EMERGENCY COMMUNICATION PLAN

ALABAMA SECTION

AMERICAN RADIO RELAY LEAGUE

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Amateur Radio Emergency Service Communications Plan 2015

Alabama Section American Radio Relay League

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The purpose of this plan

…is to implement Part 97.1 of the FCC regulations, and Federal and international treaty law applying to Amateur Radio in the Alabama Section of ARRL.

97.1 Basis and purpose.
The rules and regulations in this Part are designed to provide an amateur radio service having a fundamental purpose as expressed in the following principles:

a. Recognition and enhancement of the value of the amateur service to the public as a voluntary non-commercial communication service, particularly with respect to providing emergency communications*…[Emphasis supplied]*

This plan provides formal guidelines for the Amateur Radio Emergency Service (ARES) in the Alabama Section.

It describes an organizational structure within which District, County and Local ARES units may function with maximum effectiveness and minimum confusion. It outlines the preparation, planning, and training necessary to be ready and effective in the smallest and largest emergency, and finally it presents a "Standing Orders" plan of nets and frequencies to be implemented if and when there is a Section-wide emergency.

These guidelines are not intended as rigid regulations. The senior ARES official in charge may interpret and adapt the plan as reasonably necessary for efficient management of the situation.

Policies:

Certain policies prevail when Alabama ARES groups conduct emergency operations. When these policies differ from ARRL policy, the Alabama ARES procedures take precedence.

The SEC, DECs and ECs do not assume specific operating duties when their organizations are on Orange or Red Alert, they must remain free to cope with their official duties. When a County or District is not activated, this restriction does not apply. ARES members on duty are directed only by ARES officials. Served-agency officials may not change the ARES volunteer's instructions.

Amateurs who hold professional emergency response obligations (e.g. EMA, police officer or fireman) and who are appointed EC, should appoint AEC(s) to serve in their place when they are “On Duty”. The AEC in this position assumes the temporary position of EC and answers directly to the SEC or DEC for ARES related directions. Should an ARES Operator find it necessary to vacate his operating position for any reason, he must contact his AEC, EC, DEC, or SEC for a replacement operator before leaving that position.

ARES operators, while on duty, perform only their assigned ARES duties. If the operator wants to assume other duties he asks the EC for relief from ARES duties.

Written messages in ARRL format are used whenever third parties are involved. Complete service information will be written on the ARRL message form. *See page 36*
Every emergency related message (except MAYDAY or Welfare) should be given a Priority precedence, no matter how routine they may seem.

A reply takes the same precedence as the original; a Priority message gets a Priority reply. Priority messages addressed to, or originating at the State EOC, SEC or SM take precedence over other Priority traffic.

Emergency-related messages should usually be transferred from ARES nets to commercial circuits at the first opportunity when that will speed delivery.

In-coming Welfare inquiry traffic will not be handled on any ARES Emergency Net operating in Condition Orange or Red.

Outgoing Welfare "assurance" messages get a W (Welfare) precedence and will not be handled on any net operating on Orange Alert *unless* approved by the Net Manager. They will not be handled at all during Red Alerts.

Regular operations and other AL Traffic Nets may cease on 3965 kHz when the Emergency Net is activated. NTS liaisons may not be maintained during emergency operations. However, formal written traffic can be passed to other nets as required by normal Emergency Net operations. At their option, ARES officials may use the Emergency Net frequency for consultation and coordination.

Except for MAYDAY situations, business on the Emergency Net frequency must not be allowed to cause delays in listing emergency related traffic or listening for weak stations. Message traffic should be dispatched on the Emergency Net but actually transmitted on alternative frequencies. However, during long periods of inactivity traffic may be handled on the net frequency at the discretion of the Net Manager or Net Control.

Situation permitting, emergency communications use VHF or UHF nets in preference to HF. When any operation taxes local ARES resources, the EC asks the DEC for support. The DEC may assign ARES units from other counties within the District and/or request additional help through the SEC. The SEC may recruit additional personnel from any available source.

ARES officials may do whatever is legal and reasonably necessary for the orderly conduct of the operation.

ECs appointed to counties with OESs must hold at least a General Class Amateur license.

UTC in 24-hour format is the preferred time system for all dated ARES messages, documents and schedules. Dates must agree with the time system used. ARES messages, and any emergency or disaster message must be relayed, passed and delivered exactly as received.

During a disaster ARES members will be given an assignment and the operator must never self-deploy.

ARES: The Full-Service Organization

The Amateur Radio Emergency Service (ARES) field organization is designed to support as fully as possible, upon request, any and all emergency response and disaster relief organizations. However, ARES retains its own identity and organizational structure, personnel and physical infrastructure while providing communications support.

When dealing with served agencies we must remember that ARES is a self-contained emergency organization, and retains its own identity. When an ARES operator is assigned to a duty post anywhere, he/she remains an ARES operator for the full length of the ARES assignment.

The ARES infrastructure includes privately-owned radios, antennas, ARES dedicated and cooperating repeaters, and accessory equipment even more important than the equipment, the organizational structure includes numerous nets, training exercises, community support and cooperative planning with the agencies to learn their needs. When officials of any organization request support in Alabama, they get the full benefit of all of this, as well as the personal service of hundreds of volunteer operators, most of whom are not visible in the emergency or disaster area.

When an agency asks ARES for communications assistance, it gets the full benefit of the ARES group's entire organization including its nets, repeaters, mobiles and emergency power sources. When dealing with served agencies we must remember and remind the agencies that ARES is a self-contained emergency organization, and retains its own identity. We must be mindful that as ARES operator working in a served agency will be apart of the organization or team. The operator will be assisting the served agency directly during the assignment. Officials of emergency and disaster response agencies who desire ARES assistance should contact any of the following ARES representatives:

Table I – ARES Contacts

Section Manager	**Section Emergency Coordinator**	**ARRL headquarters**
Dave Drummond, W4MD 5001 Lakehurst Dr Northport, AL, 35473 w4md@bellsouth.net	Mike Watkins, WX4AL 334-844-9354 esquire122@gmail.com wx4al@winlink.org	Steve Ewald, WV1X Supervisor, Field Organization Team (860) 594-0265 sewald@arrl.org

Request for ARES assistance can come from two directions, locally from the EC up or from a National organization to ARRL HQ, Section Manager to the disaster area. ARES members must be given an assignment and the operator must never self deploy.

For additional information, go to the Alabama ARES webpage: www.alabama-ares.org

ARRL Headquarters General Support Functions

The primary function of the Public Service branch at ARRL HQ is to provide administrative support to the ARRL Field Organization, which includes both the Amateur Radio Emergency Service (ARES) and the National Traffic System (NTS). The Public Service Branch also provides administrative support for independent RACES groups, SKYWARN programs and the Military Affiliate Radio System (MARS).

HQ staff provides support by publishing a wide array of resource and training material in print and electronic format, by answering questions, and by providing a comprehensive web site. They also produce and distribute a number of operating aids, forms, ID cards, decals and patches.

The ARRL Headquarters staff also negotiates and manages the League's MOUs with many national organizations. They periodically update the MOU documents and meet annually with their counterparts in these agencies to maintain strong partnerships. MOUs can be found on the Alabama Section Plan or at www.arrl.org

ARRL Headquarters Support During a Disaster

During major disaster situations, HQ's primary function is to serve as an information clearinghouse. The staff collects, analyzes, and processes data from the field. Subsequently, the staff disseminates the processed information via W1AW bulletins and the ARRL Web site news page. They also respond to individual inquiries for disaster response information via e-mail, fax, and telephone.

The staff collects data from the field by contacting ARRL field officials in or as close to the disaster area as possible. They also contact key served agencies at the national level to get information and to assess needs. The American Red Cross is almost always contacted during major situations. ARRL HQ staff also contacts managers of major nets such as the Hurricane Watch Net, which is the primary wide-area hurricane service net.

Finally, the staff monitors disaster communications activity on the air from the W1AW station located within the Headquarters building. All of the information gathered is then processed and drafted into official bulletins, which are transmitted over W1AW and sent by e-mail. Information also goes into current ARRL news periodicals and ARRL website postings.

ARRL Situation Reports

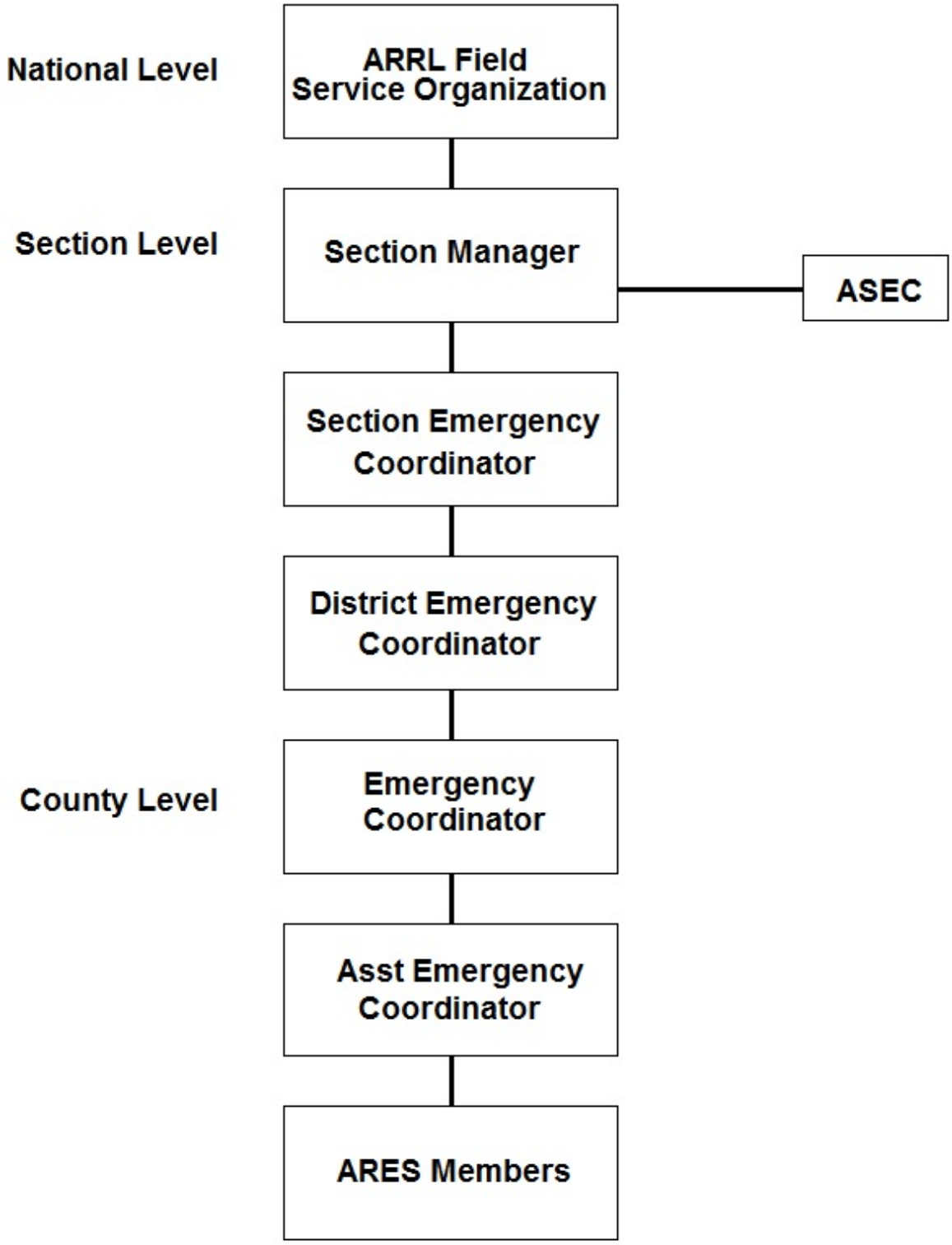
ARRL official bulletins during disasters contain situation reports (SITREPs) with:

- Damage reports
- Storm information
- Network information (which nets are active and where)
- FCC emergency frequency declarations
- Status reports on health and welfare traffic handling
- National Traffic System status

Bulletins may also contain advice on proper operating procedures to assist individual Amateurs responding to the situation.

The ARRL Headquarters staff follows major disaster situations closely and assists Amateurs, especially ARES volunteers, to the extent that they can. Call on them when necessary, keeping in mind that they handle hundreds of requests by e-mail and telephone during such situations. They do their best to provide good, reliable, comprehensive, information to support the Amateur community's response effort.

Alabama ARES Organizational and Leadership Structure



Section Manager (SM)

A Section is the largest administrative unit of the ARRL field organization. Alabama comprises one complete section.

The Section Manager has overall responsibility for ARRL activities in the Section and may appoint as many assistant officials as he deems necessary. They serve at the pleasure of the SM. Technically, their appointments end automatically when the SM leaves office, though the new SM may choose to continue any or all of them. Among the appointments made by the SM are the SEC, ASM, ACC, STM, TC and the SGL.

Section Emergency Coordinator (SEC)

The Section Emergency Coordinator is an assistant to the Section Manager. This person is appointed by the SM to take care of all matters pertaining to emergency communication and the Amateur Radio Emergency Service (ARES) on a section-wide basis, and must have considerable time and energy to devote to this critical position. There is only one SEC appointed in each Section of the ARRL Field Organization.

SEC Job Responsibilities:

- Recommend appointments for Emergency Coordinator and District Emergency Coordinator positions to the Section Manager. Also, determines the areas of jurisdiction of each appointee. At the SM's discretion, the SEC may personally make (and cancel) these appointments. Additionally, the SEC may also personally handle or delegate the Official Emergency Station appointments.

- Encourage all local Amateur Radio groups to establish an ARES organization for their area and assist in their establishment.

- Advise the SM on all Section emergency policy and planning, including the development of a "Section Emergency Communication Plan".

- Work with the Section Traffic Manager to ensure that emergency and traffic nets in the Section present a united public service front, particularly in the proper routing of traffic in emergency situations.

- Work with other Section leadership officials, particularly with the State Government Liaison and the Public Information Coordinator.

- Develop or promote ARES membership drives, meetings, activities, training events, tests and documentation of procedures, within the Section.

- Collect and consolidate Emergency Coordinator (or District Emergency Coordinator) monthly reports. Submit monthly progress summaries to the SM and ARRL Headquarters. Such summaries include timely reports of emergency and public safety communications handled within in the section. -

- Maintain contact with other communication services and serve as primary liaison

at the Section level with all agencies served in the public interest. Such contact is particularly important in connection with state and local governments, civil preparedness and such organizations as the Federal Emergency Management Agency, Red Cross, Salvation Army and the National Weather Service.

- Work with the State Government Liaison to build productive governmental relationships.

- Appoint Assistant Section Emergency Coordinators (ASEC) as needed to assist with any or all duties listed above.

The District Emergency Coordinator (DEC)

The ARRL District Emergency Coordinator is an optional position for larger Sections, appointed by, or recommended for appointment by the Section Emergency Coordinator. The DEC's major function is to supervise the efforts of local Emergency Coordinators in their assigned district. Ideally, the SEC or a single DEC should not be responsible for more than five to seven EC's. This varies widely in practice.

DEC Job Responsibilities:

- Recommend EC appointments to the SEC.

- Coordinate the training, organization, and participation of ECs in their district. This includes the coordination of mutual aid between ARES units within the district.

- Make regional decisions, in consultation with his ECs, regarding the allocation of available Amateurs and equipment during an emergency.

- Coordinate local emergency plans to liaison with any District-level nets.

- Serve as backup for local areas that have no EC and maintain contact with governmental and other agencies within the District.

- Coordinate the reporting and documentation of ARES activities within the district.

- Set a good example through dedication, reliability and job performance.

- Know the locale including the role of all government and volunteer agencies that could be involved in an emergency.

The Emergency Coordinator (EC)

The ARRL Emergency Coordinator is the key team leader in ARES on the county or similar level. Working with the SEC (or the DEC, if one exists), the EC prepares for, and manages overall communication activities during disasters.

General Organization:

To be effective, the EC must hold periodic meetings with his team for training and discussion. Meetings *do not* have to be monthly, but should be *often enough to meet the training and operational needs of the group and its mission*. Each meeting should have a specific and valid purpose, or team members will stop participating.

Organizational duties of the EC:

- Appoint assistant ECs (AEC) for specific towns, cities, or tasks.
- Maintain a current roster of team members denoting the skills, equipment and availability of each.
- Develop a notification system for drills and emergencies, with backup methods.
- Issue and cancel ARES identification cards (may also be done at District or Section level in some areas).
- Recommend Official Emergency Station (OES) candidates for appointment.
- Develop an emergency communication planning committee of all local agencies that would be involved in a disaster. Special emphasis should be placed on agencies with which ARRL has agreements (e.g., American Red Cross, Salvation Army, APCO, NCS, NWS, FEMA), and any other local communication response groups such as REACT.
- Provide served agencies with contact information to allow for activation, and for general communication between the agency and ARES
- Submit regular reports to the SEC and DEC covering ARES news, achievements, events, problems and contacts with served agencies
- Provide prompt "after-action" reports to affected agencies as well as to the SEC and DEC following incidents and drills.

Planning:

The EC is responsible for developing all emergency communication plans for his area. He works with representatives of served agencies, the SEC or DEC, NTS, and his volunteers to see that a plan is developed that will allow the group to respond efficiently and effectively when an emergency occurs. This does not mean that he has to do it himself - only that he is responsible for getting it done. An effective EC learns to delegate much of the work to others.

Recruiting and Training:

One of the EC's most critical jobs is recruiting and training a team of effective emergency communicators. It is impossible to overstate the importance of a well-trained, dedicated, and involved team.

Training begins with a comprehensive plan such as this one, but must also include:

- realistic drills and simulations
- regular training nets for traffic handling and net procedures and
- occasional classroom sessions and workshops to develop specific skills needed to make the plans work.

The EC's job is to build the organization that makes all these things possible.

Emergency Operations:

In time of disaster, the EC coordinates the response efforts of his team. He continually evaluates the communication needs of the served agencies and responds quickly to new challenges.

The EC is responsible for all the volunteers who serve in his organization and their interactions with other agencies and the public. He must deal with any interpersonal or public relations issues that come up, either personally or through a qualified assistant.

The EC also works with other non-ARES communication provider-groups to establish both mutual respect and understanding and a coordination mechanism to foster an efficient and effective overall communication response.

Emergency Assistant Positions:

There are just too many tasks involved with the operation of a busy ARES organization for one person to handle. The ARRL field organization allows for other appointees to assist the SEC, DEC and EC. In years past, most of these functions were assigned to an Official Emergency Station (OES). Many Sections now use direct "assistants," such as an Assistant Emergency Coordinator (AEC), instead. This provides a more conventional management structure that is more compatible with the Incident Command System (ICS). The choice is up to the SEC.

The OES's can also be assigned to specific functions under an assistant-level leader. For instance, if the SEC appoints an "ASEC for Net Management," the ASEC may then assign a particular OES handle a specific net, node, or packet BBS.

ASEC, ADEC, AEC, and OES Assignments

Functions assigned may include, but are not limited to, the following six major areas of responsibility:

Operations - Responsible for specific, pre-determined operational assignments during drills or an actual emergency. Examples include:

- Serve as NCS or net liaison for a specific ARES net;
- Manage operation of a specified ARES digital BBS or MBO;
- Operate the station at a specified emergency management office, Red Cross shelter or other served agency operations point.

Administration - Responsible for specific, pre-determined administrative tasks assigned by their ARES superior. Examples include:

- Recruit ARES members
- Serve as liaison with the Public Information Officer to coordinate information for the media
- Maintain ARES registration data base and/or victim/refugee data base
- Manage equipment inventory
- Conduct training
- Undertake post-event analyses and develop reports

Liaison - Responsible for specific, pre-determined liaison responsibilities as assigned by the EC or DEC. Examples include maintaining:

- Contact with assigned served agencies
- Liaison with specified NTS nets
- Liaison with ARES officials in adjacent jurisdictions
- Liaison with ARESMAT or "rapid response" teams

Logistics - Responsible for specific, pre-determined logistical functions. Examples include:

- Procure and manage transportation such supplies as food, fuel and water.
- Procure and maintain core operating elements such as antennas, batteries, computers, generators and radios.

Management Assistant - Responsible for serving as an assistant manager to the EC, DEC or SEC for specific functional assignments or for geographic areas of jurisdiction.

Consultant - Responsible for providing expert advice or recommendations to ARES officials involving a specific area of Emcomm expertise.

- Technical areas, such as digital communications or management software
- Operational issues such as were encountered during Hurricane Katrina.
- Human resource issues, such as morale and volunteer welfare planning

In general, this is an excellent position for former SECs and other higher level or experienced former appointees.

Assistant Section Emergency Coordinator (ASEC):

The SEC has a broad range of responsibilities, too many to handle on his own. By assigning ASECs to handle specific tasks, he multiplies his effectiveness. An ASEC may have responsibility for training, logistics, liaison with specific agencies at the Section level, or a variety of other tasks. For instance, many Sections have an ASEC-Red Cross, an ASEC-State Emergency Management, an ASEC-SKYWARN, and an ASEC-Training. The ASEC is a staff assistant and not presently an official ARRL appointment.

Assistant District Emergency Coordinator (ADEC):

While less frequently assigned than ASECs, ADECs also multiply the effectiveness of the DEC by taking responsibility for specific, assigned tasks. The need for ADECs varies with the section's organizational requirements. For example, if training is handled at the District level, an "ADEC for Training" may be assigned. The ADEC is a staff assistant and not presently an official ARRL appointment.

Assistant Emergency Coordinator (AEC):

AECs contribute to the success of the local ARES Team by filling a number of needs. Few ECs can effectively function without them. For instance, he may appoint an AEC to handle a city, a group of smaller towns, or a specific served agency. Other AECs might handle training, logistics, local net management, recruiting, public information, or agency liaison. AECs are appointed by their EC.

Official Emergency Station (OES):

The OES is appointed to handle specific functions designated by the EC. The OES and the EC develop a plan for the OES that makes the best use of the individual's skills and abilities.

During drills and actual emergency situations, the OES is expected to conduct their assigned duties with a high degree of professionalism and with minimal supervision.
The appointment may be made by the:

A) Section Emergency Coordinator (SEC) or

B) Section Manager (SM) at the recommendation of the EC (or DEC if there is no EC).

The OES must be an ARRL member and must demonstrate high standards of emergency preparedness and exceptional operating skills. The OES is expected to make a more active commitment to the ARES program than the average ARES member.

The requirements and qualifications for the position include the following:

- Full ARRL membership
- Experience as an ARES team member
- Regular participation in the local ARES organization including drills and tests
- Participation in emergency nets and actual emergencies

For more information on qualifications, please visit the ARRL website.

Section Staff and Support Positions:

In addition to ARES resources, the Section Manager employs other individuals to assist in various day-to-day operations. During an emergency, these individuals may be called upon to assist ARES management.

Section Traffic Manager (STM):

The STM is appointed by the Section Manager to coordinate all Section-level formal traffic handling efforts. Tactical nets are not generally managed by the STM, but by the ECs or their assigned Net Managers. The main responsibilities of the STM are to ensure that formal traffic flows efficiently within the Section and to and from affiliated networks and digital traffic nodes. The SEC must work with the STM to ensure that the net structure is adequate to meet the needs of the served agencies.

State Government Liaison (SGL):

The State Government Liaison (SGL) is an Amateur who keeps abreast of state legislative and regulatory proposals. The SGL also responds appropriately to those proposals which can affect Amateur Radio. This is an active, responsive mission, not merely a passive, "stand by the sidelines and watch" function. The SGL also works closely with the SEC and ARES staff to ensure that any new state legislation dealing with emergency response and communication preserves the role of ARES in assisting its served agencies.

Public Information Coordinator (PIC):

The ARRL Public Information Coordinator (PIC) is a section-level official appointed by and reporting to the Section Manager (SM). The PIC serves as the Section's expert on public information and public relations matters. The PIC is also responsible for organizing, training, guiding and coordinating the activities of the Public Information Officers (PIOs) within the Section.

Public Information Officers (PIO):

Public Information Officers (PIOs) are appointed by and report to the ARRL Section Public Information Coordinator (PIC). The appointment is generally based on the recommendation of an affiliated club and approved by the Section Manager (SM). PIOs are usually club publicity chairpersons and must be full ARRL members.

During an emergency, the PIO can act as the local ARES Team’s point of contact for the press, providing information on the Amateur Radio contribution to the relief effort. PIOs should restrict their comments to Amateur Radio and never comment on the efforts of served agencies. Served agencies have their own public relations staff to handle such questions.

Official Observer Stations (OO):

The Official Observer program helps Amateurs to keep their transmitting equipment and operating procedures in compliance with the regulations. The mission of the OO program is to notify Amateurs by mail of operating/technical irregularities *before* they come to the attention of the FCC.

The OO works closely with the FCC's Amateur Auxiliary. Where hard-core violations of FCC rules are encountered, OOs refer problems to the Amateur Auxiliary and may assist in collecting evidence for possible FCC enforcement actions. OOs may be certified to become a member of the Auxiliary. To gain such certification, each OO must pass a formal examination.

In time of emergency, OO stations and the Amateur Auxiliary can assist in tracking down intentional or unintentional interference to nets. They can also help to resolve interference issues.

Emergency Activation and Nets

Alerting and Notification

Levels of Alert

When a disaster strikes or threatens any Alabama community, affected ECs and DECs may invoke any of four levels of alert of their ARES organization:

WHITE ALERT (Standby)

WHITE ALERT notifies ARES members in a specified area (such as a County or District) or functional unit (such as a net) that their services may be needed on short notice in the next 24-48 hours. It is typically issued by the SEC or, occasionally by DEC, or EC. The alert may apply to the entire Section or to specific Districts or Counties. But omission of any area does not prohibit others from taking whatever precautionary steps may be appropriate.

The SEC usually does not issue a follow-up order raising the alert level but leaves that step to the ECs or DECs in the affected areas. A WHITE Alert declaration signals DECs that they should alert ECs, "jump team" coordinators, Net Managers, and other key ARES officials to prepare for short-notice calls. All members in the alerted Districts or Counties should monitor ARES net frequencies and keep closely in touch.

Alerted ARES members should prepare to be en route to duty posts within two hours or less of being assigned. Preparations may include updating "ready-kits," arranging to take time off from work, fueling vehicles and power generators, charging batteries, obtaining stocks of expendable batteries and testing emergency-related portable equipment

Nets operating in White Mode customarily run in "free mode," i.e., they are not directed. ARES members and officials should monitor the appropriate frequencies for information and for possible increases in or cancellation of the alert status.

ORANGE ALERT (Condition Orange)

Orange ALERT is descriptive of operational status. It is usually issued by DECs or ECs and designates nets, OES activations; jump teams, and such, to perform specific tasks. The alert level becomes Orange in a County or District when specific duty posts are staffed and become operational. A net typically "goes Orange" when a net control operator opens the net.

A DEC may place any District or local net or other operating unit (such as a jump team or County EOC ARES staff) in his District on Orange Alert. Most emergencies, even severe ones, can be handled without ever going beyond Orange.

RED ALERT (Condition Red)

RED ALERT Is the highest possible level of alert in an ARES operation. It is useful for maintaining tight control over HF circuits where heavy traffic and large numbers of stations are causing communication problems.

When distress traffic is being handled on any ARES net or frequency, the alert level is automatically Condition Red and remains so until all distress traffic has been cleared.

Red Alert can be invoked at the Section level only by the SEC or SM. It is the only alert level under which the SEC or SM will consider asking the FCC to clear a frequency.

Red Alert is declared by issuance of a Priority bulletin to be transmitted on all active ARES frequencies. It applies solely to nets and geographic areas designated in the formal order. A District EC can put his District on Red Alert by declaration, but he must advise the SEC or SM of his action in advance or, if this is impossible, immediately upon taking the action.

The bulletin specifies the date and time Red Alert operation is to begin. It should designate the net or nets and/or the geographic area (County or Counties, District or Districts, Section, etc.) to which it will apply. Nets or areas NOT designated in the bulletin will continue in whatever level of alert prevailed before the Red Alert began.

BLUE ALERT (Condition Blue)

Blue Alert Authorizes DECs and ECs to begin the stand-down phase of the activation. BLUE is permissive only; it does not *require* that operations be shut down in the specified area. It simply advises the designated DECs and/or ECs that no apparent reasons exists for continuing operation unless they have local requirements. The DEC and EC then may reduce operating hours, restrict operations or close down designated nets as the emergency passes and traffic loads subside.
Only the SEC (or SM) may invoke a Blue Alert for a Section net, or if more than one District is involved in the emergency operation, because specific DECs or ECs may not be aware of conditions elsewhere that might require their support.

A DEC can invoke a Blue Alert in the District net if the emergency- operation involves only his/her own District and no Section net is in operation.

NO ALERT (Condition GREEN)

Condition Green is the normal state of Amateur communications. No state of alert or emergency exists.

Net Operations

The Alabama traffic net system embraces many kinds of nets, using many modes of communication. They operate around the clock, seven days a week, on a wide variety of schedules.

The Section nets in Alabama embraces those of the National Traffic System (NTS) as well as a other nets such as the Alabama Emergency Net, the Alabama Traffic Net "Mike", and various other nets including those operating in digital modes.

In addition, a great many VHF and UHF local or semi-local nets operate all day, 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, though they may be seldom, if ever, 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.

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, on any frequency is strongly recommended as a way to become familiar with nets and how they operate. The discussions below refer to and recommend procedures for Alabama ARES affiliated circuits; however, most of these procedures work quite well in any well-disciplined traffic or emergency net.

Emergency nets function both as traffic nets and as an ARES official liaison nets. A Section NTS net frequency becomes an emergency net frequency when the SEC or Net Manager alerts the Emergency Net During operation the net uses the name "Alabama Emergency Net."

The Net Manager

Every organization needs an executive level manager to oversee the entire operation and ensure that everything runs smoothly. Depending on the type of net, the Net Manager (NM) will be responsible for recruiting and training Net Control Stations (NCS) operators, liaison stations, and other net members. The Net Manager sets up the net's schedule and makes sure that one or more qualified NCS operators will be available for each session of the net. In a long-term emergency net, the Net Manager may also arrange for relief operators and support services.

The NCS

Think of the Net Control Station (NCS) as a "ringmaster" or "traffic cop." The NCS decides what happens in the net, and when. If the EOC has a Priority message for Red

Cross Shelter 1, and Medical Station 4 has an Emergency message for Mercy Hospital, it is the NCS's job to make sure that the Emergency message is sent first. He decides when stations will check in, with or without traffic, and whether messages will be passed on the net frequency or a different one. The NCS needs to be aware of everything going on around him and handle the needs of the net, its members, and served agency as quickly and efficiently as possible. It can be a daunting task in a busy and challenging net.

The NCS can be located anywhere, but should be in a position to hear most, if not all, stations in the net. This helps avoid time consuming "relays." Some groups place their NCS at the EOC or command post, others like to keep them away from the noise and confusion.

The NCS is in charge of a specific net, but should not be responsible for the entire emcomm operation. That is the job of the EC or similar emcomm manager. It is not possible to be in command of all aspects of an emergency response, and still run a net effectively, since both jobs require 100% of your attention.

Net Scripts and Preambles

Many groups open and close their nets with a standard script or preamble. The text of the script lets listeners know the purpose and format of the net. Using a standard script also ensures that the net will be run in a similar format each time it operates, regardless of who is acting as the NCS.

The Backup NCS

A backup NCS needs to be readily available should there be an equipment failure at the primary NCS location, or if the primary NCS operator needs to take a break There are two types of backup NCS. Both are appointed by either the Net Manager or the primary NCS, depending on the situation. All members of the net should be made aware of the backup NCS assignment early in the net's operation.

The first type is at the same location as the primary NCS operator. The second is a station at a different location that maintains a duplicate log of everything happening during the net. Whenever possible, an offsite backup NCS should be maintained, even if an on-site backup is present. This is especially important during an emergency where antennas can be damaged or power lost. Equipment can fail even during less demanding operations.

Acting as a "fill-in" NCS

Even before you have had a chance to be trained by your group to act as a NCS operator, an opportunity might arise for you handle the job temporarily. During an emergency, anyone and everyone can be asked to take on new and unfamiliar tasks in order to deal with a rapidly changing situation. Fortunately, basic NCS skills are not difficult to teach or learn. Here are some basic dos and don'ts:

- Remember that although you are in control of the net, you are not "God." Treat members with respect and accept suggestions from other experienced members.
- If you are taking over an existing net, try to run it much as the previous NCS did.
- Always follow a script if one is provided. Write your own if necessary.
- Handle messages in order of precedence: Emergency - Priority - Welfare.
- Speak clearly and in a normal tone of voice. Use good mic technique.
- Make all instructions clear and concise, using as few words as possible.
- Keep notes as you go along. Do not let your log fall behind.
- Write down which operators are at which locations. When one leaves or is replaced, update your notes.
- Ask stations to pass messages off the main net frequency whenever possible.

All the reading and study in the world will not replace actual experience. You should look for opportunities to practice being the NCS operator well before an emergency occurs.

Duties of co-managers during emergency operation:

- Overall supervision of the net's operation to maintain net discipline and efficiency.
- Reporting to both the SEC and the appropriate DECs if an activated District is not consistently represented in the net by OES stations.
- Suggesting measures to the SEC to improve the existing ARES operation.
- Selecting and assigning Net Control operators to keep the net going for long hours.
- Arranging relief for NCS operators at reasonable intervals.
- Replacing NCS operators who cannot maintain effective control of the net.
- Reporting immediately to the SEC or SM any deliberate interference or persistent destructive interference of any kind.

- Advising the SEC or his designee immediately of any disruption of net operations that the manager can't immediately handle.

- Making sure that NCS operators adhere to guidelines for identifying OES stations and use them appropriately.

- Calls of NCS operators and their times on and off duty.

- Net frequency.

- Changes of band conditions and interference levels.

- Number of Priority messages handled by the net during each NCS duty shift.

- Suggestions for further NCS and net member training.

- Suggestions for changes in standing net procedures.

Writing prompt reports after emergency net operation ceases, using log entries and other available information including problems, hours of operation, and outstanding participation by an individual. Copies of this report should go by email to the SEC, SM, STM and the other net co-manager as the manager's shift ends. These reports should be used to guide discussions on subsequent sessions of Alabama Nets for training and for distribution via the AL ARES home page on the World Wide Web and via the ARES email list.

Frequencies

Section-wide coverage during an emergency is normally maintained using frequencies on 40m or 75/80m bands in both the phone portion and the digital portions of each band plan. 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 for reasons such as band congestion or poor atmospheric propagation conditions, the Net Manager on duty at the time decides whether to move the net and if so, to what band, frequency, and mode.

The manager, after consulting the SEC, may also opt for running simultaneous sessions on two bands at once, or he may set up direct "hot-line" circuits for special purposes. For example, if conditions are unfavorable on 40 and 75/80 meters, a digital circuit might be set up on an arbitrary frequency, perhaps on 30- or 160-meters, or via APRS, WINLINK2000, PSK31, PSK250RC3, or other digital modes, thus maintaining contact with critical locations while the net itself continues to operate on one of its normal frequencies.

The following table is a list of all available nets in Alabama. This list is a dynamic listing and is subject to change. Refer to the Alabama ARES web site for an up to date list.

Table III

ALABAMA SECTION EMERGENCY NET FREQUENCIES

NET Name	Frequency	Mode	Time	Day
Alabama Emergency Net – Phone Pri	7243khz	LSB	2100Z	Sunday
Alabama Emergency Net – Phone Sec	3965khz	LSB	2100Z	Sunday
AL Digital Emergency Net – Primary	7110khz	USB	2030Z	Sunday
AL Digital Emergency Net – Secondary	3570khz	USB	2030Z	Sunday

Note: The digital net using APRS, WINLINK2000, PSK31, PSK250RC3 using FLDigi and FLMsg. When internet is available, D-Rats using the drats.auburn.edu server or when using RF, Reflector 058D.

D-STAR: The Alabama D-Star Reflector is 058B for the Alabama Emergency Net.

IMPORTANT: For HF net operations, all stations should listen on the primary 40m frequency at the times the net is scheduled. If there is nothing heard on the primary frequency, stations should switch to the secondary 80/75m frequency. This is the standard procedure for all operators participating in both the HF phone and digital nets.

Other Nets in the Alabama Section

NET Name	Frequency MHz	Time (CT)	Day
Alabama Baptist Emergency Net	7.260	1400	Sunday
Alabama Emergency Net J (AENJ)	146.610	1800	Daily
Alabama Emergency Net S (AENS)	147.380, 146.920, 147200	2000	Tuesday
Alabama Emergency Net W (AENW)	147.090	2000	Monday
Alabama Emergency Net Y (AENY)	147.160	2030	Tuesday
Alabama Emergency Net Z (AENZ)	147.270	1930	Monday
Alabama Day Net (ADN)	3.965	1000	Daily
Alabama Traffic Net Mike (ATNM)	3.965	1830	Daily
Alabama Traffic Net Mike (ATNM)	3.965	0800	Sunday
Alabama Section CW Net (ASN)	3.575	1900	Daily
Baldwin County Emergency Net	147.090	1900	Monday
Birmingham Amateur Radio Club Kid's Net	146.880	1900	Monday
Blount County Amateur Radio Club Net	146.700	2100	Sunday
Boll Weevil Net, EARS	147.240	2100	Tuesday
Calhoun County ARES/RACES Training Net	146.780	1900	Monday
Calhoun County Emergency Radio Club Net	147.040	1900	Thursday
Calhoun County NTS Traffic net	147.040	1800	Daily
Calhoun County Saturday Night Simplex Net	146.555, 446.500, 52.555	2000	Saturday
Calhoun County Amateur Radio Association	147.090	2000	Monday
Central AL SKYWARN net	146.840	1900	Thursday
Cullman 2 Meter NET	145.310	2030	Sunday
East Alabama 2-Meter Net	147.060	2000	Sunday
Etowah County Emergency Net	147.160	2130	Tuesday
Eva Amateur Radio Club	145.210	2000	Tuesday
Golden Gabbers Net	147.090	1330	M-W-F
Jackson County Amateur Radio Club	146.900	1900	Thursday
Jefferson County Emergency Net	146.880	2100	Tuesday
Limestone ARES	145.150	1900	Thursday
North Alabama SKYWARN	146.960, 147.240, 147.360	2000	Thursday

North East Alabama Six Meter NET	50.150 USB	2100	Week Nights
North East Alabama Six Meter (AM) NET	50.400	1900	Friday
Madison County Emergency Net	146.940	1930	Thursday
M.A.R.C. W4IAX club net	146.820	2000	Wednesday
Marshall County Auxillary Radio Services Training Net	145.110, 147.380, 146.920	2030	Tuesdays
Marshall County SKYWARN	147.380, 146.920, 147200	2000	Monday
Mobile County ARES Nets	146.940	1900	Tuesday
Mobile County Amateur Radio Club net	444.500	2130	Thursday
Shelby County ARES Net	146.980	2000	Tuesday
St. Clair County ARES Emergency Training Net	145.130	2000	Tuesday
South East Linked Repeater Net Fort Payne	147.270	2000	Wednesday
South Alabama Radio Club 2-Meter Net	147.260 + (100hz)	1930	Thursday
Talladega County ARES/RACES Training Net	146.805 - 131.8	2000	Thursday
West Alabama Emergency Net	146.820	2030	Sunday
2 Meter SSB Net	144.225 MHz USB	2100	Saturday
6 Meter AM Net	50.415 AM	2000	Friday

The Emergency Net may operate simultaneously on both 40m and 80/75m, each with its own Net Control and its own set of side frequencies. The "primary net" is where net control is. Frequencies on either side of the primary net used for exchanging traffic, are called "secondary nets" or "side frequencies." The primary frequency and all its secondary frequencies are referred to collectively as "the net." Each net is called the "Alabama Emergency Net." They are distinguished from each other by reference to the band.

During simultaneous operation on two or more frequencies, the NM has overall responsibility for both nets, and designates an Assistant NM to supervise operations on the others.

Secondary Nets

Traffic should not be handled on the primary frequency of the Emergency Net except during periods of light activity. If the net frequency becomes continuously busy, it blocks the listing and dispatching of traffic and the conduct of other business.

Mobiles and other weak stations may have trouble being heard. If the net is handling much traffic off-frequency, the NCS or Net Manager should consider designating a separate frequency, a secondary net for use by stations handling this traffic. And if a

waiting line develops on the secondary net additional frequencies may be added to accept the overflow.

If operation is in Condition Red, and if FCC has declared a "voluntary communications emergency" for AEN operation, these secondary nets should be operated within the channel specified by FCC. Very rarely, it may be necessary to ask FCC to widen the protected channel to make room for the additional net frequencies.

Spontaneous Nets

Under FCC regulations and international law, any person may use any available means at any time to summon help in an emergency. Any person may initiate emergency operations on any frequency. If this occurs in an Amateur band, control of the resulting net will rest with the station at the scene until a fixed-station operator can assume net control. A spontaneous net of this kind is not necessarily an ARES net however. ARES officials should be careful not to intrude if the net is already functional and getting the job done. ARES members should simply monitor the frequency and offer whatever aid is appropriate without disrupting the operations. If an ARES member or ARES official started the net however, or was requested by the station at the distress scene to assume control, the net should adopt standard ARES procedures.

Nets may also be activated by ARES officials on their own initiative or upon request from any agency supported by ARES. Each EC and DEC must have a well-designed plan for alerting local nets and ARES members. The highest ranking Alabama ARES official active in the operation will usually assume over-all control and should designate a temporary net control (if the scene is in Alabama). Some Amateur Radio nets not affiliated with the ARRL or ARES operate in support of ships at sea, or of missionaries in Third World countries. Individual ARES members are encouraged to monitor these nets and to assist when possible with any distress traffic. However, they should remember that these nets are NOT ARES nets and their leaders may not need or want other parties involved.

Counties and Districts may be partially or fully alerted by their ECs and DECs as necessary. Local VHF and UHF repeaters are commonly used for emergency nets and usually require no special alerting. Any EC or Assistant EC may put a County net on White or Orange status at any time, consistent with the County and District emergency plans. If the operation seems likely to continue for more than a few hours, the EC should notify the DEC, briefly describing the nature of the emergency. The DEC may extend the alert to other Counties in his district at his/her discretion.

Any DEC or assistant may put the District net on emergency status at any time, consistent with the District and Section emergency plans. The DEC will notify the SEC immediately by radiogram, email or telephone of any District operational alert Section HF net frequencies may be used in emergency at any time by ARES members or officials consistent with other emergency communications that may then be in progress on the frequency. Use of the net frequency is not the same thing as establishing an emergency net. When a local or District ARES official begins emergency use of an HF circuit, the

SEC and Net Manager should be notified immediately by radio or landline. The SEC may (or may not) designate the ad hoc net as an emergency circuit at his/her discretion. The SEC or his designee will promptly notify the Section Manager, Net Manager and STM of any formal activation of the Section Emergency net on an NTS net frequency.

Recruiting and Relief

Once the operation is under way, it may be brief, or it could last for days. Relief operators must usually be recruited and scheduled for ARES operations that last more than a few hours. Keeping each active operating position filled during a long operation is a necessary but time-consuming task that should not be allowed to interfere with the EC/DEC's other duties. Such recruiting is best conducted by the Administrative AEC the one who keeps the ARES membership records and sends monthly reports to the DEC. If an EC believes he will exhaust the pool of reserve operators, he should advise the DEC and request reinforcements from other counties. If reserves within the District have been depleted, the DEC must advise the SEC of the need so that other Districts can be tapped for assistance. Every effort should be made to assign trained, experienced ARES members to critical posts, avoiding "walk-ons" of unknown ability. Any "broadcast" recruiting by public announcements must be authorized by the SEC. Operators recruited by such methods can create more problems than they solve. ARES members will be given an assignment and the operator must never self deploy.

Net Control

Net control should not be located in a disaster area, where it could suffer too adverse factors. Rather, NCS should be located so as to hear stations in the impacted area as well as possible.

The Net Manager should select net control operators on the basis of signal quality and strength and operating skills, and should take propagation into account. NCS will appoint relay stations as necessary.

A two-hour emergency-net control shift is the norm, but the NM will adjust this duty cycle as convenience and necessity require. OES stations should not be used as NCS, except perhaps during very slow activity hours, or when their OES services are not being utilized.

If destructive QRM occurs on an emergency net frequency, the SEC should be notified promptly by telephone or radio (but not on the net frequency). If the NCS is unable to move the troublesome station by polite request, the SM may ask the FCC to intervene.

Monitor Mode

During a WHITE Alert, each regular Section Net continues its accustomed meeting schedules. No NCS is usually assigned to 3965 KHz when formal nets are not in session, but ARES members are asked to monitor the frequency as convenient, in case an activation should develop. Chit-chat, long silences and short random QSOs have their

usual place on the frequency. That is "Monitor Mode" operation. It saves the energies of NCS operators and others for use when they are needed.

Directed Mode

When AEN is activated, its alert status changes to ORANGE. At that point, the net shifts to "directed mode" and a Net Control operator designated by the Net Manager assumes control of the frequency in the name of the Alabama Emergency Net. Thereafter, for the duration of the activation, stations wishing to contact other stations through the net must first access Net Control by saying "Net Control" or "Net Control from KG4ZZZ" and waiting for NCS to reply.

During directed operation, NCS calls a roll of OES stations in activated Districts at least hourly depending on the level of activity. NCS will ask all stations to listen for weak signals, but net control operators should not maintain a constant chant, even when the frequency would otherwise seem idle be-cause of slow business or quirky conditions.

Constant transmissions can interfere with stations trying to contact the net. In order to keep the primary net frequency as uncluttered as possible, it is used primarily as a dispatch frequency. Stations with Welfare and Priority traffic are normally sent to a side frequency to handle it.

Distress calls made on the primary net frequency, however, are always handled on that frequency and all other net business ceases until the distress traffic is cleared. Net status automatically shifts to Directed Mode, Condition RED, until all distress traffic has cleared. If the activity level is very low, the net frequency is maintained primarily for formal Priority traffic or tactical traffic (i.e. ARES coordination). See "Policies and Definitions" section above. If curious operators ask what's going on, NCS should have a brief, "canned" response ready, such as: "We're supporting the National Weather Service in a weather emergency. "

NCS should respond immediately if other stations, not realizing the frequency is occupied, try to begin operation there. A polite but firm request to respect the emergency frequency is usually all that's required. A slight shift in frequency by the emergency net should be made if reasonably necessary. The SM or SEC should be notified if interference becomes destructive and persistent or seems to be intentional. If the NCS is unable to move the troublesome station by polite request, the FCC may be asked to intervene.

The Official Emergency Station System

Every OES station serves the entire District.

All that's necessary to send a message from a county EOC to anywhere outside the County is simply to send it from the County EOC to a District OES station. That station has both a two-meter radio on the District Net and an HF station on AEN. The two-meter operator just hands the message to the HF operator, or vice versa. Within minutes the

message has passed to an HF OES on AEN and has been delivered by telephone or email. OESs may be clustered in or near major urban areas or they may be dispersed anywhere in the District within range of the VHF District Net. Either way, the function is the same, with the District Net playing the central role. In a few cases, a DEC may find it necessary to operate the District Net on two different repeaters because of propagation, technical repeater problems, or stubborn geography. In such cases, OESs might link the repeaters via voice relay on either HF or VHF.

All OES operations in each District are managed by the DEC through ADECs.

Selecting OES Stations

HF OES stations are designated Amateur Radio stations by the DEC for the district. They may use voice or digital modes or both, depending on the assignment including APRS, AMTQR/APLINK, packet and CW. They should be capable of high-quality performance, with good signals that under normal conditions cover the entire Section and beyond.
Selection and recruitment of OES Stations are responsibilities of the District Emergency Coordinator.

OES stations may be located anywhere within range of the VHF District Net in homes, club stations or any site where good antennas and 24-hour operation are feasible. They may be located at public sites such as the County EOC. The SWP will not be considered to be, or used as, a OES station. It will receive traffic from EOCs (usually the Clanton EOC) and pass traffic from the AEOC to OESs.

No matter where sited, the station must serve the whole ARES system not just its home County or District or some specific agency or organization. In any high-performance station, the antenna is the primary consideration. The best station cannot be effective when driving a poor antenna; yet a modest station with a high-performance antenna can be extremely effective. An OES should have a minimum power output capability of 100 watts, and 500 watts or more is highly desirable under poor propagation conditions.
Emergency power is highly desirable to run the station at reasonable output. However, not all OESs need full-scale auxiliary power if operation can be shifted when necessary to a backup OES with either commercial or emergency power.

An OES cannot function without VHF links to the County EOC and other local points designated by the EC or DEC.

ECs are strongly encouraged to use the County and District VHF nets and avoid using HF at all, if possible, for local communications. This reduces congestion and confusion on the HF Emergency Net and expedites all traffic. It also reduces demands on Counties with scarce personnel better used on other assignments.

The Digital Traffic System

The APRS Connection

The Amateur Packet Reporting System APRS - is a digital technology based in packet radio, but automatically relaying its messages. Unlike conventional packet it thrives in either a VHF, UHF or HF environment virtually in real time, using digipeaters on the nationally assigned frequency in the United States on 144.390 mhz FM.

Using UI-View32 or similar client software along with a mapping program such as Precision Maps, Street Maps USA, and others, APRS displays a map on a computer screen, showing the location of each transmitting station it hears. This can include all kinds of moving stations land mobiles, boats, aircraft; even the Space Shuttle. The icon moves across the map as the mobile progresses. If the transmitting station sends a text message, those receiving the signal can read the text by clicking the icon. A very good companion to UI-View32 is UI-Messenger that presents your messages in a convenient and easy to use window with a customizable contact list.

The map can be "zoomed" to show any desired piece of real estate, from the whole country to a few square blocks in a city or the streets of the smallest towns.

Since the signals are "digipeated" i.e., automatically passed along to distant digipeaters (digital repeating stations) and other receiving stations an APRS net can cover large geographic areas. If these areas overlap coverage of, say, an HF emergency net APRS can be a useful back-channel for the net filling gaps caused by the vagaries of HF propagation.

Additionally, UI-View32 can connect to an APRS server over the internet and send all real-time reported locations to an operator's station over a wide region. Messaging can be done over internet or RF if in range of an "Internet Gateway", an APRS station that reports all of the stations that it hears to an internet server. There are many "I-Gates" in all states and can be recognized by the diamond symbol on the with an "I" in the center.

APRS can run in parallel both with regional VHF nets and Section-wide HF nets, covering portions of the same geography at the same time. This allows OES operators on AEN, for example, to communicate directly with each other via APRS without disturbing the HF operation. No net control is required for APRS.

When APRS and voice nets run in parallel (overlapping some of the same geographic coverage), the voice NCS can easily monitor APRS visually at his operating position as the voice net proceeds. If NCS does not have APRS capability, he can designate an APRS-equipped station to relay information to the voice net as appropriate.

APRS is especially useful in real-time severe weather reporting. As each station reports its weather, its icon pops upon the map on the APRS receiver at the National Weather Service, and its weather dab can be extracted by the click of a mouse.

Wide geographic distribution provides an excellent idea of the extent of the weather being reported.

Message Handling

Voice communications take two basic forms in nearly all operations in which ARES plays a part:

"Tactical" – Direct (person-to-person), or "Formal – Sent through a third party to reach its intended addressee. Tactical ("informal") communications are useful and necessary. They allow an EC to speak directly over the air with ARES members or with the DEC.

Formal communications must be used when information is passed through any third party to reach its destination. Sometimes it is desirable to a standard message form just to preserve a record of what information was sent and received even when no third party relays it.

Alabama ARES has adopted two standard message forms, namely, the **ARRL Radiogram** for phone nets and the **ICS NIMS IC-213** for digital communications on HF using FLDigi and the companion program message form handler FLMsg. FLMsg has many built-in forms including the ARRL Radiogram and IC-213 and stores all sent and received messages in file on the user's computer. The messages can be printed out as needed by the operator.

Formal radiograms, however, are basic to virtually all ARES assistance to third parties. That's because, when people's lives and property are at stake, any risk of misunderstanding, or of transmitting erroneous information is close to intolerable.

Message text should be written in plain language as much as possible. When relaying, passing or delivering messages it is most important that the message is passed exactly as it is received.

The NIMS/ICS ICS-213 Form used by most Served Agencies

GENERAL MESSAGE		
TO:	POSITION:	
FROM:	POSITION:	
SUBJECT:	DATE:	TIME:
MESSAGE:		
SIGNATURE:	POSITION:	
REPLY:		
DATE:	TIME:	SIGNATURE/POSITION:

SAMPLE ARRL RADIOGRAM FORM

The American Radio Relay League
RADIOGRAM
Via Amateur Radio

Number	Precedence	HX	Station of Origin	Check	Place of Origin	Time Filed	Date

To:

This Radio Message was received at:

Amateur Station_____ Date_____
Name_____
Street Address_____
City, State, Zip_____

Telephone Number:

From	Date	Time	To	Date	Time
REC'D			SENT		

A licensed Amateur Radio Operator, whose address is shown above, handled this message free of charge. As such messages are handled solely for the pleasure of operating, a "Ham" Operator can accept no compensation. A return message may be filed with the "Ham" delivering this message to you. Further information on Amateur Radio may be obtained from ARRL Headquarters, 225, Main Street, Newington, CT 06111.

The American Radio Relay League, Inc. is the National Membership Society of licensed radio amateurs and the publisher of QST Magazine. One of its functions is promotion of public service communication among Amateur Operators. To that end, The League has organized the National Traffic System for daily nationwide message handling.

The American Radio Relay League
RADIOGRAM
Via Amateur Radio

Number	Precedence	HX	Station of Origin	Check	Place of Origin	Time Filed	Date
207	P	E	W1FN	10	LEBANON NH	1200 EST	JAN 4

To:
MARK DOE
RED CROSS DISASTER OFFICE
123 MAIN ST
RUTLAND VT 05701

Telephone Number: 802-555-1212

This Radio Message was received at:

Amateur Station_____ Date_____
Name_____
Street Address_____
City, State, Zip_____

NEED	MORE	COTS	AND	SANITATION
KITS	AT	ALL	FIVE	SHELTERS
		JOAN SMITH SHELTER MANAGER		

From	Date	Time	To	Date	Time
REC'D			SENT		

A licensed Amateur Radio Operator, whose address is shown above, handled this message free of charge. As such messages are handled solely for the pleasure of operating, a "Ham" Operator can accept no compensation. A return message may be filed with the "Ham" delivering this message to you. Further information on Amateur Radio may be obtained from ARRL Headquarters, 225, Main Street, Newington, CT 06111.

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Message Precedence

ARRL prescribes four message precedence: Routine, Welfare, Priority and EMERGENCY (equivalent to SOS or MAYDAY). In every ARRL radiogram, a "precedence" indicator follows the message number in the preamble. Net Controls must observe message precedence when dispatching traffic.

Routine

Nearly all of the day-to-day messages handled on the National Traffic System (NTS) carries a Routine ("R") precedence. Routine traffic is generally handled on any Alabama Emergency Net. It is not unusual, however, for inexperienced operators to assign a "Routine" to messages that should, in fact carry a "Priority" label. The NCS should ask if the traffic is related in any way to the emergency situation. If the answer is "yes," the operator holding the traffic should be instructed to reclassify it as "Priority" and offer it again Welfare messages (incoming or outgoing) carry a "W" precedence, a notch above Routine and a notch below Priority. They may be handled at the discretion of the Net Manager unless Priority traffic is pending, or the net is on Red Alert.

Welfare

Unfortunately, when an emergency net accepts even a few "W" messages, it sends a signal to scores of operators, who have been listening silently, that this is a chance to cram some inquiry traffic into the disaster area, triggering a landslide of welfare message listings. Welfare traffic is not included in the mission statement of the AL Emergency Net.

Independent nets often spring up specifically to handle welfare inquiries, and NCS should make a brief announcement about every hour that such nets are operating at a certain frequency.

People who try to push welfare inquiries close on the heels of a disaster may not realize that even a message that reaches its destination city may not be deliverable. Typically in the wake of a disaster, normal communications within the impact zone are disrupted. What local telephones are still working, including cellular, are invariably saturated with urgent emergency-related traffic. In addition, streets may be blocked, street signs and landmark buildings destroyed, and sometimes the area is infested with venomous snakes, making it extremely hard to deliver messages, even if spare personnel is available to try it. Welfare messages are not handled while Priority traffic is pending. Emergency nets handle no Routine traffic at all.

Priority

In emergency operations, most of the traffic handled on ARES nets will carry a Priority ("P") precedence, meaning that they are relevant to the existing emergency and therefore should be moved toward their destinations as rapidly as possible.
Since virtually all messages listed are designated "Priority", Net Control dispatches them

in any convenient order. But "P" traffic volume on some emergency nets can become quite heavy, meaning that some messages must wait in line behind others of (presumably) equal importance. For such situations, Alabama has adopted a fudged version of the Priority category. Two additional priority category's, "AEOC Priority" and a "Section leadership" category, which presumes that some messages are slightly "more equal" than others.

Messages originating at the Alabama Emergency Management Agency or addressed to AEMA, are handled ahead of other Priority messages. ARES OESs holding such traffic should list it that way with NCS, but message transmissions in progress will not be interrupted for AEOC Priority traffic either coming or going.

All emergency-related messages to or from the AEOC carry a Priority precedence. They should be listed with Net Control as "AEOC Priority." Such messages are handled ahead of other Priority messages on the net.

The "Section leadership" category would be a similar procedure as "AEOC Priority" and be designated "SEC Priority" or "SM Priority".

NOTE: The practice of using "BREAK" or "BREAK BREAK" to announce distress traffic should be strongly discouraged; it has no universally understood meaning. Always use the international standard "MAYDAY" to announce traffic of life-or-death importance. The standard CW signal is **"**SOS**,"** sent as a single character – *not* spaced as three letters.

EMERGENCY:

The word EMERGENCY is always spelled out. Use this for any message having life or death urgency. This includes official messages of welfare agencies requesting critical supplies or assistance during emergencies, or other official instructions to provide aid or relief in a disaster area. The use of this precedence should generally be limited to traffic originated and signed by authorized agency officials. *Due to the lack of privacy on radio, EMERGENCY messages should only be sent via Amateur Radio when regular communication facilities are unavailable.*

Serving Served Agencies

ARES exists for the purpose of providing supplemental communications for government and private organizations involved in emergency and disaster response and mitigation. Our field organization reaches all 50 states, as well as Puerto Rico and other island protectorates, territories. In Alabama, ARES groups serve all of the 67 counties including the other agencies that serve those counties.

When an agency asks Alabama ARES for communications assistance, it gets the full benefit of the entire ARES organization, including its nets, repeaters, mobiles and emergency power sources, as well as members' personally-owned radio equipment. Even more important than the equipment, the organizational structure includes cooperative planning with the agencies to learn their needs, training programs, and the services of scores of operators, few of whom are visible at the disaster site. When needed ARES members will be given an assignment and the operator ***must never self-deploy***.

ARES has good working relationships with most major disaster response agencies, both government and private. These are our "served agencies." But too often we fail to contact less conspicuous local groups whose needs are at least as great. Small units of city, county, state and federal governments, or volunteer agencies sponsored by churches and other community organizations, are easy to overlook. ARES planning must include consultation with their leaders, but first we must identify them and seek them out. This contact must be done before the need or disaster.

Small town and rural community organizations (volunteer fire and rescue departments, to cite one category), usually have single-channel radio systems – if they have any at all. Frequently they can't cooperate fully with similar agencies from other localities because their radios won't talk to each other! Similar problems tend to afflict sanitation departments, street and traffic-signal departments, school bus systems, hospitals and convalescent centers. ARES is designed to cope with such problems.

Support for AEMA

ARES procedures for support of the State EOC and Other Served Agencies apply in all areas of the state. During major critical situations, the Alabama Division of Emergency Management activates the State Emergency Operations Center (AEOC) in Clanton. The AEOC in Clanton has a fully-equipped station and can operate on all Alabama nets, it expects primarily to receive traffic from and send traffic to the state OES station(s).

AEMA and other Served Agencies sometimes offer assistance to other states stricken by disaster. When this happens, Alabama ARES may be requested to provide liaison back-up communications with ARES stations in the other states - usually in the Southeast.

Generally, the SEC asks the STM to work out or to recommend a liaison scheme, to get it done and report it back to the SEC. This is usually requested many hours before the circuits must be up and running, allowing ample time for planning and execution.

Situation Reports

AEMA staffers deal in what they term "SITREPs" - Situation Reports. These terse messages from disaster agencies are intended to provide the AEOC with updates at frequent intervals but they are often delayed. After evaluating SITREPS collected by ARES officials and provided to the AEOC/SWP at intervals, AEMA has asked ARES to continue the practice. The procedure described below is relatively simple in concept but it serves AEMA well and keeps the SEC and other ARES members better informed about the situation; relating to the emergency. SITREPs benefit not only AEMA and ARES, but our other served agencies as well. ARES officials will gather information about the emergency and transmit it to AEMA.

SITREP Procedures

First the SEC notifies specific DECs that SITREPs are expected every so-many hours, and lists the types of data needed. The interval may vary from hourly to daily. DECs not in the impact area might not be asked for SITREPs at regular intervals, at least at first. The DECs notify their ECs of the request with specific instructions as to types of data needed.

EC's SITREP duties

ARES operators assigned to the County EOC and other Served Agency locations are usually among the first activated. The EC will instruct each operator staffing those points to collect certain information and report it to the EC by radiogram on the County Net by a specific deadline. When the EC has collected the necessary data, he/she reports it to the DEC by the fastest means available

DEC's SITREP duties

Each County SITREP and each District SITREP must carry place, date and time so that no occasion arises as to when and where the report originated. Originating operators must sign their SITREP messages to the DEC. The DEC SITREP must retain citations of sources for each reported fact from the County SITREPs. Originating operators should retain copies of all SITREPS for a reasonable period in case they are needed for reference later. One year is a desirable minimum.

The DEC combines this information from all counties, and checks with the originating operators to verify anything that looks doubtful or incomplete before sending the composite District SITREP to the SEC and SM by the agreed-upon deadline. Speed - but not haste - is very desirable. SITREPs should not be held up for additional information. DECs should send what is available at deadline. Supplemental data can be sent along when it is available.

Planning and Testing

An ARES plan is basically a scheme for making the best use of limited ARES resources to provide maximum communications help to other emergency response organizations when they need it.

The Section ARES Plan

The Section Emergency Coordinator has full responsibility for writing, and revising, the Section Plan, after extensive consultation with the Section Manager, the District ECs, the Manager of the Section ARES Net, and the Section Traffic Manager.

The SEC is also responsible for getting the Section Plan printed and distributed to each DEC and EC, each Section-level ARRL appointee, the Field Services Manager of ARRL, the Section Managers and SECs of Georgia, Florida, Tennessee, and Mississippi, and agencies served by Alabama ARES.

District ARES Plans

Each DEC must develop a written ARES plan for his/her District subject to review by the SEC. The plan should permit the counties to operate independently in small emergencies but allow counties to cooperate smoothly with each other and to intermesh effectively with the District and Section ARES nets.

The District Net serves as the primary on-air ARES coordination and training circuit for the District. During emergencies it handles traffic among member Counties and between them and major agency headquarters (including the state Division of Emergency Management, the National Weather Service, National Hurricane Center, and Red Cross) outside the District.

The District plan must:

- List the Counties within the District.
- Describe procedures to be used by ECs to alert the DEC and other ECs in the District.
- List VHF/UHF frequencies to be used for communications between counties (the District net).
- Describe procedures for liaison with Section HF nets, including the use of OES stations. List specific locations requiring special attention when involved in emergencies.
- Describe any special measures required at each designated special site (e.g. a portable repeater, or special antenna arrangements).

In addition, the District plan must include the following verbatim portions of the current Section ARES plan: Definitions, Policies, Emergency Coordinator Alerting Procedures, OES System.

County ARES Plans

Each Emergency Coordinator (EC) must develop a written ARES plan for his/her County subject to review by the DEC. The plan should permit the County to function independently in local events, yet intermesh smoothly with the District and Section plans.

The county plan must: List AECs by title (not by name or call) and describe their duties. The EC should appoint an AEC for each major area of the ECs responsibility. Several duties may be combined in a single AEC in counties with few ARES members.

These duties include (but are not limited to):

- Administration (keeping records, making reports)
- Training and recruiting
- Liaison with each served agency
- Managing the County ARES Net
- Describe procedures to alert AECs and other ARES members for emergency duty.
- Describe procedures to alert the DEC and other ECs in the District as necessary.
- List Amateur VHF/UHF frequencies to be used within the County.
- List Amateur VHF/UHF frequencies to be used between counties (the District net).
- Describe procedures for keeping contact with activated District and Section HF nets.
- List the most likely types of anticipated emergencies and describe suitable responses to each, including evacuation, weather reporting, searches in primitive areas, and HAZMAT spills.
- List specific locations, if any, requiring special attention in certain emergencies. Examples: flood-prone areas, chemical or explosive manufacturing plants.

Describe the kinds of special attention required at each designated special site (e.g. a portable repeater, special antenna arrangements, boat mobiles or hazmat precautions). Provide instructions for OES Station operation in support of District activities.

In addition, the District plan must include the following verbatim portions of the current Section ARES plan: Definitions, Policies, Emergency Coordinator Alerting Procedures, OES System. Copies of the plan should be widely distributed to members, Served Agencies and specifically to the SEC, DECs, ECs, and AECs in the District, Net Managers, regular net control operators and other ARES members and officials.

Drills and Training

Nothing is more beneficial for long-term planning than real ARES activations, but since these can't be arranged in advance, the next best planning tool is frequent well-designed training sessions. They should be carried out frequently in each County and District to familiarize ARES members with the needs and personnel of served agencies and with local emergency plans.

Participation by ARES members in regular Section traffic nets is excellent emergency training and should be encouraged by ARES officials at every opportunity. These simple training exercises, useful and necessary as they are, can do only half the job. The DEC and each EC should design specific test operations to identify weak points in their systems, and then devise ways to eliminate them or work around them. An important source of information is also the ARRL Public Service Communication Manual which you can find on the www.arrl.org website.

Each session of any ARES net should be regarded as a training exercise. Frequent "repeater down" drills should be run to familiarize ARES members with hot spots and holes in simplex coverage and to devise a work-around when the repeater goes off the air.

The Alabama Day Net meets Monday through Saturday at, 10:00 CT, (disregarding UTC) on or near 3965 KHz. Each District should be represented by at least one OES station each day. Each County EC should make a strong effort to have his/her county represented in each Section Net at least several times a week. ADN and ATNM are often the first nets on which notice of potential emergencies is given. ADN is frequently the first net on which major and minor changes in the Section ARES organization are announced and discussed. All ARES-related messages, announcements, and other information from these sessions should be relayed promptly to the EC and/or the DEC as appropriate.

Formal Training

Each ARES officer and member should make an effort to complete as much formal classroom or online training from multiple served agencies as possible. The more we know the served agency procedures. Processes and lingo the better we can assist in time of disaster.

Training is becoming more important as served agencies are enacting requiring. Train before the event and be ready for the local or large-scale disaster. Cross-training is a good idea. Take your ARRL, various training cards and FEMA training certificates with you. Laminate your training cards to protect them. Training will help you to know the lingo, procedures and processes. Red Cross First Aid and CPR training is also a must. A good way to get general training is to enroll in the next Community Emergency Response Team (CERT) class. Then, take the Red Cross training, and all the while, take the ARRL and FEMA Independent Study online courses, one at a time.

Minimal training requirements:

Minimal training requirements for ARES member, ARRL EC-001, EC-002, FEMA IS-100, IS-200.

Minimal training requirements for ARES officers or coordinators, ARRL EC-001, EC-002, EC-003, FEMA IS-100, IS-200, IS-700 and IS-800.

These can be taken online or taught at meetings.

Simulated Emergency Test

Each October, on the third full weekend, ARRL sponsors a nation-wide Simulated Emergency Test (SET) in which ARES organizations can test their nets, personnel, procedures and equipment. SET offers an excellent opportunity for County and District ARES groups to invite direct participation by the agencies served by ARES. The date is elastic; it can be any time between 1 September and 31 October. The ARRL compiles and publishes the SET results in QST magazine.

The SEC may direct a coordinated Section-wide SET exercise or ECs may conduct independent drills specifically designed for local applications within their counties. The flexible date allows ARES planners to coordinate joint exercises with and local or regional served agencies.

In the event of a major Section-wide emergency operation within a few weeks of the scheduled SET date, the SEC may cancel the exercise and treat the actual operation as the SET, including the formal SET report filed by each EC.

ARRL has formal memoranda of understanding with several national agencies, including: The National Weather Service, Salvation Army, American Red Cross, Federal Emergency Management Agency (FEMA), National Communications System, and Associated Public Safety Officers Inc.

ANNUAL ARRL SIMULATED EMERGENCY TEST (SET)

During the Fall, between September 1st and November 30th, the Alabama Section of the ARRL will conduct the annual Simulated Emergency Test (SET) for the purpose of practicing and training to provide emergency communications on behalf of the public and our Served Agencies in times of crisis when normal communications circuits are overloaded or non-functioning.

ECs, as part of their job responsibility to not only ARES but to the public, are highly encouraged to conduct a SET with their ARES members. ECs that miss performing a SET four years in a row without any explanation or any communication with the Section EC on a regular basis will be considered to have resigned their position and replaced.

ARRL SET Information/ Forms: http://www.arrl.org/public-service-field-services-forms

Local Drills and Exercises

At least once each month, each EC should conduct a one or two-hour test of emergency readiness among his members. They can test any phase of the group's capabilities, e.g.: Check the range of a portable repeater in a temporary location.

- Install and test a permanent antenna at an agency HQ.
- Survey the County to find dead spots in the ARES repeater coverage.
- Run a local net session exclusively on emergency power or on simplex or both.
- Start and run every emergency generator owned by the ARES group. Repair the defective ones.
- Hold a surprise net session at an unusual time to see how many stations check in.

After every exercise and every actual operation, the ARES officials involved should conduct an intensive debriefing session. An after action report should be written and sent to the DEC and SEC. Local and District plans should be updated to take advantage of the experience.

ARESMAT Rapid Response or Jump Teams

Self-supporting mobile teams have been a staple of ARES operations for many years. They are often referred to as ARESMAT or ARES Mutual Assistance Teams. These Jump teams can go quickly to distant locations to help in ARES operations. They can be first responders where no local Amateurs are available, or the local resources have been overwhelmed. The organization and deployment of an ARESMAT team is described fully in the ARRL manual http://www.arrl.org/files/file/ARESFieldResourcesManual.pdf but for the purpose of this plan, we will cover the basics.

Jump Teams can provide relief operators to let exhausted local operators to get some rest. Each Alabama DEC should maintain at least one such team ready to respond to a call within two hours or less of notification. The ideal would be two or three jump teams in each District.

Suggested organization

Each DEC appoints an assistant to recruit a pool of operators from the District train and organize them, and keep them functional. Volunteers are chosen in part for their ability to drop whatever they may be doing and hit the road with their "ready kits" already loaded.

Deployment

Normally, no relief teams are sent to another District unless specifically requested by the DEC in the impacted area. Nothing prevents volunteers from offering their services.
Often, they simply show up in the disaster area uninvited, this is unwise. Before deployment ARES members must be given an assignment and the operator ***must never self-deploy***. To be most useful they should coordinate with the ARES team and the local DEC. How and whether to use them is entirely a matter for the DEC or the EC in the impacted location to decide.
When a jump team is activated, the coordinator designates a team leader from among the

members on a particular assignment after the leader is fully briefed, he and his team depart for the assigned site or staging area as quickly as possible. The coordinator typically remains at his home station to keep in close touch with both the DEC and the team captain.

The team leader is the coordinator's contact person for that team's mission. His or her duties include getting all the team members to the correct site, he keeps in touch with them en route and on duty. Upon arrival, the team should be able to set up a station on emergency power, operate on VHF/UHF and/or HF on designated frequencies, and maintain radio contact with other ARES stations as required. The coordinator provides a reliable base station link with home for the team members as necessary.

Scheduling operator relief

As soon as local ARES members in the target area begin to report for duty posts, the DEC in the impacted area would notify the SEC that relief crews will be needed to staff various positions in about 24 hours, relieving worn-out local operators. The notice would specify the number of operators and any special equipment needed, e.g.; emergency power, portable repeaters, special antennas, ATV, AMTOR or APRS, or high-speed CW operators, for example. The SEC then attempts to locate suitable teams. He sends them to a staging point near the impacted area to await further instructions.

The SEC arranges for a second-wave replacement team if necessary, and attempts to keep fresh operators moving into the impact area about every 24 hours until they are no longer needed. The first jump teams typically should be scheduled to arrive in the target area or staging area about 24 hours after local ARES units go on Orange Alert

The Staging Point

At the staging point the leader reports the teams arrival to the coordinator and the host DEC. The host DEC will advise the team how to reach specific duty sites, and on what frequency to check in. On that frequency, the impact-area DEC will direct the team to its specific duty assignments.

Preparedness

The jump team should be self-supporting in transportation, fuel, food, water, emergency power, and sleeping accommodations in addition to their communications equipment.

The Ready Kit/Jump Kit/Go-Kit Preparation

The last thing you should need to do when a call for assistance comes is think of and locate all the items you might need. Once on the site we do not want to place any burden on the system that we are assisting. Any experienced emergency responder knows how important it is to keep a kit of the items they need ready to go at a moment's notice. This is often called a "Ready Kit or Jump Kit or Go Kit."

Each member should prepare his own "Jump Kit" and keep it in his vehicle or at a

specific place where it can be picked up without delay. Typically, the ready kit would include two changes of comfortable old clothing. It should also contain non-perishable personal toiletry items and an extra pair of sunglasses, a durable drinking cup, a small first-aid kit including sun block, insect repellent and a non-prescription analgesic is also desirable. Each member should have a checklist to be consulted *every time* prior to departure. First on this list would be the Jump Kit.

Without a jump kit, you will almost certainly leave something important at home, or bring items that will not do the job. Gathering and packing your equipment at the last moment also wastes precious time. It is important to think through each probable deployment ahead of time, and the range of situations you might encounter. Here are a few basic questions you will need to answer:

- Which networks will you need to join, and what equipment will you need to do so?
- Will you need to be able to relocate quickly, or can you bring a ton of gear?
- Will you be on foot, or near your vehicle?
- Is your assignment at a fixed location or will you be mobile?
- How long might you be deployed - less than 48 hours, up to 72 hours, or even a week or more?
- Will you be in a building with reliable power and working toilets, or in a tent away from civilization?
- What sort of weather or other conditions might be encountered?
- Where will food and water come from? Are sanitary facilities available?
- Will there be a place to sleep?
- Do you need to plan for a wide variety of possible scenarios, or only a few?

Other questions may occur to you based on your own experience. If you are new to Emcomm or the area, consult with other members of your group for their suggestions.
Most people seem to divide jump kits into two categories: one for deployments under 48 hours, and one for up to 72 hours. For deployments longer than 72 hours, many people will just add more of the items that they will use up, such as clothing, food, water, and batteries. Others may add a greater range of communication options and backup equipment as well.

Everyone has their own favorite list of items to keep in a jump kit. While preparing this course material we looked at quite a few. Some were detailed, others more general. Some responders have more than one kit for different types of deployments. You will need to develop your own, suited to your own needs, but here is a general list to help you get started. Depending on your situation, you may not need some of the items on this list, or you may need special items not listed.

Here is a suggested minimum content list for your personal “Go-kit”. Your kit will need to be tailored to your specific needs. Prepare and test your Kit well before-hand, as you will have to hit the ground running during the real thing. The idea of your personal kit is to help you survive, be more conformable and protect yourself from unknowns the best you can. We cannot be productive nor do our job if we are a burden on the system. Your communications/equipment “Go-Kit” would be a separate list. Also, register with your

local EC and ***never self-deploy to a disaster area***.

Vaccinations and medications: Tetanus and Hepatitis-B vaccinations are two recommended vaccinations. Check with your doctor to make sure you get the right shots. Personal prescription medications (copies of all prescriptions, including the generic names for medications, and a note from the prescribing physician on letterhead stationary for controlled substances and injectable medications should be carried).

Relief workers should plan for travel with the knowledge that there may be shortages of electricity, safe water, or food distribution systems in affected areas. They should try to pack to be as self-sufficient as possible and bring only those items necessary for their trip. Confined or little travel space for your "Go-Kit" might be necessary. In addition to a basic travel kit, relief workers should bring the following items:

EMCOMM GO-KITS: Radios and Accessories

At the Huntsville, AL Hamfest every year, hams are asked bring their Radio Go-Kits to the ARES forum for display. In the last segment of the ARES forum, hams talk about their Go-Kit capabilities and construction techniques. In your Go-Kit, you should include:

- Handheld VHF or dual-band radio (some people also like to bring a spare)
- Spare rechargeable batteries for handhelds
- Alkaline battery pack for handhelds
- Alkaline batteries
- Speaker mic and earphone for handhelds
- Battery chargers, AC and DC for handhelds
- Mobile VHF or dual-band radio
- HF radio
- Multi-band HF antenna, tuner, heavy parachute cord
- Gain antennas and adapters (roll-up J-Pole, mobile magnetic mount, etc)
- Coaxial feed lines, jumpers
- Ground rod, pipe clamp, and wire
- AC power supplies for VHF.UHF mobile and HF radios, accessories
- Large battery source for VHF/UHF mobile and HF radios, with charger
- All related power, data, audio, and RF cables and adapters
- Small repair kit: hand tools, multi-meter, connectors, adapters, fuses, key parts
- Improvisation materials: wire, connectors, parts, insulators, duct tape, etc.
- Photocopies of manuals for all equipment
- Headphones, for noisy areas and privacy
- Specialized gear for packet, ATV or other modes
- Multi-band scanner, weather radio
- Personal cell phone, pager, spare batteries and chargers
- Pencils, legal pads, pencil sharpener
- Something to put it in - one or more backpacks, suitcases, plastic storage tubs, etc.
- Package individual items in zip lock bags or plastic kitchen containers

Operating Supplies

- Outgoing message forms or sheets to compose messages
- Incoming message forms. (Some operators copy the message onto scratch paper, and then transcribe it cleanly onto the incoming message form. Some groups use one form for both incoming and outgoing messages.)
- Log sheets
- Standard forms used by the served agency
- Letter or legal notepads
- Sticky notes
- Paper clips and rubber bands
- Blank envelopes

Personal Jump Kit Check List

- Clothing for the season, weather, and length of deployment
- Toilet kit: soap, razor, deodorant, comb, toilet paper
- Foul weather or protective gear, warm coats, hats, etc. as needed
- Sleeping bag, closed-cell foam pad, pillow, ear plugs
- High energy snacks
- Easily prepared dried foods that will store for long periods
- Eating and cooking equipment if needed
- Water containers, filled before departure
- First aid kit, personal medications and prescriptions for up to one week
- Money, including a large quantity of quarters for vending machines, tolls, etc.
- Telephone calling card

Information

- ID cards and other authorizations
- Frequency lists and net schedules
- Maps, both street and topographic
- Key phone numbers, email and internet addresses
- Contact information for other members in your group, EC, DEC, SEC, and others
- Copy of emergency plans
- Resource lists: who to call for which kinds of problems
- Log sheets, message forms

Sub-Dividing Your Kits

You may want to divide your jump kit into smaller packages. Here are some ideas:

- Quick deployment kit: hand-held radio kit, personal essentials, in a large daypack
- VHF/UHF, HF kits for fixed locations
- Accessory and tool kit
- Emergency power kit
- Short and long term personal kits in duffel bags
- Field kitchen and food box in plastic storage tubs
- Field shelter kit (tents, tarps, tables, chairs, battery/gas lights) in plastic storage

tubs

NOTE: You may not want to pre-pack some items for reasons of expense or shelf life. Keep a checklist of these items in your jump kit so that you will remember to add them at the last minute.

Pre-Planning

When the time comes, you need to know where to go, and what to do. Having such information readily available will help you respond more quickly and effectively. It will not always be possible to know these things in advance, particularly if you do not have a specific assignment. Answering the following basic questions may help.

- Which frequency should you check in on initially? Is there a "backup" frequency?
- If a repeater is out of service, which simplex frequency is used for the net?
- Which nets will be activated first?
- Should you report to a pre-determined location or will your assignment be made as needed?

Learn about any place to which you may be deployed to familiarize yourself with its resources, requirements, and limitations. For instance, if you are assigned to a particular shelter, you might ask your emcomm superiors to schedule a visit, or talk to others who are familiar with the site.

- Will you need a long antenna cable to get from your radios to the roof?
- Are antennas permanently installed, or will you need to bring your own?
- Will you be in one room with everyone else, or in a separate room?
- Is there dependable emergency power to circuits at possible operating positions?
- Does the building have an independent and dependable water supply?
- Is there good cell phone or beeper coverage inside the building?
- Can you reach local repeaters reliably with only a rubber duck antenna, or do you need an antenna with gain?
- If the repeaters are out of service, how far can you reach on a simplex channel?
- Will you need a HF radio?

If you will be assigned to an EOC, school, hospital, or other facility with its own radio system in place, learn under what conditions you will be required or able to use it, where it is, and how it works. In addition to radios, consider copiers, computers, fax machines, phone systems and other potentially useful equipment.

Consider escape routes. If you could be in the path of a storm surge or other dangerous condition, know all the possible routes out of the area. If you will be stationed in a large building such as a school or hospital, find the fire exits, and learn which parking areas will be the safest for your vehicle.

Appendix A: Automatic Packet Reporting System

Emergency Procedure

The method and manner in which APRS may be used during communications emergencies will be left to the discretion of the respective District Emergency Coordinators and their associated county Emergency Coordinators. It is well established that local ARES leaders know best how to support their needs and should have the latitude to make decisions in their best interests.

Communication Emergencies have historically proven to be quite localized in nature and the section leadership does not foresee the need to establish and maintain a section-wide APRS net.

Where a theater of operation crosses district boundaries, it will be the responsibility of the affected District Coordinators to coordinate their APRS initiatives in a manner that will be in the best interests of all concerned. Normally, APRS operations will be conducted on the national APRS frequency of 144.39 Mhz. However, DECs have the discretion to use alternate frequencies if they feel ongoing net operations or network congestion is adversely affecting their APRS operations.

APRS provides a unique graphical representation of what is happening within a given theater of operation. This has been best exemplified during hurricane operations where storm tracks are plotted. Traditionally, ARES members have maintained these plots in a coordinated manner. However, incorrect or interfering plots from stations outside the theater of operation have rendered ARES plots of this data to be questionable or ineffective. Therefore, it is the policy of the Alabama Section to not sanction the plotting of these storms by ARES participants. Of course, if ARES members wish to continue to maintain these plots, they may do so with the understanding that they are doing so of their own initiative and that the plottings are not under the auspices of the Alabama Section.

Nets

APRS can run in parallel with both the regional VHF nets and the Section-wide HF net. The VHF frequency of operation is usually 144.39 or 145.790 MHz as specified by the DEC for each district. All digis are located on this frequency. When necessary, ARES Districts may alter the local VHF frequency to avoid interference, but this could cause some confusion; the National Weather Service and County EOCs, among others, could be trying to monitor. No net control is required for APRS.

When APRS and voice nets run in parallel (overlapping some of the same geographic coverage), the voice NCS should monitor activity on his APRS screen if possible. If the NCS does not have APRS capability, a relay or OES station should be designated to relay APRS information to the voice net as appropriate.

VHF

Local APRS nets should be organized so that each county uses the closest digi and paths should be kept short so as not to interfere with other counties. The ECs and EOCs can address neighboring counties as necessary. Operators should become familiar with the OPS-DIGI List and to pre-program a complete list of alternate digi paths so that their normal unproto can be set to the local digi call. This procedure cannot address the specific unproto path for every operator within the Alabama Section. The setting of effective unproto paths should be left to the APRS coordinator or users' group in each area so that everyone uses the Net efficiently. This is a vital part of the APRS program and its importance cannot be overstated.

Weather Stations

The assigned District Weather Station will be responsible for posting the weather objects for the District and no other station should interfere with his or her duty. His data will be current and will most likely be obtained from the NWS or the Internet Wx sites. When the object is located physically within the boundaries of one District but shows weather threatening another District, the unproto path can be extended to the neighboring region to give advanced warning.

Individuals with weather measuring devices such as the Ultimeter, may post their observations using the (W)eather (E)nter command so that the NWS can monitor current conditions.

EOC Stations

The assigned operator should maintain a good OPS DIGI list so that his station can effectively communicate with others on the net. This should include the path ALLGATE, ALLGATE, WIDE for accessing the OES.

Mobile Stations

While some Districts may not have mobile APRS capacity, it should be mentioned here. There are many uses for mobile operations in an emergency net such as this. GPS/TNC beacons can be used to track the EC's or Assistant EC's location while traveling. Portable weather monitors could be set up for measuring coastal conditions during a storm.
Shelters can be equipped with APRS terminals to pass traffic concerning occupancy and needs. Such a system would not rely on the operator sitting in one point at all times since messages would be posted and acknowledged automatically. Each District should develop its own plans regarding mobile and temporary APRS stations.

Appendix B: Alabama HF Phone/CW Nets

Table IV

NET Name	Frequency MHz	Time	Day
Alabama Baptist Emergency Net	7.260	1430 CT	Sunday
Alabama Emergency Net	7.243	2100Z	Sunday
Alabama Emergency Net	3.965	1600 CT	Sunday
Alabama Day Net (ADN)	3.965	1000 CT	Daily
Alabama Traffic Net Mike (ATNM)	3.965	1830 CT	Daily
Alabama Traffic Net Mike (ATNM)	3.965	0800 CT	Sunday
Alabama Section CW Net (ASN)	3.575	1900 CT	Daily

Appendix C: AL ARES on the Internet

Email
Email is an important factor in day-to-day operation of Alabama ARES. Email notifies ARES members and officials of activations, deactivations, drills, and other activities. Email delivers most situation reports (SITREP) to AEMA.

Scores of ARES members use it to exchange information and friendly chat. An ARES "mailing list developed almost spontaneously, in which members exchange ideas and current information sporadically. As this is written, the list has nearly 100 members. Members who have Email but need information on how to use it in ARES, or who want to be added to the mailing list may send an email to the SEC with the request and their own email address. See the Section webpage for the latest information: www.alarrl.com

Appendix D: SITREP Standards

It is vitally important that SITREPS contain no rumor or unverified information that is not clearly so identified.
A report of "a tornado at East Podunk," for example, should be amended to read "buildings damaged by high winds at East Podunk," unless the National Weather Service has officially declared it a tornado. It is helpful, however, to pass along certain unverified information if it can be attributed to a specific source: A report similar to the following would be acceptable: "County Road 114 flooded at Goose Creek bridge south of Percyville. Eyewitness report by H. P. Maxwell W1AW. No independent confirmation. "Conflicting information can be reported in the same manner, citing both versions and noting the conflict Generally, requested SITREP subjects in any given activation might include several of those below, but each situation generates its own requirements.

The SEC's requested topics may change from report to report and are not limited to those given here for general guidance only:

• Weather observations – temp, wind speed and direction, tide, barometer, precipitation. Severe weather – funnel clouds, heavy rain, high winds or tides, rising streams, freezing rain.

• Casualties – Be very specific about source of this information, but DO NOT use names of victims.

• People needing evacuation – nature of threat, numbers and location. Any unusual events or matters needing immediate attention, including relief operators for ARES stations. (Jump teams?)

• Areas to be evacuated and total population of each.

• Number of shelters to be opened, and their combined capacity

• Number of shelters to be staffed by ARES

• Name and phone contact information of agency managing shelters.

• Total number of shelter occupants per county – No names of evacuees. Use official estimates of numbers if no specific figures available.

• Degree of commercial power loss in specific areas. (Usually an estimated number of users. Indicate any critical facilities, such as hospitals, that may be affected.)

• Structural damage to buildings and causes of damage. Give locations (but not street addresses), structural type and use of building (nursing home, store, factory).

• Curfews (who declared, when effective, area affected)

• Polluted water supplies

• Hospitals closed, overloaded, or non-functional

• Time and date County EOC was activated

• Number of ARES Operators assigned to duty and when activated

• List ARES-Served Agencies activated

• Changes in alert level of ARES nets.

• Changes in activation status of the District and each county.

• Road/street/bridge closings. Be specific about the location.

Appendix E: FCC Regulations Part 97
Subpart E – Providing Emergency Communications

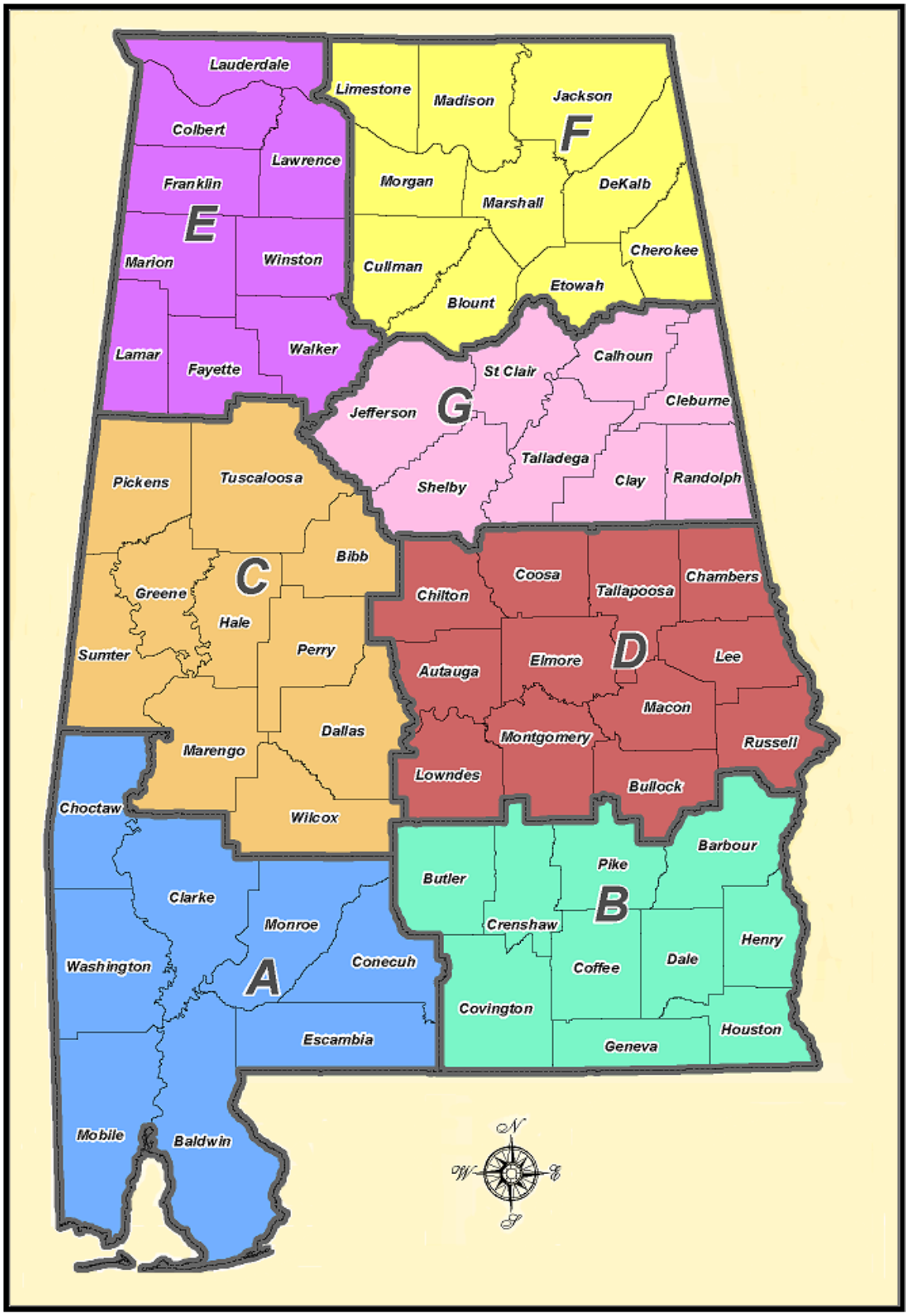
97.401 Operation during a disaster.

(a) When normal communication systems are overloaded, damaged or disrupted because a disaster has occurred, or is likely to occur, in an area where the amateur service is regulated by the FCC, an amateur station may make transmissions necessary to meet essential communication needs and facilitate relief actions.

(b) when normal communication systems are overloaded, damaged or disrupted because a natural disaster has occurred, or is likely to occur, in an area where the amateur service is not regulated by the FCC, a station assisting in meeting essential communication needs and facilitating relief actions may do so only in accord with ITU Resolution No.640 (Geneva, 1979). The 75/80m, 40m, 30m, 20m, 17m, 15m, 12m, and 2m bands may be used for these purposes.

(c) when a disaster disrupts normal communication systems in a particular area, the FCC may declare a temporary state of communication emergency. The declaration will set forth any special conditions and special rules to be observed by stations during the communication emergency.

Appendix F: Alabama 2015 ARES Counties by District



Appendix G: Emergency Tactical and Contact Frequencies:

In the event of a complete failure of normal communications modes, Tactical nets will be established by the DECs and ECs in each area on the following VHF/UHF frequencies. The SEC and STM will establish an HF net on the Primary Frequency 7243 Khz or the Secondary Frequency 3965 Khz to support the VHF/UHF nets. At least one station in each repeater area will act as the **HF Net Liaison** to monitor both the HF frequency and that repeater in order to pass messages between the nets.

Should one of the listed wide-area repeaters be unavailable, the DEC for that area will bring up one or more shorter range repeaters that have been pre-selected to fill that coverage area. Simplex updates and notifications can be passed on the wide area repeater's output frequency by a strong base or mobile station.

These nets will be under the strict control of the NCO until the nature of the emergency can be established, and instructions from Local, State or Federal officials can be obtained. ARES units located in the State or County or local Emergency Operations Centers, should check into these nets and make the assets available to the EMA Director, Police, Fire, 911, or other officials as they need Amateur operators. At that point, the VHF nets can move to a resource mode, allowing operators and equipment be used or dispatched as directed by those officials. The county EC may elect to move to a local repeater with its own net control for this function.

This plan will work on a state, county or local level as needed, and can be brought up quickly for any wide area communication failure. This plan will be used as the state Simulated Emergency Test (SET) each October, and again the Saturday before Field Day each June. The drill will involve all classes of Amateur Radio licenses.

The repeaters and frequencies listed below have been suggested by the ECs in each area of the state as being robust and reliable. At any time, this list may be modified as these may fail, and others are brought online. The County EC should notify the DEC and/or the SEC whenever changes need to be made to this list. The list will be modified, and announcements will be made to that effect on the local and state nets.

NOTE: *The Alabama Emergency Net net frequency will be on HF* ***7243*** *Khz (primary) or* ***3965*** *Khz (secondary). All operators should listen to the primary frequency and if they hear no traffic, they should switch to the secondary frequency in case the Alabama Emergency Net was moved due to any signal interference or poor atmosphere propagation conditions on the 40m primary frequency.*

Appendix H: Bibliography

Every ARES official should be familiar with the District and Section plans. These plans are based on standard procedures recommended by the American Radio Relay League. The following publications, available from ARRL, explain League policies and procedures in detail:

Public Service Communications Manual
http://www.arrl.org/FandES/field/pscm/index.html Guidelines for ARRL District Emergency Coordinators
Guidelines for ARRL Emergency Coordinators
ARRL Emergency Communications Courses
http://www.arrl.org/cce/ The ARRL Operating Manual
FCC Regulations Part 97 (Amateur Radio)
ARRL Net Directory (current edition) for 3rd party countries and net frequencies and schedules in various states and Sections
ARRL Repeater Directory ARES Field Resources Manual

Appendix I: National Weather Service Offices in Alabama:

National Weather Service
Huntsville, AL Weather Forecast Office
320 Sparkman Drive
Huntsville, AL 35805
Phone: (256) 890-8503

National Weather Service
Birmingham, AL
465 Weathervane Road
Calera, Al, 35040-5427
205-664-3010

National Weather Service
Mobile/Pensacola
8400 Airport Blvd, Bldg 11
Mobile, AL 36608
251-633-6443

Appendix J: Net Preambles

Alabama Emergency Net Preamble

CQ, CQ, CQ, this is the Alabama Emergency Net. This net meets each Sunday afternoon at 2100Z, or during outbreaks of severe weather and other emergencies. Your net control station this afternoon is (callsign). My name is _____. I am located in _____, AL.

This is a directed net. Please direct all communications through net control. Are there any stations with announcements or bulletins for the net?

We will now begin taking check-ins. Are there any Alabama Section Officers and District ECs wishing to check in? Are there any stations on frequency for NWS, American Red Cross, County EMAs, County ECs and AECs, please check in now.

We will now begin taking check-ins by ARES District. Are there any check-ins in District A (B, C, D, E, F, G)? Please give your call-sign slowly and phonetically as you check in.

District A	District B	District C	District D	District E	District F	District G
Baldwin	Barbour	Bibb	Autauga	Colbert	Blount	Calhoun
Choctaw	Butler	Dallas	Bullock	Fayette	Cherokee	Clay
Clark	Coffee	Greene	Chambers	Franklin	Cullman	Cleburne
Conecuh	Covington	Hale	Chilton	Lamar	Dekalb	Jefferson
Escambia	Crenshaw	Marengo	Coosa	Lauderdale	Etowah	Randolph
Mobile	Dale	Perry	Elmore	Marion	Jackson	Shelby
Monroe	Geneva	Pickens	Lee	Walker	Limestone	St. Clair
Washington	Henry	Sumter	Lowndes	Winston	Madison	Talladega
	Houston	Tuscaloosa	Macon		Marshall	
	Pike	Wilcox	Montgomery		Morgan	
			Russell			
			Tallapoosa			

We will now begin taking out of State Stations Check-In.

This concludes roll call and we will now move into the discussion and training portion of the net. Does any station have anything they wish to bring before the net this afternoon for discussion? {If you have a training topic bring it up at this time.}

We will now take a stand-by for any late check-ins. Any stations wishing to check-in late please do so now.

Is there anything we can do for the net this evening?

We will proceed to close the net at this time and thank all stations for checking in this evening. This is (callsign) closing the Alabama Emergency Net at _____ central time and returning the frequency back to normal amateur use.

Alabama Day Net Preamble

This is_____, located in_____ county Alabama. My name is _____.

I will be your net control today. The Alabama day net is a section net of the ARRL, and is a directed net. This net meets daily at 10:00 am local time on 3.965 mhz. You do not have to be a member of this net to participate. All stations are welcome.

At this time are there any stations with emergency or priority traffic?

Are there any mobile or portable stations?

Is there any business or announcements?

At this time are there any stations with formal written traffic? (pass traffic)

Is there any informal traffic?

Any comments?

Thanks each and every one of you for checking in, and passing and receiving traffic.

Is there anything this net or net control can do for anyone before we close?

73` to all

Alabama Traffic Net "Mike" Preamble

Calling all members of the Alabama Traffic Net "MIKE". This is _ located in___county, my name is___. I'll be your net control station for this session

The Alabama Traffic Net "MIKE" is part of The Alabama Emergency Net System and The National Traffic System.

The "ATNM" meets daily on 3.965 MHz. at 1830 hours central time and on Sunday mornings at 0800 hours central time for the purpose of training its members to be more proficient during emergency situations and in handling traffic.

Please tune to this frequency, this is a directed net. (If needed, make arrangements for a relay station(s).

Traffic will be listed before roll call and will be passed on or off frequency at the discretion of the net control station. Stations going off frequency need not recheck unless traffic was not passed.

At the conclusion of the Alabama Roll Call, out of state stations will be called by state. A stand-by will be taken for late stations to participate. Stations desiring to participate must give call signs to be acknowledged.

This is standing by for any station with emergency or priority traffic. (Always pass emergency or priority traffic immediately)

Any business or announcements for the net? Are there any mobile stations ?
Are there any portable stations?
Do we have any stations going to Section, Region, Mars or other traffic nets?

Do we have any stations desiring to list formal traffic?(NCS be sure to pass out of state traffic first so the section reps can make
is/her net.)

Do we have any stations desiring to list informal traffic?

Stations who are unable to wait for their proper time and place during roll call to check in may secure now. Do not break the net to secure early. If you miss your check in time wait until we call for late stations to join us! We will now begin roll call with the counties in Alabama beginning with….

Appendix K: ARRL Emergency Communications Training Courses

Introduction to Emergency Communications (EC-001) Course

Link: http://www.arrl.org/emergency-communications-training

This is a revision of our former Emergency Communications Basic/Level 1 course.

Cost: Members $50 Non-Members/ Guests: $85

Description. This course is designed to provide basic knowledge and tools for any emergency communications volunteer. The course has 6 sections with 29 lesson topics. It includes required student activities, a 35-question final assessment and is expected to take approximately 45 hours to complete over a 9-week period. You will have access to the course platform at any time of day during this 9-week period so you may work according to your own schedule. You must pace yourself to be sure you complete all the required material in the allotted time.

Course Completion Requirements. At the end of the course an online final assessment is taken. A score of 80% or better is required for successful course completion. For the student to receive a "Pass," Mentors must also verify student completion by evaluating work on required activity assignments and notify the Continuing Education Program that the student has successfully completed both the course work and achieved a satisfactory score on the final assessment.

Computer Requirements. This is an online course hosted on the Moodle online learning platform. This online learning platform is best accessed using the Internet Explorer or Firefox browsers.

Prerequisites. Before you begin the course you should have completed the following prerequisites. These courses provide a foundation for the content of this course. These are free mini-courses you can take online at http://training.fema.gov/IS/NIMS.asp.

- ICS-100 (IS-100.b) (Introduction to the Incident Command System)
- IS -700 (National Incident Management System)

Please note: When you enroll for this course you will be asked to provide your date of completion of these courses.

Course Requirements. This is a mentored course. You will be assigned to correspond with an experienced radio amateur who will be your resource for any questions you have about the course content. Please review the Student and Mentor Expectations included in our Policies for Online Courses.

Public Service and Emergency Communications Management for Radio
Course #: EC-016

Description. This course is designed to train licensed Amateur Radio operators who will be in leadership and managerial roles organizing other volunteers to support public service activities and communications emergencies. In this course you will learn how radio amateurs prepare and organize to support local community events, and, working in coordination with governmental and other emergency response organizations, deploy their services to provide communications when needed in an emergency. This course is made available on our Web site to all ARRL members. It is a self-study course that you may complete at your own pace.

This is not a course which you can easily complete in a weekend - it is not intended to be. If you are currently serving in a leadership role in your local ARES organization or are training to assume more management responsibility, you may want to complete the final assessment for this course and earn the certificate of completion validating your study. Students who successfully complete the curriculum activities and receive their certificates will indeed be ready for leadership roles in situations where lives and property are at stake.

We understand that you are volunteers and "amateurs." Your and our interest in this training is to provide the best possible assistance to our communities. Thank you!

Prerequisites. Before you begin the course you should have completed the following prerequisites. These courses provide a foundation for the content of this course.

- ARRL Amateur Radio Emergency Communications Level 1/ Basic (EC-001)
- National Weather Service Skywarn Training
- FEMA Online Course IS-100.b/ ICS-100 Introduction to Incident Command System ·
- FEMA Online Course IS-200.b- ICS-200 for Single Incidents and Initial Action Incidents ·
- FEMA Online Course IS-700.b NIMS: An Introduction
- FEMA Online Course IS-800.b National Response Framework

Throughout this course you will find additional FEMA courses that are required are within the FEMA Professional Development Series, which includes the following:

- IS-120.a An Introduction to Exercises
- IS-230.b Fundamentals of Emergency Management
- IS-235.b Emergency Planning
- IS-240.a Leadership & Influence ·
- IS-241.a Decision Making & Problem Solving
- IS-242.a Effective Communication
- IS-244.a Developing and Managing Volunteers

The following courses are recommended but *not required*:

- IS-1 Emergency Manager: An Orientation to the Position
- IS-250.a Emergency Support Function 15 (ESF 15) External Affairs: A New Approach to Emergency Communication and Information Distribution

Appendix L: Acronyms and Definitions:

AEC – Assistant Emergency Coordinator

AEMA – The Alabama Emergency Management Agency.

AEOC – Alabama Emergency Operations Center in Clanton.

APRS – Automatic Packet Reporting System – A digital system that transmits and displays data on maps on computer screens. Highly effective as a parallel to voice circuits.

ARES – Amateur Radio Emergency Service headed by the Section Emergency Coordinator (SEC); is part of the ARRL field organization.

ARESMAT – ARES Mutual Assistance Team. A rapid response team trained and equipped to travel outside of their home county to assist other ARES groups.

ARRL – American Radio Relay League – National Amateur Radio organization dedicated to implementing Part 97 of the FCC regulations.

Blue Alert – Condition Blue – Alert status allowing ARES officials at their discretion to shut down operations when they complete their emergency-related duties.

CEM – County Emergency Manager or County Emergency Management.

Communications emergency as defined the FCC occurs when normal communications systems are disrupted in a specified area.

County - Any geographical jurisdiction assigned to an EC. For ARES purposes a County can be an actual Alabama County, a portion of a County, or a combination of counties.

County Warning Point – A county public safety site, such as a Sheriffs dispatch office that functions 24 hours a day. It is a principal contact point for the State Warning Point.

DEC – District Emergency Coordinator, an appointee in charge of ARES activities in a cluster of counties comprising a District. Reports to the SEC.

DHS – The Department of Homeland Security which oversees FEMA and other Emergency areas.

Disaster – An event causing death or serious injury to humans or a major loss of property.

Distress traffic – Any traffic relating to an acute, immediate threat to human safety or property; i.e. SOS, MAYDAY, or EMERGENCY traffic.

District – Two or more contiguous counties assigned to a DEC.

EC – Emergency Coordinator. An ARES appointee who supervises emergency planning and operations in a specified geographical area. Reports to the DEC.

Email – Electronic messages exchanged over the Internet or local computer network.

Emergency – any situation in which human life or property is threatened. The emergency ceases when relief agencies have no further need for our services. (See Disaster)

EMA – Emergency Management Agency

Emergency Net – A group of Amateurs using the same frequency and associated side frequencies to support emergency relief measures.

EOC – Emergency Operating Center; an emergency headquarters.

ESF – Emergency Support Function. Each of the 16 ESFs is a group of people in an EOC dealing with specific kinds of problem.

FEMA – Federal Emergency Management Agency

Formal traffic - is written in ARRL message form. It is used when Amateur Radio operators relay information between third parties.

GPS – Global Positioning Satellite

HAZMAT – Hazardous Materials.

Informal communications – Radio exchanges between two people not requiring verbatim relay to any third party. Classified as non-traffic; not handled on emergency nets.

Jump Team – A group of experienced Amateur volunteers selected and trained to mobilize on very short notice to meet an emergency.

LGL – Local Government Liaison is an appointment made by the State Government Liaison (SGL) for any specific task.

AL – Alabama - The Alabama Section of ARRL.

NM – Net Manager.

NOAA – National Oceanic and Atmospheric Administration - Home agency for the National Weather Service

No alert – same as Condition Green. Normal operations.

NTS – National Traffic system..

NWS – National Weather Service

OES – Official Emergency Stations - Fixed stations providing liaison between two nets.

Orange Alert – Condition Orange ARES members are active at assigned duty posts – not on standby.

QNC - QN signal for CW or digital net use meaning All net member stations please copy. It indicates that the message to follow is of general interest.

RACES – Radio Amateur Civil Emergency Service – RACES organizations, where they exist in Alabama, operate at the County level under direct control of the County Emergency Management Director.

Red Alert – Condition Red – Maximum level of ARES activation in the Alabama ARES Plan.

Section – ARRL administrative unit headed by elected Section Manager (SM).

SEC – Section Emergency Coordinator – Official responsible for all ARES activities within a Section.

Secondary net – A communications channel associated with the primary emergency net used for traffic handling and other time-consuming net business or alternative frequency when atmospheric propagation conditions are poor for the primary frequency.

Service information – Handling notes attached to a message form.

Service message – Radiogram relating to handling of another message.

SET – Simulated Emergency Test.

SGL – State Government Liaison is an appointment made by the Section Manager. The role is that of interface between amateur radio and all facets of state government.

Side Frequency – Secondary Net.

SITREP – Situation Report – message reporting status of emergency-related activities.

SM – Section Manager

STM – Section Traffic Manager

SWP – State Warning Point – Communications center at AEMA; operates 24 hours a day, everyday

SWPAS – State Warning Point Amateur Station – An amateur station located at the State Warning Point in the State Emergency Operations Center in Clanton. It is activated by the AEOC Operations Officer when needed, is staffed by amateurs recruited by the LGL who has that role, and serves the roles given to it by the AEOC Operations Officer.
Usually that will include receiving input from the Clanton OES, including SITREPS from the SECs, and transmitting traffic for County Emergency Managers from the AEOC. It will NOT usually include receiving or transmitting messages to individual amateurs unless they are serving County Emergency Managers or SECs.

Tactical traffic – Spoken instructions or consultation on the air. No third party communication occurs.

Traffic – Any exchange of information between two or more Amateur Radio stations.

Traffic Log – A list of incoming and outgoing traffic at an Amateur station.

White Alert – Condition White – Notice to ARES members to prepare for deployment on very short notice.