Last Revised: 04/09/2014

1. INTRODUCTION TO ARES

- **1.1** The Mecklenburg Amateur Radio Emergency Service (ARES) is comprised of FCC licensed Amateur Radio Operators who have voluntarily registered their capabilities and equipment for public service communications. Under Federal regulations, Amateur Radio operators cannot receive compensation of any kind for providing public service communications.
- **1.2** The Mecklenburg ARES functions under this EMERGENCY PLAN under the direction of the MECKLENBURG COUNTY ARES EMERGENCY COORDINATOR (EC). The EC shall be appointed by the NORTH CAROLINA SECTION EMERGENCY COORDINATOR (SEC).
- **1.3** The EMERGENCY COORDINATOR may appoint one of more ASSISTANT EMERGENCY COORDINATORS (AEC) sufficient to function efficiently as an ARES unit.
- **1.4** Registration in ARES will also register a station with the RADIO AMATEUR CIVIL EMERGENCY SERVICE (RACES) as directed by the State of North Carolina.
- 1.5 The contents of messages handled by Amateur Radio are not divulged to unauthorized persons.
- **1.6** Such public service communications are furnished without compensation of any kind.
- **1.7** The primary responsibility of the Mecklenburg ARES is to furnish emergency communications in the event of disaster or other event, when regular communications fail or become inadequate for served agencies to perform their duties.

2. PURPOSE

- **2.1** The purpose of this plan is to provide a written guide containing the minimum information that would be needed in an emergency. Each emergency is different and flexibility to provide adequate response to each situation is a necessity.
- **2.2** All drills, training and instruction shall be carried out to insure readiness to respond quickly in providing effective Amateur Radio emergency communication whenever an occasion may arise.
- **2.3** The following agencies could be served during a communication emergency:
 - Charlotte-Mecklenburg Office of Emergency Management
 - Mecklenburg County Emergency Operations Center (EOC)
 - Charlotte-Mecklenburg Police Department
 - Charlotte Fire Department
 - Mecklenburg County Communications and MEDIC departments (COUNTY WARNING POINT)
 - American Red Cross, Greater Carolinas Chapter
 - Salvation Army, NC/SC Divisional Headquarters and Regional Center
 - National Weather Service, Greenville-Spartanburg Office
 - Charlotte Area Hospitals
 - Duke Power Company, Joint Information Center (JIC), Weather Center and Damage Dispatch
 - State Emergency Response Team (SERT)
 - Federal Emergency Management Agency (FEMA)
 - Any other department or agency requiring and/or requesting assistance

Last Revised: 04/09/2014

3. ACTIVATION PROCEDURES

- **3.1** Any ARES member who, for any reason suspects a communication emergency exists, should MONITOR his assigned frequency for activity (reference 4.2)
- **3.2** If local telephone service is available the EC and or AEC(s) should be notified by phone or pager (reference Appendix B).
- **3.3** In an emergency where ARES activation is required, Amateur Operators may be alerted by a served agency directly, an ARES official or authorized person acting on behalf of an ARES official.
- **3.4** The District Emergency Coordinator (DEC) for Area 13 which includes Mecklenburg, Gaston, Cleveland, Burke, Catawba, Lincoln, and Union counties, and the North Carolina Assistant Section Emergency Coordinator –Western Branch (ASEC) will be notified of activities and if any assistance is needed.
- **3.5** The requesting agency should use the following order of contact precedence when requesting ARES activation:
 - a. The requesting agency or service should attempt to contact the EC first.
 - b. If the EC is unreachable, please continue down the call list until an AEC is reached. Contact information for the EC and AECs of Mecklenburg County are maintained in Appendix B of this plan.
 - c. In the event an AEC cannot be reached, a transmission should be made on the 146.940- repeater (or simplex if the repeater has failed) requesting assistance from any ARES member or available amateur radio operator on frequency.
 - d. If all other attempts have failed, please attempt to contact the DEC or SECTION EMERGENCY COORDINATOR (SEC) to initiate the request.
- **3.6** After making initial contact with an ARES member, the requesting agency is responsible for communicating the necessary information for ARES to activate and effectively mobilize for the emergency. See Appendix A for further details about the information that is necessary for ARES activation.

After completing this step, the requesting agency/services' responsibility is fulfilled and they should continue with their normal duties in the emergency. The first ARES member contacted is responsible for contacting the remaining individuals on this activation list and beginning the ARES mobilization procedures mentioned below.

3.7 A list of amateurs and ARES members shall be kept on file with the EC/AEC(s) in the event of an emergency. This list will be used to populate a "call tree" that will used to activate ARES members during an emergency requiring ARES services. See Appendix B for a description of the Mecklenburg County "Call Tree".

4. ARES MOBILIZATION PROCEDURES

- **4.1** If telephone service is available, use telephone activation. All training will advise operators to tune to proper frequencies during emergency situations.
- **4.2** All Mecklenburg County ARES mobilization efforts will be coordinated on the primary call up frequency. The primary call up frequency for Mecklenburg County is the W4BFB repeater on 146.940 MHz (-600 kHz/tone 118.8). In the event that the 146.940 MHz repeater has failed, the 145.290 MHz (-600 kHz/tone 118.8) repeater will be used for call up.

Last Revised: 04/09/2014

- **4.3** After assembling the ARES unit on the primary call up frequency for Mecklenburg County, an ARES official (or station acting on behalf of an ARES official) may spawn additional nets to meet the needs of the emergency relief and recovery efforts. Some of the frequencies that may be used during an emergency are as follows:
 - 146.940 MHz repeater (-600 KHz, t118.8) (W4BFB) Mecklenburg ARES Emergency Net
 - 145.290 MHz repeater (-600 KHz, t118.8) (W4BFB) Secondary tactical net or traffic net
 - 444.450 MHz repeater (+5 MHz, t82.5) (W4CQ) Secondary tactical net or traffic net
 - 145.230 MHz repeater (-600 KHz, t118.8) (W4BFB) SKYWARN Net
 - 147.060 MHz repeater (-600 KHz, no tone) (W4CQ) Secondary tactical net or traffic net
 - 145.090 MHz (no offset, no tone) Packet / RMS Gateway
 - 145.010 MHz (no offset, no tone) Packet / RMS Gateway
 - 146.580 MHz simplex (no offset, no tone) (Secondary tactical net or traffic net)
 - 147.505 MHz simplex (no offset, no tone) (Secondary tactical net or traffic net)
 - 446.000 MHz simplex (no offset, no tone) (EOC local tactical frequency)
 - 444.675 MHz repeater (+5 MHz, no tone) (W4WBT) Disaster Logistics
 - 442.125 MHz repeater (+5 MHz, t156.7) (WT4IX) Disaster Logistics
 - 444.350 MHz repeater (+5 MHz, t118.8) (K4KAY) Disaster Logistics
 - 444.600 MHz repeater (+5 MHz, t118.8) (W4BFB) Disaster Logistics
 - 444.950 MHz repeater (+5 MHz, t/136.5) (WA1WXL) Disaster Logistics
 - 3.923/3.927 MHz NC EOC/EM statewide HF (Tarheel Emergency Net)
 - 7.232 MHz State EOC/EM statewide HF (Tarheel Emergency Net 40m band)
 - 3.573 MHz (Carolinas Net 10 PM nightly)
 - 3.927 MHz (North Carolina Morning Net 7:45 AM daily)
 - Other frequencies as needed
- **4.4** Mobile units are activated as required to cover evacuation centers and locations of disaster.
- **4.5** The EC/AEC shall act as Net Control Station (NCS) or may delegate to another station.
- **4.6** The NCS shall originate from the best location possible, preferably one with emergency power. This could be from any of the following areas:

Charlotte-Mecklenburg EOC

1770 Shopton Road Charlotte, NC 28217

Mecklenburg County MEDIC

4525 Statesville Road Charlotte, NC 28269

Red Cross Chapter Headquarters (W4BFB Club Station)

2425 Park Road Charlotte, NC 28203

NC/SC Salvation Army Divisional Headquarters (W4CQ Club Station)

501 Archdale Drive Charlotte, NC 28217

At home, where emergency power exists.

Any other location as needed.

Last Revised: 04/09/2014

5. DUTIES OF THE NET CONTROL STATION (NCS)

- **5.1** The main duty of the NCS is to insure the ARES nets are ran in an orderly fashion, to help eliminate confusion on communication networks, provide information regarding the disaster to ARES member stations and to coordinate the flow of traffic as required.
- **5.2** All traffic shall be written in ARRL message format or other specified protocol as deemed fitting by the served agency or department. See Appendix A for a sample of this message format.
- **5.3** All messages must carry the signature of the person originating the message and their title or office. (Example: John Smith, Emergency Management)
- **5.4** Message precedence as defined by ARRL will be used. They will be in the following order:
 - **EMERGENCY** (**E**) Any message dealing with life and/or death urgency to any person or group which is transmitted in the absence of regular commercial facilities.
 - **PRIORITY** (**P**) Any important message having a specific time limit, official messages that are not covered by the emergency category, press dispatches and emergency-related traffic but not of utmost urgency.
 - **WELFARE** (**W**) Any message that refers to an inquiry as to the health and welfare of an individual in the disaster area or an advisory update from the disaster area that indicates all is well.
 - **ROUTINE** (**R**) Any message not meeting the above criteria or any message of a routine (day to day) type nature.
- **5.5** The NCS is responsible for taking check-ins as needed to meet the needs of the disaster operation and/or ARES activation requirements. Traffic listed shall be categorized by precedence and moved as soon as possible, with Emergency and Priority traffic taking top precedence.
- **5.6** Participating stations should be instructed by the Net Control Station NOT TO TRANSMIT unless asked or if they have information that is of urgent importance for the net (emergency or priority traffic from other nets or agencies, urgent announcements, etc.).
- **5.7** WELFARE precedent traffic SHOULD NOT BE PASSED until authorized by the EC. The EC will not authorize this traffic to be accepted (unless it is of an emergency nature) until all normal emergency communication requirements have been satisfied and are operating efficiently. At what point during the emergency that Welfare traffic will be allowed is at the discretion of the EC.
- **5.8** The phrase "BREAK" will only be used in an emergency. NCS will recognize emergency traffic immediately and handle the emergency traffic.
- **5.9** The NCS shall keep a log of the net and member check-ins. This log will be provided to the EC as soon as possible following the emergency closure.
- **5.10** Before starting an ARES net, make sure someone records a list of participating ARES member stations who are available for deployment and/or assignment. Preferably, this should be performed by the EC or an AEC.
- **5.11** Net Control Stations (NCS) may use any preamble and net procedure(s) that appropriately meet the needs of the emergency. A sample NCS preamble can be found in Appendix F of this plan.

Last Revised: 04/09/2014

6. DUTIES OF THE MEMBER STATIONS

- **6.1** The main duty of the ARES member station is to provide a communication link from critical locations in the disaster area for ARES nets. These locations may be under the control of any of the served agencies during an emergency (i.e., Red Cross, Salvation Army, Local Government Agencies, FEMA, etc.). While performing these duties, the ARES station will work closely with on-site agency members to communicate information to and from their site.
- **6.2** A primary goal of the ARES member station should be to prepare oneself and participate in training in order to become proficient in providing emergency communications. Means to accomplish this goal are local area training offerings, participation in ARES and NTS training nets, self-study and technical preparation.
- **6.3** All traffic shall be written in ARRL message format or other specified protocol as deemed fitting by the served agency or department. See Appendix A for examples of this message format.
- **6.4** All messages must carry the signature of the person originating the message and their title or office. (Example: John Smith, Emergency Management)
- **6.5** Message precedence as defined by ARRL will be used. They will be in the following order:
 - **EMERGENCY** (**E**) Any message dealing with life and/or death urgency to any person or group which is transmitted in the absence of regular commercial facilities.
 - **PRIORITY** (**P**) Any important message having a specific time limit, official messages that are not covered by the emergency category, press dispatches and emergency-related traffic but not of utmost urgency.
 - WELFARE (W) Any message that refers to an inquiry as to the health and welfare of an individual in the disaster area or an advisory update from the disaster area that indicates all is well.
 - **ROUTINE** (**R**) Any message not meeting the above criteria or any message of a routine (day to day) type nature.
- **6.6** Participating stations will be instructed by the Net Control Station NOT TO TRANSMIT unless asked by NCS or if they have information that is of URGENT IMPORTANCE for the net (i.e., emergency or priority traffic from other nets or agency sites, urgent announcements, etc.).

Please Note: One of the most important things you can do during an emergency is LISTENING more than you transmit and keeping your transmissions SHORT. This is not the time to be RAG-CHEWING, airing opinions, etc. Our goal is to get the information through in a timely manner to right people who need to know. We all have to work together to accomplish this!

6.7 Traffic with a precedent of WELFARE will NOT be passed until authorized by the EMERGENCY COORDINATOR. The EC will not authorize this traffic to be accepted for inbound or outbound communication through local nets (emergency traffic of this nature is always an exception, but uses the EMERGENCY precedent) until all emergency communication requirements have been satisfied and are operating efficiently. At what point during the emergency that welfare traffic will be allowed is at the discretion of the EC (or "Assistant EC in Charge").

The EC will primarily receive direction from the Mecklenburg County EOC Director and/or ARES official, which will allow him to make these decisions at the appropriate time. When WELFARE traffic is authorized by the EC, this traffic should be handled on an alternate frequency other than the primary ARES call up frequency. After the traffic is passed, all stations participating in this task should return to the primary call up frequency for further instructions and notify NCS of their availability.

Last Revised: 04/09/2014

- **6.8** The phrase "BREAK" will only be used in an emergency. NCS will recognize emergency traffic immediately and handle the emergency traffic. This traffic may be of a tactical or formal message format (i.e., you do not necessarily need to use the NTS message for this traffic, unless it is applicable. For example, if you are confirming the touchdown of a tornado, you should use the phrase BREAK and pass this traffic immediately without taking time to format a NTS message. Try to use clear and concise statements as you pass this traffic. Keep things simple and make sure directions to your location are accurate. On the other hand, if you have emergency traffic for State EOC and need to pass it via a very busy ARES net, you should use the NTS format with a signature and alert the net of this traffic by saying the phrase BREAK). Primarily, this phrase should be used sparingly and only when a situation of a life or death nature is present.
- **6.6** Member stations should follow the instructions of their EC, AEC, DEC, SEC or NCS to the best of their ability. This may require the member station to travel to a location in Mecklenburg County or one of the surrounding areas to provide a vital communication link for an ARES net. **Your cooperation and participation is appreciated.**

7. DRILLS, TESTS AND ALERTS

- **7.1** At least two annual tests will be conducted throughout the calendar year. These tests will be scheduled by the Mecklenburg ARES EC and may or may not coincide with or support local, state or national tests.
- **7.2** An annual event called "Field Day" will be held in the Mecklenburg County area to assist amateurs with training and enhancing their operating skills under less than normal conditions (using noncommercial power, operating outdoors, expedient station construction, etc.). This event is normally hosted by each of the area clubs (The Mecklenburg Amateur Radio Society and The Charlotte Amateur Radio Club) and each club will participate in this national event.
- **7.3** Other annual drills will coincide with the nuclear tests performed at McGuire and Catawba Nuclear Stations. The date of these drills is determined by the Mecklenburg County Office of Emergency Management. Officials from this office notify the EC of drill dates and requirements for participation.
- **7.4** The Mecklenburg ARES Net at 9:00 PM local time each Wednesday on the 146.940 repeater is the designated ARES net. Any training questions or activities should be bought to the attention of this net. Other training courses will be offered at area facilities and publicized in the Charlotte-area that will assist the ARES members in becoming more proficient in the ARES skills and procedures.
- **7.5** Public service events and other drills will supplement training on a regular basis.
- **7.6** All clubs or other Amateur Radio Associations in Mecklenburg County are encouraged to independently perform tests, drills other training scenarios to keep their members prepared for emergencies. The results should be reported to the Mecklenburg ARES EC.