

# Brevard County Amateur Radio Emergency Operations Guide



## Revision History

| Revision | Date       | Change Description                              |
|----------|------------|---|
| 1.0      | 08/13/2010 | First Draft                                     |
| 1.1      | 08/28/2010 | Incorporated input from Ec's meeting 08/28/2010 |

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**Purpose**

The purpose of this document is to familiarize all amateur radio operators in Brevard County how we assist the Red Cross and other county services. This document will provide information how amateurs can best be utilized during a time of emergency and how to avoid interfering with ongoing operations. The organizational structure and the relationship among the organizations for the American Red Cross, Brevard County Emergency Operations and BEARS will be outlined.

**ARES**

In the United States and Canada, 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 and the Radio Amateurs of Canada.

**BEARS**

BEARS itself is not a radio club, but a consortium of radio clubs, and not just amateur radio. Space Coast REACT (Radio Emergency Associated Communications Teams), born in the days of the Citizens Band craze, sends a representative to BEARS, as do MARS, the Military Affiliated Radio Service which operates in military frequencies outside the amateur bands. BEARS serves as a coordinating agency for all amateur radio operators in Brevard county by way of its member organizations. More information about BEARS may be obtained from the BEARS website.

Amateur Radio Operators supporting Brevard County Emergency Services are under **BEARS** from an Organization standpoint, but once an Emergency is under way we are an **ARES** operation.

**Chain of Command**

The Director of the Brevard Emergency Operations Center (BEOC) will make the decision when to open which shelters. The BEOC director will notify the ARES County Emergency Coordinator of shelter openings and he in turn will notify the club Emergency Coordinators of the three regions. Each regional EOC will activate their telephone calling tree or simply call each of the qualified shelter operators on his/her list for shelter duty. Special instructions or duties will follow the chain of BEOC director, ARES EC, Club EC to shelter operators.

**Activation**

The Emergency Operations Center recognizes certain barriers and time lines to ready the County for a storm.

| <b>Hours ahead of storm landfall</b> | <b>EOC Readiness</b> | <b>EOC/BEARS Action</b>   |
|--------------------------------------|----------------------|---|
| 72-30 hours                          | Level 3              | EOC – Normal staffing, on call night watch, increased vigilance.<br>BEARS Monitor ARES net for changes.   |
| 30 hours                             | Level 2              | EOC – 24 hour staffing, open special needs shelters, evacuate special needs clients, prepare to evacuate barrier islands.<br>BEARS – Operators deploy to special needs shelters. Other operators prepare to assist with |

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| Hours ahead of storm landfall | EOC Readiness | EOC/BEARS Action  |
|-------------------------------|---------------|---|
|                               |               | evacuation communications.  |
| 24 hours                      | Level 1       | EOC – Begin evacuation of barrier islands. Fully staffed 24 hours.    |
|                               |               | BEARS - Shelter operators report to shelters for 24 hour watch.       |
| 12 hours                      | Level 1       | Tropical storm force winds. No vehicles on highway.                   |
| 6 hours                       | Level 1       | Tropical storm to Cat 1 or 2 winds. EOC and shelters are locked down. |

**Mission Number**

During an emergency, state of Florida Emergency Operations in Tallahassee will issue a mission number to Brevard Emergency Operations. This number is used for tracking expenses and for workers comp. All volunteers should be aware of its existence.

**Net Operations & Conduct**

When net control operators arrive on station they will make an initial announcement that the repeater is being removed from general use and the designated net is being activated. Net controllers will periodically announce that the repeater is in use for that net following periods on inactivity. Shelter operators will likewise announce their arrival on station. Net control may periodically establish a communications check with each shelter operator during periods of inactivity. Net control operators will maintain a chart of operators at shelters.

**Flow of Communication**

Messages originating from the shelter will go through the regional net control and regional net control will pass the message to the Red Cross net control on the Red Cross Net. Likewise messages originating at the Red Cross will be passed to the regional net control for delivery to the appropriate shelter. In the event the shelter is requesting public emergency service and the Red Cross approves, the Red Cross net controller may relay the message to EOC net control.

If there is a need for the EOC net to pass traffic directly to the regional net controls they may do so on the EOC net. Likewise if there is non Red Cross traffic originating at the regional net controls they may contact the EOC on the EOC net. Red Cross and shelter traffic should always be passed using the Red Cross net. Each shelter will have a county manager and a police officer and there could be traffic needed between them and the EOC.

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In the case an amateur operator, not supporting shelter operations, is in need of public service or have information relevant to public service, they should contact their regional net control and then the regional net control will pass the traffic to the EOC over the EOC net.

### **Special Needs Shelter**

Special Needs Shelters are operated by the county not the Red Cross and therefore traffic to and from Special Needs Shelters go through the EOC net not the Red Cross net. **It is up to each regional net control to understand which shelters are special needs shelters and pass their traffic only to the EOC net controller.** It is very important for every amateur radio operator serving as a regional net control to take care to forward traffic to the appropriate net. Clients of Special Needs shelters are required to register in advance and the location of Special Needs shelters are not publicly disclosed to avoid having to turn away the general public on the outset of an emergency.

### **Tactical Call Signs**

Also called Static Call Signs, Tactical Call Signs will not be changed while the regional nets are in operation. Since personal call signs will likely be changed every few hours, the use of Static Call Signs can save much confusion. Static Call Signs are determined in advance and assigned to all shelters and nets. Regional net control operators must be able to identify the static call signs of Special Needs shelters and pass this traffic to the EOC Net only.

### **Checking in and Out**

All operators are required to check in to the appropriate net prior to passing traffic and to check out each time they will be away from their radio equipment. All currently checked in operators must be listening to their radio at all times.

### **Nets**

All nets will be directed by a net control operator who will:

- Assign a date/timestamp to each message.
- Pass the Message and receive an acknowledgement
- Fill out the reply section of the ICS-213
- Enter the message tracking number and originator provided priority onto the ICS-309 form.
- Archive the ICS-213 form to a notebook, clipboard or binder clip.

Net control operators should arrive with at least one blank ICS-213 form and one blank ICS-309 form and make copies as needed retaining at least one blank form to make copies.

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**North Net – Regional Net**

Location of Net Control – Titusville Police Station  
Phone number at Net Control -264-7800  
Provided by Club – Titusville Amateur Radio Club (TARC)

**Central Net – Regional Net**

Location of Net Control – 1150 West King Street Cocoa  
Phone number at Net Control - 632-1000  
Provided by Club – Cocoa Amateur Radio Society (CARS)

**South Net – Regional Net**

Location of Net Control – Fire Station in Melbourne  
*Phone number at Net Control*  
Provided by Club – Platinum Coast Amateur Radio Society (PCARS)

**Red Cross Net**

Location of Net Control – 1700 Cedar Street Rockledge  
Phone number at Net Control - 890-1002 Extension 5231  
Provided by Club – Indian River Amateur Radio Club (IRARC)

**EOC Net**

Brevard Count Emergency Operations Center 1746 Cedar St. Rockledge  
637-6670  
Provided by Organization - BEARS

**Simplex Net**

All amateur radio operators not participating in emergency operations should use the simplex net on 147.42 to share information and provide mutual assistance. This can be done from home and many neighborhoods utilize FRS/GMRS radios as a backup for local communications. Simplex net operators should join their neighbors in FRS/GMRS communications and serve them as their neighborhood amateur radio operator and be prepared to request public service through their regional nets, North, Central or South nets.

**Communications with Emergency Management Tallahassee**

There will be at least one independent operator checked in to the EOC net who will have D-Star capability to the 34 Alpha reflector. Emergency Management in Tallahassee will be aware that this operator is the bridge to Brevard Emergency Management through Amateur Radio. At some point in the future it may be possible to outfit all net control points with D-Star capability.

**Shelter Operations**

Only licensed amateur radio operators who have passed the Brevard county background check and have completed the ARECC Level 1 training session are

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eligible for shelter duty. Shelter operators should identify themselves to the Shelter Manager upon arrival who will introduce them to their operating area and any other management staff present. Shelter operators should bring at least one blank ICS-213 form and one ICS-309 log form and make 50 copies of the 213 form and several 309s, retaining master blanks for both forms. These forms are available on the BEARS website in the documents section. Once set up to operate, the shelter operator will check into the regional net and be prepared to send and receive traffic. Shelter operators should not be asked to do anything except pass message traffic. Shelter operators may perform some tasks at their discretion provided that they do not interfere with their communications responsibilities.

There is one Fire Operations Center to support, which will check in to the EOC net. It is strongly recommended that shelter operators use high power mobile radios rather than hand held radios because the shelters are storm hardened and hand held radios do not work well. The shelter operator should also plan on bringing a battery of sufficient capacity to operate at high powers for several hours.

***Note: Do not go to any of the Shelters for inspection or testing without being directed to do so by the Brevard County Emergency Management.***

### **Using Form ICS-213**

When the operator receives the ICS-213 with the header and message blocks filled out, he will enter a date and time to be used as a unique identifier. Should the operator handle two messages at the same time they will attach a letter designation to distinguish the message (A,B). On the ICS-213 form there is a line with the title MESSAGE. The ICS-213 instruction does not use this line for anything so Brevard Amateurs will use this line to indicate the tactical call sign of the message destination. The operator will then notify net control that he/she has a message to relay. Once the reply, or no-reply has been received, the reply box on the ICS-213 will be filled in by the operator and then the ICS-213 will be secured in a notebook, clipboard or binder clip provided by the shelter operator.

### **Maintain log**

Once the ICS-213 is secure in the notebook, clipboard or binder clip, an entry into the ICS-309 log will be made by the operator to record the date/time stamp of the message and message priority. Message priorities will be:

1. Emergency
2. Priority
3. Welfare
4. Routine

At the conclusion of the emergency when the nets are shut down all the paper produced at all locations should be delivered to the County EC at the ARES EOC on King street in Cocoa.

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**North Shelters**

| <b>Shelter</b>                 | <b>Location</b>                       | <b>Capacity</b> | <b>Phone</b> |
|--------------------------------|---------------------------------------|-----------------|--------------|
| Mims                           | 2582 US Highway 1, Mims, Florida      | 338             |              |
| Apollo                         | 3085 Knox McRae Dr., Titusville       | 752             |              |
| Enterprise - <i>backup</i>     | 7000 Enterprise Road Cocoa            | 1370            |              |
| <b>Oak Park - SNS</b>          |                                       | 350             |              |
| <b>Astronaut - SNS</b>         |                                       | 150             |              |
| <b>Parrish - SNS</b>           |                                       | 35              |              |
| Pt St John <i>pet friendly</i> | 6650 Corto Road, Port St. John        | 300             |              |
| Imperial Estates               | 900 Imperial Estates Lane. Titusville | 720             |              |
| Atlantis - <i>backup</i>       | 7300 BRIGGS AVE in Cocoa              | 1295            |              |

**Central Shelters**

| <b>Shelter</b>             | <b>Location</b>                     | <b>Capacity</b> | <b>Phone</b> |
|----------------------------|-------------------------------------|-----------------|--------------|
| BCC                        | Bldg 3, 1519 Clearlake Rd., Cocoa   | 812             |              |
| Walter Butler              | 4201 US Highway 1, Cocoa            | 509             |              |
| Anderson - <i>backup</i>   | 3011 S. Fiske Blvd. Rockledge       | 744             |              |
| <b>Williams - SNS</b>      |                                     | 750             |              |
| Vierra                     | 2300 Judge Fran Jamieson Way, Viera | 300             |              |
| Manatee                    | 3425 Viera (Solerno?) Blvd., Viera  | 1427            |              |
| Rockledge - <i>backup</i>  | 220 Raider Road, Rockledge          | 490             |              |
| Vierra <i>pet friendly</i> | 2300 Judge Fran Jamieson Way, Viera | 300             |              |
| Fire Operations Center     | 1040 South Florida Av. Rockledge    | NA              |              |

**South Shelters**

| <b>Shelter</b>                     | <b>Location</b>                    | <b>Capacity</b> | <b>Phone</b> |
|------------------------------------|------------------------------------|-----------------|--------------|
| BCC                                | 3865 N. Wickham Rd., Melbourne     | 775             |              |
| Eau Gallie                         | 1400 Commodore Blvd., Melbourne    | 497             |              |
| Longleaf - <i>backup</i>           | 4290 N. Wickham Road, Melbourne    | 1284            |              |
| Sherwood - <i>backup</i>           | 2541 Post Road, Melbourne          | 1246            |              |
| <b>Quest - SNS</b>                 |                                    | 750             |              |
| <b>Sunrise - SNS</b>               |                                    | 750             |              |
| <b>Meadowlane - SNS<br/>backup</b> |                                    | 250             |              |
| Heritage <i>pet friendly</i>       | 2351 Malabar Rd., Palm Bay         | 1174            |              |
| Melbourne High                     | 74 Bulldog Blvd., Melbourne        | 730             |              |
| Bayside                            | 1901 DeGroot Rd. S.W. Palm Bay     | 2246            |              |
| Mainland                           | 3700 Allen Ave., Micco             | 473             |              |
| Central - <i>backup</i>            | 100 East Florida Avenue, Melbourne | 807             |              |
| Westside - <i>backup</i>           | 2175 DeGroot Road SW Palm Bay      | 1313            |              |
| Discovery - <i>backup</i>          | 1275 Glendale Ave NW Palm Bay      | 1425            |              |
| Jupiter - <i>backup</i>            | 950 Tupelo Road, S.W, Palm Bay     | 1258            |              |

\*\* Important: Do not disclose the location of the Special Needs shelters. Only people who are pre-registered to evacuate there are accepted there. You have to have a serious protracted medical condition to become registered. Even family members must evacuate to regular primary shelters.

**Visiting Mutual Aid**

Radio operators arriving in Brevard County for volunteer service will register at the Florida Solar Energy Center on Clearlake road in Cocoa. There they will be



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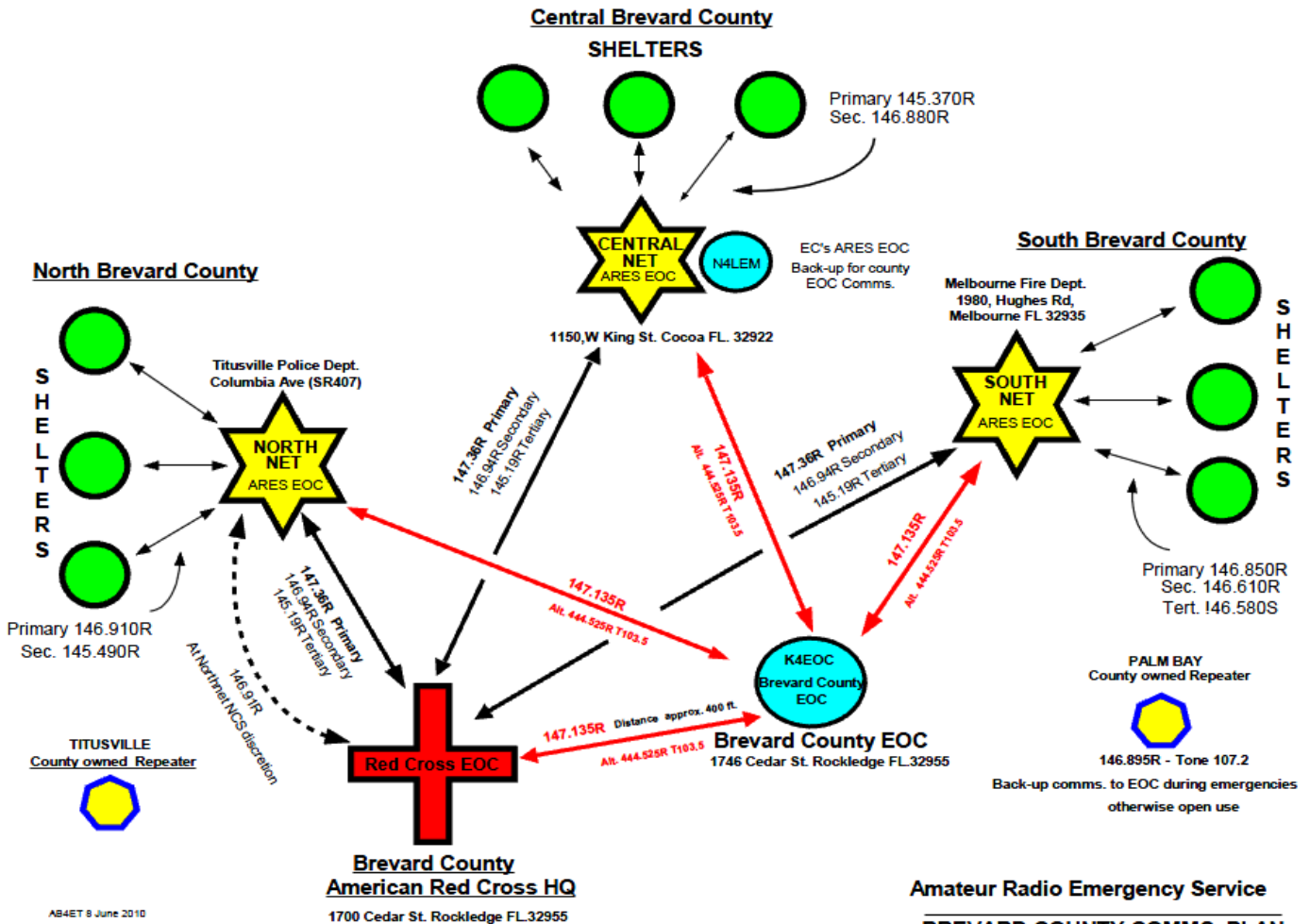
entered into the system and then directed to the ARES EOC at King street in Cocoa to wait there for assignment or to help out with activities ongoing there at the ARES EOC.

**Frequency Table**

| Net              | North             | Central           | South             | Red Cross         | EOC                |
|------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| <b>Primary</b>   | In 146.31         | In 144.77         | In 146.25         | In 147.96         | In 147.735         |
|                  | Out <b>146.91</b> | Out <b>145.37</b> | Out <b>146.85</b> | Out <b>147.36</b> | Out <b>147.135</b> |
|                  | PL                | PL 156.7          | PL                | PL 107.2          | PL                 |
| <b>Secondary</b> | In 144.89         | In 146.28         | In 146.01         | In 146.340        | In 445.525         |
|                  | Out <b>145.49</b> | Out <b>146.88</b> | Out <b>146.61</b> | Out <b>146.94</b> | Out <b>444.525</b> |
|                  | PL 100.0          | PL 107.2          | PL                | PL                | PL 107.2           |
| <b>Tertiary</b>  | In 144.59         | In 144.59         | In <b>146.58</b>  | In 144.59         | In                 |
|                  | Out <b>145.19</b> | Out <b>145.19</b> | Out <b>146.58</b> | Out <b>145.19</b> | Out                |
|                  | PL                | PL                | PL                | PL                | PL                 |

**Figure 1. Brevard County Comms. Plan.**

This picture shows the three regional nets and their communication paths to the Red Cross net and the EOC net (red arrows). **NOTE:** the regional net control operators must understand the traffic to and from special needs shelters goes over the EOC net, not the Red Cross net.



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## References

| <b>Title</b>                        | <b>Location</b> <span style="float: right;">(BEARS.K4EOC)</span>  |
|-------------------------------------|---|
| Form ICS-213                        | <a href="http://bears.homelinux.net/members/documents/ics213.pdf">http://bears.homelinux.net/members/documents/ics213.pdf</a>   |
| Completing the ICS-213 Message Form | <a href="http://bears.homelinux.net/members/index.html/Completing%20The%20ICS%20213%20General%20Message%20Form.pdf">http://bears.homelinux.net/members/index.html/Completing The ICS 213 General Message Form.pdf</a> |
| Form ICS-309                        | <a href="http://bears.homelinux.net/members/documents/ics309.pdf">http://bears.homelinux.net/members/documents/ics309.pdf</a>   |
| Brevard Background Check Form       | <a href="http://bears.homelinux.net/members/documents/bearsbackground.pdf">http://bears.homelinux.net/members/documents/bearsbackground.pdf</a>   |

## Appendix A – Recommended Items for Shelter Go Kit

VHF Radio power source, battery, coax and antenna.  
Something to sleep on for three days  
Food for three days  
Medication for three days  
Tooth paste tooth brush  
Clothing for three days

## TBD Items

- Where and how to determine traffic priority?
- Where on the two forms to place traffic priority?
- Is the mission number used anywhere?

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**Approval Page**

Brevard County ARES Emergency Coordinator

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Ray Kassis

Date

Brevard County ARES North Emergency Coordinator

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Date

Brevard County ARES Central Emergency Coordinator

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Date

Brevard County ARES South Emergency Coordinator

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Date