



Tennessee Section Amateur Radio Emergency Service (ARES®)

Emergency Communications Plan

Keith E. Miller, Sr., N9DGK
Section Manager

n9dgk@arrl.net

Daniel F. O'Donovan, W4DOD
Section Emergency Coordinator

w4dod@arrl.net

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1.0 Purpose

1.1 The purpose of this document is to provide general guidelines and an organizational framework in support of Emergency Communications within the ARRL Tennessee Section while leaving the specific details for each District and County Emergency Communications plans to be developed at those respective levels.

1.2 The Plan describes an organization within which District and County amateur radio units may function with maximum effectiveness and minimum confusion. It is intended to promote uniform procedures among Local, District and West, Middle and East Division amateur radio units, their officials and their operators.

1.3 These guidelines are not intended as rigid regulations. The appointed Emergency Coordinator (EC) in each county may interpret and adapt the plan as reasonably necessary for efficient and effective management of their local situation.

2.0 Background

2.1 The Amateur Radio Service in the United States is governed under the rules of the Federal Communications Commission (FCC), Title 47 of the Code of Federal Regulations, Part 97.

2.2 Specifically, Part 97.1.a (revised October 1, 2008); the FCC rules recognize that a fundamental purpose of the Amateur Radio Service is to provide voluntary noncommercial communication service to the public with respect to emergency communications.

2.3 In support of this, the Amateur Radio Emergency Service® (ARES®) is part of the field organization administered by the American Radio Relay League (ARRL) for the public good and is designed to provide communication services to government and non-government organizations (NGO's) such as the American Red Cross and Salvation Army. All currently licensed Amateur Radio operators with a sincere desire to assist in an emergency are encouraged to register and participate in the Amateur Radio Emergency Services® program. ARRL membership, while desirable, is **not** a requirement for ARES® membership except for appointed leadership positions.

2.4 Additionally, the FCC in part 97.407 authorizes such Amateur Radio stations to also be enrolled with their local Emergency Management Agency (EMA) in the Radio Amateur Civil Emergency Service (RACES) to provide emergency communications support to local, county and state governments.

2.5 The Amateur Radio Service also supports the National Oceanic and Atmospheric Agency's (NOAA) National Weather Service (NWS) with Radio Amateurs assisting as communicators and storm spotters in the Skywarn™ program. This program was developed to promote a cooperative effort between the National Weather Service and communities. Local Skywarn™ county coordinators are appointed by the Regional NWS Forecast Office (NWSFO). Whenever possible, this person should also be appointed as an ARES Assistant Emergency Coordinator for Skywarn™ to lead this function and to arrange for recurring training of county Amateur Radio Operators.

2.6 In the Tennessee Section, the suggested method of operation is for one combined county organization to perform all three functions (ARES®, RACES & Skywarn™). However, if they are not one and the same organization, an alternative is that the RACES County Radio Officer be appointed as an ARES® Assistant Emergency Coordinator. Alternatively, the ARES® Emergency Coordinator is appointed as a RACES Assistant Radio Officer.



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This approach ensures that the Amateur Radio response to an emergency is well coordinated while providing the most flexibility in operations and effective allocations of limited resources. This concept is reflected in the latest guidance from the ARRL and aligns well with the Incident Command System (ICS) that is used in Tennessee and throughout the United States.

3.0 Concept

3.1 The Amateur Radio operator's primary emergency service mission is to provide supplemental communication channels. In addition, Amateur Radio operators should have a high degree of technical ability that can assist in quickly establishing communications recognizing that each emergency is different, and as such, flexibility is a necessity in order to provide an appropriate and adequate response.

3.2 Amateur Radio serves as supplemental communications (as opposed to a back-up emergency system) to established services and often is not called immediately if normal communications circuits are intact and adequate. Members should monitor developments and be prepared for swift deployment should such a request be received.

3.3 Periodic drills, training, and instruction should be carried out to insure readiness and quick response in providing effective communications when the need arises. Each District Emergency Coordinator (DEC) and County Emergency Coordinator (EC) should arrange to participate in or create an effective annual Simulated Emergency Test (SET) to test their organizations capabilities.

3.4 Agencies that may be served during a communications emergency include, but are not limited to Emergency Management Agencies (EMA), Emergency Operations Centers (EOC's) police, fire, rescue squads, schools, military, utility companies, large industrial concerns, the National Weather Service, forestry services, or other volunteer agencies such as VOAD, The American Red Cross, Southern Baptist relief or the Salvation Army. Contact should be made with selected agencies prior to crises to develop mutual understandings and plans of action. Memoranda of Understandings (MOU) exist between ARRL and some of these organizations and are available from ARRL at <http://www.remote.arrl.org/FandES/field/mou/>.

4.0 ARES® Organization

4.1 The Section Manager (SM) is elected by the Tennessee ARRL membership every two years to manage the ARRL Field Organization in Tennessee. ARES® is one of eight programs that are part of the ARRL Field Organization. The Section Emergency Coordinator (SEC) is appointed by the SM to take care of all matters pertaining to emergency communications and ARES® in Tennessee.

4.2 Assistant Section Emergency Coordinators (ASEC's) are appointed by the SEC to manage each of the three Tennessee Section Divisions, West, Middle, and East. In addition, the SEC may appoint additional ASEC's to help manage various aspects of the ARES® program in the State. Each of the three Divisions contains a number of Districts managed by a District Emergency Coordinator who reports to an ASEC.

4.3 The primary level of organization for ARES® in Tennessee is at both the District and the County level, with a District subdivided into a number of counties. The SEC appoints the DEC and Emergency Coordinators (EC) based on the advice of the ASEC and DEC for each county within each district. The EC's are responsible for organizing the local amateurs into an effective and flexible team supporting both governmental and non-governmental agency emergency needs at the county and local levels.



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4.4 In the districts, the DEC can appoint Assistant District Emergency Coordinator's (ADEC) and the County EC may appoint Assistant Emergency Coordinator's (AEC). ADEC's and AEC's may be appointed to assist in various organizational functions such as administration and reporting, training, logistics, public relations, etc.

4.5 Tennessee borders eight other states, has a total land area of 42,143 square miles, and is 440 miles long and 120 miles wide. The State is geographically, culturally, economically, and legally divided into three Grand Divisions West, Middle, and East. TN ARES® is organized into three Divisions as follows: twenty-one counties make up the West Division and are located west of the Tennessee River. Thirty-eight Middle Division Counties are east of the Tennessee River and west of the Eastern Time zone boundary. The thirty-six counties comprising the East Division are east of the Eastern Time zone boundary.

4.5.1 TN ARES® West Districts:

West: District 1	West: District 2	West: District 3
Crockett	Benton	Chester
Fayette	Carroll	Decatur
Haywood	Dyer	Hardeman
Lauderdale	Gibson	Hardin
Shelby	Henry	Henderson
Tipton	Lake	Madison
	Obion	McNairy
	Weakley	

4.5.2 TN ARES® Middle Districts

Middle: District 4	Middle: District 5	Middle: District 6
Cannon	Bedford	Clay
Davidson	Coffee	Cumberland
Rutherford	Franklin	DeKalb
Sumner	Grundy	Fentress
Trousdale	Lincoln	Jackson
Williamson	Marshall	Macon
Wilson	Moore	Overton
		Pickett
		Putnam
		Smith
		Van Buren
		Warren
		White



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4.5.3 TN ARES® East Districts

East: District 7

Bledsoe
Bradley
Hamilton
Marion
McMinn
Meigs
Monroe
Polk
Rhea
Sequatchie

East: District 8

Anderson
Blount
Campbell
Claiborne
Jefferson
Knox
Loudon
Morgan
Roane
Scott
Sevier
Union

East: District 9

Carter
Cocke
Grainger
Greene
Hamblen
Hancock
Hawkins
Johnson
Sullivan - East
Sullivan - West
Unicoi
Washington



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5.0 Personnel

5.1 All FCC licensed Amateur Radio operators who wish to assist in public service are encouraged to register with their County EC. While membership in the American Radio Relay League is encouraged, it is not required except for persons holding ARRL leadership appointments such as Emergency Coordinators and Official Emergency Stations. Participation is a privilege and can be denied or revoked by the SEC or SM at any time.

5.2 The issuance of identification cards and vehicle placards by the County EC and county Emergency Management Agency (EMA) is encouraged. With this privilege comes the responsibility to be trained in emergency procedures, be willing to regularly participate in practice and actual emergency operations, and to always act in a manner that reflects favorably on Amateur Radio.

5.3 All Amateur Radio operators are encouraged to maintain proficiency as Skywarn™ Spotters through training offered by the regional NWSFO office.

5.4 ARRL members may also apply for designation as an Official Emergency Station (OES) from the ARRL. The County EC can determine the exact duties of such stations, but they should include certain training requirements and emergency power capabilities. OES appointments are also appropriate for stations functioning as primary liaison to other communication systems, such as MARS, CAP, etc.

5.5 It is suggested that each County EC prepare a one-page reference card describing their counties Amateur Radio Emergency Procedures for ARES® members. This card can also be used for informing other hams how to respond in an emergency and as a recruiting tool for potential new members.

6.0 Operational Support

6.1 When operating in support of state, county, and/ or local government, Amateur Radio operators can function either as RACES operators under the Tennessee State RACES Plan published by the Tennessee Emergency Management Agency, or as ARES® operators, depending upon the circumstances. Typically, most incidents / events function under the ARES® organization due to restrictions on RACES operations. (See 23.0 of this Plan)

6.2 When operating in support of the National Weather Service, Amateur Radio operators will function in accordance with the procedures established by the regional NWSFO office for the Skywarn™ program.

6.3 When operating in support of non-governmental relief agencies such as the American Red Cross, Salvation Army, etc., Amateur Radio operators will function as ARES® operators in accordance with the guidelines published by the ARRL Public Service Manual, the appropriate MOU, and their local County EC.

6.4 Support of public gatherings such as walkathons, parades, etc. can provide valuable operational experience. Consider using these events to recruit new ARES® members and as training opportunities. Advice on supporting such events can be found in the ARRL Special Events Manual.



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7.0 Planning

7.1 Each County EC will develop a written emergency communications plan to define how emergency communications are to be handled within their county. The plan should allow for the support of government operations between County and City Emergency Operations Center (EOC's) and between the county EOC and the state EOC, while simultaneously supporting operations between shelters and the local Salvation Army and Red Cross chapter. Additional ARES® circuits may also be needed to support other volunteer agencies.

7.2 The county emergency communications plan should establish alerting procedures and mutual support arrangements with adjacent counties.

7.3 Arrangements with local repeater operators to support emergency operations should be made in advance and reviewed annually. Such arrangements, when possible, should be reduced to a simple written agreement or Memorandum of Understanding (MOU) to outline details regarding any ARES® priority use of repeaters. Plans should also be made for simplex operations in the event of repeater failure or for long-term operations to release repeaters back to normal use. The national simplex frequency 146.52 MHz should **not** be a primary channel for these operations.

7.4 The county emergency communications plan should also identify which operators will serve as liaison stations with the ARRL National Traffic System (NTS) for message handling into and out of the disaster area.

7.5 The County plan should permit amateur radio communications in the County to function independently in local events, yet integrate with the District, Division and Section frequencies and plans.

7.6 A copy of the county emergency communications plan should be filed with the county Office of Emergency Management, local Red Cross Chapter, Salvation Army, and any other served agencies. Copies should also be sent to the DEC and ASEC as well as the adjacent County ECs. The County Plan should be reviewed annually with served agencies and revisions made as necessary...

8.0 Training

8.1 Each ARES® member is expected to be trained and proficient in appropriate emergency communication procedures. The exact training requirements will be determined by the local County EC and in consultation with the served agencies. Generally, members should complete AECCC Level I certification as well as practical on-the-air experience in formal and tactical message handling, exercises and nets. Maintaining annual proficiency in formal message handling and the equipment and procedures used at the local EOC, Salvation Army, local Red Cross chapter and other served agencies is encouraged.

8.2 Tennessee local governments and other agencies have adopted the Federal Emergency Management Agency's (FEMA) Incident Command System, and have established local minimum Incident Command System (ICS) courses. Completion of these courses may be required of ARES® members prior to assisting in any incident or event.

8.3 In the Tennessee Section, recommended minimum ARES® training includes ICS-100,200,700 and 800 for all members. ARES Leadership members are encouraged to receive advanced training such as ICS-300 / 400; COML and COMT and AUXCOM.



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9.0 Logistics

9.1 Each County EC should ensure that personnel are adequately trained, have sufficient equipment and review any pre-arranged MOU for repeater use and the designated simplex channels to simultaneously support ARES® operations within their county for a minimum period of 72 continuous hours. Each County EC should establish a liaison station on this frequency in the event of an incident involving multiple counties.

9.2 ARES® members are encouraged to use 30 amp Anderson Powerpole connectors on all portable 12 VDC powered radios, batteries and power supplies to facilitate quick response and the ability to share resources in a disaster. Information on this ARES® standard can be found at <http://www.ocraces.org/powerpole.html>.

9.3 Each member should assemble a 24 hour go kit to allow them to rapidly respond to local emergencies. Each is also encouraged to develop a 72-hour go kit to allow response to longer-term emergencies. Members of ARES® Mutual Assistance Teams must maintain such a 72-hour go kit. Suggested contents of such kits are described in the AECCC Level I course.

9.4 Each County EC should work with their served agencies to ensure the establishment of permanent radio stations and emergency power at EOCs, Red Cross chapters, hospitals, and similar locations. The development of portable shelter radio kits is also encouraged.

10.0 Concept of Operations

10.1 The Section ARES® operates under the "lead agency" principal. This means that the local ARES® group responds to requests from the agency that has the authority under local, county, or state legislation to provide the lead in response to an emergency or disaster. In most instances this will be the local county emergency management agency (EMA). By following this guideline amateur radio resources are coordinated through the local EMA and any conflicts for the resources are decided by EMA officials who are in a better position to prioritize communications needs.

10.2 Local County EC's should have an MOU with their local emergency management agency including contact information. The MOU should be reviewed periodically and contact information kept current.

11.0 Authority to Activate ARES®

11.1 Local ARES® groups can be activated by the Emergency Coordinator (EC), or the Assistant Emergency Coordinator (AEC), at the request of:

1. The City or County Emergency Management Agency
2. The Tennessee RACES Officer
3. The Governor or his designated representative, such as the Tennessee Emergency Management Agency (TEMA)
4. Department of Homeland Security, FEMA or other designated agency under the Federal Response Plan
5. Any agency that has an existing MOU with ARRL.

11.2 Should ARES® members be aware of a communications emergency they should make every attempt to contact their County EC or AEC to ensure that he / she is aware of the situation.



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11.3 ***ARES® members should not respond to any emergency or request from any agency unless the County EC or AEC (or in their absence the DEC, SEC or SM) has authorized deployment of ARES®. Members should never self-deploy to any incident.***

11.4 Once the local ARES® group has received an activation request, the County EC must notify the DEC as soon as possible. The DEC should in turn notify the ASEC and SEC.

11.5 The County EC may request additional assistance from other ARES® groups within the District by contacting the DEC. The DEC may request assistance from other ARES® groups in other Districts by contacting the ASEC or SEC.

12.0 Warning, Alert & Response Levels

12.1 Local ARES® groups should develop phone trees and other appropriate notification methods to alert their ARES® group in the event of an emergency. They should also work with local repeater owners to establish emergency alerting procedures.

12.2 Level 1 – Standby (Officials anticipate a potential need for ARES® assistance)

12.2.1 ARES® groups should be placed on standby when there is information that might indicate the need for ARES® deployment. Such indications include severe weather alerts.

- County EC's should contact their local EMA officials and confirm contact information
- County EC's should contact those in their ARES® group and confirm contact information and their availability
- County EC's should also check with local repeater owners to confirm the operational status and emergency power capabilities of local repeaters
- ARES® members should check their equipment and ensure they have emergency power capabilities as well as 24-hour and 72-hour preparedness kits
- County EC's should notify the DEC, or if unable to make contact with the DEC then the SEC.
- DEC's should notify the SEC or if unavailable the SM.
- The SEC should contact the DEC's to confirm that ARES groups within the effected area have been placed on standby.
- The SEC should insure that the SM is notified.



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12.3 Level 2 – Alert (Prepare for immediate deployment and wait until assigned)

12.3.1 An alert status should be initiated when there is an indication of an impending need for ARES® deployment. An initial contact from the local EMA requesting to know the availability of ARES® for deployment could also indicate the need to initiate an alert. The following actions should be taken if not already done for a standby:

- County EC's should contact their local EMA officials to confirm contact information and obtain a list of sites & location where communications may be needed, along with initial staging areas.
- County EC's should contact those in their ARES® group to confirm contact information and their availability
- County EC's should notify local repeater owners of the intent for exclusive use of specific local repeaters if Level 3 is entered; and, per their MOU with the repeater owners confirm the operational status and emergency power capabilities.
- ARES® members should check their equipment to ensure they have emergency power capabilities as well as emergency communications and 72-hour preparedness kits
- DEC's should contact the county EC's in their District to confirm that these activities have been done and to confirm contact information and emergency net frequencies. The potential need for additional ARES® members from other Districts should be considered
- The SEC should contact the DEC's and confirm that ARES® groups within the effected area have been placed on standby. The potential need for ARESMAT should be considered if sufficient resources are not available within the Section.

12.4 Level 3 - Deployment of Personnel

12.4.1 The County EC will usually be the liaison with the agency served and coordinates the alerting and deployment of personnel. Upon arrival at the assigned location ARES® members should immediately identify themselves to the person in charge or the contact person provided by the County EC or Net Control.

12.4.2 In most instances two or three operators will be assigned to each location to provide relief and backup equipment. This allows one person to establish communications while the other is setting up other equipment or acting as liaison to the served agency.

13.0 ARES® Mutual Assistance Team

13.1 In a disaster, such as an earthquake or tornado, ARES® resources may be quickly overwhelmed, especially if the event and recovery operations are going to be prolonged. In these situations communications assistance may be needed from other Districts or even other Sections. The ARES® Mutual Assistance Team concept is designed to address those incidents requiring mutual aid support from other amateur radio operators.

13.2 Local county EC's and each District DEC should maintain a list of ARES® members who are willing and able to be part of a mutual assistance operation. Each individual county is encouraged to form an ARES® Mutual



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Assistance Teams with their adjacent counties, including those on bordering states, and develop a written a Memorandum of Understanding (MOU) defining their relationship and level of support.

ARES® Mutual Assistance Team personnel should:

- have completed the ARRL-ECC level 1 course
- have completed the NIMS ICS courses required by agencies they will support
- have functional mobile & portable 2-meter and HF equipment, including emergency power supplies, antennas, etc.
- have sufficient food, water and other supplies to be self-sufficient for 72 hours
- have strong inter-personal communication skills and be physically fit

13.3 ARES® Mutual Assistance Team assistance may be requested through the SEC. When a request is received for support, the SEC will contact DEC's in Districts not impacted by the incident and/or SEC's in adjacent Sections and determines the availability of team members.

13.4 If the scale of the disaster indicates that ARES® operations may be prolonged, the SEC should contact adjacent Section SEC's in advance to determine the availability of assistance teams and consider placing them on standby. The SM should be notified of such action. Deployment of team members should not exceed five days.

13.5 When a team is requested, a designated reporting point and a point of contact should be provided to the other DEC's and Section's SEC before the team departs. This should include contact frequencies, repeaters and any other pertinent information.

13.6 If a request is received from an adjacent Section for a team, the SEC will contact ARES® Mutual Assistance Team members through the TN Section's DEC's and County EC's. Teams will only be deployed after the exact nature, destination, reporting contact, length of deployment and other details have been determined. No deployment should be made until all details have been confirmed in writing.

13.7 In the event that it is necessary to request that the FCC declare a communications emergency and secure a designated HF frequency, the County EC should contact the DEC, ASEC or SEC. The SEC should request a "voluntary communications emergency" to the FCC Field Office. The SEC should also contact ARRL HQ and advise them of the situation. As soon as the frequency is no longer needed the SEC should request that the FCC rescind the declaration. Each county should develop a roster of their registered Mutual Assistance Team members who are willing and able to travel to neighboring counties or states to provide communication support inside the disaster area. In addition, it is important that pre-disaster planning include inter-county and other training exercises including inter-county and district VHF/UHF and HF nets.

4.5 Since not all counties will have a sufficient number of trained and equipped personnel to deploy full Mutual Assistance teams on their own, the individual county plans should then be incorporated into District wide plans. Note that any deployment of such teams outside of the TN Section requires the approval of the SEC or SM.

14.0 Net Operations

14.1 Nets are established to control the radio traffic on any given frequency. There can be multiple nets in operation for a given disaster, each with a specific purpose, and each with a Net Control Station (NCS).

14.2 In Tennessee, nets are numerous and embrace many modes of communication. They operate on a wide variety of schedules. The TN ARES Web page lists reported county nets.



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14.3 In addition, a great many VHF and UHF local nets operate every day, and in just about every mode authorized by the FCC. These include repeaters which, by their inherent nature may be defined as nets, although

they may sometimes not be subject to net controls. Each of these nets has its own procedures, schedule and operating practices and many of them shift almost automatically from routine, casual operation to emergency mode.

14.4 It is not the intent of this plan to prescribe operating functions or procedures for any of these nets unless they are explicitly part of the County, District, or Section ARES® program. Individual participation in almost any well conducted net, in any mode or on any frequency, is strongly recommended as a way to become familiar with nets and how they operate.

14.5 Section-wide coverage during an emergency is normally maintained using frequencies on 75- or 40-meter sideband. The Net Control operator on duty will decide whether to keep the net on its current frequency or to move up or down a few kHz to avoid interference. However, if it becomes desirable to move the net to another band, the Net Manager on duty at the time decides whether to move the net, and if so, to what band, frequency, and mode.

14.6 If conditions are unfavorable on 75 and 40 meters, a CW or digital circuit might be set up on an arbitrary frequency, perhaps on 30- or 160-meters, or via APRS, D-Star, NBEMS (Narrow Band Emergency Messaging System), or other digital modes. Accordingly, contact may be maintained with critical locations while the net itself continues to operate on one of its normal frequencies.

14.7 The Tennessee Section ARES Band Plan:

Band	RX Freq	RX Tone	TX Freq	TX Tone	Notes
80 m	3.980		3.980		TN / ARES Phone Net
40 m	7.288		7,288		Alternate TN / ARES Phone Net
2 m	146.5200	csq	146.5200	csq	National Simplex Calling Frequency
2 m	146.5800	csq or 100.0	146.5800	csq or 100.0	TN Simplex Calling Frequency
70 cm	446.0000	csq or 100.0	446.0000	csq or 100.0	National Simplex Calling Frequency
70 cm	multiple		multiple		MTEARS Linked repeaters;see:www.mtears.org
WinLink	various		various		WinLink see: www.winlink.org

15.0 Message Operations

15.1 Formal messages must be written and signed by the appropriate public official to facilitate the movement of equipment, personnel and resource requests in support of emergency protective measures, search and rescue and recovery efforts.

15.1.1 Health and welfare traffic are messages concerning the welfare of people in the effected area; these can be from people within the effected area to family in another area to let them know they are safe, or it can be an inquiry from family outside of the effected area. In either case, these messages are low priority and are usually handled after the initial response has moved into the recovery phase. In most instances, the Red Cross coordinates these inquiries.

15.1.2 Whenever possible packet stations, NBEMS stations, Winlink and/or D-Star stations should be established for handling most non-tactical or formal traffic, i.e., all welfare requests, logistics & supply requests, damage reports etc. Packet traffic, D-Star, NBEMS, and Winlink provides more detailed information, is less likely to be misinterpreted, and takes up less air time. In addition, it is more difficult for the public to monitor and understand packet, NBEMS, Winlink, or D-Star traffic.



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15.1.3 ARRL Radiogram Message Form

In order to be proficient at passing formal traffic it is essential that operators practice passing traffic on a regular basis. One method of doing this is to participate in the National Traffic System as an Official Relay Station, passing formal traffic on a regular basis. Another method is by participating in ARES® drills and exercises.

The ARRL Radiogram form is used on the NTS nets on a regular basis and all operators should be familiar with their use. Radiogram forms are downloadable from the ARRL web site at <http://www.arrl.org/FandES/field/forms/>.

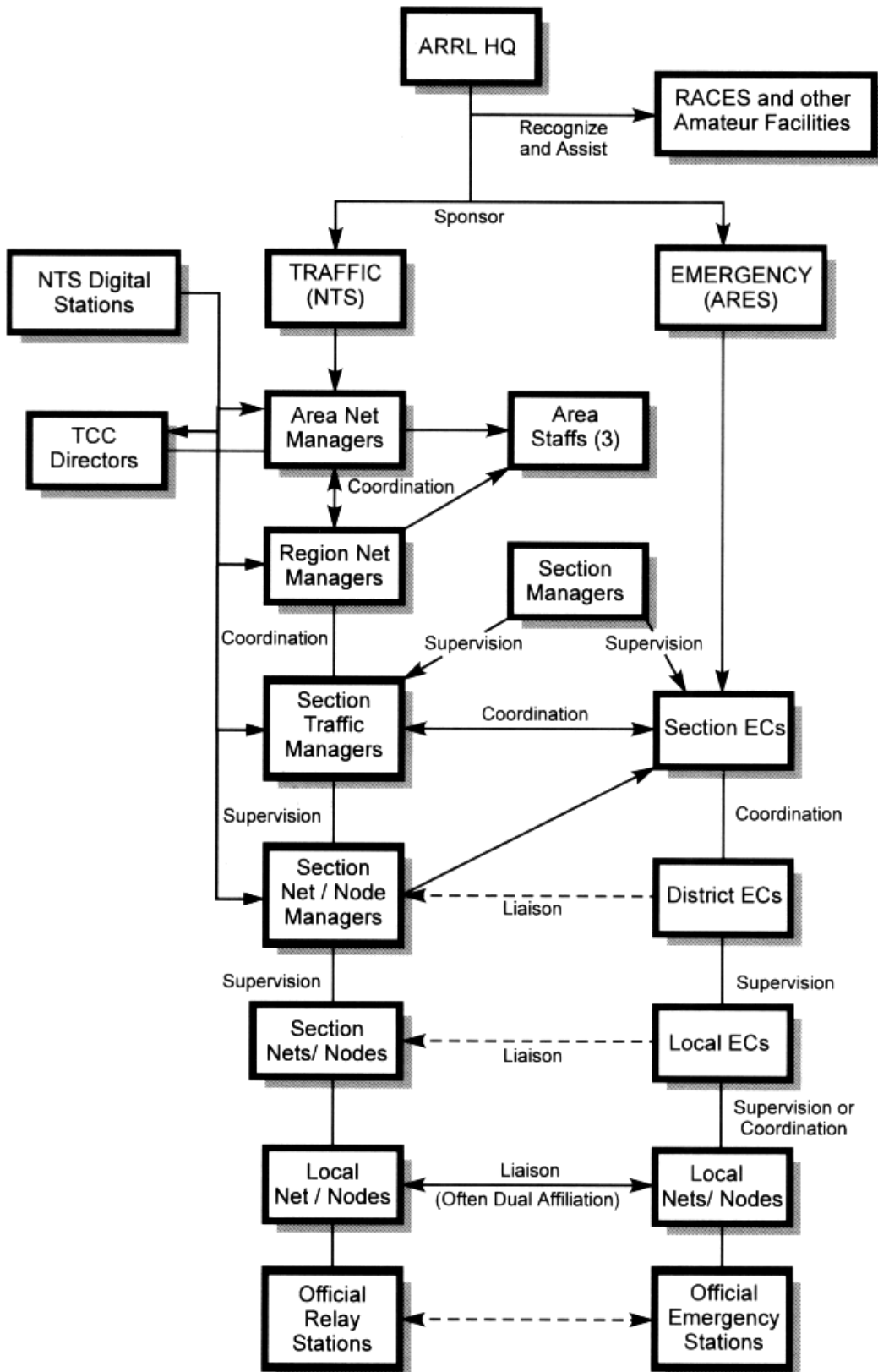
15.1.4 The National Traffic System (NTS) is an organized network of amateur radio operators sponsored by the American Radio Relay League for the purpose of relaying messages throughout the US and Canada. NTS works closely with the Amateur Radio Emergency Service to provide emergency communications in an emergency or disaster. The most common type of disaster-related messages are "health and welfare" inquiries and notifications into and out of the area affected by the disaster. NTS is defined using geographic areas. The US is divided into areas that approximate time zones. Areas are divided into regions, and regions into sections that correspond to a state. Each of these subdivisions has nets for collecting and distributing traffic. Representatives from section nets relay traffic collected from local nets up to the appropriate region net, or relay to a nearby section for further delivery. Messages are exchanged between section and region representatives, which are then passed to area nets, the highest level in the system. Nets at these upper levels usually take place on HF band.

15.1.5 The National Traffic System's relationship with ARES® is outlined below.





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16.0 Shelter Operations

16.1 Shelter operations and other deployment sites should be staffed by a minimum of two ARES® operators; one to manage the radio and the other to act as a runner/ logger. Communications will normally be on 2-meters or 70cm. However, other modes / technologies such as MESH or NBEMS may be employed.

16.2 The purpose of radio operators in shelters is to provide communications between the Shelter Manager and the organization in charge of the shelters, usually the Red Cross or Salvation Army. Shelter operations may be on their own net depending on the scale of the incident.

16.3 Some of the communications involved may be lists of persons at the shelter, logistics requests, or Welfare messages. Ideally these should be passed by packet, NMEMS, Winlink, or D-Star.

16.4 Internal shelter communications should be accomplished by other means, i.e., simplex, Family Radio Service, etc.

16.7 Operators should avoid accepting duties or roles other than those associated with the function of ARES®.

16.8 All shelter communications should be authorized by the Shelter Manager or designee and should be in the form of a written message.

17.0 Search & Rescue Operations

17.1 ARES® members may be called upon to assist agencies conducting Search and Rescue (SAR) operations. Many times these types of operations are conducted in remote areas, where communications on the served agency's frequencies may be challenging due to lack of repeaters.

17.2 In most instances communications will be tactical in nature and a single net will be sufficient. In addition, simplex operations may be sufficient with the occasional use of a repeater to pass logistical requests. The NCS should choose the most appropriate modes.

18.0 Public Service Communications

18.1 Public service communications are provided to organizations sponsoring a public event. Public service communications are:

- scheduled
- do not require activation by an emergency management agency
- do not normally require coordination with multiple agencies

19.0 Working with Served Agencies

19.1 The ARES® field organization is a self contained emergency communications organization. It is designed to support, upon request, emergency response, and disaster relief organizations. However, ARES® retains its own identity and organizational structure, personnel and physical infrastructure while providing communications support.



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19.2 When an ARES® operator is assigned to a duty post anywhere, he/she remains an ARES® operator for the full length of the assignment. Although the operator comes under the operational authority of the served agency, he / she remain under the administrative authority responsible directly to the local County EC (or designee).

20.0 Plan Development and Maintenance

20.1 This plan was developed with input from numerous sources including information provided by amateur operators who have had “hands-on” experience in emergency communications. However, the continued input from those that use the plan is essential if it is to be a useful document for the deployment of ARES® in the Tennessee Section.

20.2 The Section Emergency Coordinator is responsible for the development, maintenance, and upkeep of the plan.

20.3 Subsequent to any ARES® deployment, after-action reports should be submitted to the SEC and indicate any problems associated with the plan.

21.0 Drills and Exercises

21.1 Drills and Training are an essential function of preparing for performance during emergencies. It is known through experience that individuals and organizations will execute a function based on training and knowledge of the emergency plan.

21.2 Participation by ARES® operators in regular Section traffic nets and local VHF nets can be an excellent emergency training tool and should be encouraged by ARES® officials at every opportunity.

21.3 In addition, the annual ARRL sponsored Field Day is designed to test Amateur Radio operator’s capabilities in establishing stations other than at their normal location and using non-commercial power.

21.4 Each October, on the third full weekend, the ARRL sponsors a nation-wide Simulated Emergency Test (SET) to assess ARES® abilities in handling (simulated) emergency traffic. The SET weekend gives communicators the opportunity to focus on the emergency communications capability within their community while interacting with NTS nets. SET dates can be established at the EC / DEC level at their discretion.

22.0 National Incident Management System

22.1 On February 28, 2003, President George W. Bush issued a Homeland Security Presidential Directive (HSPD-5) in reference to Domestic Incidents, which directed the Secretary of Homeland Security to develop and administer a National Incident Management System (NIMS).

22.2 Subsequently, the Tennessee Governor issued a Proclamation that mandated that NIMS be used for all incident management in the state.

22.3 This Presidential directive and Governor’s proclamation includes Amateur Radio volunteers who are encouraged to complete the ICS-100, 200 700 and 800 on line courses.



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22.4 Each County EC is required to maintain a record of each individual's accomplishments, and make it available to any EMA office requiring NIMS certification. The TN ARES® Reporting and Roster Program provide the standardized platform within the Section for maintaining a record of training within each ARES® organization.

23.0 Radio Amateur Civil Emergency Service (RACES)

23.1 Created in 1952 primarily to serve in civil defense emergencies, RACES provides essential communications and warning links to supplement State and local government assets during emergencies.

RACES is a special part of amateur radio emergency operations sponsored by the Federal Emergency Management Agency (FEMA). It provides emergency communications for civil preparedness purposes only. As such, RACES stations can only be activated at the request of the local, State or Federal emergency management authority.

In the event that the President invokes the War Emergency Powers Act, amateurs registered with RACES at the local level would be permitted to utilize certain amateur frequencies, while all other amateur operations would be prohibited from operating.

Accordingly, it is strongly recommended that ARES® groups are enrolled with the local RACES organization. Ideally, the ARES® EC also serves as the local RACES Officer.

24. Official Emergency Stations (OES)

24.1 Appointments

Amateur operators may be appointed as an Official Emergency Station (OES) by their Section Emergency Coordinator (SEC) or Section Manager (SM) at the recommendation of the EC, or DEC (if no EC) holding jurisdiction. The OES appointee must be an ARRL member and set high standards of emergency preparedness and operating. The OES appointee makes a deeper commitment to the ARES® program in terms of functionality than does the rank-and-file registrant.

The OES appointee is appointed to carry out specific functions and assignments designated by the appropriate EC or DEC. The OES appointee and the presiding EC or DEC, at the time of the OES appointment, will mutually develop a detailed, operational function/assignment and commitment for the new appointee. Together, they will develop a responsibility plan for the individual OES appointee that makes the best use of the individual's skills and abilities. During drills and actual emergencies, the OES appointee will be expected to implement his/her function with professionalism and minimal supervision.

24.2 Requirements: Full ARRL membership; Experience as an ARES® registrant; Regular participation in the local ARES® organization including drills and test; Participation in emergency nets and actual emergency situations; Regular reporting of activities; Encouraged to earn certification in Level 1 of the ARRL Emergency Communications Course.

24.3 Responsibilities:

- OPERATIONS--Responsible for specific, pre-determined operational assignments during drills or actual emergencies. Examples include: Net Control Station or Net Liaison for a specific ARES® net; Manage operation of a specified ARES® VHF or HF digital BBS or MBO, or point-to-point link; Operate station at a specified emergency management office, Red Cross shelter or other served agency operations point.
- ADMINISTRATION--Responsible for specific, pre-determined administrative tasks as assigned in the initial appointment commitment by the presiding official ARES® I. Examples include: Recruitment of ARES® members; liaison with Public Information Officer to coordinate public information for the media; ARES® registration data base management; victim/refugee data base management; equipment inventory; training; reporting; and post-event analysis.



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- LIAISON--Responsible for specific, pre-determined liaison responsibilities as assigned by the presiding EC or DEC. Examples include: Maintaining contact with assigned served agencies; Maintaining liaison with specified NTS nets; Maintaining liaison with ARES® officials in adjacent jurisdictions; Liaison with mutual assistance teams.
- LOGISTICS--Responsible for specific, pre-determined logistical functions as assigned. Examples include: Transportation; Supplies management and procurement (food, fuel, water, etc.); Equipment maintenance and procurement--radios, computers, generators, batteries, antennas.
- MANAGEMENT ASSISTANT --Responsible for serving as an assistant manager to the EC, DEC or SEC based on specific functional assignments or geographic areas of jurisdiction.
- CONSULTING--Responsible for consulting to ARES® officials in specific area of expertise.
- OES appointees may be assigned to pre-disaster, post-disaster, and recovery functions. These functions must be specified in the OES's appointment commitment plan.
- The OES appointee is expected to participate in planning meetings, and post-event evaluations. Following each drill or actual event, the EC/DEC and the OES appointee should review and update the OES assignment as required. The OES appointee must keep a detailed log of events during drills and actual events in his/her sphere of responsibility to facilitate this review.
- Continuation of the appointment is at the discretion of the appointing official, based upon the OES appointee's fulfillment of the tasks he/she has agreed to perform.



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25.0 Appendix

25.1 Online References

FCC Rules, Part 97, Amateur Radio Service <http://www.arrl.org/FandES/field/regulations/rules-regs.html>

The ARRL Public Service Communications Manual <http://www.arrl.org/FandES/field/pscm/>

The ARES® Field Resources Manual <http://www.remote.arrl.org/FandES/field/aresman.pdf>

The ARRL Special Events Manual <http://www.remote.arrl.org/FandES/field/spevman/index.html>

ARRL Net Directory <http://www.arrl.org/FandES/field/nets/>

ARRL Emergency Communications Certification Courses, AECCC <http://www.arrl.org/cce/>

FEMA online NIMS reference <http://www.fema.gov/emergency/nims/>

25.2 Offline References

The ARRL Emergency Coordinators Manual

Tennessee Communications Field Operations Guide (TN COMM FOG) *note: contains public safety Sensitive Information.* Published by: Tennessee Emergency Management Agency

Auxiliary Communications Field Operations Guide (AUX FOG), Published by: US Department of Homeland Security Office of Emergency Communications

National Interoperability Field Operations Guide; Published by: US Department of Homeland Security Office of Emergency Communications



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26.0 Revisions Record

<u>DESCRIPTION</u>	<u>REVISION</u>	<u>AUTHOR / AUTHORITY</u>	<u>DATE</u>
Draft	N/A	D. O'Donovan, W4DOD / SEC	30 June 2014
SM Review	(approval)	K. Miller, N9DGK / SM	1 November 2014