



**PALM BEACH COUNTY
DEPARTMENT OF PUBLIC SAFETY
DIVISION OF EMERGENCY MANAGEMENT**



**STANDARD OPERATING GUIDE
COMMUNITY EMERGENCY RESPONSE TEAM (CERT)
AMATEUR RADIO COMMUNICATION**

SOG PL-010
Rev. January 26, 2016

Purpose

To establish a policy and procedures to ensure that amateur radio communications are clearly articulated and then followed by Palm Beach County CERT members in order to successfully communicate with the Emergency Operating Areas (EOA) and/or the Emergency Operations Center (EOC).

Policy

Each CERT shall have their own Communication Plan for internal communications with team members. Changes in individual CERT procedures may be required if the team is dependent on commercial systems (e.g., cellular, landline, internet) at the time of activation due to possible damage to the communications infrastructure. Information received from reporting teams will help the EOC establish and maintain a common operating picture of the incident. CERT communications will provide up-to-date information to assist in formulating responses from the EOC, EOAs, law enforcement, fire rescue, and other responding agencies.

During activation of the EOC to a Level 2 or Level 1, CERT and/or volunteer Amateur Radio Emergency Services (ARES) Federal Communications Commission (FCC) licensed radio operators will be located at the EOC and the EOAs.

CERT leaders are responsible to ensure that their team's amateur radio operator(s) have a valid license issued by the FCC, are familiar with these communication protocols, and are familiar with the maintenance and proper operation of their radio equipment. Team operators should participate in nets¹, drills, and exercises to practice their skills and to test equipment. If a CERT team does not have an amateur radio operator, then the team leader should make alternative arrangements with a team nearby that has the capability to handle their messages during times of disaster, or arrange for some other type of communications medium (e.g., satellite phone, nearby shelter, messenger, or landline call to the Emergency Information Center). During preparedness times, teams without amateur radio operators should work to build and train members to obtain a valid FCC license.

Procedure

The Volunteer CERT Coordinator will obtain the names of the amateur radio operators from each team no later than April 1st of each year. The Volunteer CERT Coordinator will assemble the operator directory categorized by team and EOA by May 1st of the same year and provide it to the Director of Emergency Management and the Palm Beach County ARES EOC Liaison.

¹ Amateur radio operators coordinate their communications through groups referred to as "networks" or "nets" as a way to organize and manage radio traffic.



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Disaster Communication Protocol

1. Prioritizing messages: The team incident commander must prioritize any traffic to be passed to the EOA/EOC.
 - a. Emergency Traffic: If a station breaks through with an emergency message, all other traffic will cease until the emergency message has been handled. Such traffic may include any of the following:
 - i. Mass casualties, mass fatalities
 - ii. Potential for loss of life or mass casualties
 - iii. Trapped victims
 - iv. Hazardous materials which may require evacuation of people
 - v. Large scale fires with potential to spread
 - vi. Property damage to essential services (hospitals, sewer systems, etc.)
 - b. Priority Traffic: Incidents included in this ranking may involve major risk to property or time dependent issues:
 - i. Confirmed or potential risk of long-term environmental damage (flooding, sewer leaks, etc.)
 - ii. Severe damage to shelter supplies, public safety buildings, etc.
 - iii. Other incidents ranked as priority by the team incident commander
 - c. Routine Traffic: Non-critical messages such as request for resupply of non-urgent equipment or other supplies
2. Communications are for informational purposes only. No "idle chatter" is allowed.
3. Keep messages brief.
4. Listen before transmitting.
5. Make sure there are no messages being passed before transmitting. Think about what information you are going to pass before starting to transmit.
6. At the end of the message you must identify yourself utilizing your FCC call sign.

Reporting Protocols

1. Frequencies: In an emergency activation or training drill, the current Incident Command System (ICS) 205 should be used as a guide for frequencies that may be active immediately before and after an incident. An emergency amateur radio communicator should first check the primary, secondary, and then tertiary repeaters for their area (North, Central, West, and South) to determine if the net is active. It is very likely that the first net to be operating will be one of the repeaters assigned for the Central area. Under normal ICS procedures, net control will direct the user to the appropriate frequency as other nets are established.



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2. EOAs: Once activated, EOAs are expected to be operational in three to four hours. If an EOA is activated, CERT operators should check the frequencies (simplex) for their respective EOA and report traffic to the EOA operator. The net control station will also direct operators, if and when they are informed, that a local area EOA is operational.
3. Municipal CERTs: In a communications failure for a municipal CERT (West Palm Beach, Jupiter, Boca Raton, etc), the same procedures listed above should be followed based on their location within Palm Beach County.

Note: The Frequency Assignment Form (ICS-205) has certain designations for the various Palm Beach County repeaters, but during an emergency (depending on the particular communication emergency) the repeaters listed on the ICS – 205 will be reassigned on an “as needed” basis. Keep in mind that there are other repeaters within our local area that are not on the ICS - 205 that also might be used. Some of them may be on UHF frequencies.

General Communications CERT to/from EOC or EOA

Tactical call signs are based upon the name of the CERT team. For example, Platina CERT is the tactical call sign for the amateur radio operator reporting for Platina CERT. There may be a change in operators but the tactical call is always Platina CERT. No personal names should be used. The use of “Q” messages, such as “QSO, QTH, etc” should not be used. A communicator’s FCC call sign will be used at least every ten (10) minutes and when an exchange of information is complete where transmissions are not expected to occur for awhile.

When making radio transmissions, the following sample protocol listed below should be used:

1. CERT Operator Calling EOC

CERT: “EOC (this is)

Platina CERT.” EOC:

“Platina CERT (this is)

EOC.”

CERT will then proceed with their message.

Both operators will clear the final transmission by using their FCC call-sign.

2. CERT Operator Calling EOA

CERT: “EOA 5 (this is) Platina

CERT.”

EOA 5: “Platina CERT (this is)

EOA 5.” CERT will then

proceed with their message.

Both operators will clear the final transmission by using their FCC call-sign.



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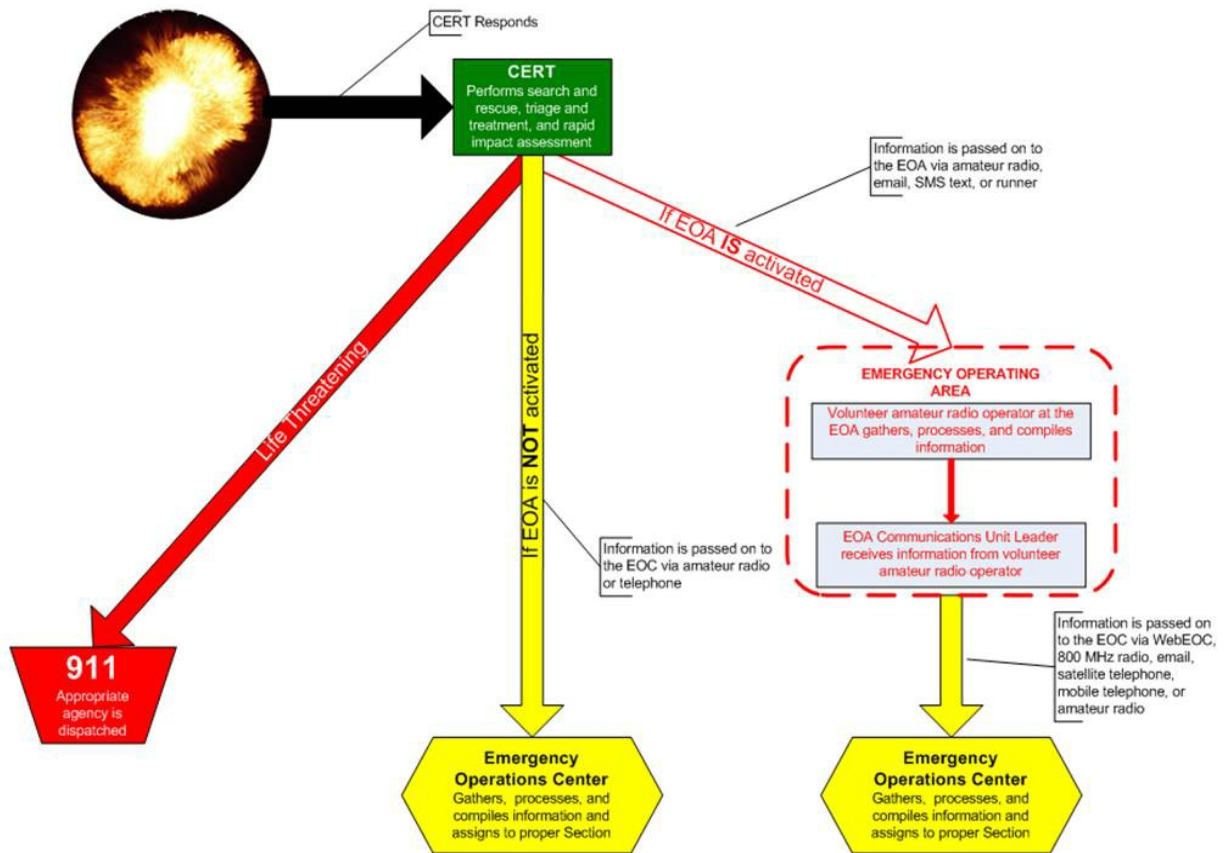
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Record all transmissions on Communications Log (ICS - 309). Formal messages should be recorded on the Radio Message Form (ICS - 213).

Figure 1 depicts the flow of information following a disaster from CERTs to 9-1-1 centers, EOAs (if activated), and the EOC.

Figure 1. Communication Flow





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Attachments

ICS 205 - Frequency Assignment
ICS 213 - Radio Message Form
ICS 309 - Communications Log (modified)

Approved

Bill Johnson, RN, Director
Division of Emergency Management

February 11, 2016

Date

| | | |
|------------------------|---|-------------|
| PBDARES ICS-205 | Amateur Radio and Other Volunteer Activation Frequencies | 2014 |
|------------------------|---|-------------|

| Area/System | Frequency | PL | Function | Assignment | Location | Name |
|------------------------------------|----------------------------------|----------|-------------------------|----------------------------|-------------------------|--------|
| NORTH (EOA 2) | 146.625/146.025 | 110.9 | Primary | | Hobe Sound | N PRIM |
| | 146.715/146.115 | 110.9 | Secondary | | NW WPB | N SEC |
| | 145.170/144.570 | 110.9 | Tertiary | | W. Jupiter | N TER |
| | 146.88/146.280 | 110.9 | to/frm PBC EOC | PBC | NE Riviera Beach | N EOC |
| | 147.540 | | Simplex | | | N SIMP |
| | 147.400 | | Simplex to/frm EOA 2 | EOA 2 | | EOA 2 |
| CENTRAL & WEST (EOA 3, 4, 1) | 147.045/147.645 | 110.9 | Primary Cntrl, W & Cnty | + SkyWarn | W Lantana | C PRIM |
| | 146.67/146.070 | 110.9 | Secondary Cntrl | +SkyWarn | W WPB | C SEC |
| | 146.940/146.340 | 91.5 | Tertiary | | N WPB | C TER |
| | 145.39/144.790 | 110.9 | to/frm PBC EOC | PBC | NW WPB | C EOC |
| | 146.580 | | Simplex | Central | | C SIMP |
| | 147.425 | | Simplex to/frm EOA 3 | EOA 3 | | EOA 3 |
| | 147.450 | | Simplex to/frm EOA 4 | EOA 4 | | EOA 4 |
| | 147.36/147.960 | 110.9 | to/frm PBC EOC | PBC | 20 mile bend | W EOC |
| | 147.120/147.720 | 110.9 | West/Central primary | | Belle Glade | W PRIM |
| | 147.570 | | Simplex | West | | W SIMP |
| | 146.420 | | Simplex to/frm EOA 1 | EOA 1 | | EOA 1 |
| SOUTH (EOA 5, 6) | 147.225/147.825 | 107.2 | Primary | | W Boyn. Bch | S PRIM |
| | 146.82/146.220 | 110.9 | Secondary | | Boca | S SEC |
| | 145.29/144.690 | 110.9 | Tertiary | | | S TER |
| | 147.36/147.960 | 110.9 | to/frm PBC EOC | PBC | 20 mile bend | S EOC |
| | 146.550 | | Simplex | | | S SIMP |
| | 147.530 | | Simplex to/frm EOA 5 | EOA 5 | | EOA 5 |
| | 147.550 | | Simplex to/frm EOA 6 | EOA 6 | | EOA 6 |
| Wellington | 147.285/147.885 | 103.5 | Primary | | Wellington | WELVHF |
| | 442.05/447.050 | 103.5 | Secondary | | Wellington | WELUHF |
| PBDARES | 444.325/449.325 | 179.9 | PBDARES | Admin | N WPB | ADM US |
| PBC F/R | 444.275/449.275 | 110.9 | Fire Rescue | Admin | 20 mile bend | ADM FD |
| Special Needs | 147.045/147.645 | 110.9 | | | | |
| | 146.580 | | simplex | | | SPCNED |
| PBC SkyWarn | 147.045/147.645 | 110.9 | Primary | SkyWarn | W Lantana | |
| | 146.67/146.070 | 110.9 | Secondary | | W WPB | |
| Florida State (HF) | 7247 kHz Days 3940 kHz Nights | LSB | Long Haul Comms | County EOC to State EOC | HF nets to state EOC | |
| Weather Serv. | 162.475 | Rec Only | PBC East | | | WEATH1 |
| | 162.400 | Rec Only | PBC West | | | WEATH2 |
| | 162.550 | Rec Only | Dade/Broward Cnty | | | WEATH3 |

Notes: All frequencies are MHz unless otherwise noted; Repeaters are listed as output/input.

|

ICS-213 RADIO MESSAGE

| Number | Precedence | Handling | Station of Origin | Check | Place of Origin | Time Filed | Date Filed |
|--------|------------|----------|-------------------|-------|-----------------|------------|------------|
| | | | | | | | |

| | |
|--------------------------------------|----------------------------|
| 1: Incident Name: | 2: Date & Time of Message: |
| 3: To: | ICS Position: |
| 4: From: | ICS Position: |
| 5: Subject: | |
| 6: Message (One word per underline): | |
| | 5 |
| | 10 |
| | 15 |
| | 20 |
| | 25 |
| | 30 |
| | 35 |
| | 40 |
| | 45 |
| | 50 |
| 7: Signature and position: | |

| Received From | Date | Time | Sent To | Date | Time |
|---------------|------|------|---------|------|------|
| | | | | | |

REPLY RADIO MESSAGE ICS-213

| Number | Precedence | Handling | Station of Origin | Check | Place of Origin | Time Filed | Date Filed |
|--------|------------|----------|-------------------|-------|-----------------|------------|------------|
| | | | | | | | |

| | |
|--|----------------------------|
| 1: Incident Name: | 2: Date & Time of Message: |
| 3: To: | ICS Position: |
| 4: From: | ICS Position: |
| 5: Subject: | |
| 6: Message (One word per underline): | |
| | 5 |
| | 10 |
| | 15 |
| | 20 |
| | 25 |
| | 30 |
| | 35 |
| | 40 |
| | 45 |
| 7: Signature and position (person replying): | Date and Time of Reply: |

| Received From | Date | Time | Sent To | Date | Time |
|---------------|------|------|---------|------|------|
| | | | | | |

LOGGING REQUIREMENTS

ALL STATIONS ARE REQUIRED TO MAINTAIN COMPLETE LOGS of all communications that occur during any period of activation.

This log will contain the DATE & TIME (in local, 24 hour time) of each message, the CALL of the contacted station and brief CONTENT of the message, or the message number and subject.

A Copy of all FORMAL TRAFFIC will be kept and become part of the log.

ALL LOGS, INCLUDING COPIES OF ALL FORMAL TRAFFIC, SHALL BE SUBMITTED TO

- The agency being served, usually in the Plans Section, Documentation Unit
- The Operations Section Chief. These logs will be kept as a part of ACS records. These logs should be submitted at the end the operational period they cover and must be received by no later than five (5) days after conclusion of the activation. If an operator requires copies for his/her own log, copies should be made and the originals remain with the agency served.

ICS 309 COMMUNICATION LOG

| Item # | Item Title | Instructions |
|--------|------------------------|--|
| 1 - 2 | For Operational Period | Record the start and end date (month, day, year) and time (24 hour local time). |
| 3 | Tactical I.D. | Enter the tactical identifier for this station |
| 4 | Incident Name | Enter name of exercise or incident (e.g., Hurricane Wilma) |
| 5 | Location | Enter the location for a fixed station such as xxxx SHELTER or County EOC. Enter the address if available. |
| 6 | Date / Time Prepared | Enter date and time this log was finalized and submitted with copies of all formal traffic handled during the operating period. |
| 7 | Operator Signature | Enter the signature of the radio operator |
| 8 | Operator Call Sign | Enter the Call Sign of the Radio Operator |
| 9 | Operator Printed Name | Print the name of the radio operator |
| | | |
| 10 | Time | Enter Time (24 hour) the communications took place |
| 11 | Station ID FROM/TO | Enter station that was contacted (TO) or the station that contacted you (FROM). <u>Only one of the sections should be completed per contact.</u> It shows if you called the other station or if they called you. |
| 12 | SUBJECT / INFO | Enter message number and addressee for formal traffic. Enter brief summary for informal traffic. |
| 13 | Page ___ of ___ | Sequentially number all pages for the operational period covered by the log. Page numbers start over at 1 at the beginning of each new operational period. |