

BROWARD COUNTY FLORIDA



EMERGENCY COMMUNICATIONS TRAINING

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August 2014



*The BCEPN has a new Net Manager
(Broward County Emergency Preparedness Net)*

Please Meet

'Mike Davis' k2mol@seftn.net

The BCEPN meets every Wednesday night starting at 7:00 PM on the:

Primary Repeater

146.910 MHz.-600 PL tone of 110.9 Hz

Secondary Repeater

147.210 MHz., +DUP. PL tone 131.8 Hz

Tertiary Repeater

146.790 MHz., -DUP, PL tone 88.5 Hz



The BCEPN is a directed net and the purpose is to go over emergency communication protocols and procedures. Our ARES/RACES group consists of federally licensed amateur radio operators who are trained in emergency communications and have a strong desire to serve our community whenever the need arises. Hams throughout Broward County, who have an interest in community service and emergency communications, are strongly encouraged to get involved with ARES/RACES.

By attending the BCEPN and the ARES/RACES meetings, you will learn the proper procedures when providing communications for non-emergencies, man-made or natural disasters.

For those of you that would like to join Broward County ARES®/RACES, please fill out the ARES®/RACES Application found in the back of this Newsletter and bring it with you to the next ARES®/RACES meeting or email it to n4hhp@comcast.net. Would you also like to be a Net Control Station? If so, Mike would love to train you. Contact Mike on the Net or email him at k2mol@seftn.net.

Please check into the BCEPN and say hello to Mike.
Robin / N4HHP Broward County RACES Officer



**NWS IS LOOKING FOR YOUR
SUPPORT BY COMMENTING
IN FAVOR OF THESE
ADDITIONS TO THE FCC**

On Tue, Jul 22, 2014 at 5:24 PM,
Robert Molleda - NOAA Federal
robert.molleda@noaa.gov



Good Afternoon South Florida Media and EM Partners:

The information below and attachments are concerning a proposal to create three new national EAS (Emergency Alert System) event codes for the Extreme Wind Warning (issued when a major hurricane landfall is imminent), Storm Surge Watch and Storm Surge Warning. The Extreme Wind Warning is a current NWS warning product and is one of the key EAS triggers, but it does so using the tornado (TOR) code. Obviously, it makes sense for a warning as critical as an Extreme Wind Warning to have its own unique code as to avoid any conflict with a real tornado event. The Storm Surge Watch/Warning is scheduled to become operational in 2016, and the importance of warning folks in a storm surge zone can't be overstated. The EAS is set up precisely to give wide and easy dissemination to critical weather and non-weather events, and the Extreme Wind Warning, Storm Surge Watch and Storm Surge Warning fit under the category of critical weather events.

To that end, I humbly ask the local media and EM community to help us by commenting on the FCC website in favor of these codes being added. Otherwise, we run the serious risk of not being able to properly implement the new Storm Surge watch/warning products in 2016.

Detailed instructions on how to leave a comment on the FCC page can be found in the first attachment. The second attachment contains a letter sent by NWS senior management to the FCC back in November 2013 advocating and requesting for the creation of these codes. This second attachment provides good background on the meaning and importance of each product (starting with #2).

If you need more explanation on this, please don't hesitate to contact me.

Best Regards,

Robert Molleda
Warning Coordination Meteorologist
National Weather Service
Miami/South Florida Forecast Office
11691 SW 17th ST
Miami, FL 33165
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<[facebook-small.jpg](#)> <[twitter-small.jpg](#)>

Check us out on Facebook and Twitter! The contents of this message are mine personally and do not necessarily reflect any position of NOAA.

----- Original Message -----

Subject: **ASSISTANCE REQUESTED: FCC Comment Period Opens for the Emergency Alert System (EAS)**

Date: Tue, 22 Jul 2014 14:22:57 -0500

From: Walt Zaleski - NOAA Federal walt.zaleski@noaa.gov

The FCC has opened an official "**comment period**" pertaining to various FCC dockets. The FCC comment period closes **August 14, 2014**.

The last FCC "comment period" for the Emergency Alert System (EAS) was in Fall 2013 which yielded only one comment (*from an EAS encoder/decoder vendor*) regarding the official NWS request to the FCC for three new EAS event codes for the following products:

- [EWW](#) - Extreme Wind Warning
- [SSA](#) - Storm Surge Watch
- [SSW](#) - Storm Surge Warning

As a bit of background, the NWS initiated the first experimental use of the Extreme Wind Warning for Hurricane Charley in 2004 by WFO Melbourne. Shortly thereafter, WSH, on behalf of the WFOs/Regions, requested approval for a new EAS event code "EWW" for appropriate transmission of the product through the EAS. Unfortunately, after several years, the FCC approval for the new EAS event code has not been obtained. The Storm Surge Watch/Warning product is expected to be operational in 2016.

□ Your help is needed in providing comment to the FCC in approving the above codes for optimum dissemination of the three products.

The first attachment contains detailed instructions with screen grabs of the FCC website in which to make comments. The second attachment is the actual submission which the NWS made to the FCC back in November, 2013 which requested the creation of the codes, and gives information on the importance of this effort which can be the basis of comments users can make on the website. Walt Zaleski - NOAA Federal walt.zaleski@noaa.gov

In the Matter of Review of the Emergency Alert System

Marlene H. Dortch, Secretary
Office of the Secretary
Federal Communications Commission
445 1th Street SW
TW-A325
Washington, DC 20554
U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE
1325 East-West Highway
Silver Spring, Maryland 20910-3283

NOV 18 2013

Re: In the Matter of Review of the Emergency Alert System
EB Docket No. 04-296

Dear Ms. Dortch:

The National Oceanic and Atmospheric Administration's (NOAA) National Weather Service (NWS) welcomes the opportunity to provide inputs to EB Docket No. 04-296 concerning Part 11 Emergency Alert System (EAS) Rules, as detailed in Sections 1, 2, and 3 below.

1. Change in Part 11 rules, Subpart B. Section 11.31(0, Offshore (Marine Areas) Offshore marine areas are denoted by endpoints along the coast. The National Hurricane Operations Plan changed one endpoint from Bonita Beach, FL to Ocean Reef, FL in the title of the marine area for the West North Atlantic and Gulf of Mexico. Corresponding titles (or Area descriptions) in Part 11 rules, Subpart B, Section 11.31 (t), Offshore (Marine Areas), should be changed to be consistent with those in use by the NWS. Specifically, the NWS requests the old end point, Bonita Beach, FL, be changed to the new end point, Ocean Reef, FL so the titles appear as: FIPS# 75: Western North Atlantic Ocean, and along U.S. East Coast, south of Currituck Beach Light, NC, following the coastline to Ocean Reef, FL, including the Caribbean FIPS # 77: Gulf of Mexico, and along the U.S. Gulf Coast from the Mexican border to Ocean Reef, FL

2. Add a new Event Code for the Extreme Wind Warning The NWS requests the addition of a new "State and Local" Event Code to the presently authorized code listing in Part II EAS rules, Subpart 8, Section 11.31(e), Event Codes. The NWS recommended nature of activation is Extreme Wind Warning (EWW). The NWS recommended Event Code is EWW. NWS forecasters issue short duration EWW products to provide the public with advance notice of the onset of extreme sustained surface winds (greater than or equal to 115 miles per hour) of a major landfalling hurricane (category 3 or higher on the Saffir-Simpson Hurricane Wind Scale), usually associated with the eyewall of a hurricane. Extreme Wind Warnings inform the public of the need to take immediate shelter in an interior portion of a well-built structure due to the onset of extremely strong winds. The NWS requests the above changes be made as soon as possible but not later than February 1, 2014, to allow time to prepare for the 2014 Atlantic hurricane season beginning June 1, 2014, in the Atlantic, Caribbean Sea and Gulf of Mexico. Preparations include adding the new Event Code to the NWS warning message Common Alerting Protocol (CAP) and NOAA Weather Radio (NWR) audio message production; training and outreach to community decision makers, emergency managers, and broadcasters; and implementation of the Event Code change by broadcasters. Additional details on the EWW are provided in the attachment.

3. Add New Event Codes for the Storm Surge Watch and Storm Surge Warning The NWS requests the authorization of new "State and Local" Event Codes to be added to Part 11 rules, Subpart B, Section 11.31 (e), Event Codes. The nature of the activation is titled Storm Surge Watch/Warning; the NWS recommended Event Codes are, respectively, SSA and SSW. The NWS issues weather watches/warnings for numerous threats to life and property. It does not, however, issue warnings for storm surge. Storm surge losses in the hundreds or thousands of lives have occurred in every coastal state from Texas to South Carolina, and in some states north of there. Most of the 8,000- 12,000 deaths from the Galveston, Texas, hurricane of 1900 resulted from a storm surge. In recent years, Hurricane Katrina (2005), Hurricane Ike (2008), Hurricane Isaac (2012), and Hurricane Sandy (2012) further demonstrate the impacts to property and lives from storm surge and the need for a new NWS watch/warning. The Storm Surge Watch/Warning issuance is a new NWS watch/warning scheduled for dissemination beginning in the 2015 hurricane season. EAS activation will be triggered by a product issued by NWS Weather Forecast Offices (WFO). Extensive preparations include adding the new Event Code to the NWS warning message CAP and NOAA Weather Radio (NWR) audio message production; training and outreach to community decision makers, emergency managers, and broadcasters; and implementation of the Event Code change by broadcasters. The WS requests the above changes be made as soon as possible e but not later than February I, 20 14, to allow time to prepare for the 20 IS Atlantic hurricane season beginning June I. 20 15. in the Atlantic, Caribbean Sea and Gul f of Mexico. Additional details on the Storm Surge Watch/Warning are provided in the attachment.

NWS Point of Contact

Mr. Timothy Schott in the WS I headquarters Office of Climate, Water and Weather Services is the lead staff member for each of the three requested changes to the Part II EAS Rules. He may be reached via email at timothy.schott@noaa.gov or by telephone at (301) 713-0090 x 146.

Sincerely, Marlene H. Dortch, Secretary



(For more information clique on the above logos)

Getting to Know Your Radio?

Taken with Permission from Harris County ARES®

Knowing how to access the basic functions on the radios that you use during an emergency response is an important skill as emergency communicators. I have seen incidents during public service events where an operator could not change a parameter such as frequency, tone, power, etc. This affected net operations since an operator was not able to communicate due an issue such as the wrong tone being selected. The time to learn how to operate communications gear is not during a response.

Since transceivers vary in their features and menu systems, this will be a general guide rather than offer specific advice. The best source of information is often the owner's manual. The table of contents can narrow down your search quickly.

- The first basic item is how the display works. You want to be able to determine if you are in VFO or Memory mode, what memory you are at presently, the offset used, and the tone mode used.
- The second basic item is how to change from VFO to Memory. Most recent transceivers have at least one VFO and a set of memories to save frequently used frequencies including the offset and tone. You should also be able to save the contents of a VFO into a memory. Since some transceivers contain a provision to display a memory tag rather than the actual frequency being used, you should be able to switch between displaying the memory tag and the actual frequency.
- The third basic item is how to change the frequency, offset, and tone. These sound trivial, but being off-frequency, using the wrong offset, and using the wrong or no tone are the causes of the majority of the communications problems that I have seen. If you have a multi-mode transceiver such as an IC-706MKIIG or FT-817, you also need to know how to set the modulation mode. If you are on an FM repeater, you do not want to use sideband.
- The fourth basic item is how to disable the VOX, if applicable. VOX should never be enabled during a response since it is possible for stray sounds to trip the VOX. This ties up a communications channel. The Hurricane Watch Net prohibits the use of VOX for this reason.
- The fifth basic item is how to lock and unlock the dial to prevent inadvertent frequency changes. It is possible to inadvertently change the frequency by bumping the dial.
- The sixth basic item is how to change the power level.

You should also become familiar with the other features on the transceivers that you use such as microphone levels, meter display modes, and time-out timer features. If you are assigned to an EOC or other facility with pre-deployed equipment, then become familiar with the equipment before an actual response. Have one of the operators already assigned to the facility show you how to use the equipment. If you can download the manuals or otherwise obtain copies of them, then do so and become familiar with the equipment before an actual response. This is also why it is a good idea to pack the manuals in your "Go Kit". In the event that another operator needs to use your equipment, that operator can consult the manuals.

Communication Guidelines ARES®/RACES training Material

Used with permission from Christine Smith, N5CAS

Let's face it, there are hundreds of people that can talk and talk, and when they finally finish you ask *yourself* "what did they actually say?" *Within Emergency Communication, you will have TWO different levels of communication.* The first is in passing traffic on behalf of a served agency. This is known as formal traffic. Under those conditions you pass traffic EXACTLY as written. You change nothing. In some instances you will not understand what the message means. That is fine. Your job is to get the message to the destination as quickly as possible, not to understand it. When you receive a message from a served agency, read it. If there is any part you cannot read, ask for clarification before accepting the message. You can't accurately transcribe what you cannot read. When you transcribe a message from a served agency, MAKE NO CHANGES! It does not matter if you do not understand the technical meaning. It DOES matter that you pass traffic exactly as written.

Let's revisit the last sentence. PASS TRAFFIC EXACTLY AS WRITTEN! If you are the author, make your corrections before you are ready to send. If ANYONE else initiated the message, MAKE NO CHANGES!

•The second type of communication is where YOU originate the message, it is not written and where a written response is not required. This is commonly known as informal traffic. In that situation you control what the text of the message will be. Therefore phrasing is up to you. Plan your communications at least as well as you plan what you say when you know you will be quoted. Whenever reasonable, write down what you will say before you say it.

In Emergency communication it is important to say as little as possible, yet convey all of the meaning.

How can we do this?

Brevity and Clarity

•1. The standing "rule of thumb" is - if you can leave a word out without changing the meaning, leave it out. If a description of an item will not add to the understanding of the subject of the message, leave it out. Another item to remember, do NOT use contractions within your messages. Words like "don't" and "isn't" are far too easy to confuse. Add to that the stress and confusion during an emergency and they WILL create problems.

•2. Slow Down! Hams, in general, tend to handle communications as quickly as they can. It has been proven again and again that a three or four second break between transmissions will actually result in information being passed more quickly. If this seems strange to you, take the time to listen to Police, Sheriff's Office or Fire dispatch. They are able to convey large amounts of information very quickly because they maintain a slow, measured pace. In addition, the three or four second break between transmissions insures priority and emergency traffic can gain access to the net without requiring the largest signal on that frequency.

3. Do not editorialize

Literally hours can be lost by people inserting their opinion on unrelated subjects. What someone thinks about a ball game or the weather is irrelevant unless weather or the ball game is the subject being discussed.

4. Listen

The first requirement for communication is the ability to listen. But, you say, I can tell someone what is required without listening. Not really. Communication is the - two way - exchange of thoughts, ideas or information. Two way. That requires listening. An olde timer once told me "A ham has two ears and one mouth. Therefore he should listen twice as much as he talks". Makes sense. Communication will be acknowledged.

5. Standard ITU Phonetics

While it may take less effort to speak into a microphone and listen than to operate CW, it does take some care to quickly and accurately convey exact information. Speak distinctly at all times. If information is to be written, pace your speech accordingly. For critical information, or under noisy conditions, spell words with standard ITU phonetics. ITU phonetics were chosen so that each word sounds completely different from all others. A list of ITU phonetics is available in the ARRL handbook and the ARRL logbooks.

•6. Numbers are pronounced as individuals. The number 509 is pronounced five zero nine, not five hundred nine and NOT five oh nine.

•7. Formal written traffic Insure you have asked all questions necessary to have obtained the following:

- A. Who is requesting and from whom?
- B. What is the requester's full name/title/agency & location?
- C. What is the recipient's full name/title/agency & location?
- D. What are they requesting and how many do they want/need?
- E. Is it a list or single item?
- F. If it's a list, do all items come from the same place?
- G. If multiple sources then use multiple messages.
- H. Is the subject the transportation of an item, or the acquisition of that item, or both?
Where will it come from (not always the same as the location of the person receiving the request)?
Where will it go to (not always the same as the location of the person requesting the item(s))?
- I. When is it needed?
- J. Time/date as applicable

8. **Getting the message through to improve communications you need to improve the difference between the signal and the noise levels (signal to noise ratio) to achieve reliable communications.** For our purposes here, noise is defined as any impediment to transmission or reception of information (messages)

9 **What form can this "noise" take?** Some of the more common ones are:

- A. Static and background noise on the air
- B. Equipment or voice sounds around you
- C. Inappropriate amount of light
- D. "Loose cannon" tempers
- E. Improper transmission speed
- F. Improperly formatted messages

What can you do to maximize message throughput?

Here are some of the more common ways to handle impediments.

Static and background noise on the air **Insure you have the proper antenna for the job.** An NVIS will work very well for 40 and 75 meter SSB when your communications range is up to about three hundred miles where a vertical will not. Conversely, a vertical will work quite well for VHF/UHF.

Choose the best band for the job. VHF/UHF are very good for short distances (less than 50 miles) but are useless for distances over one hundred miles. The antennas are quite small. HF propagation differs by band and antennas are quite large. What distance do you wish to cover? Make sure your equipment is grounded.

Equipment or voice sounds around you

- Use a headset to minimize noise you will hear from the area you are in.
- Use a noise canceling microphone to minimize transmitted noise.
- Whenever possible, locate your station away from the source of noise.

Inappropriate amount of light

Many people do not think of light as a potential problem. Think what happens when you have too much light when you try to read a computer screen or too little light when you try to read printed information. Stay out of direct sunlight if at all possible. Try not to be in shade while having to look directly into the sunshine. Insure there will be sufficient light for you to work at night.

"Loose cannon" tempers

These are very hard to deal with. Your best bet is to ask assistance from your supervisor. A team working calmly toward a common goal will frequently defuse the situation.

Improper transmission speed

Practice sending at the appropriate rate where the other party can copy. That means you shouldn't ramble off the message text at high speed, but pace yourself to the same speed that the other party is copying (about 15 WPM). That translates to about one word every four seconds. As you speak, imagine that you're writing the word in your mind. After a while, you'll get the hang of talking 15 WPM. If you do this right, you'll never get a request to repeat a section.

When asking for part or all of the message to be repeated, get into the habit of saying "Say Again" instead of "Repeat". Repeat is used in the military to fire another salvo of artillery.

So You Volunteered For a Communications Event

First - you need to find out what the event is, what is your position and at what time you are to supposed to arrive at your position, approximately what time will this event end and type of equipment is necessary for me to do my job providing communications.

Basic equipment that you will need for every communications event that you will participate in requires:

- Two or more fully charged batteries. Out in the field in a bad time to realize that your batteries are dead.
- If you are using a handi-talkie, the standard stock antenna probably is not the best antenna to use. Some communications events may run on simplex where everyone is within line of site making communications a breeze. Other times, you are miles away from a repeater making communicating difficult for the NTS to understand you. You may want to invest in a collapsible 5/8 wave antenna or a magnetic mount style if you do not have one.

- Another item that you really do not want to be without is a headset. Some communication events are noisy, I mean really noisy and others are not. A good amateur makes sure that he can hear what the NTS wants and answers the NTS on the first call from them. If you purchase a headset with a boom mic attached, do not use the VOX circuit. Always use a push to talk to transmit.

- One item which is constantly overlooked is a pad of paper and a couple of pens or pencils to take notes from the NCS or to the NTS.

- Are you dressed for the weather? As a suggestion, you should take with you the on the day of the event, warm clothing, cold clothing, raingear, food, drinks, a first aid kit, your medication, sunscreen, insect repellent, a gallon size Ziploc bag to put your radio in if it rains, a chair to sit on and the list goes on and on. In other words, if you do not bring it out with you, you will not be able to get it. Are you getting the drift here?

Just to think. You haven't left for your assignment yet. You have loaded up your vehicle and finally you're off to do your part in communicating. The event will start in two hours and you think you have enough time to locate the place where you are to be, then park your vehicle, then find out where you are to be, then locate the person that you are to report to. What I am saying here is that you need to plan to arrive early enough to do all of the above and then some to be prepared, the NCS would like for everyone to check into the NCS when they are leaving to go to their assigned position, when they arrive at their assignments and when they secure their position.

The NCS will probably run a controlled net. This means that all communications must go thru the NCS. Keep your traffic to a minimum. Give all the details and be precise at the same time. Think what you are going to say before you transmit. This will maximize the net to emergency traffic if needed and at the same time maximize your battery life. In other words, "Tell me the time and don't build me a clock."

WHAT ARE TACTICAL CALLS AND WHY USE THEM?

When you volunteer for a position in a Public Service or a manmade or natural disaster event, the use of Tactical Calls can and does increase the efficiency and speed in identifying a specific function or person. They also eliminate confusion with the NTS known as Parade Control. An example of this would be working the Annual Fort Lauderdale Boat Parade. N4*** is working the N.E. 3rd Ave Bridge, Nobody would know who N4*** is but if N4*** says "Parade Control this is the 3rd Ave Bridge," everyone knows that the ham on the 3rd Ave Bridge needs to contact Parade Control. During the night of the Parade tactical calls are very important since Parade Control works very close to Law enforcement and numerous other agencies on that night.

When working with all these agencies, call signs mean nothing to them. What they do understand is that using "Net Control this is Commercial Street Bridge" is a lot easier and to the point than "N4*** this is KJ4***." The assignment of a tactical call should, if possible, relate to the amateurs function at the event. Tactical calls such as Rest stop 1, supply truck 2, First Aid, net control and so on provide a verbal "picture" of the function. The use of tactical call signs at an event does not relieve the amateur radio operator of the responsibility of identifying his or herself with their FCC assigned call sign. As required in Part 97.119(a) of the FCC Regulations, the amateur radio station must transmit its assigned call sign on its transmitting frequency at the end of each communication, and at least every 10 minutes during a communication. This is to clearly make sure the source of the transmission from that station is known to those receiving the transmission. Although the amateur is not required to identify at the beginning of the communication, doing so is just common courtesy and good operating practice and should be the norm. During most events

we will have a mix of amateurs that may not have worked together before and therefore are not recognizable by voice. In any case it is the responsibility of the individual amateur to transmit his or her call sign as required by the FCC. A good practice is when you call the NTS when you are finished with your communications, you end your conversation with your callsign and this will always meet the requirement of the FCC.

Robin/N4HHP

Are You a Ham Radio Skywarn Storm Spotter?

Did you know that one of the more high profile amateur radio/served agency relationships is the one which exists with the National Weather Service? The National Weather Service in Miami-Dade County covers the areas of Palm Beach, Broward, Miami-Dade, Glades, Hendry, Collier and Mainland Monroe Counties,

“SEVERE WEATHER” Its effects are felt by many of us during our lifetimes. To obtain critical weather information, the National Weather Service of the U.S. Department of Commerce’s National Oceanic and Atmospheric Administration, and cooperating organizations, have established SKYWARN Spotter Networks. The Skywarn program is a concept that was developed in the late 1960s that was intended to promote a cooperative effort between the National Weather Service and communities. The emphasis of the effort is focused on a storm spotter, an individual who takes a position near their community and reports wind gust, hail size, rainfall, hail size and cloud formations that could signal a developing tornado.

Although SKYWARN spotters are essential information sources for all types of weather hazards, your largest responsibility as a SKYWARN spotter is to identify and describe severe local storms. In the average year, 10,000 severe thunderstorms, 5,000 floods, and over 900 tornadoes occur across the United States. During the past 10 years, tornadoes, severe thunderstorms, and flash floods have killed nearly 2,300 people in the United States and injured thousands of others. Because of storm spotter reports, such as those you provided, plus the addition of new technology and improved warning dissemination, this death toll was reduced by more than 800 from the previous 10 years. While the figures still appear staggering, several thousand lives have been saved by reports from storm spotters.

The National Weather Service has all kinds of computerized products including their Doppler radar to use when severe weather is threatening an area. Even though all this high-tech equipment is useful, nothing else can replace a real time observer who is able to witness’s severe weather first-hand. These reports has enabled the National Weather Service to issue more timely and accurate warnings for tornadoes, severe thunderstorms, and flash floods. An important issue is what to report and what not report. Some events can be considered significant to some, but strictly "by the book", are not considered severe. Calls, and reports of an event not considered severe are a waste of your time as well as theirs'.

Severe Weather Reporting Criteria

Many types of weather information are needed from storm spotters; however, some types of information are much more important than others. Strict adherence to the reporting criteria allows vital information to be communicated as soon as possible. Also, some of the reporting criteria should receive higher priority communication than others.

You should report the following weather events.

Urgent Priority

Wind speed greater than 58 mph
Rainfall 1 inch or more per hour
Hail 1/2-inch diameter or larger
Tornado

High Priority

Rotating wall cloud
Flash flooding
Hail 3/4-inch diameter or larger
Persistent non-rotating wall cloud

Lower Priority

Cloud features suggesting storm organization
Wind speed greater than 40 mph

The National Weather Service offers free training classes by a Meteorologist from the National Weather Service. If you would like to take a Skywarn class, then please go to the National Weather Service Skywarn page located at: (Clique on the Uncle Sam)



Doppler link



Describe what you see here

Generator Safety



According to the Consumer Product Safety Commission, the misuse of the portable power sources killed at least five people and sickened dozens more after Hurricane Katrina. The Associated Press (AP) reported on October 13, 2005, that many people relied on portable generators after the hurricane knocked out most of the power in the Gulf Region. And that was deadly for those who did not use their generator properly.

AP said, "The five deaths were among fifty-one cases of carbon monoxide poisoning reported in Louisiana, Mississippi and Alabama after the hurricane, according to the Centers for Disease Control and Prevention. All of these cases involved the misuse of portable

generators, except for one that involved a gasoline-powered pressure washer. Four deaths occurred in one Louisiana house where a generator was used. The fifth death occurred in a Louisiana house where a generator was used in an attached garage." All of these portable generator related deaths could have been prevented. Here are some basics regarding portable generators. But the first thing to do is **Read the Instruction Booklet or Manual** that came with the generator. If the manual is lost or missing, contact the generator's manufacturer.

Never use a generator indoors or in an attached garage A portable generator is an internal combustion engine that exhausts a deadly gas called carbon monoxide or CO. CO is odorless and colorless, and you can be overcome if the generator is indoors. Be sure to place the generator outside where exhaust fumes will not enter into enclosed spaces. Only operate a generator outdoors in a well-ventilated, dry area, away from air intakes to the home. The generator should be protected from direct exposure to rain and snow. Don't connect your generator directly to your home's wiring. Connecting a portable electric generator directly to your household wiring can be deadly. A generator that is directly connected to your home's wiring can 'backfeed' into the power lines connected to your home. Utility transformers can then increase this lower electrical voltage to thousands of volts. That's more than enough to kill a utility lineman making outage repairs many

miles away. You could also cause expensive damage to utility equipment, your home appliances, and your generator.

If you wish to hard-wire a generator to your home, it should be installed by a licensed electrician with an approved cut-off switch that will automatically disconnect the home from the power grid when the generator is being used. Please check with your local utility company and building office before installing a hard-wired generator.

Don't plug a portable generator into an electrical outlet in your home or garage *If a generator is plugged into your home's electrical circuits, it can still 'back-feed' power into the utility company lines, which can injure or kill utility workers fixing on the downed power lines. The correct way to use a generator is to connect a heavy-duty, outdoor-rated power cord to the generator. Appliances can then be connected to the power cord, as long as they are in the wattage range that the generator can supply. Make sure that the outdoor-rated power cord has a sufficient wire gauge to handle the electrical load.*

Don't overload the generator. All generators have a power rating. They should be used only when necessary and only to power a limited number of appliances or equipment. The total wattage used by the appliances should be less than the output rating of the generator. If you put too many appliances on the generator, it could seriously damage the appliances and electronics. Overloading the generator could also cause fires in the power cord. If in doubt, don't add that extra load to the generator. ***Make sure your generator is properly grounded to avoid electrical shocks*** Check the generator owner's manual for correct grounding information.

Do not store gasoline for the generator indoors *Gasoline should be stored in approved, non-glass safety containers. Don't store gasoline in a garage if there's a water heater or other fuel-burning appliance in the garage. Vapor from gasoline is heavier than air and can travel invisible along the floor. It could be ignited by a pilot light or other source of flame, such as an electric spark. Extinguish all flames or cigarettes when handling gasoline or the generator. Shut off the generator before refueling. Turn off all equipment powered by the generator before shutting it down. Always have a fully charged, approved fire extinguisher located near the generator.*

Read and adhere to the manufacturer's directions for safe operation. Read the owner's manual before you operate the generator. If you've lost the manual, contact the manufacturer for another copy. You can often download the manual from a manufacturer's Web site. Keep the owner's manual with the generator in a zip-lock bag to keep it dry.

Final Tips -- Many generator parts are hot enough to burn you during operation. Stay away from the muffler and other hot areas. Keep children away from portable electric generators at all times.

Sent in by Al Sachs KD4NV



This may save your life

How to achieve good vision while driving during a heavy downpour **we** are not sure why it is so effective; just try this method when it rains heavily. This method was given me by a Police friend who had experienced and confirmed it. It is useful....even driving at night.

One method used by Canadian Military Drivers for years.

Most of the motorists would turn on HIGH or FASTEST SPEED of the wipers during heavy downpour, yet the visibility in front of the windshield is still bad...In the event you face such a situation, just try your **SUN**

GLASSES (any model will do), and miracle! All of a sudden, your visibility in front of your windshield is perfectly clear, as if there is no rain.

Make sure you always have a pair of SUN GLASSES in your car. As you are not only helping yourself to drive safely with good vision, but also might save your friend's life by giving him this idea...Try it yourself, and share it with your friends! Amazing, you still see the drops on the windshield, but not the sheet of rain falling. You can see where the rain bounces off the road. It works to eliminate the "blindness" from passing semi's spraying you too. Or the "kick up" if you are following a semi or car in the rain.

They ought to teach that little tip in driver's training. It really does work...

And for a similar reason, why "Fog" lights must make WHITE light, or else are useless in FOG. Those YELLOW "FOG" lights are great in those blinding night SNOW storms, and those big snowflakes become virtually invisible. But YELLOW is useless in RAIN or FOG.

This next warning is a good one! I wonder how many people know about this:

A 36 year old female had an accident several weeks ago and totaled her car. A resident of Kinburn, Ontario was traveling between Kinburn & Ottawa. It was raining, though not excessively, when her car suddenly began to hydro-plane and literally flew through the air... She was not seriously injured but very stunned at the sudden occurrence!

When she explained to the OPP Officer what had happened he told her something that every driver should know. NEVER DRIVE IN THE RAIN WITH YOUR CRUISE CONTROL ON. She thought she was being cautious by setting the cruise control and maintaining a safe consistent speed in the rain. But the Officer told her that if the cruise control is on when your car begins to hydro-plane and your tires lose contact with the pavement, your car will accelerate to a higher rate of speed making you take off like an airplane. She told the OPP Officer that was exactly what had occurred. The Officer said this warning should be listed, on the driver's seat sun-visor NEVER USE THE CRUISE CONTROL WHEN THE PAVEMENT IS WET OR ICY, along with the airbag warning. We tell our teenagers to set the cruise control and drive a safe speed - but we don't tell them to use the cruise control ONLY when the pavement is dry.

NOTE: Some vehicles (like the Toyota Sienna Limited XLE) will not allow you to set the cruise control when the windshield wipers are on.

If you send this to other people and only one of them doesn't know about this, then it was all worth it....

You might have saved a life!! !

Sent it by Joel / KB4KXV

**BROWARD COUNTY
FLORIDA
ARES®/RACES**

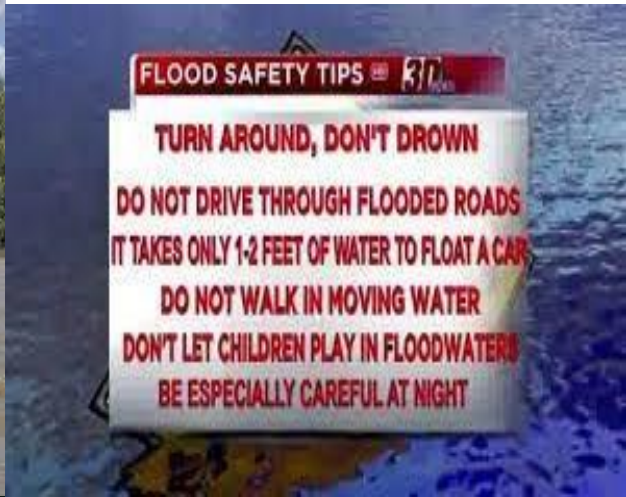
Amateur Radio Emergency Service®

Radio Amateur Civil Emergency Service

National Weather Service Skywarn Program

Three different organizations with the same purpose...





Humor Corner

n4hhp@comcast.net

Dilbert - The Knack

<http://www.youtube.com/watch?v=CmYDgncMhXw>

Sent in by Mike, WB4RFC

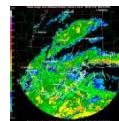
AMATEUR & SKYWARN TRAINING INFORMATION

Amateur radio today - hosted by Walter Cronkite, SK.

http://www.youtube.com/watch?v=5Z9136_Nhh4



The Doppler Effect: what does motion do to waves?
----- (Clique on both pictures)



ARRL President Kay Craigie, N3KN

Published on Jul 16, 2014

ARRL President Kay Craigie, N3KN, has recorded a video message to all amateurs concerning the need for immediate grassroots support of HR.4969, the Amateur Radio Parity Act. Also, see the ARRL HR.4969 website at www.arrl.org/hr-4969.

<https://www.youtube.com/watch?v=ema5Fclt-1Q>



We Are Looking For Volunteers

(Click on the Preparing for future disasters image for a shelter list and map)

Broward County needs a commitment from you today, that you will help out with secondary communications when called upon. Are you aware that phone lines, cell phones, police, fire commutations and the list goes on and on can be off the air when there is a man-made or natural disaster that affects Broward County? As proven throughout the history of disasters, amateur radio is the only form of communications that survives and is on the air just following an event. Did you know that you can even bring your immediate Family with you? There is also a pet friendly shelter where pets can be taken. You will find this information in the map above.

When you take on a position, please check out where the shelter and antenna is. All of the Hospitals and shelters have installed antennas on them. If you have a problem locating the RG8X sign and coax, please call me ASAP and I will get someone to locate the coax for you. When you take a shelter position, you will find in the Cafeteria kitchen area an engraved red sign with letters RACES VHF antenna in white. Locate that sign and you will find the coax run to connect your transceiver to.

The only equipment that you need to bring is a 25 watt or more transceiver, a power supply, 50 feet of RG8X coax with S0259 Connectors on both ends, and a barrow connector. Don't forget to bring an adapter to connect the coax to your radio.



This is what amateur radio public service is all about. Please signup today. A application is found in this Newsletter.

Robin Terrill N4HHP
Broward County RACES Officer n4hhp@comcast.net
954 249-5343



If you have an amateur radio related humor or training, please send it to the Editor

n4hhp@comcast.net

FEMA and ARRL Sign Agreement; FEMA Administrator Calls Ham Radio “Resilient”

07/19/2014



<http://www.arrl.org/files/file/Public%20Service/FEMA/FEMA-ARRL-2014.pdf>

Craig Fugate, KK4INZ

The ARRL and the Federal Emergency Management Agency ([FEMA](#)) have announced a Memorandum of Agreement (MOA) that will enhance cooperation between the League and FEMA in the area of disaster communication. FEMA Administrator Craig Fugate, KK4INZ, and ARRL President Kay Craigie, N3KN, signed the agreement July 18 during the ARRL National Centennial Convention at the Connecticut Convention Center in Hartford, Connecticut.

“Radio is one of the most resilient communications technologies we have,” Fugate said. “When the power is out and telecommunications are down, the Amateur Radio community can serve as a vital resource in support of emergency responders and survivors during a disaster. This MOA will strengthen FEMA’s partnership with ARRL and build upon our work to expand emergency communications capabilities and the use of Amateur Radio in emergency management.”

The new agreement will allow FEMA and ARRL to work together to provide resources, services and personnel, as available, in order to strengthen capacity in areas of emergency communications, mass care and emergency assistance, disaster preparedness, response and recovery, while also raising public awareness about the use of Amateur Radio as a public safety resource. The pact also outlines the ways in which FEMA and ARRL will cooperate to carry out their respective responsibilities, with respect to disaster mitigation, preparedness, response and recovery operations in the event of a natural or manmade disaster.

Craigie said that from radio’s earliest days of experimentation to the present, ham radio volunteers have combined a passion for technology with a devotion to assisting agencies that respond to disasters. “This combination of inventiveness and service has saved lives for a century,” she said. “We look forward to working with FEMA to further develop opportunities for trained, equipped and prepared amateur radio operators to serve the public interest whenever and wherever disasters affect our country and its communities.”

Fugate echoed his afternoon remarks as the keynote speaker at the ARRL National Centennial Convention Banquet Friday evening. He said that before he even became FEMA administrator, it became clear to him that Amateur Radio could support ad hoc and innovative communication without relying on conventional telecommunication systems.

“The more sophisticated our systems become, the more fragile they become,” he told the gathering of some 800 dinner guests. He again emphasized the need for resiliency in communication systems, and asked, “How many public safety networks can come close to ham radio’s bandwidth?”

“The relevancy of ham radio only grows,” asserted Fugate, who just upgraded to General class. “Amateur Radio is taking that hobby and turning it into saving lives.”

After Fugate’s talk, President Craigie presented him with the ARRL Medal of Honor.

The Amateur Radio Service :

This article goes back in the early 2000's but is still current,
Paul Harvey News and Comment, ABC Radio, March 19, 2003

Homeland Security

Ham radio is essential to homeland security in the United States. Our service is a dispersed and decentralized communications system that can't be shut down by terrorist attack. While public safety agencies rely on central dispatch stations, amateur radio operators can go on the air just about anywhere anytime. Hams are trained communicators with technical knowledge that prepares them to put their stations on the air at remote sites quickly, creating makeshift facilities when needed. Amateur radio operators don't have to wait for technicians to arrive to repair equipment or re-program computers. Hams can do it themselves on the fly.

Communications Technology

Radio amateurs have unique capabilities. The telephone companies can't afford to build cellphone towers everywhere. There are big holes in coverage of sparsely populated areas away from cities and Interstate highways. Ham radio, on the other hand, is everywhere. During disasters, amateur radio volunteers can work without any fixed infrastructure. We're mobile and we're portable.

Of course, we do have a huge infrastructure in place, also. For example, the ARRL Repeater Directory 2006-2007 lists 20,389 VHF and UHF repeaters across the U.S. and Canada. And then there are hundreds of thousands of homes and cars outfitted with two-way radio transceivers on HF, VHF and UHF bands.

Whether or not there are towers to receive and repeat their signals, we can't help but notice there are cellphones everywhere. Unfortunately, the one-on-one nature of cellphone calls makes it almost impossible for a large group of emergency workers all at the same time to get an overall picture of how an event is developing. When an emergency manager is taking a call from one person, he or she miss calls from others.

Also, cell networks can go down when conditions are most critical. Towers can become disabled by the very conditions that may have caused an emergency and cellular networks can be flooded out with panic calls placed by members of the general public.

Hams operate nets all over the HF, VHF and UHF bands, while public safety agencies and related industries have narrow two-way systems on one or a few frequencies with what they call *dispatchers*. Those public safety agencies - such as police and fire departments, ambulance companies, rescue squads and the power and telephone companies and other outfits that are part of the nation's critical infrastructure - can't afford to provide the kinds of widespread, distributed radio communications networks for themselves that hams already have. Instead, those agencies that radio amateurs work with during emergencies have to rely on ham radio. Radio amateurs bring more than two-way voice communications to emergencies.

Here are some of the additional services hams can offer:

- portable and mobile amateur television (atv)
- fixed and mobile data services (packet radio)

- vehicle location services (APRS)
- telephone connections (phone patch) where cellular networks don't have coverage.

Hams are ready now to carry emergency message traffic across town, across the state, coast to-coast or around the globe.



America's Quiet Warriors

America's quiet warriors are the legion of ham radio operators, 700,000 of them, who are always at ready for backup duty in emergencies - amateur, unpaid, uncelebrated, civilian radio operators, during and after floods and fires and tornadoes. After the 9/11 attacks, hams were indispensable in reuniting friends and families. Most recently it was they who expedited the search for debris after the [disaster to the space shuttle Columbia](#), and right now, at this moment, they are involved in homeland security to a greater degree than you would want me to make public.

– Paul Harvey News and Comment, ABC Radio, March 19, 2003

If a manmade or natural disaster hits Broward County we need to know now if we have communication volunteers in place! Broward County ARES® and RACES need volunteers. Please fill out an application found in the rear of this Newsletter, Note: that you will only be called upon if the shelters, special needs facilities, hospitals and other areas in Broward County are opened when a disaster strikes and communication are overloaded or nonexistent.

*Show your Support
Please make a commitment today.*

Please email it to Robin at n4hhp@comcast.net or Carol at CSjursen@bellsouth.net

For the Broward County Emergency Shelter List Clique on the Emergency Shelter for the list of shelters





The 30/30 Lightning Rule Explained

The '30/30' rule for lightning safety could save your life. The first '30' means that you need to take cover if you hear thunder within 30 seconds of the lightning flash ('flash to bang' ratio). Then wait at least 30 minutes after the last lightning flash or thunder in order to resume normal activity - the "all clear" signal.

Lightning research has confirmed that consecutive lightning strikes can occur as much as six miles apart. People often do not perceive lightning to be close if it is two miles or more away, but the risk of the next strike being at your location may actually be very high. Many lightning casualties occur in the beginning as a thunderstorm approaches because people ignore these precursors. When thunderstorms are in the area but not overhead, the lightning threat can exist even if it is sunny at your location.

Practice the '30/30' rule and be lightning safe!

Lightning Safety

Do you know what to do if you are caught in the open during a thunderstorm or you feel tingling or your hair standing on end? Lightning causes around 100 deaths in the U.S. annually (more than hurricanes and tornadoes combined).

In this picture the young woman and her friends were severely injured just by lightning a few seconds after this picture was taken. Notice that no rain was falling clearly illustrating that lightning can strike up to several miles away from the thunderstorm.



General lightning safety rules:

WHEN INSIDE:

- Avoid using the telephone (except for emergencies) or other electrical appliances.

Do not take a bath or shower.

IF CAUGHT OUTDOORS:

- Go to a safe shelter immediately! Such as inside a sturdy building.
 - A hard top automobile with the windows up can also offer fair protection.
 - If you are boating or swimming, get out of the water immediately and move to a safe shelter away from the water!
 - If you are in a wooded area, seek shelter under a thick growth of relatively small trees.
 - If you feel your hair standing on end, squat with your head between your knees. Do not lie flat!
 - Avoid: isolated trees or other tall objects, bodies of water, sheds, fences, convertible automobiles, tractors, and motorcycles. During severe weather it's very important that your focus be on remaining safe.
- In order to protect yourself and ensure your safety throughout severe weather



SKYWARN SPOTTER TRAINING

YOU ARE NOT A STORM CHASER!

Tim Samaras Killed. Tim Samaras, his son Paul and Tim's chasing partner Carl Young were killed while chasing a tornado. Here is a video about that day



In memory of Tim Samaras, his son Paul and Carl

DEADLIEST TORNADOES
NOVA Discovery/ Science/History





(Click on the picture to learn about Doppler Radar)



In the picture above, what do you observe?

BROWARD COUNTY FLORIDA ARES®/RACES



Amateur Radio Emergency Service®



Radio Amateur Civil Emergency Service

National Weather Service Skywarn Program

Three different organizations with the same purpose...



<h2 style="margin: 0;">Broward Emergency Management</h2> <h3 style="margin: 0;">ARES / RACES Membership Application</h3> <p style="margin: 10px 0 0 0;">Please type or print clearly</p>	<p style="text-align: center; margin: 0;">EOC Use Only</p> <p>RACES # _____ RACES POSITION _____</p> <p>Effective _____</p> <p>Expires _____ Approved by _____</p>
--	---

<p>Name _____</p> <p>Address _____</p> <p>City _____ Zip Code _____ County _____</p> <p>Home Phone _____ Work _____ Cell _____</p> <p>Amateur Call _____ License Class _____ Expiration Date _____ Date of Birth _____</p> <p>Emergency Contact _____ Phone _____</p>	<p style="text-align: center; margin: 0;">Completion of this Application DOES NOT OBLIGATE YOU</p> <p style="margin: 5px 0 0 0;">Enrollment in RACES qualifies you for County insurance in the event RACES is activated, and you are performing duties.</p> <p style="margin: 5px 0 0 0;">This information provides a database of qualified Amateur Radio operators available for ARES/RACES emergency activation.</p> <p style="margin: 5px 0 0 0;">ARES/RACES participation is voluntary.</p> <p style="margin: 5px 0 0 0;">By submitting this application you consent to a background check.</p>
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Email Address to receive Broward County ARES / RACES Alerts / Bulletins _____

You reside at the above address during what months? From _____ To _____

Are you capable of setting up a station in the field? Indicate what, below, if yes YES NO

What languages are you fluent in? _____

In the event of an emergency do you have family members you must assist?	YES	NO	
Are you willing to Staff a shelter during a hurricane?	YES	NO	
Is your home station capable of operation without commercial power?	YES	NO	
Could you serve another area in Florida by joining the Communications Away Team (CAT)?	YES	NO	MILES AWAY _____

Indicate below any capabilities you have i.e. big beam, tall tower, high power, special mode etc. that could assist in the event of an emergency.

Modes	160	80	40	30	20	17	15	12	10	6	2	1.25cm	70cm	Add. Bands/ Comments
SSB- Power in Watts														
CW- WPM														
TOR- RTTY, PSK31, WinLink, Pactor II, etc.														
SSTV, DSSTV, NBTV														
Mobile / RV- Modes and Power in Watts														
Packet- Baud 300, 1k2, 9k6														
APRS- GPS, WX, DF, Tracker														
ATV- AM, FM														
FM- Power in Watts														
Satellite- AO, FO, RS, SO etc.														

Other modes or special operation / capabilities / equipment i.e. CERT, CAP, Coast Guard, Marine, MARS, REACT, Contest Station, Remote Control, ect.

Do you have ICS 100 200 700 800 Do you have Emcomm 1 2 3 (circle those that you have) Please submit Certificate Copies.

Signature _____ Date _____

Use back of this application for additional space. Please be as detailed as possible with all information.

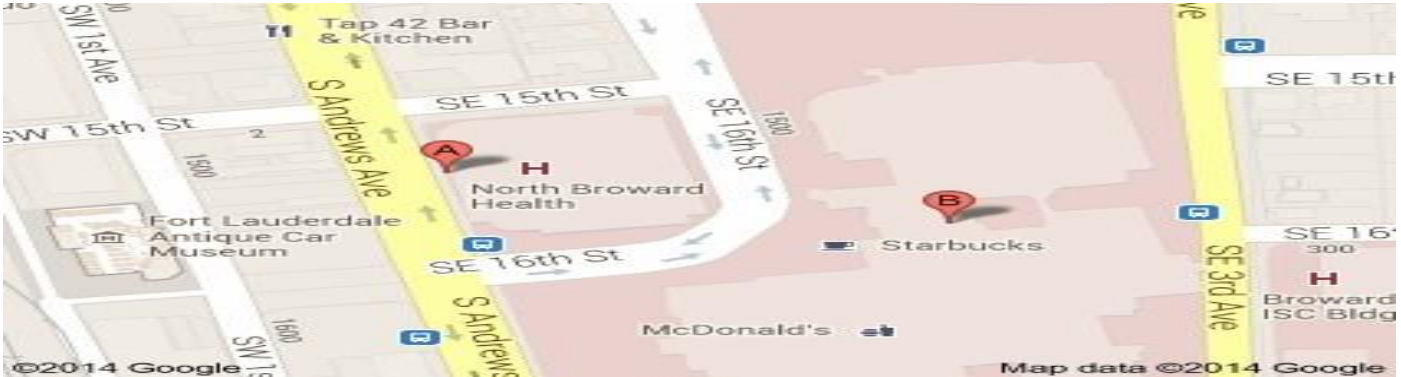
Please list experience, qualifications and other special considerations or capabilities. Use back of this application for additional space. Revised 04/2014

Broward County ARES®/RACES

3rd Tuesday of the month, at 7:30 P.M. Meeting in the Oak Room.

Broward Health (The old Broward General Medical Center)

1600 South Andrews Avenue, Fort Lauderdale, FL 33316 Meeting is held In The Oak Room



Parking will be in the 7 story parking garage, (see A Above). The entrance to the building is on the first floor directly across from the parking garage. You will need to go in the main entrance and sign in at the security desk and they will issue you a pass to wear. Bring a driver's license with you or a picture I.D. Do not bypass security. They will tell you how to get to the Oak Room.

From I-95 or 595

Take I-95 or 595 to SR 84. Go east on 84 until you get to Andrews Avenue turn left (North) until you get to the hospital on your right. 1600 South Andrews Avenue

From I-95 to Broward Blvd

Take I-95 to Broward Blvd. East on Broward Blvd until you get to Andrews Avenue turn Right (South) until you get to the hospital on your Left. 1600 South Andrews Avenue

Talk-in will be on the 146.910 MHz. -600 PL 110.9 Hz.

If you get lost or need directions, please call our cell phones:

Robin Terrill, N4HHP RACES Officer 954 249-5343
Carol Sjursen, KJ4AWB ARES® EC 954 803-6338



If you would like to receive this training Newsletter when they come out, please reply to n4hnp@arrl.net