BROWARD COUNTY FLORIDA

EMERGENCY COMMUNICATIONS TRAINING

ARES/RACES Meeting July 21, 2015

This month's topic will be Part 2 of 2 Introduction to Winlink 2000

Presented by Barry Porter / KB1PA

Please plan on attending this meeting. Starts at 7:30 PM. Map and contact information on the last page.

July 2015

ELMERS NEEDED

Every year we have an influx of new hams (a great problem to have) and along with that, an increased need for knowledge! Unfortunately, we can't teach all of everything that everyone needs at our monthly clubs or ARES/RACES meetings. There are just too many amazing facets of this hobby for any of us to keep up on. So what do we do to support these new hams and get them started successfully?

ARE YOU ELMER MATERIAL?

For those of you that are new, the term "Elmer" refers to someone that mentors a new (or not so new) ham in a field of particular interest or ability.

So if you are a newcomer looking to learn more about a specific topic or just want to get to know a local ham or club located here in Broward County then contact the Presidents of these clubs for more information. They would love to have you as a member too!
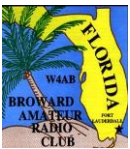
Broward Amateur Radio Club: (BARC) W4AB Meets 7:30 *PM* on the second Tuesday of each month in the Oak Room, which is located at Broward Health Medical Center, 1600 S. Andrews Ave, Fort Lauderdale. Further information is available on the club repeater 146.91 Contact: Tony Becker, KK4GUU BARC President. Phone: (954) 612-9303 E-mail: tony@mcrsys.com ARRL VE Testing @ 6:00 pm

Davie Cooper City Amateur Radio Club: Meets 6:30 PM. on the first Monday of each month at Davie Moose Lodge, 4483 SW 64th Ave, (Davie Road) Davie, FL 33314. Further information is available on the club website, http://dcarc.org/ Contact: Tom Hayes, N4MEO / DCARC President. Phone: (954) 218-1567 E-mail: hayesjt@bellsouth.net ARRL VE Testing @ 6:00 pm

Gold Coast Amateur Radio Association: (GCARA) W4BUG Meets 7:30 p.m. on the fourth Tuesday of each month (except December) at the Imperial Point Medical Center, 6401 North Federal Highway, Ft. Lauderdale, FL in the hospital auditorium. Contact: John Kramer, W4JRK. GCARA President. Phone: (954) 298-4004 Web: http://www.w4bug.org/; E-mail:W4JRK@hotmail.com ARRL VE Testing @ 6:00 pm

Broward County ARES/RACES: provides emergency communications through amateur radio in the event of a disaster. They meet every *3rd Tuesday of the month, at 7:30 PM.* Broward Health 1600 South Andrews Avenue, Fort Lauderdale, FL 33316 Meeting is held In the Oak Room. Broward County ARES Emergency Coordinator, Carol Sjursen, KJ4AWB (kj4awb@arrl.net) Phone: 954 803-6338, Broward County RACES Officer and Broward County Skywarn Coordinator, Robin Terrill, N4HHP (n4hhp@comcast.net) Phone: 954 249-5343, Broward County ARES/RACES Training Officer Barry Porter, KB1PA (barryp13@mac.com) 1 561 499-8424

So, new hams: reach out and make connections. You get as much out of this hobby as you put into it. Don't be afraid to ask for help. Call or email anyone of these Club Presidents and don't be afraid to ask for help!

For you experienced hams: even if you don't think you know very much, you probably know a lot more than some of these new guys so help them out and make yourself available to them.....and know that your efforts are appreciated.

FCC GOES PAPERLESS

From The Amateur Radio Relay League

In order to streamline procedures and save money, the FCC stopped routinely printing and mailing licenses in February. There are a number of ways a license holder can obtain an official copy of their license. The official license will display the FCC logo and the watermark "Official Copy" will be printed across each page of an official authorization from FCC.

1. Download and Print License: The licensee can log into the FCC ULS License Manager System http:// wireless.fcc.gov/uls/ with their FRN and password to 'Download the Electronic Authorization' of the official license. On the 'Download Authorizations' page the license holder will add their call sign to the 'Authorizations to Download' and then click download. The PDF of the license can be saved to a computer and printed later or the file can be opened and printed immediately.

2. Login and Set Paper Preferences: The licensee can log into the FCC ULS License Manager System http:// wireless.fcc.gov/uls/ with their FRN and password and set their own paper authorization preferences for future mailings. This option determines whether a user will receive paper authorizations (printed license and FRN information) from the FCC. The license holder would select either YES or NO and then click SAVE. By selecting YES, you will continue to receive paper authorizations printed and mailed by the FCC. By selecting NO, you will not receive authorizations printed and mailed from the FCC. This preference will affect all granted authorizations on this FRN.

3. Receive License via email: When modifying, renewing or requesting a duplicate copy of the license, a licensee who already has an FCC Registration Number (FRN) and provides a valid e-mail address under "Applicant Information" while logged in to the ULS system will receive an official ULS-generated electronic authorization via e-mail. The action of adding a valid e-mail address into the FCC system can also be performed by a VEC filing new, upgraded, modified or renewed licenses on behalf of applicants.

4. Contact FCC: Licensees may contact FCC Support via the web, by telephone (1-888 225-5322) or by mail to request paper licenses. Please note that FCC recently stopped using distinctive paper stock to produce hard copy licenses and has been printing these on "standard, white recycled paper." The Bureau noted that the distinctive paper stock it had used was six times more expensive than the plain recycled paper it now uses.

All this information is located on the VE Resources page www.arrl.org/resources-for-ves in the section titled "Obtain a License Copy".

Additional Information An unofficial "reference copy" can always be printed from the FCC's ULS License database http://wireless.fcc.gov/ uls/. New licensees may choose to register their SSN (social security number) with the FCC and receive a FRN before the exam date to make retrieving a copy of their new license after the session much easier. VE Teams may accept photocopies or printouts of licenses from the follow sources: the official license or reference license printed from the FCC website, and license data printed out from the ARRL website or QRZ website. This information can be found on the ARRL web page what to bring to an exam session.

Voice over Internet Protocol (VOIP)

VoIP, or Voice over Internet Protocol, is a method for taking **analog audio signals**, like the kind you hear when you talk on the phone, and turning them into digital data that can be transmitted over the Internet. How is this useful? VoIP can turn a standard Internet connection into a way to place free phone calls. The practical upshot of this is that by using some of the free VoIP software that is available to make Internet phone calls, you're bypassing the phone company (and its charges) entirely. VoIP is a revolutionary technology that has the potential to completely rework the world's phone systems.

The interesting thing about VoIP is that there is not just one way to place a call. There are three different "flavors" of VoIP service in common use today:

- **ATA -- The simplest and most common way is through the use of a device called an ATA (analog telephone adaptor). The ATA allows you to connect a standard phone to your computer or your Internet connection for use with VoIP. The ATA is an analog-to-digital converter. It takes the analog signal from your traditional phone and converts it into digital data for transmission over the Internet.**

- **IP Phones -- These specialized phones look just like normal phones with a handset, cradle and buttons. But instead of having the standard RJ-11 phone connectors, IP phones have an RJ-45 Ethernet connector. IP phones connect directly to your router and have all the hardware and software necessary right onboard to handle the IP call. Wi-Fi phones allow subscribing callers to make VoIP calls from any Wi-Fi hot spot.**

- **Computer-to-computer -- This is certainly the easiest way to use VoIP. You don't even have to pay for long-distance calls. There are several companies offering free or very low-cost software that you can use for this type of VoIP. All you need is the software, a microphone, speakers, a sound card and an Internet connection, preferably a fast one like you would get through a cable or DSL modem. Except for your normal monthly ISP fee, there is usually no charge for computer-to-computer calls, no matter the distance.**

Phone companies use VoIP to streamline their networks. By routing thousands of phone calls through a circuit switch and into an IP gateway, they can seriously reduce the bandwidth they're using for the long haul. Once the call is received by a gateway on the other side of the call, it's decompressed, reassembled and routed to a local circuit switch.

Now amateur radio fans are using VoIP technology to link users around the globe. Here's how it works. Ham radio has always relied on FM repeaters, **large radio towers that act as base stations for accessing the radio network from home. By attaching an Internet-connected PC to these repeater stations, people can communicate with the repeater using VoIP.**

Several amateur radio fans have developed special software that helps connect home radio transceivers to the Internet. Users can connect their ham radio transceivers to their PC sound card and use the computer software to search for available repeater stations across the world. No longer are ham radio fans limited to the closest repeater station.

EchoLink

EchoLink was developed by Jonathan Taylor, K1RFD, in early 2002. In an astonishingly short period of time, EchoLink has become one of the dominant Amateur Radio VoIP systems with more than 30,000 users worldwide. The free EchoLink software for Windows can be downloaded at **www.echolink.org** . When you start the EchoLink software, your computer taps the Internet to connect to an EchoLink server. Before you can make your first

connection to the network, your call sign must be verified with the information in the FCC database. This can take minutes or hours, depending on the state of the system, but it helps reduce the chances of non-hams entering the EchoLink network. Once you're validated (you only do this once), the rest is easy. The EchoLink server acts like a telephone switchboard in cyberspace. It maintains a directory of everyone who is connected at any moment. After browsing the directory, you can request a connection between your computer and that of another amateur.
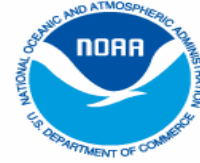
Voice over Internet Protocol (VOIP) and the Hurricane Net Purpose
Taken from the NWS/NHC

SKYWARN's purpose, and our primary objective, is to help save lives and property thru the identification and cautious field evaluation of threatening or dangerous weather and hazardous conditions and facilitating the timely gathering and dissemination of this information.

We have merged the EchoLink Conference Server with an IRLP Reflector to create this net which provides a single point of contact for people in the field submitting reports as well as for the National Hurricane Center and National Weather Service to be able to easily stay in contact with one another. Rather than duplicating efforts, we are getting much better utilization of our available resources by merging these two proven technologies and this should benefit all involved.

The main function of this website is for Net Controllers and the general public to be able to easily review the latest tropical bulletins and satellite images as well as to be able to submit weather observations which meet or exceed reportable criteria to the National Hurricane Center and/or National Weather Service offices nationwide.

Our hurricane report web submission form may also be used by any other amateur radio Net Control Operators running other Nets and even by the general public. All posted weather reports may also be viewed online for any weather event. Whenever tropical weather is imposing a threat to the U.S. mainland and certain other areas of interest, the VoIP WX-NET will be fully operational.

Our Weekly VoIP SKYWARN and Hurricane Prep Net is held each Saturday evening at 8pm Eastern or 7pm Central time (Sunday 0000z). You may join us by connecting to the EchoLink WX-TALK conference server Node #:7203, and IRLP Reflector 9219 through any of the many linked repeaters in this network worldwide or via your PC using EchoLink. Please check in with us or at least monitor if you are able. To stay abreast of any new weather developments, you may want to monitor this NET during any major severe weather events.

"The VOIP Connection"

You are cordially invited to join the "VOIP Connection" which originates from Naples Florida on the repeater of the Broward Amateur Radio Club located in Fort Lauderdale Florida on the frequency of 146.910-600, PL 110.9 or the AllStar Node 28478. We meet every Tuesday night at 7:00 PM EST.

The Net Manager is Harry Sevush, KD4JMV Phone 1 239 322-2586
Email: kd4jmv@comcast.net.
All are invited to join us and to bring any ham related topic to the VOIP Connection.

Practice Amateur Radio Exams

from Http://QRZ.COM

The QRZ Practice Tests for amateur radio exams are free and open to the public. No previous or existing amateur license is required to participate.

These tests keep track of your individual progress and so in order to use them, you must first register or log in with a QRZ User account.

Please note that anybody can have an account on QRZ. If you are not yet a licensed amateur, simply choose a user name of your liking when you are asked to register with a callsign. Once you have obtained your license, we'll change your username to your new callsign.

Log in or Register now.

Note: You do not need to be a licensed ham to become a member. Registration is necessary so that we can remember which test questions you've taken and how best to study.
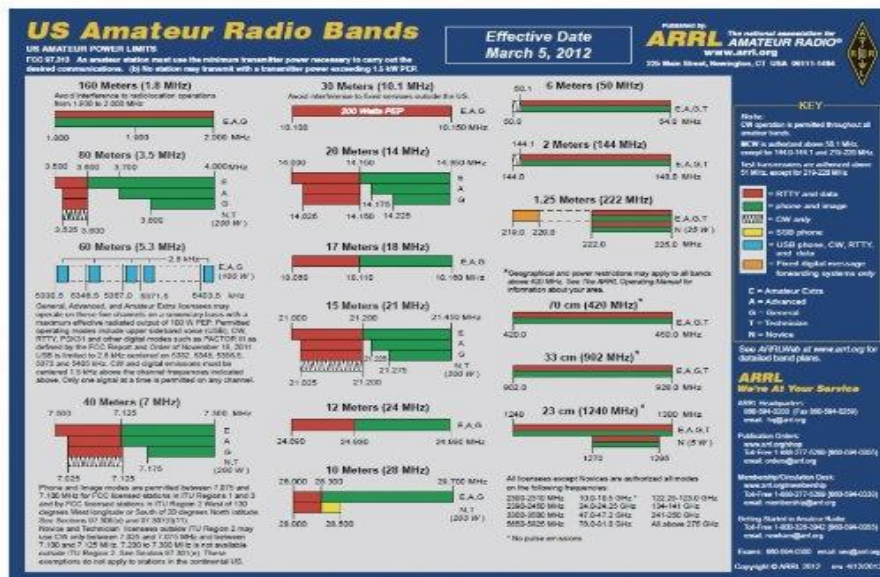
Amateur Radio Exam and Study Guide Websites

http://www.qrz.com. On the right column under "Ham Study", go to "Practice Tests"
http://www.eham.net. On the left column under "Resources", go to "Ham Exams"
http://www.KB0MGA.net. Log in is required
http://www.radioexam.org. Practice Exams

Frequency Bands Chart [PDF] (color)

My Accident
Author Unknown - Source is the Internet

This one needs an intro, so you won't be lost at the beginning. This man was in an accident (work accident, not car accident), so he filled out an insurance claim. The insurance company contacted him and asked for more information.

This was his response: "I am writing in response to your request for additional information for block number 3 on the accident reporting form. I put 'poor planning' as the cause of my accident. You said in your letter that I should explain more fully and I trust the following detail will be sufficient. I am an amateur radio operator and on the day of the accident, I was working alone on the top section of my new 80 foot tower.

"When I had completed my work, I discovered that I had, over the course of several trips up the tower, brought up about 300 pounds of tools and spare hardware. Rather than carry the now un-needed tools and material down by hand, I decided to lower the items down in a small barrel by using a pulley, which was unfortunately attached to the gin pole at the top of the tower.

Securing the rope at ground level, I went to the top of the tower and loaded the tools and material into the barrel. Then I went back to the ground and untied the rope, holding it tightly to ensure a slow descent of the 300 pounds of tools.

"You will note in block number 11 of the accident reporting form that I weigh only 155 pounds. Due to my surprise of being jerked off of the ground so suddenly, I lost my presence of mind and forgot to let go of the rope. Needless to say, I proceeded at a rather rapid rate of speed up the side of the tower. In the vicinity of the 40 foot level, I met the barrel coming down. This explains my fractured skull and broken collarbone. "Slowed only slightly, I continued my rapid ascent, not stopping until the fingers of my right hand were two knuckles deep into the pulley." Fortunately, by this time, I had regained my presence of mind and was able to hold onto the rope in spite of my pain. At approximately the same time, however, the barrel of tools hit the ground and the bottom fell out of the barrel. Devoid of the weight of the tools, the barrel now weighed approximately 20 pounds. I refer you again to my weight in block number 11.

"As you might imagine, I began a rapid descent down the side of the tower. In the vicinity of the 40 foot level, I met the barrel coming up. This accounts for the two fractured ankles, and the lacerations of my legs and lower body. The encounter with the barrel slowed me enough to lessen my injuries when I fell onto the pile of tools and, fortunately, only three vertebrae were cracked.

I am sorry to report, however, that as I lay there on the tools, in pain, unable to stand and watching the empty barrel 80 feet above me, I again lost my presence of mind. I let go of the rope."

What Does QSL Mean?

First there's the contact, delicious sparks and static with a far-off Ham and then, sometimes after months or even years, a QSL card that is glorious, full-color proof of that contact comes in the mail. It is a nudge of the memory when it's crossed in a scrapbook or noticed on the wall. QSL cards can be a golden medallion of success for a Ham radio contact. They are a long-honored tradition in Amateur Radio.

A QSL card is a written confirmation of either a two-way radio communication between two amateur radio stations or a one-way reception of a signal from an AM radio, FM radio, television or shortwave broadcasting station. A typical QSL card is the same size and made from the same material as a typical postcard, and most are sent through the mail as such. There is a quaint, but well-ordered, procedure where cards are mailed to "the Bureau" and subsequently sent on to the Ham. A relatively new twist has cards sent electronically which automates the process and makes it almost instantaneous. QSL card derived its name from the Q code "QSL," which means "do you confirm receipt of my transmission?"

National Weather Service Weather Forecast Office
Miami – South Florida

The National Weather Service Miami-South Florida Forecast Office is co-located with the National Hurricane Center on the campus of Florida International University. Our meteorologists, hydrometeorological technicians, and support staff keep an eye on the sky 24-hours a day, 7-days a week, producing all warnings and forecasts for South Florida and the adjacent waters of the Atlantic Ocean, Gulf of Mexico, and Lake Okeechobee.

Weather Safety >> Weather Radio

- Audio "voice" links to products from NOAA Weather Radio
- Buying a weather radio receiver
- Programming your county SAME codes
- Nationwide NOAA Weather Radio information

NOAA Weather Radio broadcasts the latest weather information from your local National Weather Service (NWS) office through 400 FM transmitters on seven frequencies in the VHF band, ranging from 162.400 to 162.550 megahertz (MHz) in fifty states, Puerto Rico, the Virgin Islands, Guam, and Saipan. These frequencies are outside the normal AM or FM broadcast bands.

Weather messages are repeated every 4 to 6 minutes and are routinely updated every 1 to 3 hours or more frequently when severe weather strikes. During severe weather, NWS forecasters can interrupt the routine weather broadcasts and insert special warning messages concerning imminent threats to life and property. The forecaster can also add special signals to warnings that trigger "alerting" features of specially equipped receivers. In the simplest case, this signal activates audible or visual alarms, indicating that an emergency condition exists within the radio listening area and alerts the listener to turn up the volume and stay tuned for more information. More sophisticated receivers can be programmed for individual counties and are automatically turned on when an alert is received.

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Klotzbach-Gray continue to call for slow hurricane season
http://www.sun-sentinel.com/news/weather/hurricane/fl-klotzbach-gray-update-20150601-story.html

NOAA Weather Radio coverage across South Florida
move mouse over the map for individual transmitter details
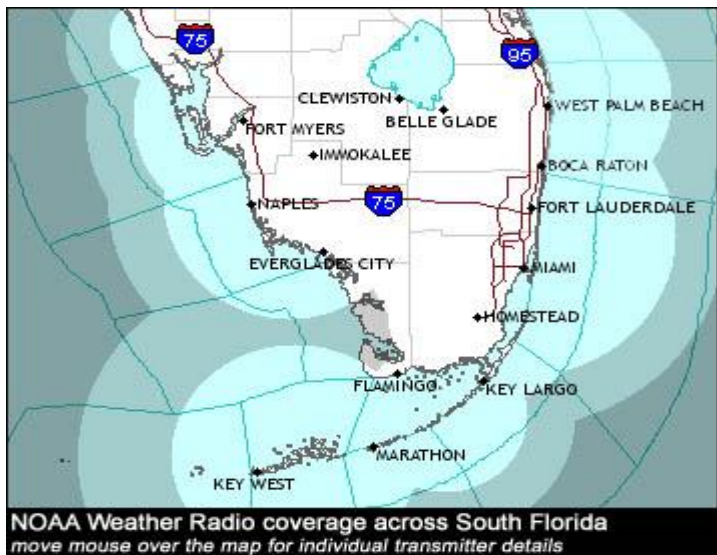
County	SAME ID	NOAA Weather Radio Stations
Broward	012011	Miami, Palm Beach, and Spanish Station
Collier	012021	Naples and Ft Myers
Glades	012043	Ft Myers and Belle Glade
Hendry	012051	Naples, Ft Myers, and Belle Glade
Miami-Dade	012086	Miami, Princeton, and Spanish Station
Monroe	012087	Naples, Tea Table Key, Princeton, and Key West
Palm Beach	012099	Palm Beach and Belle Glade

Since 1975, NOAA Weather Radio has been the sole Government-operated radio system providing direct warnings for both natural disasters and nuclear attack. This concept has recently been expanded to include warnings for all hazardous conditions that pose a threat to life and safety, both at the local and national level.

Special radios that receive only NOAA Weather Radio, both with and without special alerting features, are available from several manufacturers. In addition, other manufacturers are including NOAA Weather Radio as special features on an increasing variety of receivers. NOAA Weather Radio capability is currently available on some automobile, aircraft, marine, citizens band, and standard AM/FM radios as well as communications receivers, transceivers, scanners, and cable TV.

By nature and design, NOAA Weather Radio coverage is limited to an area within about 40 miles of the transmitter. Reception of this broadcast depends on the distance from the transmitter, local terrain, and the quality and location of the receiver. In general, those on flat terrain or at sea, using a high quality receiver, can expect reliable reception far beyond 40 miles. Those living in cities surrounded by large buildings and those in mountain valleys with standard receivers may experience little or no reception at considerably less than 40 miles. If possible, a receiver should be tested in the location where it will be used prior to purchase.

The National Incident Management System (NIMS)

By Robin / N4HHP Broward County RACES Officer

We as amateur radio operators should never become complacent with our training or preparation for the future, or do we? On 9-11 (September 11, 2001) brought to light the need for communications to be done with plain language. Amateurs who plan on helping during an emergency event need to update their training. Amateur Radio is a commodity that will be needed and used during an incident; therefore we need to be fully trained. FCC Rule 97.1 Basis and purpose states; (a) Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications.

WHAT THE SERVED AGENCIES EXPECT FROM Broward County ARES/RACES

Our served agencies members are professionals, trained in the use of ICS procedures and protocols because they use NIMS. They expect our members, who deploy to support their agency to be previously trained in NIMS/ICS and accustomed to working on a team in an ICS environment. Second, they expect us to know our equipment and how to use it to find solutions that "move the message" and solve communications problems that are encountered whether in a fixed/rear or a forward/remote location.

The Emergency Management Institute (EMI) replaced its Incident Command System (ICS) curricula with courses that meet the requirements specified in the National Incident Management System (NIMS). EMI developed the new courses collaboratively with the National Wildfire Coordinating Group (NWCG), the United States Fire Administration and the United States Department of Agriculture.

The following links will take you to the Federal Emergency Management Agency (FEMA) independent study courses dealing with the Incident Command System (ICS) and emergency communications. These courses will take between one and two hours to take. Upon successfully passing these courses, you will be sent a course completion certificate and will be able to print out a certificate. Please send me a copy of these certificates so I can put them in your ARES/RACES file.

IS-100.b Introduction to Incident Command System, ICS-100
- **IS-100.b Course**
- **IS-100.b Exam**

IS-200.b ICS for Single Resources and Initial Action Incidents
- **IS-200.b Course**
- **IS-200.b Exam**

IS-700.a National Incident Management System (NIMS) An Introduction
- **IS-700.a Course**
- **IS-700.a Exam**

IS-800.b National Response Framework An Introduction

- **IS-800.b Course**
- **IS-800.b Exam**

IS-802 Emergency Support Functions (ESF) #2 – Communications (Highly recommended)

- **IS-802 Course**
- **IS-802 Exam**

Note: These FEMA courses are not required to participate locally in ARES / RACES by providing communications in shelters, special care facilities or hospitals, but are highly recommended to take to understand what it means to work on a team in an NIMS environment.

Great Ham Apps for IPhone & Android

There are plenty of apps out there to choose from for Ham use. These are some of the more popular ones for both iOS and Android devices that are free or low cost.

For IPhones

Simple Utilities:
- **Ham I Am (Storke Brothers/Free) A handy app that covers some basic amateur radio reference material (Phonetic alphabet, Q Signals, Ham Jargon, Morse Code, RST System, etc.)**
- **Maidenhead Converter (Donald Hays/Free) Handy app that displays your grid locator, uses maps and does lat/ lon to grid locator conversions.**
- **HamClock (Ben Sinclair/$0.99) A simple app that displays UTC time and local time. This one reads out to the second.**

Call Sign Lookups:
- **CallBook (Dog Park Software/$1.99) Simple ham radio callbook lookup with map display.**
- **Call Sign Lookup (Technivations / $0.99) Another simple ham radio callsign lookup with map display.**

Repeater Directory:
- **RepeaterBook (ZBM2 Software/Free) This app is tied to the RepeaterBook.com web site, works well and is usually up to date.**

Mobile Logbook:
- **HamLog (Pignology/$0.99) This app is much more than a logbook because it has a bunch of handy tools including UTC Clock, Callsign Lookup, Prefix list, Band Plans, Grid Calculator, Solar Data, SOTA Watch, Q Signals & more.**

HF and VHF propagation:
- **WaveGuide (Rockwell Schrock/$2.99) This is an excellent tool for determining HF and VHF propagation conditions at the touch of a finger.**

EchoLink:
- **EchoLink (Synergenics/Free) Make EchoLink QSOs directly from your phone! Full featured EchoLink client for iPhone.**

APRS:
- **Ham Tracker (Kram/$2.99) APRS app, works well, uses external maps such as Google & aprs.fi. "Share" feature allows you to send an SMS or email with your location information.**

Satellite Tracking:
- **Space Station Lite (Craig Vosburgh/Free) A free satellite tracking app for just the International Space Station. It has annoying ads but its free.**

Summits On The Air (SOTA):
- **Pocket SOTA** (Pignology/$0.99) A good app for finding SOTA summits, checking spots and accessing other information.

- **SOTA Goat** (Rockwell Schrock/$4.99) This is my favorite app for SOTA activity (finding summits, checking/posting spots and alerts, etc...)

Morse Code:
Morse-It (Francis Bonnin/$0.99) This app decodes and sends Morse audio. There are fancier apps out there but this one does a lot for $1.

For Androids

Simple Utilities:
- **Ham Radio Tools** (V_Firefighter/Free) A simple all-in-one utility to assist ham radio operators. Callsign lookup; GPS; Wavelength calculator; logging & more.
- **HamGPS** (Miguel A. Vallejo, EA4EOZ/Free) Maidenhead locator, lat/lon to grid locator conversions, and useful to align antennas in microwave DX activities.
- **Ham** (Smerty Software/Free) Open Source Ham Radio App for Android. Solar / calculated band conditions, Maidenhead Grid Locator & Callsign lookups via QRZ. com XML subscription. Works great with premium QRZ.com accounts.

Call Sign Lookups:
- **Ham Radio Call** (Roy Watson, N1ZTL/Free) U.S. based ham radio callsign lookups with maps.
- **Ham Finder** (KD7UIY/Free) Displays grid locations using maps, does lat/lon to grid locator conversions. Check the DXCC of a callsign. Looks great on tablets.

Repeater Directory:
- **RepeaterBook** (ZBM2 Software/Free) Easily find Amateur (Ham) Radio Repeaters across the world.

Mobile Logbook:
- **Ham Radio Log** (Talixa Software/Free) Simple logbook for amateur radio enthusiasts with ADIF export.

HF and VHF Propagation:
- **MyHF_Map HAM Radio MUF maps** (agtim.ch/$2.70) Propagation at a glance. During   map view you can switch between HPF, MUF, FOT and each hour of the day (UTC).

EchoLink:
- **EchoLink** (Synergenics/Free) Make EchoLink QSOs directly from your phone! Full featured EchoLink client for Android.

Mobile Log:
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HF and VHF Propagation:

- **MyHF_Map Ham Radio MUF** maps (agtim.ch/$2.70) Propagation at a glance. During map view you can switch between HPF,MUF,FOT and each hour of the day (UTC).

APRS:

- **APRSdroid** (Georg Lukas/$4.95) It allows reporting your position as well as sending and receiving messages. It also conveniently displays nearby stations as a list or on a map.

Satellite Tracking:

- **ISS Detector Satellite Tracker** (RunaR/Free) ISS Detector will tell you when and where to look for the International Space Station.

Summits On The Air (SOTA):

- **SOTA Finder** (ZBM2 Software/Free) Easily find SOTA Summits near you with complete database across the world. Pocket SOTA (Pignology/$0.99) Carry the Summits on the Air (SOTA) summit database with you on your Android device.

Morse Code:

- **Morse Code** (PixelCan/Free) Translate text into Morse and vice-versa. Tidy interface makes it real easy to use. Flashlight, sound, and vibration features as well.

Android Apps to use with Rigblaster Blue!

Morse Code:

- **Morse Decoder** (Wolphi/$4.99) Decode live CW via your Android device's built-in microphone or the RIGblaster Blue interface.

Digital Modes:

- **DroidPSK** (Wolphi/$5.49) Transmit & receive PSK31 on your Android device. Easy to use and lots of macros make this an excellent app!
- **DroidRTTY** (Wolphi/$5.49) Transmit & receive RTTY on your Android device. Sensitive decoding of ham and commercial RTTY signals.

Maritime Signals:

- **HF Weather Fax** (Wolphi/$9.99) Display gray scale live HF weather fax pictures on your Android device.

  DroidNavtex (Wolphi/$9.99) Decode live Maritime Navtex signals on your Android device. Weather forecasts, warnings and other information are shown on the display.

SSTV:

DroidSSTV (Wolphi/$6.99) Here's a novel way of operating SSTV! Use your smartphone's camera (or existing image) to have fun with SSTV. Full RX/TX capabilities.

BROWARD COUNTY AMATEUR RADIO CLUBS AND NETS

AllStar: **The AllStar Link portal allows licensed amateur radio stations to communicate with one another over the internet using streaming-audio technology. This allows worldwide connections to be made between stations or from computer to station greatly enhancing amateur radio communications capabilities.**
Broward Amateur Radio Club146.910 MHz -600 Hz PL 110.9 FM AllStar Node 28478
Nodes List: https://allstarlink.org/nodelist.php

American Radio Relay League: **Founded in 1914 by Hiram Percy Maxim, ARRL (American Radio Relay League) is the national association for Amateur Radio in the US. Today, with more than 161,000 members, ARRL is the largest organization of radio amateurs in the world. ARRL's mission is based on five pillars: Public Service, Advocacy, Education, Technology, and Membership. http://www.arrl.org/**
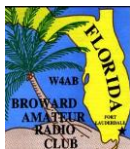
Broward Amateur Radio Club: **(BARC) W4AB Meets 7:30 *PM* on the second Tuesday of each month in the Oak Room, which is located at Broward Health Medical Center, 1600 S. Andrews Ave, Fort Lauderdale. Further information is available on the club repeater 146.91 Contact: Tony Becker, KK4GUU BARC President. Phone: (954) 612-9303 E-mail: tony@mcrsys.com: Club Web site: http://browardarc.net, Club Info: info@w4ab.org Club repeaters: 146.910 MHz -600 Hz PL 110.9 FM AllStar Node 28478, 224.76MHz -1.6 MHz PL 110.9 Hz FM, 444.825 +5 MHz PL 110.9 FM, 442.450 +5 MHz no PL DSTAR (Gateway). For information VE Testing contact VEC Tom Hays/N4MEO 954 218-1567 Email: hayest6961@gmail.com**

Broward County ARES®/RACES: **The Amateur Radio Emergency Service (ARES) is a corps of trained amateur radio operator volunteers organized to assist in public service and emergency communications. It is organized and sponsored by the American Radio Relay League The Radio Amateur Civil Emergency Service (RACES) is a standby radio service provided for in Part 97.407 of the Federal Communications Commission (FCC) rules and regulations governing amateur radio in the United States.**

Broward County ARES/RACES: **provides emergency communications through amateur radio in the event of a disaster. They meet every *3rd Tuesday of the month, at 7:30 PM.* Broward Health 1600 South Andrews Avenue, Fort Lauderdale, FL 33316 Meeting is held In the Oak Room. Broward County ARES Emergency Coordinator, Carol Sjursen, KJ4AWB (kj4awb@arrl.net) Phone: 954 803-6338, Broward County RACES Officer and Broward County Skywarn Coordinator, Robin Terrill, N4HHP (n4hhp@comcast.net) Phone: 954 249-5343, Broward County ARES/RACES Training Officer Barry Porter, KB1PA (barryp13@mac.com) 1 561 499-8424 Website: https://www.facebook.com/BrowardARESRACES**
Broward County Emergency Operations Center Broward County Emergency Operations Center

Broward County Emergency Preparedness Net (BCEPN): **Broward County ARES RACES provides emergency training. Net meets every Wednesday at 7:00 PM on the 146.910 MHz -600 Hz PL 110.9**
Net Manager: Mike Davis Cell: 954 826-4758 Email: k2mol@seftn.net
Website: https://www.facebook.com/BrowardARESRACES

Davie Cooper City Amateur Radio Club: Meets 6:30 PM. on the first Monday of each month at **Davie Moose Lodge, 4483** SW 64th Ave, (**Davie Road**) Davie, FL 33314. **Further information is available on the club website, http://dcarc.org/ Contact: Buzz Bowen, N1BUZ / DCARC President. Phone: (954) 655-6164**
E-mail: buzbowen@comcast.net

DCARC RF Net: **is held on the 146.790 MHz -600 PL 88.5 Hz on the every other Thursday starting at 7:30 PM for an question and answer session or you can tell us what you've been doing; purchased a new rig, worked a new DX contact, upgraded your license, put up a new tower, etc. You can also Buy, sell or trade on this net too. Net Manager Tom Hayes, N4MEO, 954 218-1567, email: hayest6961@gmail.com**

D-STAR: **(Digital Smart Technologies for Amateur Radio) D-Star offers digital voice and slow and high-speed data communications. Slow-speed digital voice and data are transported at 4800 bps, of which 3600 bps is used for voice transmission and the remaining 1200 bps is used for synchronization and general use. http://www.dstarusers.org/repeaters.php**

Echolink / VOIP Net: **High-Speed digital data communication is transported at 128kpbs and is capable of supporting Ethernet packets and also is fast enough to use for Internet applications such as displaying web pages. Repeater Fort Lauderdale 443.625 + PL 110.9. ECHOLINK #48646 Margate Repeater on 444.025+ PL. 107.2 ECHOLINK #269436. Boynton Repeater 147.225+ PL TONE 107.2 Hz and on 444.650- 5 PL 127.3 Hz.**

"The VoIP Connection" originating in Naples Florida, connects to Fort Lauderdale on 146.910-600 PL 110.9 AllStar Node 28478. We meet every Tuesday night at 7:00 PM EST Net MGR. is Harry Sevush, KD4JMV Phone 1 239 322-2586 Email: kd4jmv@comcast.net

Gold Coast Amateur Radio Association: **(GCARA) W4BUG Meets 7:30 p.m. on the fourth Tuesday of each month (except December) at the Imperial Point Medical Center, 6401 North Federal Highway, Ft. Lauderdale, FL in the hospital auditorium. Refreshments are provided. Dinner is available in the cafeteria @ 5:15pm GCARA / ARRL VE Testing @ 6:00pm in Auditorium C. Meeting starts @ 7:30pm in Auditorium A. Talk-in on 146.610 MHz and 146.820 MHz, -600 Pl 110.9 Hz., Other repeaters: 442.50 MHz.+5 PL 151.4 Hz. and 145.340 MHz D-STAR SYSTEM. Contact: John Kramer, W4JRK. GCARA President. Phone: (954) 298-4004 Web: http://www.w4bug.org/; E-mail:W4JRK@hotmail.com**

Gold Coast Amateur Radio Association: **(GCARA) Amateur Radio Fun Net every Thursday. Starts @ 7:00pm on 146.610 MHz and 146.820 MHz, -600 Pl 110.9 Hz. Discussion: Anything the check-in wishes to discuss. Everything from Ham Radio topics to general information. It's an easy come format and I never have a set discussion. It's where the station ops takes it. Contact: John Kramer, W4JRK. GCARA President.**
Phone: (954) 298-4004 Web: http://www.w4bug.org E- mail: W4JRK@hotmail.com

Internet Radio Linking Project: (ILRP) uses Voice-Over-IP (VoIP) custom software and hardware. Coupled with the power of the Internet, IRLP will link your repeater site or simplex station to the world in a simple and cost effective way. IRLP operates a worldwide network of dedicated servers and nodes offering very stable worldwide voice communications between hundreds of towns and cities. All this with unsurpassed uptimes and the full dynamic range of telephone quality audio. Node: 7830 WB2NBU Wellington FL USA +147.2850 No PL.

Knight Of The Roundtable Net: When all else fails, keep it Simplex. This is an open Forum Radio Group. We meet every Monday starting at 7:30 on either the 146.550 MHz (no PL tone) Simplex frequency or on a back-up frequency 145.555 (no PL tone) Simplex frequency. At that time Check-ins will be taken and begin our Rag Chew session. Web: www.knightsoftheroundtable.info www.knightsnet.org
NCS: Kenny Hollenbeck KD4ZFW Cell 954 692-4600 Email: kd4zfw@gmail.com

Motorola Solutions Amateur Radio Club: (MARC) (open only to current and former Motorola employees) Contact: Rich Pratt, K4XF. Web: E-mail: w4mot.club@gmail.com
The repeaters are accurately listed on QRZ.com under the call sign W4MOT.
Current VHF repeater is 146.790 – 600 Pl 88.5 Hz

Hurricane Watch Net: 14.325 MHz The Hurricane Watch Net consists of a group of licensed Amateur Radio Operators trained and organized to provide essential communications support to the National Hurricane Center during times of Hurricane emergencies. Our primary mission is to disseminate tropical cyclone advisory information to island communities in the Caribbean, Central America, along the Atlantic seaboard of the U.S., and throughout the Gulf of Mexico coastal areas. We also collect observed or measured weather data from amateur radio operators in the storm affected area as well as any post storm damage, and convey that information to the Hurricane Forecasters in the National Hurricane Center via the amateur radio station in the center (WX4NHC).

Palmetto Amateur Radio Club: (PARC) Meets quarterly. Meeting place announced on the club web site: http://www.palmettoarc.org The Palmetto Amateur Radio Club's Repeater's. Call Sign: K4PAL 146.850 MHz - 600 PL 91.5 Hz, 442.250 MHz +5 PL 114.8 Hz., 147.210 MHz - 600 PL 103.5 Hz., 147.375 MHz - 600 PL 91.5 Hz, 443.825 MHz +5 PL 103.5 Hz. Contact: Edward Kashuba / WD4HIP. Phone: (954) 551-9463E-mail: questions@palmettoarc.org

Southeast Florida Traffic Net: (SEFTN) SEFTN is part of the American Radio Relay League's National Traffic System. We meet daily at 6:00 PM local time on 146.61MHz- with a PL tone of 110.9, or 442.50MHz+ with a PL tone of 151.4, which is the Gold Coast Amateur Radio Association repeater. Our backup frequency is 146.79 MHz with a PL tone of 88.5, which is the Motorola Amateur Radio Club repeater. Learn the ARRL MESSAGE FORMAT

National Traffic Service: Our purpose is to pass formal written traffic, announce amateur radio events, deliver information on severe Weather, and to provide training for new operators and net control stations. We also provide emergency or special sessions when necessary and will assist agencies under Homeland Security, such as FEMA and Broward County Emergency Management, and the Broward County Emergency Coordinator, if called

upon to do so. Thank you for visiting and we hope you will join us on the air. **Web site: http://seftn.net/** Net Manager is Mike Sanner, KM2V Email: **km2v@arrl.net**

**How to Become a Skywarn Storm Spotter: SKYWARN Amateur Radio Serving the National Hurricane Center Covering all counties served by the Miami forecast office of the NWS on your local Florida AllStar Hub Repeater Since 1965 WX4SFL Skywarn Net FL AllStar Wiki The National Weather Service in Miami-Dade Florida National Weather Service The Amateur Radio Station at the National Hurricane Center for over 35 years. National Hurricane Center**
"Become A Storm Spotter From Home" http://www.improvenet.com/a/become-a-storm-spotter-from-home

South Florida DX Association: (SFDXA) K4FK Meets 7:33 p.m. on the first Wednesday of odd numbered months at Florida Medical Center, 5500 West Oakland Park Blvd, Ft. Lauderdale. Further information is available on the club repeater K4FK, 147.33/93 PL 103.5 DX Net: Wed. evenings at 7:30 PM on the club repeater. Contact: Don Drennon, N4THZ, / SFDXA President E-mail: n4thz@arrl.net
Web: http://www.qsl.net/k4fk/ . WR4AYC Repeater Group Contact: Marshall A. Paisner, K4MAP. Phone: (954) 873-2234 Web: http://wr4ayc.org/ E-mail: wr4ayc@arrl.net

Wellington Radio Club: in Palm Beach County leads the effort to promote and train amateurs in the reliable transmission of complex documents such as FEMA and Red Cross forms and spreadsheets. All done with only with a computer, simple and free software and a transceiver. No special equipment or cables are needed. It's called Basic Narrow Band Emergency Messaging System.   Repeaters and nets 147.285 +5 PL 103.5 and 442.050b +5 PL 103.5. Emergency Net on Mondays 7:30 PM on the 1st, 2nd and 3rd Mondays on VHF. This net also meets on holidays. President Larry Lazar KS4NB Phone: (561) 694-0868 Email: LARRY33414@aol.com   Beginner's Guide to FLDIGI   FLDIGI User's Guide   Free FLDIGI/FLMSG Digital software download site FLDIGI/FLMSG Download
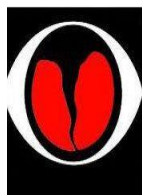
WX4SFL South Florida Regional Skywarn Training Net: The Purpose of the net is to assist Skywarn operators in the training for and handling of emergency communications, to provide useful information to Skywarn Members, and to familiarize people with directed net operations. We provide support for the NWS WFO's in both Miami and Key West. The Net meets every Thursday night at 1930 hrs. Local time on the SoFla AllStar Broward Amateur Radio Club146.910 MHz -600 Hz PL 110.9 FM AllStar Node 28478. Net Mgr.: Chris Vasilenko, K4FLL phone: 954-465-8425
email: WX4SFL@earthlink.net www.facebook.com/SouthFloridaRegionalSkywarn

If you know of any Broward County clubs or training nets that are not on this list or you notice an error in a listing, please contact me. Robin Terrill, N4HHP Editor n4hhp@comcast.net

Favorite Southeast Florida Repeaters At A Glance
Dade – Broward – Palm Beaches

Output Freq. MHz (In Numeral Order)	Offset	PL in Hz	Location	Callsign	Notes
145.270	-	-------	Parkland	WR4AYC	
145.290	-	110.9	Boca	N4BRF	Monday Club Roundtable 7:00 PM
145.290	-	110.9	Boca	N4BRF	Monday New Ham Net 7:30 PM
145.290	-	110.9	Boca	N4BRF	Wednesday Training Net
Starts at 7PM for South County, 7:30 for North County and 8 PM for Central County					
145.340	- D	-------	Fort Lauderdale	W4BUG	
146.550	S	-------	Broward County	----------	Knights of the Roundtable
146.555	S	-------	Broward County	----------	Knights of the Roundtable
146.610	-	110.9	Pompano Beach	W4BUG	SEFTN Net 6:00 PM Daily
(GCARA) Amateur Radio Fun Net every Thursday. Starts @ 7:00pm on 146.610 MHz and 146.820					
146.615	-	110.9	North County	W4JUP	North Co. ARES Net 7:30 PM
146.790	-	88.5	Plantation	W4MOT	
146.820	-	110.9	Boca Raton	W4BUG	
146.850	-	91.5	Hollywood	K4PAL	
146.910	-	110.9	Fort Lauderdale	W4AB	BCEPN Wednesday at 7 PM
146.910	- A	-------	Fort Lauderdale	W4AB	AllStar Node 28478
147.045	+	Central County ARES Net 8 PM			
147.075	I	110.9	Delray	W2GGI	IRLP, node 9050
147.210	+	103.5	Dade/Broward Co. Line	K4PAL	
147.225	+	123.0	Boynton Beach	N4RP	
147.225	+	107.2	Boynton Beach	N4AP	South County ARES Net 7 PM
147.330	+	103.5	Fort Lauderdale	K4FK	
147.375	+	91.5	Dade/Broward Co. Lin	K4PAL	
224.460	+	110.9	Pompano Beach	W4BUG	
224.760	+	110.9	Plantation	W4AB	
442.200	+ D	-------	Fort Lauderdale	W4BUG	
442.250	+	114.8	Dade/Broward Co. Lin	K4PAL	
442.450	+ D	-------	Fort Lauderdale	W4AB	DStar Gateway
442.500	+	110.9	Pompano Beach	W4BUG	
442.825	S	110.9	Andytown on Alligator Ally		SARNET
442.850	+	110.9	Fort Lauderdale	-----------	SARNET
442.875	+	110.9	Boca Club		
442.875	+ E	110.9	Boca Club		Echolink Node 826953
443.825	+	103.5	Dade/Broward Co. Line	K4PAL	
443.850	+	110.9	Coral Springs	WR4AYC	
443.975	S	110.9	Palm Beach	K4EEX	SARNET
444.025	+	107.2	Margate	KA4EPS	
444.600	S	94.8	Fort Lauderdale	K4AG	SARNET (Not On Yet)
444.825	+	110.9	Fort Lauderdale	W4AB	

Note: S = Simplex D = DStar A = AllStar I = IRLP E = Echolink S = SARNET

If you know of any Broward County clubs or nets that are not on this list or you notice an error in a listing, please contact me. Robin Terrill, N4HHP Editor n4hhp@comcast.net

Broward Emergency Management
ARES / RACES Membership Application

Please type or print clearly

Name

Address

City   Zip Code   County

Home Phone   Work   Cell

Amateur Call   License Class   Expiration Date   Date of Birth

Emergency Contact   Phone

**Completion of this Application
DOES NOT OBLIGATE YOU**

Enrollment in RACES qualifies you for County insurance in the event RACES is activated, and you are performing duties.

This information provides a database of qualified Amateur Radio operators available for ARES/RACES emergency activation.

ARES/RACES participation is voluntary.

By submitting this application you consent to a

background check.

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? _____

	YES	NO	
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, eet.

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

Please email this Application to Carol, KJ4AWB at Carol Sjursen (CSjursen@bellsouth.net) or bring it to the next meeting

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 (see B above). 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 by-pass 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
Barry Porter, KB1PA ARES/RACES Training OFFICER 1 561 499-8424

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