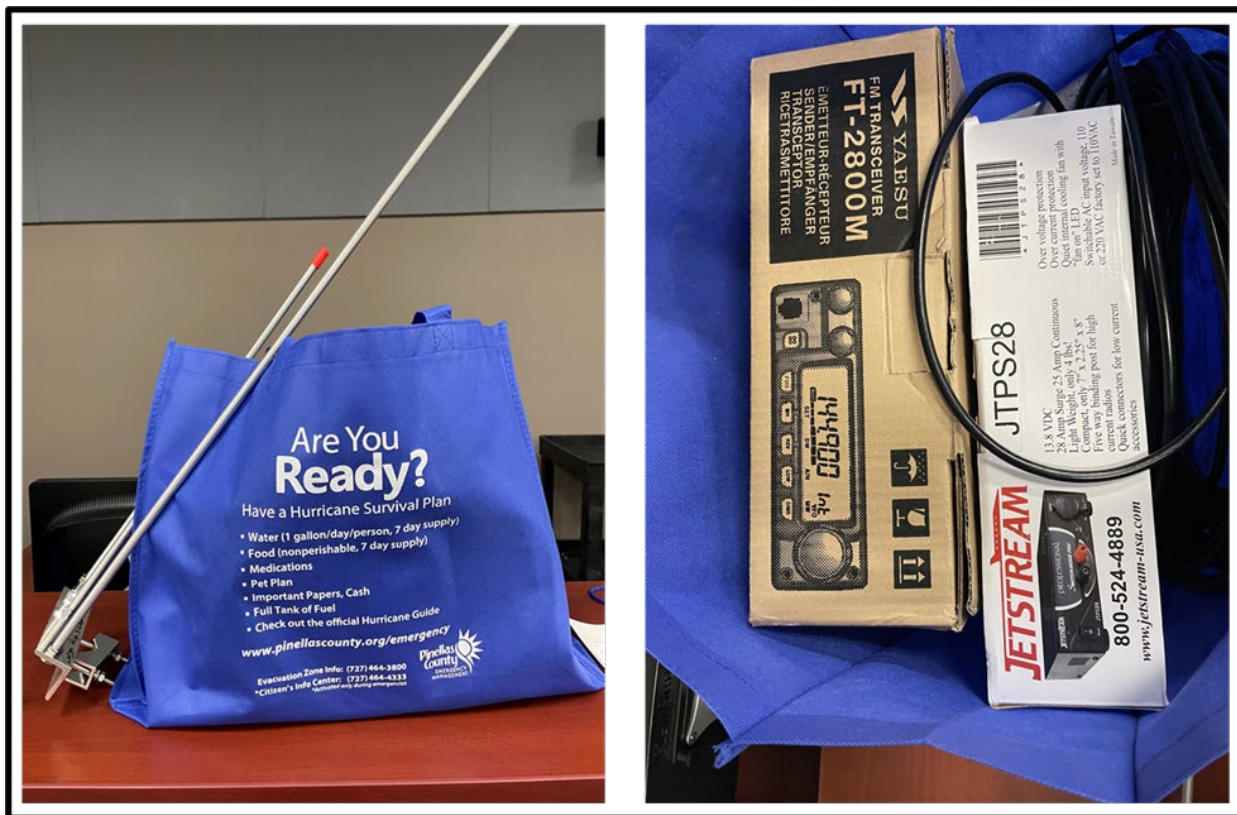


Northwest Front of Complex



Pinellas ACS Hurricane Amaranth Exercise

Shelter Radio Kit



- Shelter Teams will obtain Radio Kits from EOC Cache
 - Deploy to Simulated Shelter location
 - Unbox, install, configure
 - Establish communications with the EOC
- Demobilization
 - De-install, pack, and transport back to EOC Cache
 - Document discrepancies



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Pinellas ACS Hurricane Amaranth Exercise Documentation

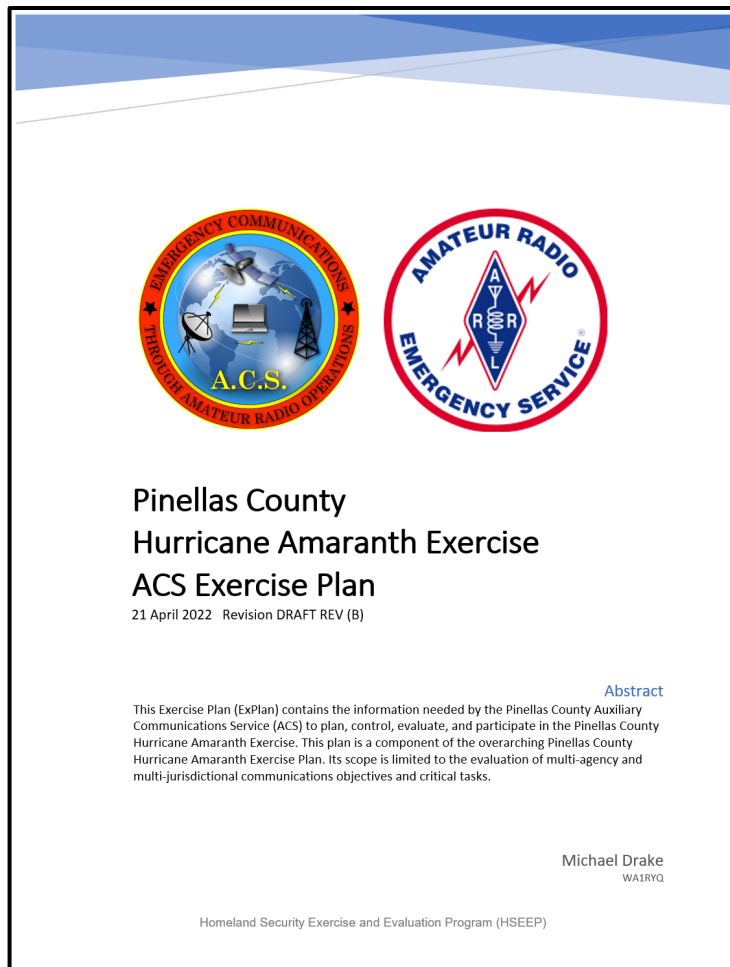


- Exercise Planning Documents
 - Exercise Plan
 - Exercise Evaluation Guides
 - Master Scenario Event List
 - Inject Packets
- Exercise Documents
 - Incident Action Plan
- Post Exercise Documents
 - After Action Report and Improvement Plan



Pinellas ACS Hurricane Amaranth Exercise

ACS Exercise Plan

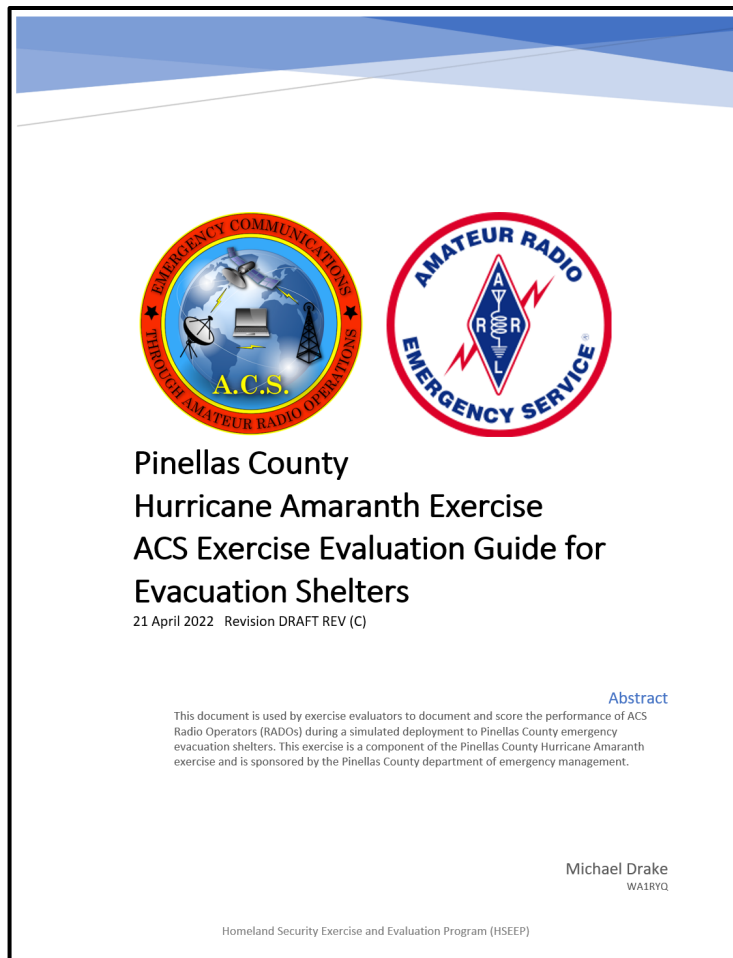


- Section 1. Exercise Overview
- Section 2. General Information
- Section 3. Exercise Logistics
- Section 4. Post-exercise Activities
- Section 5. Participant Information and Guidance
- Appendix A. Communications Plan
- Appendix B. Exercise Participants
- Appendix C. Exercise Schedule
- Appendix D. Exercise Site Maps
- Appendix E. Exercise Scenario
- Appendix F. Acronyms, Abbreviations, and Definitions



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

ACS Exercise Evaluation Guide - Sample



Organizational Capability Target 2.

Within 3 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.

Table II. Capability Target 2 - EEG Score Sheet

Task ID	Critical Task	AUXC PTB Item	Observation Notes and Explanation of Rating	Target Rating
SCT2T1	ACS RADO obtains, assembles, and prepares the material for a personal and Winlink digital 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.	
SCT2T2	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.			
SCT2T3	On an as needed basis, ACS RADO obtains shelter radio kit from EOC.			
SCT2T4	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		
SCT2T5	ACS RADO installs and configures shelter radio equipment at emergency evacuation shelter.			



Pinellas ACS Hurricane Amaranth Exercise

ACS Exercise Evaluation Guide - Ratings

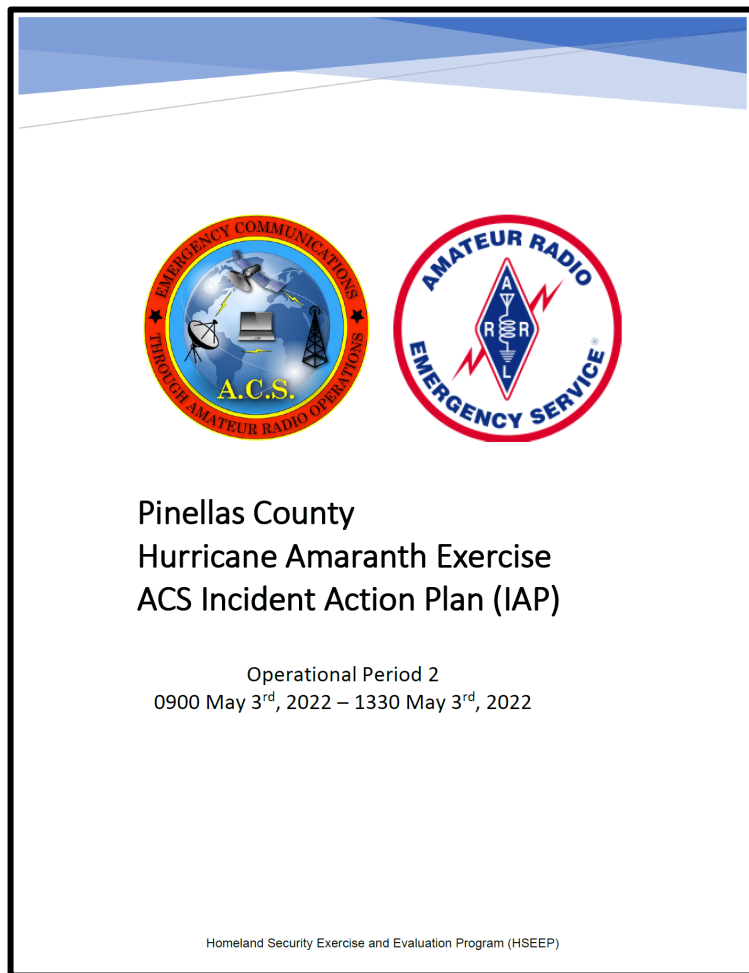


Performed without Challenges (P)	The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or 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

Incident Action Plan



- ICS 202 Incident Objectives
- ICS 204 Assignment Lists
 - Pinellas EOC Radio Room
 - Evacuation Shelters
 - Incident Communication Centers
- ICS 205 Incident Radio Communications Plan
- ICS 205A Communications List
- ICS 207 Incident Organizational Chart
- Maps/Charts
 - Simulated Evac Shelter and ICC deployment Locations



Pinellas ACS Hurricane Amaranth Exercise

Conclusion



- 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

Questions?



Back-up