

**ALACHUA DISTRICT STATE WIDE HURRICAN EXERCISE PLANNING
PURPOSE, OBJECTIVES AND SCENARIO**

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PURPOSE	
<p>This exercise is designed to provide feedback on our proficiency and capabilities to achieve the likely communications tasks required in a severe weather emergency of sufficient magnitude to overwhelm or temporarily disable normal communications and normal grid power. It is also a learning opportunity for peripherally involved amateur radio operators, and local government and NGO personnel to become more aware of the abilities as well as the limitations of the local amateur radio ARES group.</p>	

OBJECTIVE	
1	Assess the capabilities of groups and individuals at EOC, Red Cross, up to 2 local shelter sites, and 1 local hospital, to create, manage, and position antennas in response to communications goals and weather-induced damage of existing antennas and repeaters; provided that during this exercise no person shall go onto any roof or use any slingshot or other lofting mechanism in the vicinity of any power line greater than 240VAC
2	Assess the capability to place an emergency simplex repeater and utilize it to provide communications between all the locations involved in the Exercise.
3	Assess the capability to utilize WINLINK text messages, ICS forms, and attachments on both VHF and HF frequencies to meet realistic emergency communications needs.
4	Assess the capability to flexibly find and employ backup power systems of any available type at all locations involved in the Exercise
5	Assess the capability to move (when travel is “safe”) to a new location and expeditiously resume communications on VHF.
6	Assess capabilities to send MT63-2000L bulletins over VHF frequencies, and to receive and store them.
7	Assess capabilities of individual volunteers to participate in PACKET CHAT.
8	Assess the capability of LINBPQ packet chat functions to serve as many as 6 simultaneous roundtable discussants trying to determine the best solution to a communications problem.
9	Provide an opportunity for participants to utilize ICS Forms 211 (Incident Check In

Form) and 214 (Activity Log), using handwriting, and inside WINLINK, Form 213 (General Message Form), as well as refer to Form 205 (Incident Communications Plan) to facilitate communications.

EVALUATIONS:

Facility at accomplishing different forms of communication

- a) voice
- b) MT63-2000L
- c) PACKET CHAT
- d) WINLINK

will be subjectively graded by evaluators on a 1-10 scale *where attempted at each segment*, with 10 being an obvious expert dealing deftly even with problems, and 1 being a rank beginner needing to read instructions to accomplish the task.

SEGMENT beginning at exercise time (circle one) 0000 0030 0130 0230	Communication technique utilized during segment	Apparent overall location FACILITY at using technique -- only grade techniques that were attempted 1=rank beginner 10=expert deftly handling difficulties
	Voice	
	MT63-2000L	
	PACKET CHAT	
	WINLINK	

Facility at accomplishing

- a) antenna or transmission line repairs,
- b) placement of a simplex repeater;
- c) establishment of backup power;
- d) relocation and re-establishment of VHF communications of any kind;

will be subjectively graded by evaluators on a 1-10 scale where efforts were made, using the same scale as above. (1= rank beginner needing to read instructions; 10= obvious expert dealing deftly even with problems)

SEGMENT beginning at exercise time (circle one)	Communication technique utilized during segment	Apparent overall location FACILITY at using technique -- only grade

0000 0030 0130 0230		techniques that were attempted 1=rank beginner 10=expert deftly handling difficulties
	Antenna/Transmission line repairs	
	Placement of simplex repeater	
	Establishment of backup power	
	Relocation and establishment of VHF comms	

LINBPQ CHAT

Suitable performance by LINBPQ CHAT functions will be subjectively graded **by the communications volunteers** on a 1-10 scale from 1=unusable to 10=excellent when utilized by volunteers.

SEGMENT beginning at exercise time (circle one) 0000 0030 0130 0230	Suitability of performance of LINBPQ CHAT functions	1= unusable 10 = excellent
	CHAT	

Message Transfer Success

Each message successfully transferred (*by any means*) will be objectively “ticked” on a hash mark count (4 ticks and then a slash) , and each attachment, photo, or database transferred will be separately notated along with the size of the data transferred

SEGMENT beginning at exercise time (circle one) 0000 0030 0130 0230	Messages (with or without attachment) transferred during segment (use hash ticks, 1-4 and then a slash) ANY MEANS OF TRANSFER IS ACCEPTABLE	Write down sequentially the size (in kilobytes) of every attachment, photo or database transferred
	_____ _____ _____ _____ _____	KILOBYTES 1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____ 8 _____ 9 _____ 10 _____

Scenario

Exercise Time	Event Time	Location		
0000	Noon, Day1	ALL	Hurricane ARES with Cat IV sustained winds and heavy rain are expected to arrive in approximately 4 hours. Alachua County has been preparing for several days, and 4 shelters have been opened including the Newberry Sports Complex and the Senior Center in Gainesville. Amateur radio operators are in position at both these shelters and also at the EOC and Red Cross facility. Power outages are expected as well as possible telecommunications losses. Communications via analog voice and PACKET CHAT function are requested to be established, and each location is asked to send a WINLINK ICS 213 email to W4UFL@WINLINK.ORG upon completion of those tasks, describing their situation.	

0030	Midnite Day 1	ALL	<p>Hurricane ARES has passed, with significant damage. Widespread power outages, downed power lines, scattered traffic accidents (from citizens who neglected to stay at home) and house fires are occurring. Unfortunately, normal telecommunications including Internet, telephone and cell phone are down, due to wind & water damage to facilities; the city of Gainesville is cut off from normal telecommunications. There are scattered water failures as various pumps have failed. Significant structural damage has occurred at many buildings, and there are a large number of trees down, blocking roads. Several tornadoes are believed to have passed through various areas, and damage assessments are hampered by a failure of the trunked 700/800 MHz police/fire comms system.</p> <p>Only one radio station, WSKY FM, is still on the air at reduced power. .</p> <p>Participants open the envelope marked with “0030” which explains how <i>their location</i> weathered the passage of the Cat IV sustained winds, and the eye of Hurricane ARES, and gives a list of communications goals which may include:</p> <ul style="list-style-type: none"> a) tactical communications to send to one or more other stations, related to all the issues occurring in the city b) email messages to be sent by any means possible, as directed, to W4UFL@WINLINK.ORG or to KX4Z@WINLINK.ORG (representing the Tallahassee EOC accessible via SHARES); these messages will be provided in digital form on a thumb drive. c) email attachments to be sent by any means possible to W4UFL@WINLINK.ORG; these attachments will be provided in digital form on a thumb drive d) discussion points to be raised on PACKET CHAT or any other available communications medium to try and reach a consensus to solve a difficulty revealed in the envelopes.. e) as well as a list of action goals which may include a requirement to relocate to a specific location in a local hospital. <p>STATUS: Expect one or more locations to have lost conventional electrical power (for this exercise we will assume that the EOC has working backup power); one or more locations to have lost their antenna and need to come up with a substitute; and one or more local repeaters (either analog</p>	
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			digital or both) to have failed.	
0130	Noon, Day 2	ALL	<p>The sun is up but the city is still covered by clouds and debris. Power is still out in many areas, there are still house fires in various areas brought about by broken utilities, and citizens with inexperience using candles, generators etc. Crews are out trying to clear major streets with chain saws and heavy equipment, and need direction to move from one issue to another. Casualties are being discovered. Two local radio stations are operating on emergency power.</p> <p>Participants open the envelope marked with “0130” which explains how their location's status has changed in the preceding 12 hours, and gives a list of communications goals which may include:</p> <p>a) tactical communications to send to one or more other stations</p> <p>b) email messages to be sent by any means possible to W4UFL@WINLINK.ORG or to KX4Z@WINLINK.ORG (representing the Tallahassee EOC accessible via SHARES); these messages will be provided in digital form on a thumb drive.</p> <p>c) email attachments to be sent by any means possible to W4UFL@WINLINK.ORG; these attachments will be provided in digital form on a thumb drive</p> <p>d) discussion points to be raised on PACKET CHAT or any other available communications medium to try and reach a consensus to solve a posed communications difficulty.</p> <p>as well as a list of action goals which may include a requirement to relocate to a specific location in a local hospital.</p> <p>STATUS: Expect one or more locations to have lost conventional electrical power (for this exercise we will assume that the EOC has working backup power); one or more locations to have lost their antenna and need to come up with a substitute; and one or more local repeaters (either analog digital or both) to have failed.</p>	
0230	Midnite, Day 2		Most of the house fires are now under control, but there is little motor fuel available in the city, and looting is now being reported under the cover of darkness, with shots heard in	

			<p>several sectors of the city, unknown whether by assailants, defenders or just frightened people who thought they saw something move in the darkness. Power crews are still hard at work to repair power line damage.</p> <p>Participants open the envelope marked with “0230” which explains how their location's status has changed in the preceding 12 hours, and gives a list of communications goals which may include:</p> <p>a) tactical communications to send to one or more other stations</p> <p>b) email messages to be sent by any means possible to W4UFL@WINLINK.ORG or to KX4Z@WINLINK.ORG (representing the Tallahassee EOC accessible via SHARES); these messages will be provided in digital form on a thumb drive.</p> <p>c) email attachments to be sent by any means possible to W4UFL@WINLINK.ORG; these attachments will be provided in digital form on a thumb drive</p> <p>d) discussion points to be raised on PACKET CHAT or any other available communications medium to try and reach a consensus to solve a posed communications difficulty.</p> <p>as well as a list of action goals which may include a requirement to relocate to a specific location in a local hospital.</p> <p>STATUS: Expect one or more locations to have lost conventional electrical power (for this exercise we will assume that the EOC has working backup power); one or more locations to have lost their antenna and need to come up with a substitute; and one or more local repeaters (either analog digital or both) to have failed.</p>	
03:30	Noon, Day 3	ALL	<p>Much of the power has been restored, major roads are passable and a sense of recovery is beginning to take place, with more and more radio and television stations coming back on line. Cell telephone service is now available in many portions of Gainesville</p> <p>Close down operations safely, pack up all equipment, clean up all facilities to leave them “better than when we found them”, remove any emplaced antennas, stop any generators or other</p>	

			emergency power systems started and secure them in a safe method, including against theft and to return to their owner.	
04:00		ALL	Meet for “hot wash” discussion and lunch at a restaurant to be determined.	

Possible scenarios that will be injected via envelope at different points and for different groups, with resultant pre-prepared messages to be sent (see flash drive) include some but not all of the following:

- Generator failure at a hospital
- Power failure (grid)
- Air Conditioning / Heating failure (mechanical) of one or more facilities
- Fuel shortage (diesel for generator)
- Computer network down
- Water shortage (municipal)
- Water shortage (service water for in-house utilities)
- Water shortage (potable)
- Gas shortage (oxygen / nitrous oxide) for anesthetic locations within hospital
- Transfusion fluids shortage (blood[type] / plasma)
- Drugs shortage (Lidocaine 2% / Amiodarone / Nitroglycerine / Verapamil / Albuterol / Epinephrine / Propofol / Naloxone / Heparin / Alteplase / Ibuprofen / Acetaminophen / etc.)
- Surgical supplies shortage(antiseptic / scalpels / clamps / rubber gloves / specialty items)
- Laboratory failure ([blood / gas] analyzer / low on reagents / x-ray / film low / autoclave / etc.)
- Personal messages (staff / patients / families / HEC personnel)
- Lights (surgery / emergency room)
- Administrative supplies (paper / pens / pencils / clips / tape / etc.)
- Need police assistance (unruly person / people)
- Fire, not controlled by sprinklers / hoses
- **HURRICANE / STORM FLOODING (additional to GENERAL)**
- Flooding on first level
- Sewage backing up
- Need to move radios to higher floor / roof
- Windows broken in emergency room
- Windows broken in patients’ rooms
- Displaced persons in waiting area
- Ambulance disabled by water
- Hospital isolated by floodwaters (in parking lot / on roads / etc.)
- Heavy influx of environmental overexposure patients
- Power lines down (in front of building / in parking lot / in entrance road / on building / etc.)
- Trees down (in front of building / in parking lot / in entrance road / on building / etc.)
- Doors failed (emergency room / front entrance)

INJECT EXPECTATIONS & LIMITATIONS (RULES OF THE GAME):

- *Every location (except the EOC) will lose power at one or more points and need to arrange for backup electrical power to continue communicating.*
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- *Every location is likely to lose 1 antenna or feedline at one point; once repaired we won't make them repair it again. It is possible for a location to lose both VHF and HF antenna.*
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- *Other than short messages and packet CHAT communications, **no location will have to do significant typing** --- but they may be communicating VERY significantly long messages or attachments, which will be provided in a thumb drive.*
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- *At various times during the exercise, volunteers may be fairly busy getting communications done -- this will not be a “1 message and you're done” exercise. However, the effort will be in COMMUNICATING, not in typing.*
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- *A huge movement of patients or casualties from a location is likely to be discussed and arranged for, using communications provided by the volunteers.*
- *Volunteers without a flashlight or headlamp, or flood lighting will be presumed unable to accomplish outdoor tasks at “nighttime”*
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