AMERICAN RADIO RELAY LEAGUE

SOUTHERN NEW JERSEY

SECTION EMERGENCY OPERATIONS PLAN

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FORWORD

This Section Emergency Operations Plan is a guide for the amateur radio emergency communications for nine Counties of Southern New Jersey. It is intended as guide for each County Amateur Emergency Radio Service team to utilize in the development of a local plan. The plan is a living document that will be continually changing and updated based on the needs of the partner organizations served and changing technology of amateur radio.

The plan has been developed based on the ARES Strategic Plan, Emergency Coordinators Manual, and Federal Emergency Management Agency current documents. In addition, other American Radio Relay League Sections and emergency communications working groups were reviewed for the development. The development has been a team effort consisting Tom Devine, WB2ALJ, Section Emergency Coordinator and consensus of the County Emergency Coordinators.

The Section Emergency Operations Plan has been approved by Tom Preiser, N2XW, Section Manager of Southern New Jersey Section of the Atlantic Division.

PREFACE

HAM radio operators who read this, most likely volunteer to help people. We can give back to our communities in times of need because we have some unique equipment and skills to do so. With those goals in mind, it is an important task to make this Emergency Operations Plan (EOP) as professional, accurate, and as concise as possible to aid our organization in these modern days of Emergency Management.

We **H**elp **A**ll **M**ankind during disasters**.**

INTRODUCTION

The Southern New Jersey Section Emergency Operations Plan is designed to assist Federal Communication Commission (FCC) licensed amateurs radio operators of the nine counties of Southern New Jersey with guidelines for supporting partner organizations with emergency communications based on past practices learned by the Amateur Radio Emergency Service (ARES). The Amateur Radio Emergency Services (ARES) program has been sponsored by the American Radio Relay League, the national non-profit association for amateur radio, since 1935.

ARES MISSION STATEMENT

The Amateur Radio Emergency Service is a program of the American Radio Relay League, that offers to its partners at all levels, trained Amateur Radio Service licensees who are skilled in the use of a wide range of emergency and disaster communications techniques and who are committed to supporting our partners' missions in service to the public. (ARES Strategic Plan)

ARES VISION STATEMENT

The Amateur Radio Emergency Service is comprised of organized, trained, qualified, and credentialed Amateur Radio operators who augment and support vital communications on behalf of the public through partner agencies and organizations during emergencies and disasters. The Amateur Radio Emergency Service, through its volunteer radio communications, strives to be an effective partner in emergency and disaster response, providing public service partners at all levels with radio communications expertise, capability, and capacity.

The Amateur Radio Relay League has signed national memorandums of understanding with some organizations for local ARES groups to assist with emergency communications, if the local branch of these national service organizations desire assistance. Three notable examples of these agreements are:

> **American Red Cross** – providing communication for "Health and Welfare" messages when commercial means of communications are not available from shelters during Hurricane or Flood evacuations.
>
> **Federal Emergency Management Agency (FEMA) –** provide radio communications for civil preparedness purposes only during period of local, regional or national civil emergencies. These activities are referred to as Radio Amateur Civil Emergency Service (RACES) in Federal Communication Commission regulations. There activities are under of direction of FEMA on federal level, under the direction of State Police at State level, County Sherriff or Office of Emergency Management at local level.
>
> **National Weather Service (NWS)** - trains amateur radio operators through SKYWARN, server as weather observers, "Spotter", to report ground level weather conditions for regional offices. The regional NWS office for SNJ is in Mount Holly, NJ.

In addition, the nine local ARES groups can and have memorandums of understanding with other regional organizations, such as Southern Counties Emergency Repeater Network (SCERN) and local hospitals. (Appendix K)

Historically, amateur radio, ARES responses are related to 1) severe weather events, 2) support communications for missing person search teams, 3) provide emergency communications when

commercial communications are interrupted, and 4) provide communication for public and charitable organization activities. In the event of any type of disaster, this Emergency Operations Plan (EOP) has been developed in order to serve as a template for a general response if needed with little to no modification.

It should be noted that some of the subjects and procedures within this plan have not been established yet and may require additional developed if they are accepted. Therefore, this document should be considered as a continuous improvement guide for teams and the Section. Thus, this plan should also be constant updates based upon 'lessons learned' during exercises and emergency events, at least annually.

THE AMATEUR'S CODE

The Radio Amateur is:

CONSIDERATE ~ never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL ~ offers loyalty, encouragement and support to other amateurs, local clubs, and the American Radio Relay League, through with Amateur Radio in the United States is represented nationally and internationally.

PROGRESSIVE ~ with knowledge abreast of science, a well-built and efficient station and operation above reproach.

FRIENDLY ~ slow and patient operating when requested; friendly advice and counsel to beginners; kindly assistance, cooperation and consideration for the interests of others. These are the hallmark of the amateur spirt.

BALANCED ~ radio is an avocation, never interfering with the duties owed to family, job, school, or community.

PATRIOTIC ~ station and skill always ready for service to country and community.

Note: the original Amateur's Code was written in 1928 by Paul M. Segal, W9EEA.

PURPOSE

Amateur Radio's primary emergency service missions are to provide supplemental communication channels, to tie disparate systems, and agencies together. Amateur Radio operators have a high degree of technical ability that can assist quickly in establishing or repairing communications facilities. Since each emergency is different, flexibility to provide an adequate response is a necessity.

This Emergency Operations Plan (EOP) is provided by the Southern New Jersey Section to assist its assets and members in setting up goals about an emergency event that would require the response of multiple counties of the SNJ Section. The plan establishes timelines to achieve those goals based on that threat. It is intended to set forth some, but not all actions that the Southern New Jersey Section assets can take in order to fulfill its role as set forth in the Memorandum of Understandings or other agreements in each perspective county. Additionally, it provides a format for effective and coordinated response by our counties ARES assets that would be impacted during a severe emergency event.

Having this information established prior to a large-scale event prevents the need to plan and coordinate logistics as a crisis is unfolding, when time is valuable, and situations are chaotic.

SITUATIONS & ASSUMPTIONS

Hazards and disaster fall into three categories: natural, technological and terroristic. Natural and technological disasters can include:

Earthquakes
Floods & Flash Floods
Hurricanes
Ice/Snowstorms
Sever Winter Storms
Mudflow/Landslide
Aircraft Crash
Power Outages
Communications/Internet Outages
Major Fires & Wildfires
Water System Contamination
Energy/Fuel Shortage
Hazardous Material Incident
Nuclear Incident

In some instances, such as weather-related problems, there may be advanced warning. Taking appropriate advanced actions can save lives and improve ARES effectiveness. Although many of these disasters listed above may not directly affect the entire section, there is a cascade effect that occurs as a result of these events on our infrastructure. The following are some affect examples:

SERVICES	AFFECT
Transportation	• Inability to transport victims away from the affected area. • Inability to get emergency services personnel into the affected area.
Electrical	• Increased risk of fire & electrical shock. • Possible destruction of transportation due to downed lines across roads.
Telecommunications	• Loss of contact with victims, service providers and family members. • Systems overloaded due to volume of call from friends & family.

It is necessary to make some assumptions to allow us to prepare for the unexpected situation.

The typical assumptions are:

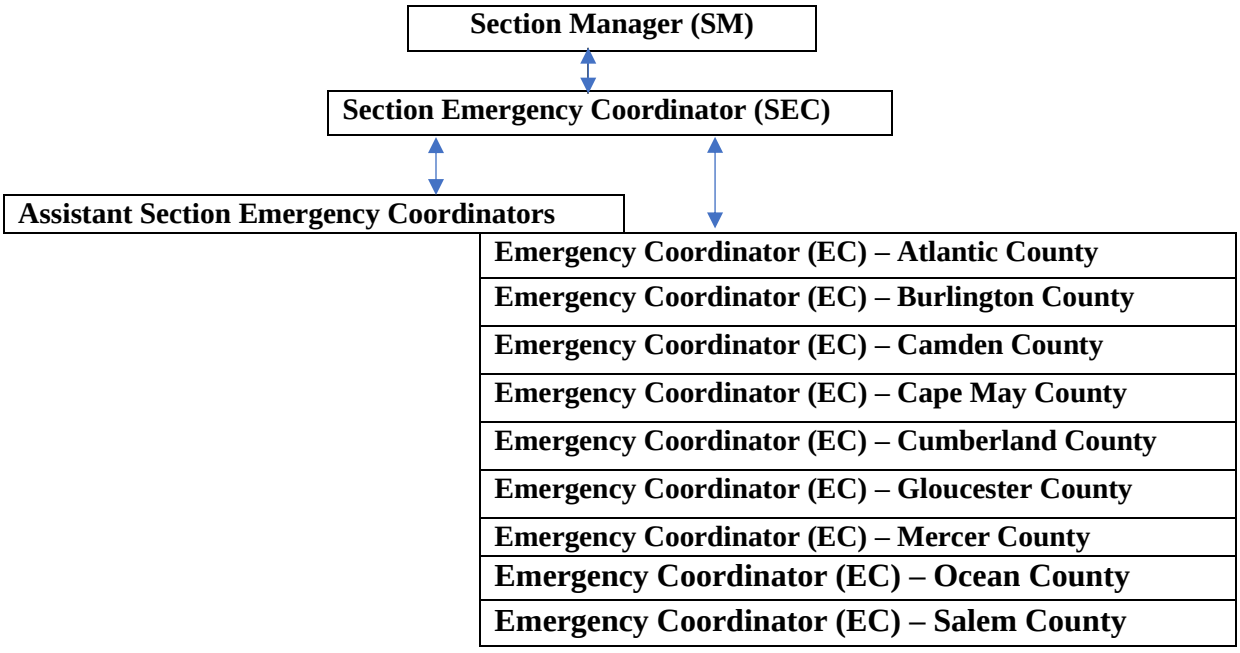
- A disaster will happen in your community, eventually.
- A disaster can and in many cases, does occur without warning.
- Disasters can occur at any time and families may be separated when it strikes.
- When a disaster occurs local emergency services will not be able to respond to every call for assistance.
- Some situations may cause parts of the communities to be isolated from others.
- Outside assistance will not be available for at least 72 hours.
- Telephones, Internet and Cellular systems may become disrupted.
- Electricity may be disrupted.
- Water system may be disrupted, or water may be undrinkable.
- Local emergency services and hospitals will not be capable of handling a sudden number of injured people (EPA Emergency Communications Plan, 2003).

Amateur radio emergency communicators should always place safety first, their own personal and that of their families.

ORGANIZATION & RESPONSIBILITES

The organizational structure for the amateur radio emergency communications focus on the County level with an Emergency Coordinator in charge for each of the nine counties in Southern New Jersey. They are coordinated by a Section Emergency Coordinator who is a pointed by the Southern New Jersey ARRL elected Section Manager. The Section Emergency Coordinator has Assistant Section Emergency Coordinators for supporting functions. The Emergency Coordinator has Assistant Emergency Coordinators for supporting functions.

SECTION STRUCTURE FOR ARES



MEMBERS

Any licensed amateur radio operator can be an ARES team member. Membership in the American Radio Relay League (ARRL) is not a requirement. ARES members are expected to participate in training above FCC licensing requirements. Joint ARES/RACES/AUXCOMM team members may be requested to participate in a background checks and additional specialized training depending on the RACES/AUXCOMM local agency requirements.

EMERGENCY COORDINATOR (EC)

The Emergency Coordinator is the person responsible for the ARES or ARES/RACES group at the local county level. Working with local community officials, the Section Emergency Coordinator (SEC), and other field appointees, the EC leads the local ARES Group through the planning, preparation, and response phases. (Appendix A)

Requirements for ECs:

Technician-class FCC license or higher; full ARRL membership, and achievement of Level 3 qualifications. (Appendix B)

Requirements for ECs:

- Promote and enhance the activities of the Amateur Radio Emergency Service (ARES) for the benefit of the public, as a voluntary, non-commercial communications service.
- Manage and coordinate the training, organization and emergency participation of interested amateurs working in support of the communities, agencies, or functions designated by the SEC and SM.
- Establish visible working partnerships with federal, state, county, city governmental and/or private agencies in the ARES jurisdictional area that needs the services of ARES in emergencies.
- Identify and collaborate with local partners to assess how ARES can assist them with their mission, ensuring partners are aware of the limitations and capabilities of ARES.
- Develop detailed local operational plans, with partner agency officials in the jurisdiction, that sets forth precisely what expectations are during and ARES activation. Work jointly with partners to establish relationships based on mutual trust and respect. All matters involving recruitment and utilization of ARES participants are directed by the EC, in response to the needs assessed by the agency officials. Technical issues involving message format, security of message transmission, disaster welfare inquiry policies, and others, should be reviewed and expounded upon in the ARES detailed local operations plan.
- Establish local communications networks that run on a regular basis, and periodically test those networks by conducting realistic drills.
- Work with the SEC to identify potential local shortcomings and define resources that may need to be drawn from adjacent ARES groups in support of a local emergency or disaster.
- Establish an emergency traffic plan, with welfare traffic inclusive, utilizing the National Traffic System (NTS) as one active component for traffic handling. Establish an operational liaison with local and section nets, particularly for handing welfare traffic in emergency situations.
- Work with other Amateur Radio Public Service groups, organizations or programs to establish relationships of mutual trust and respect, and a coordination mechanism for good of the public and Amateur Radio. The goal is to foster an efficient and effective Amateur Radio response overall.

- Work for growth in the local ARES program. Making it a stronger, more valuable resource, and hence able to meet more of the agencies' local needs.
- Actively use ARES Connect to manage group personnel, schedule events and generate activities reports with the SM and ARRL Headquarters. Promote ARES Connect among ARES group participants. Provide timely reporting of emergency and public safety communications rendered in the Section for potential inclusion in ARRL media relations activities. (ARES Strategic Plan)

SECTION EMERGENCY COORDINATOR (SEC)

The Section Emergency Coordinator (SEC) is the assistant to the Section Manager (SM) for emergency preparedness. The SEC is appointed by the SM to administer all matters pertaining to emergency communications and the Amateur Radio Emergency Service (ARES) on a Section-wide basis. There is only one SEC appointed in each Section of the ARRL Field Organization. (Appendix A)

Requirements for SEC:

Technician-class FCC license or higher; full ARRL membership, and achievement of Level 3 qualifications. (Appendix B)

Responsibilities for SEC:

- Promote and encourage the development of local ARES or joint ARES/RACES groups.
- Advise the SM on all Section emergency policy and planning, including the development of Section Emergency Communications Plan.
- Cooperate and coordinate with the Section Traffic Manager (STM) so the emergency nets and traffic nets properly route welfare traffic in disasters and emergencies. Cooperate and coordinate with other Section leadership officials.
- Recommend candidates for Emergency Coordinator appointments (and cancellations) to the Section Manager and determine area of jurisdiction of each amateur so appointed. Verify that candidates meet training requirements. At the SM's discretion, the SEC may be directly in charge of making (and canceling) such appointments. Promote ARES membership drives, meetings, activities, tests, procedures, etc., at the Section level.
- Serve in support of local ECs during a communication emergency; to ensure the local ECs have the necessary resources to sustain their mission.
- Maintain contact with other communication services and serve as liaison at the Section level with all agencies served in the public interest, particularly in connection with state government, emergency management officials, state and regional Volunteer Organizations Active in Disaster (VOAD) organizations, and similar agencies. In states with multiple ARRL Sections, the SECs shall work as a team to develop and maintain an appropriate ARES Emergency Communications Plan in conjunction with the state officials. Maintain cooperation with the State Government Liaison.
- Actively use ARES Connect to manage group personnel, schedule events and generate activities reports with the SM and ARRL Headquarters. Promote use of ARES Connect among all ARES group participants. Approve ARES Connect admins at the local level (Usually an EC). Provide timely reporting of emergency and public safety communications rendered in the Section for potential inclusion in ARRL media relations activities. (ARES Strategic Plan)

ASSISTANT SECTION EMERGENCY COORDINATOR (ASEC)

Requirements for ASEC:
Technician-class FCC license or higher; full ARRL membership, and achievement of Level 3 qualifications. (Appendix B)

Responsibilities for ASEC:

- May serve as a general assistant to the Section Emergency Coordinator, or as a specialist. That is, the ASEC may assist the SEC with general leadership matters as the SEC's alternate or the ASEC may be assigned to handle a specific important function that does not fall within the scope of the duties of the Section Emergency Coordinator's other assistants. The ASEC will act as the SEC in his or her absence, or in emergency response operations to maintain continuity of leadership when 24-hour activity requires multiple shifts.
- At the Section Manger's discretion, the ASEC may be designated as the recommended successor if the incumbent Section Emergency Coordinator resigns or is otherwise unable to finish the term of office.
- Should be familiar with the Official Appointment Description for the ARRL Section Emergency Coordinator, which contains the fundamental responsibilities of the SEC.
- Actively uses ARES Contact to manage group personnel, schedule events and generate activities reports with the SM and ARRL Headquarters. Promote use of ARES Connect among all ARES group participants. Approve ARES Connect admins at the local level. Provide timely reporting of emergency and public service communications rendered in the Sections for potential inclusion in ARRL media activities. (ARES Strategic Plan)

PUBLIC INFORMATION OFFICER (PIO)

The Public Information Officer (PIO) maintains contact with other ARRL officials in the local area particularly the ECs. Collaborates with the Section Public Information Coordinator (PIC) in the preparation of emergency response public relations kits, including general brochures on Amateur Radio and specific information about local clubs and ARES groups. During emergencies, the public relation kits should be made available to reporters at the scene or at a command post. The PIO, if available, should be the spokesperson for Amateur Radio at an emergency event. The PIC and PIOs are appointed by the Section Manager.

INCIDENT TYPES

Incidents may be categorized or typed, in order to make decisions about resource requirements. Incident types are based on the 3 levels of complexity and dependent on the requirements during the actual incident.

NOTE: A typical Type 3 Incident wouldn't require this EOP to be put into effect.

Type 3 Incident: *(Lowest)* Not a SNJ Section level event. The incident can be handled with one or more resources/personnel contained within an individual county. This type of incident does not require a multi-county response and can be handled within the county infrastructure by the county ARES EC and associated trained ARES communications operators. However, the Event should be placed in ARES Connect with participants & hours and the SEC should be notified after the event.

Type 2 Incident: This type of incident extends beyond the capabilities of a county ARES control and is expected to go into multiple operational periods or into multiple counties simultaneously. This type of incident requires the response of resources out of the local area. This could be either gear or personnel. Most likely a scenario where there are not enough personnel on the county level to man a station or stations for extended periods of time, a large-scale event over a large geographical area, or support equipment is needed, not available on the county level. If assistance is needed local leadership shall contact the SEC or SM. After the event, record it within ARES Connect with participants & hours.

Type 1 Incident: *(Major*) This type of incident extends beyond the capabilities of the SNJ Section and individual counties within the section. This type of incident requires the assistance of the "Outside Volunteer Units" most likely through reginal ARESMAT or beyond through ARRL headquarters. The personnel within the SNJ Section are not capable of sustained operations in the scale of incident that is necessary to accomplish the goals. Example: Super-storm or hurricane causing evaluations and sheltering. The local ECs communicate their needs to SEC and/or SM who seeks the resources for them.

CONCEPTS OF OPERATION

General

The role ARES is that of a corps of volunteer trained amateur radio operators, organized to assist in public service and emergency communications. It must have an effective organization to develop and maintain the necessary plans, equipment, and personnel to achieve its objective. It is understood that on a day-to-day basis, its volunteers have jobs, lives, and other responsibilities. It is up to the SNJ Section to administer an active, on-going emergency preparedness program at the section level, and make sure its personnel are familiar with this program.

The SNJ Section will ascertain, through contact with county ARES EC's and their personnel, the emergency needs of its volunteers in the case of a large scale, multi-county event. It will then assess its resources and facilitate the acquisition, application, and coordination of those resources throughout the affected counties. The SNJ Section can also provide direct guidance and assistance to the county ARES level in helping them develop an effective ARES response plan and can

channel assistance down to the county level for that purpose. In a major emergency, the SNJ Section ensures a coordinated response through the combined efforts of State and County ARES volunteers, as well as the public and private sector organizations.

Priorities in a Disaster

Safety

Protection of ARES members and assets from the effects of a disaster are the first priority. The expectation is that the volunteer would be prepared to be self-reliant after the initial incident for the volunteer to provide services as effectively and with as little interruption as possible for themselves or their family. ARES volunteers are in no way expected to put themselves at risk at any time during their deployment. They would not be expected to volunteer if they themselves have circumstances personally that need to be attend to during an event Volunteers may be limited by several factors:

- Inability of volunteers to be self-sufficient for more than a few days without additional supplies of food, water, medical, and shelter resources.
- Shortage of critical drugs and medicines the volunteer may need.
- Shortage of trained response personnel and equipment to respond to requests for assistance. These shortages may be felt immediately due to an increased need for twenty-four-hour operations sustained over a long period of time.
- Damage to lifelines such as transportation routes, utilities, petroleum pipelines, and gas stations.

Provide Communications

To provide emergency communication services to our served agencies, public and private, through use of our available technologies within the limits of our federal licensure. Those agencies including, but not limited to this list: Red Cross, medical facilities, shelters, County and State EOC's and possibly some CERT groups. (Appendix D)

Situational Assessments

The first step in any emergency response plan, is to assess the potential impact of the damage that may be caused by the disaster and the capacity of the affected served agencies to meet its immediate needs. It should be noted, it is not out of the realm of possibilities for a large-scale event to take place and not affect the communications infrastructure whatsoever.

However, experience shows that a poorly conducted assessment is likely to lead to poor planning decisions and an inadequate response. This often has consequences beyond the emergency phase and can directly affect our support efforts when it comes time to respond in the recovery phase.

Assessments should be done using the following format in pre-and post-event planning:

- **Rapid assessment:** Rapid assessment provides information on needs, possible courses of action, and resource requirements. In pre-event planning, the rapid assessment would be what determines the initial response. More detailed assessments can take place during the deployment process. This allows for a rapid but *controlled* and *calculated* response.
- **Detailed assessment**: A more detailed assessment is carried out after a rapid assessment, if the situation is changing and more information is needed.

- **Continual assessment:** Situations can evolve rapidly and include unexpected effects, such as further communication infrastructure breakdown. Assessment should therefore be an ongoing process throughout the pre-emergency phase and during post-emergency deployment phase. Information is continually updated so that the response can be adapted to evolving needs.

Pre-event assessment consists of *Monitoring*, which is a continuous observation of the potential events progress. *Review*, which is a comprehensive examination of the information gained from the monitoring by several decision-making position individuals. *Evaluation*, which is the independent, objective feedback by the individuals from the review process.

Since weather related events are a primary threat to the coastal areas of New Jersey including the Delaware River area. Every county in the Southern New Jersey Section has been identified as vulnerable to storm surge and/or flooding, if they are directly impacted by a hurricane that traverses near coastal New Jersey. (Appendix E & F)

An additional concern is the hurricane season overlaps with the tourist season in New Jersey. Much of our area of operations includes barrier islands and locations along the shore, adding to the possible number of people in areas that by nature are very difficult to evacuate in a timely manner. Some of the most crowded roads during early hurricane season are the same roads that would be used for evacuations during a severe weather event. There is a severe limit to the amount of bridges leading from the multiple barrier islands and the mainland.

Tourists visiting the New Jersey shore that do not live within driving distance would certainly add to the number of people who would need to be relocated to shelters, if shelters were needed and established. It would be assumed that airports would also be shut down not allowing those tourists to leave the area. There are certain roads designated as Coastal Evacuation Routes in NJ. (Appendix G)

The pre-event assessments need to include input from multiple individuals within the SNJ Section organization who have authority to make decisions. More input leads to better assessments.

Determining Communications Needs

1. **Pre-event phase**:
   Determining the communications needs during the pre-event phase may be difficult. It is unknown what the exact impacts will be and how severe. The determination should be made using two levels of assessment. The best-case scenario and worst-case scenario. The worst-case scenario MUST include possible catastrophic impact to the SNJ Sections own communications infrastructure.
2. **Post-event phase**:
   Determining the communications needs in the post-event phase will be based on the overall impact to the general population communications infrastructure and more importantly, the impact to the SNJ Sections communications infrastructure. Agencies that require our response will be the ones who determine what type of support they need.

Communications needs should follow the structure outlined in the field Communications Structure and plan frequencies of this documents whenever possible. (Appendix D, H, I & J)

Contact Outside Volunteer Units (ARESMAT)

In a major incident when ARES is Activated, a call for assistance out of the normal area of operations may be required, if the incident occurs and hinders the allocation of county ARES volunteers within the SNJ Section. In order to provide prompt and sustained operations in response to a disaster, we may need to summon the service of ARES personnel who reside out of our effected area, also known as ARES Mutual Assistance Teams (ARESMAT).

Counties are encouraged to form ARESMAT sub-groups of members who could deploy to other counties in the Section or other Sections, if they have enough trained personnel. Such teams should be capable of deploying 3 to 6 operators for 72 hours with only six hours' notice. Organization and training requirements are described in the ARRL Public Service Communications Manual, Emergency Coordinator Manual, and ARRL 'Introduction to Emergency Communication' course.

List of such groups, if they exist in our SNJ Section should be included in the EOP. (Appendix K) The SNJ Section is working with the Delaware, Eastern Pennsylvania, Maryland/District of Columbia, and Virginia sections to develop plans for ARES Mutual Assistance Teams in planning and share Section and County operating frequencies so that mutual assistance team can preprogram frequencies.(Appendix H, I, & J)

Establish Volunteer Support Services

- Is there a way to keep the volunteers with food and water if they are not deployed at a shelter that provides both?
- Do you have ARES personnel who can be assigned to distribute water and food to other ARES volunteers in your group?

Recovery

- Responsibility for breaking down the site and securing the equipment.

EMERGENCY COMMUNICATIONS

Emergency communications typically consist of three primary elements:

1. **Operability**—The ability of an agency or group to establish and sustain communications in support of mission operations.
2. **Interoperability**—The ability of an agency or group to communicate among served agencies, using a variety of frequency bands and modes as needed and as authorized. System operability is required for system interoperability.
3. **Continuity of Communications**—The ability to maintain those communications in the event of damage to or destruction of the primary infrastructure. (Appendix L)

Frequency Usage Structure

Communications structure: Bottom Up - Order of Simplicity that is use Simplex, UHF, VHF, & HF first, whenever possible. The move up to local county repeaters as coverage requires. Eventually, utilize C4FM network system as coverage of communications requires.

The use of the linked C4FM system during a wide scale incident should be limited to a designated purpose of coordination between the SNJ Section ARES hierarchy and ARES county operations (NCS) in the affected areas of the incident. This is dependent on conditions and other factors such as locations and coverage.

The frequency usage structure diagram in (Appendix H, I & J) *should be followed whenever possible to maintain a flow of information through the area.*

Primary County Repeaters & SCERN Frequencies Maps (Appendix H & I)
Use of channels should be prioritized using secondary channels for non-priority traffic and logistical communications as follows:

- Emergency involving imminent danger to life or property.
- Traffic handling.
- Disaster operations requiring interoperability and inter-county communications.
- Special events and support events, generally of a pre-planned nature.
- Training exercises.
- Casual day-to-day communications.

Traffic Handling:
Formal messages in ICS-213 format are normally used for most served pattern, while some have their own message forms. However, at the county and city level, the local served agencies may already have a message format that is built into their standard operating procedures. In those instances, it is the responsibility of the EC to establish an acceptable format that will allow efficient message handling during the entire course of the event.

Regardless of the format used during an incident, the ARRL Radiogram message format will be used for traffic directly inserted into the National Traffic System (NTS), such as "Health & Welfare" inquires. (Appendix M, N & O)

Traffic should <u>not</u> be handled on the primary frequency of an Emergency Net, except during periods of light activity or if secondary frequencies are unavailable or have no coverage. If the net is handling much traffic off the primary frequency, the NCS or Net Manager should consider designating the separate frequency a secondary net for use by stations handling this traffic. If a waiting line develops on the secondary net additional frequencies may be added to accept the overflow if available and they can be staffed.

ARES members should already be trained and practiced in message handling, if they are to be deployed. Please use caution concerning personal privacy, especially with injuries and medical information, it is the law. Some Traffic handling information and references are available in Appendix: M, N & O, plus ARES Manual Field Resources Manual.

Alternate Modes and Methods of Communications:
When traditional methods (VHF/UHF/HF Simplex, repeater, & linked system) of communications break down, we have alternative methods at our disposal It is highly suggested that your specific team of core individuals test and be practiced on the use of these alternate methods.

Field capabilities would determine which alternate modes can be used during deployment.

APRS (Automatic Packet Reporting System):
APRS is a system for real time digital communications of information of immediate value in the given local area. APRS is also capable of transmitting a wide variety of data, including weather reports, short text messages directly to specific recipients and short Emails.

Narrow Bandwidth Emergency Message System (NBEMS):
Narrow Band Emergency Messaging Software (NBEMS) is an Open Source software suite that allows amateur radio operators to reliably send and receive data using nearly any computer (Windows, Mac, and Linux) and any analog radio without requiring a dedicated digital infrastructure or specialized modem hardware. NBEMS works on both VHF/UHF FM and on HF. NBEMS is a robust protocol that is HIGHLY resistant to interference and weak signals. Its advantage lies in being able to send radiogram messages much faster and more reliably than voice methods. NBEMS can be used using cellular phone, tablets, and computer through audio coupling or interface connections.

Winlink
Winlink is a powerful tool during emergency events for sending message, especially large volumes of data, since permit and RF link to the Internet. The linkage can enable e-mail message to areas outside the effected event area to serve partner with operational Internet.

NVIS (Near Vertical Incidence Skywave): For HF
NVIS, is a skywave radio-wave propagation path that provides usable signals in the range between groundwave and conventional skywave distances—usually 30–400 miles (50–650 km). There is no fundamental difference between NVIS and conventional skywave propagation; the practical distinction arises solely from different desirable radiation patterns of the antennas (near vertical for NVIS, near horizontal for conventional long-range skywave propagation).

DSTAR data and DRATS:
D-RATS is a free, easy to use, multi-platform program for data communications with D-STAR devices and/or through the Internet. The software can be run on Windows, MacOS and Linux/UNIX computers. D-RATS provides many functions including chat dialog box and the ability to send Radiogram messages quickly.

Text Messaging and Cellular Systems:
During periods of heavy traffic or bad reception, if the cell system is up and usable, it can be used as a last resort. Remember we are serving a function as communicators no matter what method we use to fill that role. APRS is also capable of sending short messages.

MESH Network:
Mesh networks are self-contained wireless computer networks that are capable of interconnections repeaters, message systems, VOIP, cameras, and links to the Internet. These networks operate on amateur radio frequencies at 3.4 and 5.8 GHZ. There are multiple emergency communications applications being used and more being developed. AREDN is a source for future information.

ARES members should already be familiar with and practiced in alternate modes of communications available to us if they are to be deployed. However, these alternate mode and others may be future options.

Continuity of Operations Plan (COOP):
A major incident or emergency could include injury or death of key personnel and the partial or complete destruction of established facilities. Our organization being mostly volunteers also must understand that we ourselves in some incidents may not be able to help either.

Continuity of operations is particularly important with respect to the support we provide to our partners. A key aspect of this support is the continued capability to communicate official requests, situation reports, and another emergency information throughout the event. Having enough people to provide adequate coverage is very important. This is where the idea of "assistant" positions becomes important in the ARES infrastructure.

A Continuity of Operations Plan (COOP) according to basic standards is needed. Appendix J

To ensure continuity of our group, the following elements need to be addressed:

- Line of succession (minimum three "deep") for essential positions.
- Pre-delegation of emergency roles to key personnel.
- Pool of trained operators on the county level.
- Usage of alternative modes and methods of communications.
- Training.

National Incident Management System (NIMS)
National Incident Management System (NIMS) provides a common, nationwide approach to enable the whole community to work together to manage all threats and hazards. NIMS applies to all incidents, regardless of cause, size, location, or complexity. (Appendix P)

During any emergency or disaster, the National Incident Management System (NIMS) will be utilized by most if not all emergency response agencies to manage an emergency incident/disaster or a non-emergency planned event. The Incident Command System structure used for emergency and disaster management. This is the primary structure of most partner agencies and used when multiple agencies are involved. It is the rationale for be familiar with IS courses, formerly ICS course. (Appendix Q)

ARES members should already be familiar with NIMS and at least have an IS-100 and IS-200 certification. (Appendix P & Q)

NETS

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

Role of Net Control
The role of the NCS is vital to the efficient and smooth traffic handling and operation required during a disaster. Role of the NCS:

- The NCS is in-charge of the net while the net is in session. He is responsible for controlling who uses the frequency and when they pass traffic.
- NCS must keep track of which resources are on the net and who has cleared the channel. NCS is also responsible for knowing what traffic each person can deal with (sending HF traffic to a Technician will not work).

- In medium and large operations, a backup NCS and a person to log are necessary.
- Keep a written record of the incident and all traffic passed. This does not mean a copy of all formal traffic, simply an overview of the message ("Communications Log" role)
- Make ALL instructions clear and concise, using as few words as possible.
- Use tactical call signs. If participants do not follow your lead, only recognize those using tactical call signs (obviously this does not apply if they have emergency traffic).
- Different nets may be established for different traffic. Should someone try to pass traffic that should be on another net, refer them to the correct net. Nets can either be "open" or "directed":

Types of Nets

Open Net ~ Open nets do not have a Net Control Station and participants follow good amateur practice in taking turns at communicating. Nets for public service communications, such as parades, can usually be an open net.

Directed Net ~ A directed net has a Net Control Station assigned who controls and "directs" the flow of traffic through the net. Most emergency nets are directed nets. During an emergency it is essential that NCS is assigned due to the volume of traffic.

Tactical Net A tactical net is the primary coordination net for the event or for an agency being served. These nets should use tactical call signs, identifying the location or function of that site: i.e., shelter, fire control, EOC, etc. Amateur call signs are used at the end of transmissions only, as required by FCC regulations (traffic should short and concise and should not exceed the 10-minute rule for identification). The use of tactical call signs prevents confusion when operators change. Tactical call signs will be assigned by net control. These nets are restricted to traffic for the event only.

Logistics Net ~ A resource or logistics net is for acquiring volunteers for the event and making assignments for various operators. A resource net could be a District level net, coordinating the response of amateurs from other Districts to respond to the affected area. When establishing a resource net consider using a linked repeater system that covers a wide area, or an HF frequency.

Traffic Net ~ A traffic net is for passing formal (normally written) traffic. These are directed nets and traffic can either be passed on the net frequency or sent off to another frequency. During a disaster there may be more than one traffic net, one may be local, and one may be on HF to pass traffic into and out of the affected area. Packet stations should be established to handle welfare traffic. A list of established voice traffic nets is contained in the Annex

Admin Net ~ An admin net can be established to coordinate the response and relief of ARES volunteers, arrange for equipment or other ARES resources to support the function of ARES. This type of net would normally be for the EC and AEC's. If available 70cm repeaters are ideal.

Hospital Emergency Amateur Radio Service (HEARS) ~ A HEARS net is a directed net that handles communications related to hospital operations. Hospital statistics or needs and specific patient information is passed on this net. The HEARS NCS will check in with the county net and information is passed to participating hospitals. Communications within each hospital will be transmitted by simplex. Hospital Emergency Amateur Radio Service (HEARS) is a specialized ARES group that consists of volunteer amateur radio operators who dedicate their time and equipment to communicate for the local hospitals in times of disaster or communications failure. These operators receive specialized training in emergency medical communications. Inter- and intra-communications are provided at each of the participating hospitals. Specific patient information is received from the scene and forwarded to the necessary hospital personnel. Hospital status and needs are also reported to the county EOC. All communications must comply with all hospital, personal privacy and FCC regulations.

Other Nets ~ Other nets may be established to support functions, within emergency response, such as Community Emergency Response Teams (CERT), Family Radios used by shelter personnel or tactical teams.

Roles and Responsibilities - During Large-Scale Event

This serves as a synopsis for reference during an emergency.

1. **Southern New Jersey Section Leadership**
   - Coordinate contact with appropriate SNJ ARES leadership personnel SEC's and ASEC's.
   - Coordinate contact with appropriate ARES county EC's and AEC's.
   - Schedule conference calls conferences to relay information and get feedback if needed.
   - Monitor and participate in State Office of Emergency nets, as necessary.
   - Monitor ARRL Bulletins, as necessary.
2. **County ARES leadership (EC's and AEC's)**
   - Responsible for the county's emergency planning and response decisions.
   - Distribute weather reports to your key members.
   - Designate roles for individuals within your group as necessary.
   - Keep Section leadership advised of status on a regular basis.
   - Request aid from section leadership (personnel and/or equipment).
   - Ensure maintenance of agreements with county, private sector partners, and non-profits.
   - Make sure members are familiar with the ARES Manual.
   - Make sure members are familiar with NIMS and ICS.
   - Maintain current list of resources within your county.
   - After the event record it and participation of members in ARES Connect.
3. **Section Level Weather Coordinator or other NWS weather personnel and liaisons.**
   - Develop weather reports based on National Hurricane Center (NHC) and National Weather Service forecasts specifically for accuracy within for our area of operations (SNJ Section).
   - Coordinate and distribute weather information and reports regularly, specifically through email to section leadership personnel.
   - Distribute weather information and reports regularly through social media (Facebook and Twitter accounts).
4. **Expert in designated field**
   - Outside the prevue of a weather event and depending on the type and severity of the anticipated incident, outside experts may need to be consulted to lend guidance.

SPECIFIC SITUATIONS

Shelter Operations:

Staffing ~ Shelter operations should be staffed with a minimum of two people: one operating the radio and the other acting as runner and logger. Ideally, both operators can rotate roles to provide each other relief. Shelter operations can usually be handled on VHF secondary frequencies with backup. It may be advisable for operators to have access to FRS, GMRS or other frequencies used by shelter staffs, if the staffing partner or CERT volunteers use radios within the shelter facility. *(FRS & GMRS may have limitations with interference and distance at some location.)*

Duties ~ Operators role will focus on providing communications:

- Between Shelter Manager and organization in charge of shelter, typically Red Cross, if the normal communications channels are not operating or overloaded. Communications would be for logistical supplies, equipment needs, personnel request and assistance. Typically using partner/agency or ICS-213 message forms.

- Between Shelter Manager and ARES/RACES net control for emergency services in the event of normal telecommunications disruption.
- With shelter staff or volunteers, typically using FRS frequencies.
- Handle "Health & Welfare" messages for sheltered individuals, typically using ARRL message forms and numbered message format or similar served agency forms.

Operators should focus on emergency communications, thus avoiding accepting other duties that hinder effective emergency communications. Shelters are good locations for digital data message handing for "Health & Welfare" traffic.

Weather/SKYWARN ~ SKYWARN operations can usually be staffed by an operator training in SKYWWARN procedures from any location that has access to weather information and can send weather "Spotter" reports. During a significant weather event, the net control station ideally would be monitoring the NWS reports, warnings, bulletins, and radar, plus collect "Spotter" information for relay to the regional NWS facility. SKYWARN operations can usually be handled with VHF secondary frequency, if there is a need to keep primary frequencies open.

Hospital Emergency Amateur Radio Service ~ HEARS operations are directed net that handles communications related to hospital operations. Hospital statistics or needs and specific patient information are passed, requiring a significant concern for privacy of patient information. Operators are usually especially trained in privacy issues. Some considerations are:

- Select operators who have been especially trained in privacy issues for hospitals.
- At no time should patients, individuals name or title, be communicated.
- Consider digital communications modes for privacy and movement of large amounts of data with the highest accuracy.

Search & Rescue ~ Search and rescue operations frequently are conducted in remote area, where communications may be on the agency's frequencies, different or multiple repeaters, or simplex frequencies. Some considerations are:

- Be prepared physically to navigate unexpected terrain, changing weather conditions, and mentally for what may be found, deceased person.
- Usually communications will be tactical in nature using a single net with multiple staff.
- If possible, study topographical maps of the search area to determine potential communications challenges and provide copies of search area maps to net control for tracking search teams.
- Always have an alternate communications channel plan before walking into the remote areas.
- Prior to entering search areas team communicators should indicate to net control; area being searched, number of searchers, and tracking dogs. When leaving search area count and report number of searchers and tracking dogs. Net control should record and verify the information of 'in and out' are the same. *{Leave no searcher unaccounted for.}*
- Be prepared to paper log information or evidence found including description, time and location (GPS coordinates, if available) APRS is useful for tracking search teams and reporting clues to jurisdictional authorities.
- If working with organized search & rescue team(s) with their own communication system attempt to arrange for their leaders to decide information to be sent to net control before amateur operator provides it to net control.

- Attempt to organize assets available at recon area of interest for Net control in advance of searching an area, examples verify map & terrain, handle private property questions.

RACES/AUXCOMM ~ When activated for Radio Amateur Civil Emergency or Auxiliary Communications duty operators are serving a Federal, State, or County agency. The operators will be utilizing the agency's procedures, frequencies, and message handing protocol. Some for the RACES/AUXCOMM assignments require prior training and credentials, such as radiation exposure training prior to activation duties.

Public Service Events ~ Public service communications are provided to non-profit organizations sponsoring a public event. These events are planned and do not require any emergency management. They usually require some advanced planning, the larger the event the more planning required. Planning will determine the type of communications needed, best frequencies, number of operators, and other consideration. However, you should always remember amateur radio operators are there for the unexpected; incidents, lost child, or call for assistance. Be aware and be visible to the public.

Shadowing Operations ~ Shadowing operations occur when an amateur radio operator is providing a communications channel between the person (principal or key partner representative) and other stations on the net. The operator has primary two duties; 1) stick like glue to the person being shadowed without getting in their way, and 2) to be prepared to communicate successfully from any place that your "key partner representative" might travel. Some things to consider for shadowing are:

- Is a HT with several watts of power, earphone, and spare batteries enough?
- If traveling in vehicle, is there a need for external antenna -mag-mount, power connection – what voltage/type or spare battery - Gel Cell, appropriate clothing, and special safety concerns.

Liaison/Relay Operations ~ During any events local teams should consider establishing a Liaison/Relay station, typically stationery/home based, that can provide needed services such as:

- Monitor and relay information other key frequencies or nets such as EOC, and Section Traffic Net.
- Provide logistical support, such as researching information, contacting served agencies or local authorities by telephone, and/or calling up additional resources.
  Note: Ideal role for team member who is unable to be in field environment.

POTENTIAL CHALLENGES & FUTURE CONSIDERATIONS

This section could have the titled 'What If'? The following are challenges identified during the preparation of this document and its initial review by SNJ Section Emergency Coordinators, Assistant Emergency Coordinators, Assistant Section Emergency Coordinators, Section Emergency Coordinator and Section Manager for future consideration. That is should the items be address, if so in what priority. These are stated for continuous improvement of emergency communications, rather than negative feedback of the plan.

POTENTIAL CHALLENGES	CONSIDERATIONS
• Have multiple frequencies been tested between shelters/hospital and net control?	➢ Is simplex an alternative? ➢ Is it possible to relay message on simplex? ➢ Test the multiple frequencies annually.
• Activation plan for a total telecommunication disruption?	➢ Establish single repeater and simplex frequency to monitor in the event of disruption? ➢ Test the activation plan annually.
• Expand digital message handing, since it faster and more accurate than voice messages?	➢ Expanding NBEMS, PACKET and/or Winlink used by Counties, Section, and Division.

IMPLEMENTATION & TRAINING

In order, for this plan to work we need to make certain requirements regarding the training of ARES personnel. It is critical to the success of this plan that these requirements regarding the training are correct for each county.

If a county cannot fulfill these goals at this time, training should be planned and accomplished within that county to be included in a wide area response. Contact the SEC for assistance.

- All county ARES personnel are familiar with the ARES Manual.
- All county ARES personnel are trained in ICS and NIMS coursed; IS-100. IS-200, IS-700, and IS-800.
- Each county ARES has an Emergency Coordinator (active and available)
- Each county ARES has at least one Assistant Emergency Coordinator
- Each county knows its role and responsibilities for preparedness, response, and recovery (based on the ARES Manual and their specific county needs).
- Each county ARES maintains a state of readiness and make its members aware of potential threats and actual threats as they develop.
- Each county ARES practices, trains and takes part in at least one drill a year.
- PODS (Appendix C) are available for semi-rapid deployment for counties that have them available.
- We are beholden to our counties and served agencies and therefore may not always have the personnel or equipment to coordinate with a full SNJ Section response.
- Some ARES members may have emergencies of their own in the event of a natural disaster, therefore may not be available.

In addition, it is desired that the local ECs cooperate with the SEC in development of a Section-wide Simulated Emergency Test annual in the Fall. If a significant Section-wide event occurs, the Section Manager could wave that year's SET. Using the significant Section-wide event lessons learned for continuous improvement.

All training should be recorded as an ARES Connect Event with participants indicated. Since the Section Manager has the ultimate authority over training, the Section Manager can change requirements as warranted.

Local ECs should communicate any training needs beyond their team's instructional capability to the SEC for possible assistance of the SNJ Instructional Team.

Document Control & Maintenance

Document Control Responsibilities:
Each iteration of the EOP will be accompanied by a revision number (version number) for easy authentication.

Section Emergency Operations Plan Recommendation and Approval

Recommended by:	Approved by:
Thomas Devine – WB2ALJ	Thomas Preiser – N2XW
Section Emergency Coordinator	Section Manager
Date: April 5, 2020	Date: April 5, 2020

R – 03/24/2020 ~ WB2ALJ

List of Acronym Definitions

AEC=Assistant Emergency Coordinator

ARES = Amateur Radio Emergency Service

ARESMAT = ARES Mutual Assistance Teams

ASEC = Assistant Section Emergency Coordinator

ARRL = American Radio Relay League

EC = Emergency Coordinator

EOC = Emergency Operations Center

EOP = Emergency Operations Plan

ETTE = Estimated Time to Event

FEMA = Federal Emergency Management Agency

ICS = Incident Command Structure

MARS = Military Auxiliary Radio System

MOU = Memorandum of Understanding

NCS = Net Control Station

NIMS = National Incident Management System

OEM = Office of Emergency Management

SEC = Section Emergency Coordinator

SCERN = Southern Counties Emergency Repeater Network

SM = Section manager

SJWRA = South Jersey Weather Readiness Alliance

SNJ = Southern New Jersey

APPENDIX A: SNJ SECTION LEADERSHIP

County	Position	First Name	Last Name	Call	Email	Cell Phone #
Atlantic	EC	Dave	Larcombe	KD2KVZ	KD2KVZ@gmail.com	609-513-9389
Atlantic	AEC	Ben	Liberatore	N2WCL	N2WCL@outlook.com	609-645-7258
	AEC	Sal	Emma	KB2DMU	Savy1962@comcast.net	609-231-9671
	AEC	Tom	Hurst	AB2KP	AB2KP@comcast.net	609-641-1132
	AEC	Jason	Schollenberger	KD2QED	jason@schollenberger.com	609-457-5177
Burlington	EC	Chris	Cannatella	KC2GNQ	Chris@Cannatella.com	609-665-2020
Camden	EC	Tom	Gorman	KE2ES	Tom.Gorman2178@gmail.com	609-922-5754
Camden	AEC	Pete	Greene	N2LVI	Peter.Greene14@gmail.com	856-596-1740
Camden	AEC	Art	Arnold	N2CPR	artarnold@yahoo.com	
Camden	AEC	Tim	Carvis	WB9ULP	WB9ULP@comcast.net	
Cape May	EC					
Cape May	AEC					
Cumberland	EC	Mike	Harla	N2MHO	N2MHO@arrl.net	609-319-4927
Cumberland	AEC	Shep	Kilby	KA2M	Beanie357@comcast.com	609-247-2665
Cumberland	AEC	Dave	Smith	KC2VEM	mrdavidsmith@comcast.com	856-825-0153
Gloucester	EC	Karl	Frank	W2KBF	W2KBF@arrl.net	201-803-2567
Gloucester	AEC	Walter	Seitz	KB2JCG	KB2JCG@gmail.com	865-723-3858
Mercer	EC	John	Pugh	WJ3P	WJ3P@arrl.net or Jepugh@gmail.com	609-439-3076
Mercer	AEC	Jamie	Pugh	N2VVL	Jkpugh@gmail.com	609-468-1631
Mercer	AEC	Roger	Ding	KD2FDT	airseadog@gmail.com	732-986-1470
Mercer	AEC	Thomas	Czeizinger	W2DRT		
Ocean	EC	Bob	Murdock	WX2NJ	WX2NJ@comcast.net	732-330-5413
Ocean	AEC	John	De Poto	N2LD	N2LD @arrl.net	609-713-5894
Ocean	AEC	Tim	Tonnesen	NJ2N	NJ2N@arrl.net	
Salem	EC	Charlie	Olinda	N2SRQ	N2SRQ@arrl.net	856-649-6331
Section	SEC	Tom	Devine	WB2ALJ	WB2ALJ@arrl.net	908-399-7573
Section	ASEC	Dave	Larcombe	KD2KVZ	KD2KVZ@gmail.com	609-513-9389
Section	PIC	Rick	Kennard	N2RPQ	N2RPQ@arrl.net	732-620-5252
Section	PIO	Tullio	Dellaquila	K2PCG	tulliodellaquila@gmail.com	609-638-4434
Section	STM	Steve	Bromhead	KB2RTZ	KB2RTZ@gmail.com	856-297-6186
Section	Tech. C.	John	Kafka	NJ1SP	jkafk@optonline.net	609-820-1036

R-03-13-2020

APPENDIX B: LEVELS OF QUALIFICATIONS

Based on the ARES Strategic Plan, all participants shall have a valid Amateur Radio license issued by the Federal Communications Commission. All participants shall have an interest in self-improvement and maintaining standards of excellence.

Since many of the partner agencies that ARES serves have mandates and structured training programs where all participants receive the same training and, when deployed, would be qualified to assume any position. Therefore, changes have been made to resolve this issue identified by our partners about inconsistent training requirements required of ARES participants. Such training will be measurable and recognized across a broad spectrum of the county by served partners.

Three levels of training will allow ARES participants to enter the program and migrate to higher levels of qualifications and service.

- **Level 1** ~ This is the entry level for those new to Amateurs Radio or emergency communications. This introductory training is conducted by the local ARES group to meet their needs and those of their served agency or partners. This training could be formal or informal and would introduce the ARES participant to the fundamentals of emergency communications and provide instruction on how participants are to conduct themselves while deployed.
- **Level 2 ~** To qualify for this level participants shall have completed the following courses: ARRL's EC-001 "Introduction to Amateur Radio Emergency Communications" (or current equivalent) and FEMA IS-100, IS-200, IS-700 and IS-800. Participants are also encouraged to take advantage of training opportunities available through partners to enhance their knowledge and skill set.
- **Level 3 ~** This level of training prepares ARES participants to take on leadership positions such as EC, ADC, DEC, ASEC, and SEC, and other designated positions in the ARES program. Participants are required to complete ARRL's EC-016, "Emergency Communications for Management" along with FEMA courses IS-300 and IS-400. Participants are strongly encouraged to complete the FEMA Leadership Development series of courses IS-120, IS-230, IS-240, IS-241, IS-242, IS-244, and IS-288.

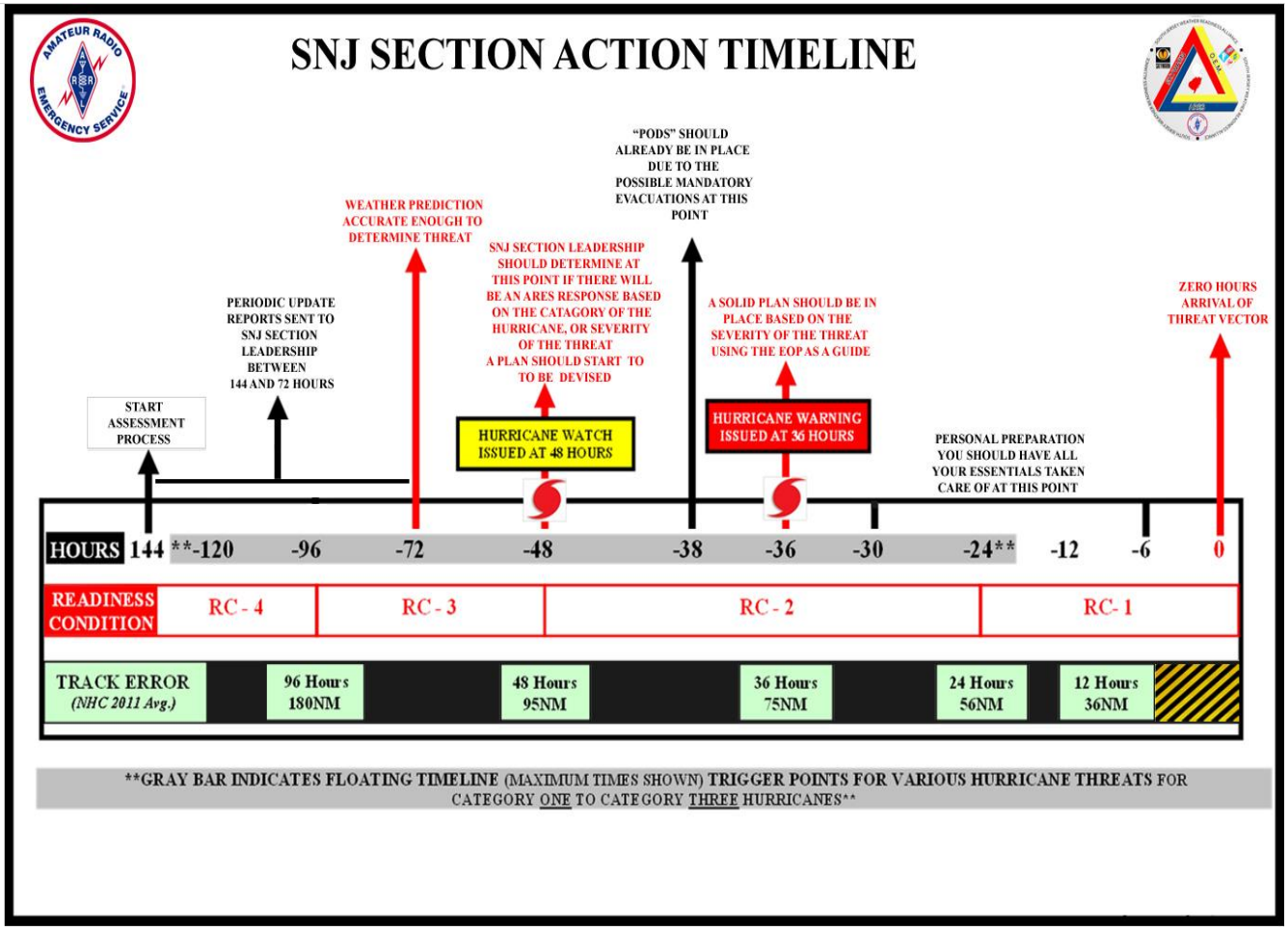
Completion of all training programs will be verified by the participant's Emergency Coordinator (EC) before the participant advances to a higher level. Since the Section Manager has the ultimate authority over training, the Section Manager can change requirements as warranted.

Those individuals holding leadership positions as the new program is introduced will be allowed one (1) year to complete the necessary training to meet qualifications for Level 3. (Extension can be permitted for extenuating conditions.)

Training requirements for ECs, DEC, and their assistants will be verified by their SEC or SEC's designated individual. In the case where the local community may have limited classroom study programs for IS-300 and IS-400.

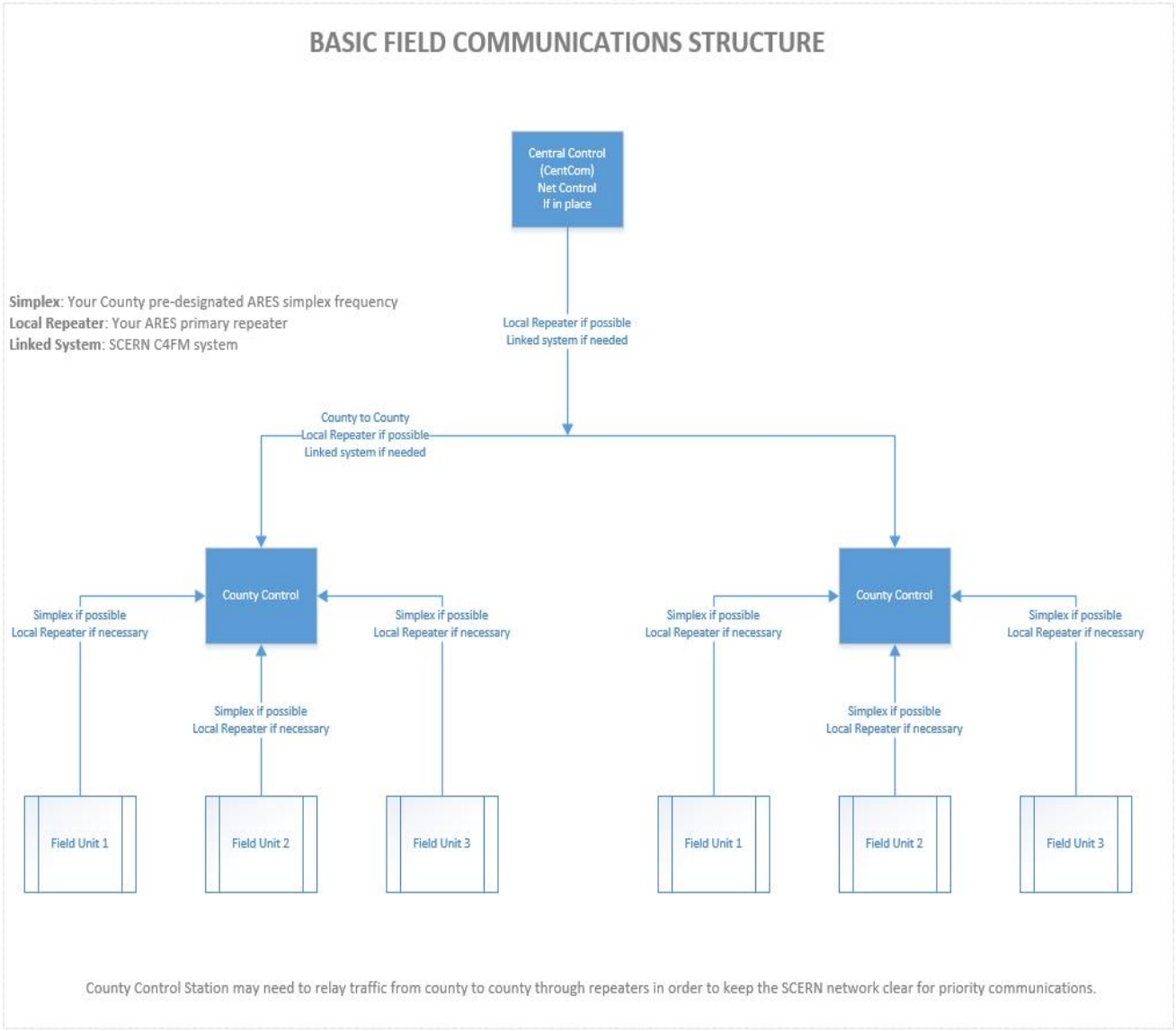
APPENDIX C: SOUTHERN NEW JERSEY SECTION ACTION TIMELINE

This appendix is provided as supplement to the Concept of Operations Section

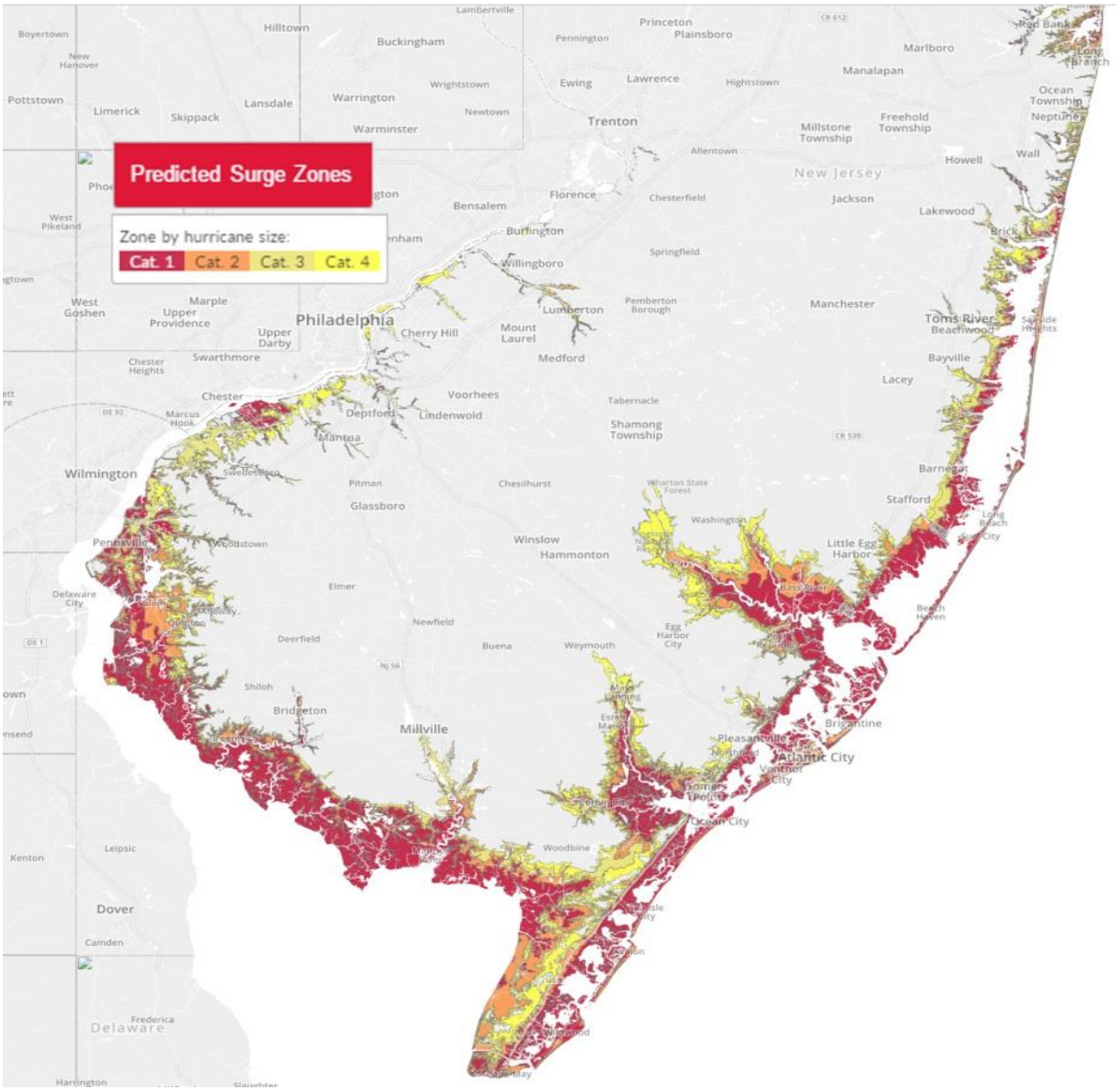


Appendix D: FIELD COMMUNICATIONS STRUCTURE

It should be noted that the field unit simplex and County to County portion of this structure can also represents HF or alternate modes other than VHF/UHF methods.



Appendix E: Map of the Hurricane Risk Jurisdictions



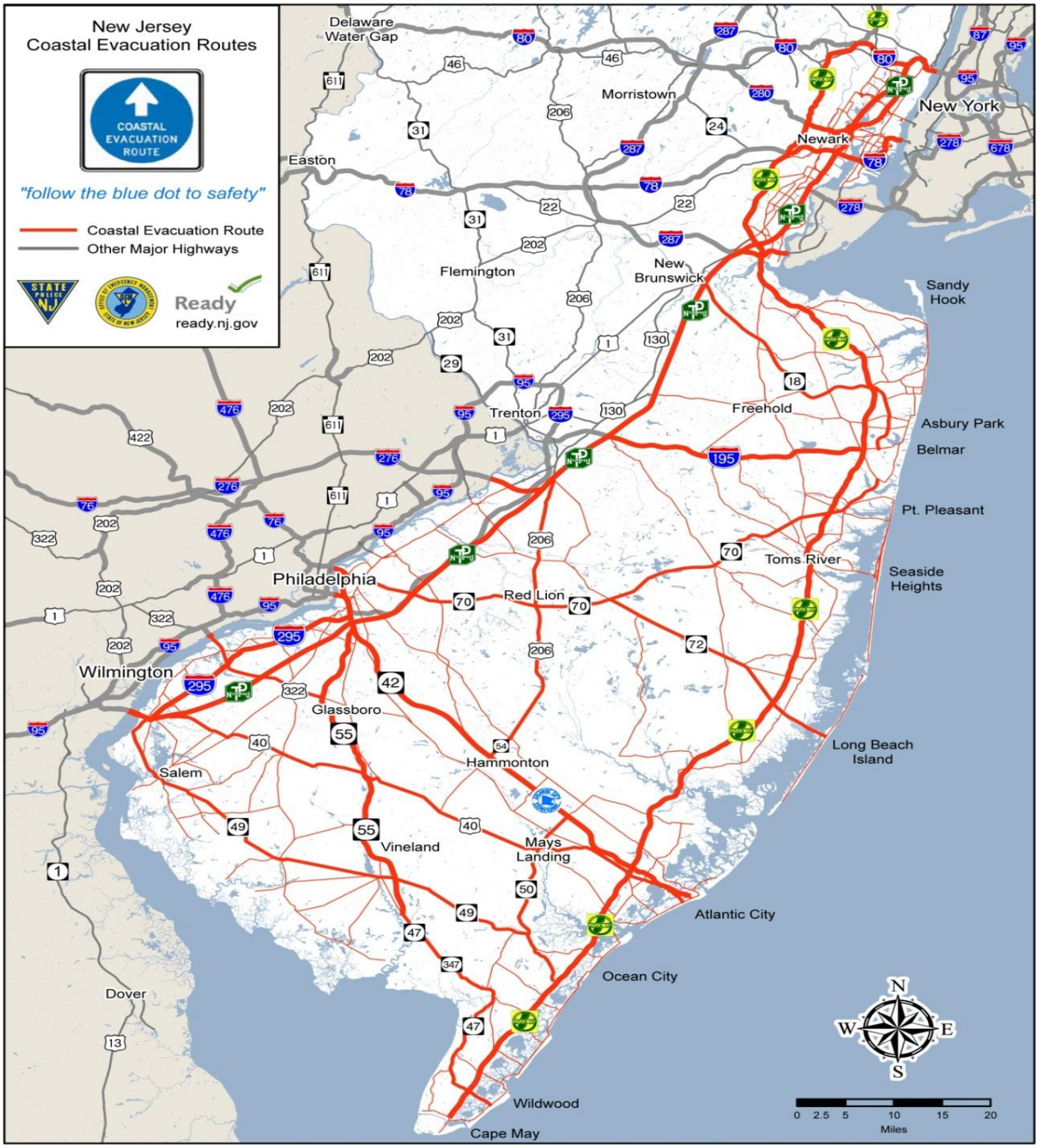
Designated Hurricane Risk Localities	
Atlantic County	Coastal areas, back bays, Egg Harbor Bay, barrier islands
Burlington County	Mullica River and tributaries
Camden County	Delaware River and tributaries
Cape May County	Entire county with North-west being the exception
Cumberland County	Coastal areas and tributaries
Gloucester County	Delaware River and tributaries
Mercer County	Delaware River-Minimal Risk
Ocean County	Coastal areas, back bays and barrier islands
Salem County	Coastal areas, Delaware River and tributaries

Appendix F: SAFFIR-SIMPSON HURRICANE WIND SCALE

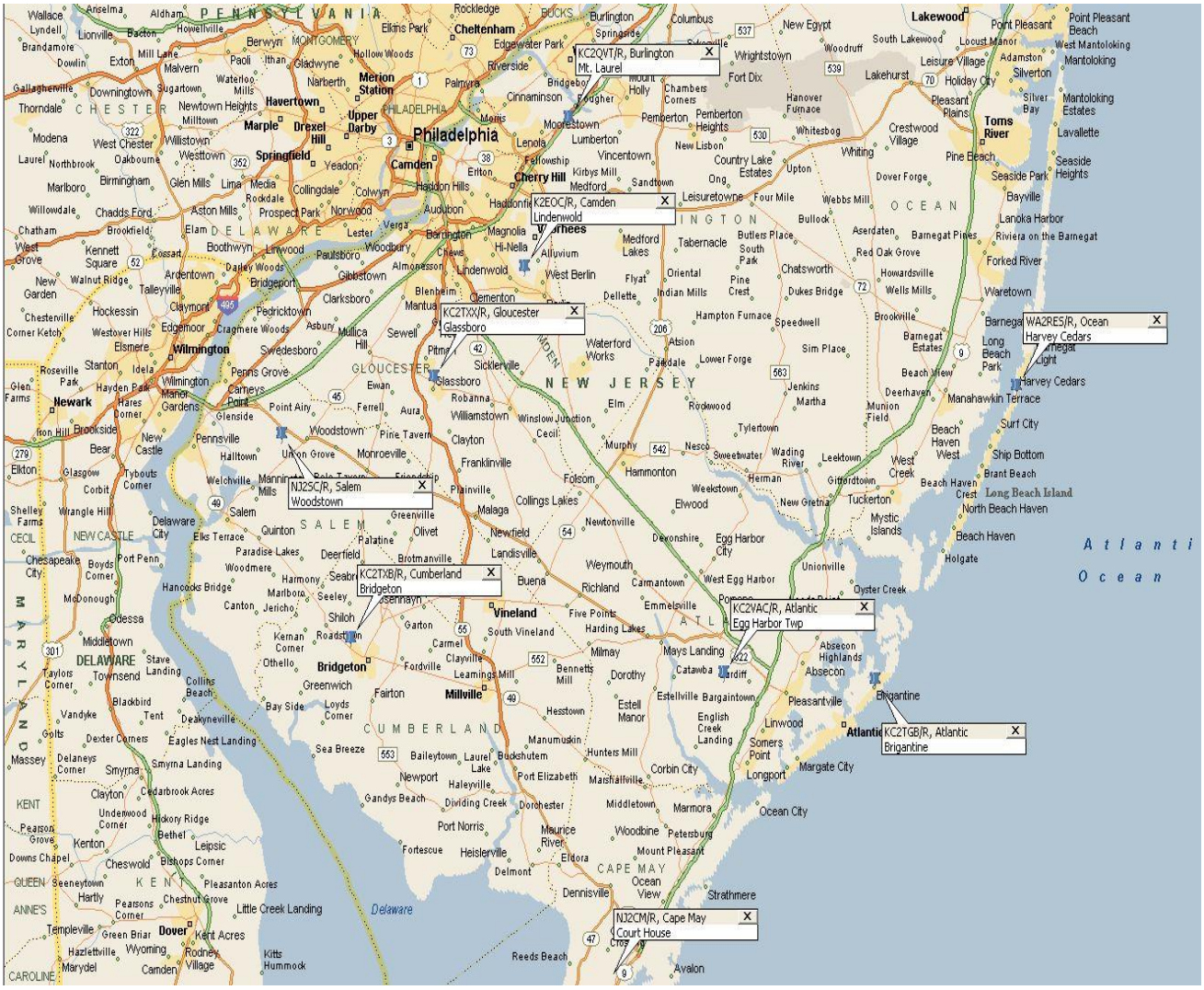
Category	Winds MPH	Anticipated Damage
1	74 – 95	Very Dangerous Winds – Will Produce Some Damage
2	96 – 110	Extremely Dangerous Winds – Will Cause Extensive Damage
3	111 – 129	Extremely Dangerous Winds – Devastating Damage Will Occur
4	130 – 156	Extremely Dangerous Winds – Catastrophic Damage Will Occur
5	> 157	Extremely Dangerous Winds – Catastrophic Damage Will Occur

Non-Hurricane Classifications	Winds MPH
Tropical Depression	23 – 38
Tropical Storm	39 – 73

Appendix G: COASTAL EVACUATION ROUTES



Appendix H: SCERN REPEATERS



SCERN Frequencies C4FM

County	Output FREQ.	SHIFT	CALLSIGN
Atlantic EOC	**445.16875**	**Negative**	**KC2VAC/R**
Burlington	**445.33125**	**Negative**	**KC2QVT/R**
Camden	**440.24375**	**Positive**	**KC2EOC/R**
Cape May	**440.09375**	**Positive**	**NJ2CM/R**
Cumberland	**445.31875**	**Negative**	**KC2TXB/R**
Gloucester	**440.10625**	**Positive**	**KC2TXX/R**
Ocean**	**446.97500**	**Negative**	**WA2RES/R****
Salem	**445.03125**	**Negative**	**NJ2SC/R**

**Linked to SCERN on C4FM

Appendix H: 7 Pods'. Self-Contained Stations

7 Pods'. Self-contained stations that included the following:

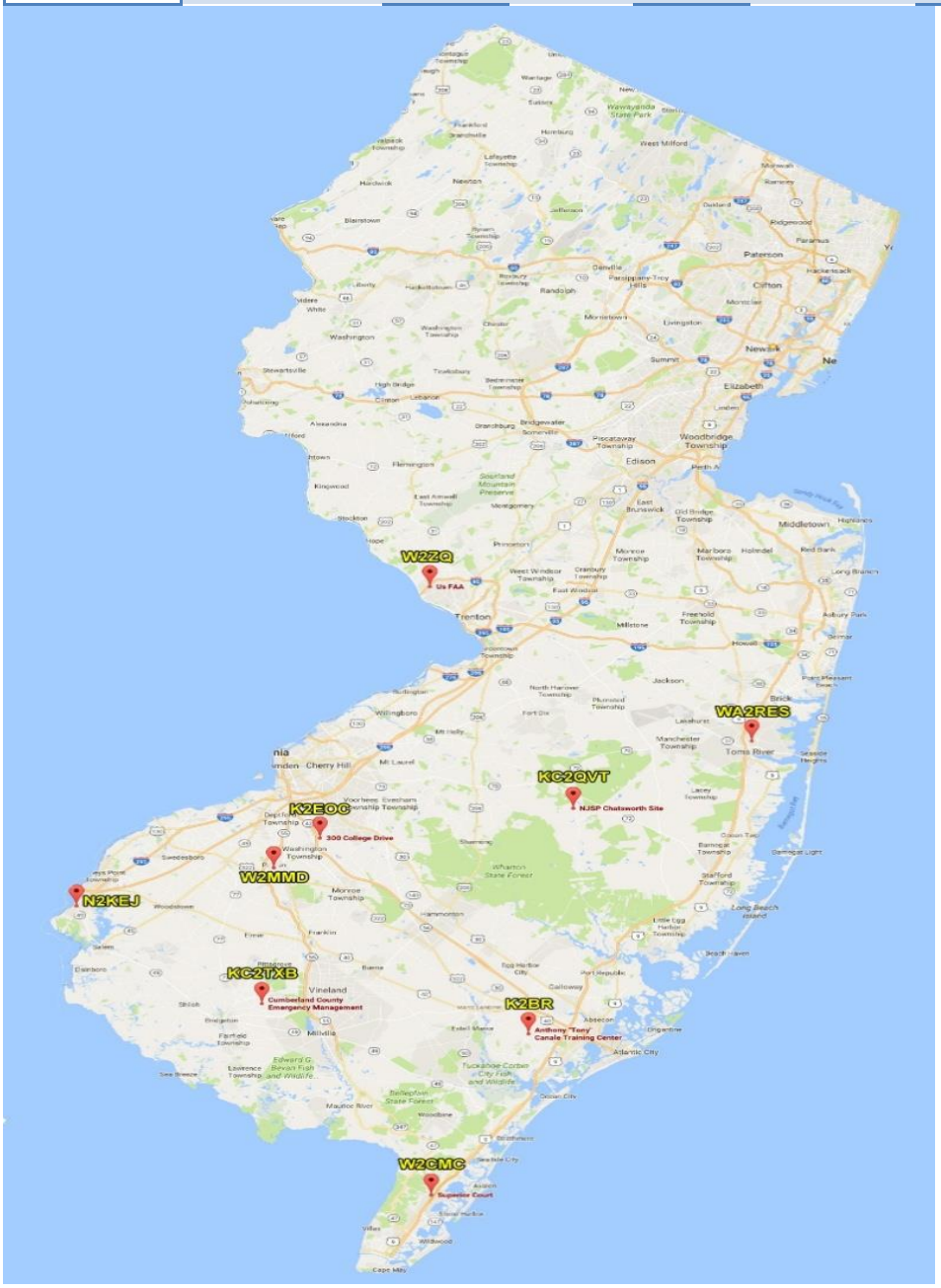
- Icom ID-5100 V/UHF D-STAR Dual Band
- Icom ID-1 1.2 GHz D-STAR DD/DV
- Yaesu FTM-400 V/UHF System Fusion Dual Band
- Yaesu FT857D U/V/HF SSB
- (2) Icom ID-31 D-STAR handheld
- (2) Yaesu FT-1DR System Fusion handheld
- Kantronics KPC-3+ Packet TNC
- (2) Laptop computers

Each POD contains;

- 2000w Inverter Yamaha Portable Generator
- Antennas for each radio.
- POD mounts on any standard 2" trailer hitch with no speed, road or licensing restrictions.
- Cranking the handle raises the chassis up to align with the hitch adapter. The handle locks for transport. One person can easily operate and store the POD without any lifting.

Appendix I: County Repeaters - Primary

COUNTY	PRIMARY	CALL	SPLIT	PL	BACKUP Power	SOURCE
ATLANTIC	146.745	K2BR	-600	146.2	YES	GEN
BURLINGTON	147.150	KC2QVT	+600	127.3	YES	X
CAMDEN	146.895	K2EOC	-600	91.5	YES	X
CAPE MAY	147.240	W2CMC	+600	146.2	YES	X
CUMBERLAND	147.255	KC2TXB	-600	179.9	X	X
GLOUCESTER	147.180	W2MMD	+600	131.8	YES	X
MERCER	147.105	W2MER	+600	123.0	YES	X
OCEAN	449.825	WA2RES	-5MHZ	131.8	YES	BAT/GEN
SALEM	146.625	W2KEJ	-600	131.8	YES	X



Appendix J: All Section Frequencies by County

County	Tactical #	Output	Call	Split	PL	Modes	Location	Backup Pwr
Atlantic	ALPHA	146.745	K2BR	-600	146.2	FM/C4FM	Atlantic County EOC	Auto Generator
Atlantic	BRAVO	146.985	W2HRW	-600	146.2	FM/C4FM	Stillwater Bldg.	Yes
Atlantic	CHARLIE	147.165	AG2NJ	+600	91.5	FM	S. Egg Harbor City	Yes
Atlantic	GOLF	447.575	K2ACY	-5Mhz	156.7	FM	Brigantine	Yes
Atlantic	FOXTROT	445.875	AG2NJ	-5Mhz	85.4	FM	Atlantic City	Yes
Atlantic	DELTA	448.775	K2BR	-5Mhz	146.2	FM	Atlantic Co. EOC	Auto Generator
Atlantic	ECHO	443.250	W2HRW	+5Mhz	146.2	FM/C4FM	Absecon	Yes
Atlantic	HOTEL	448.975	KC2KVZ	-5Mhz	123.0	FM/C4FM	Egg Harbor Twp	Yes
Atlantic	INDIA	444.650	KC2TGB	+5Mhz	156.7	FM/C4FM	Galloway	Yes
Atlantic	LIMA	146.560		Simplex		FM		
Atlantic	MIKE	146.580		Simplex		FM		
Atlantic	JULIET	146.520		Simplex		FM	Monitor for Emer. Traffic	
Atlantic	KILO	146.540		Simplex		FM		
Atlantic	NOVEMBER	445.16875	KC2VAC	-5Mhz		C4FM/DN	*SCREN Stillwater Bldg.	Yes
Atlantic	ROMEO	447.525	KC2TGB-B	-5Mhz		DSTAR	Brigantine	Yes
Atlantic	OSCAR	144.390	MAYS LNDG	Simplex		Digipeater	Mays Landing	Yes
Burlington		445.33125	KC2QVT/R	-5Mhz		C4FM/DN	*SCREN	Yes
Burlington	ARES Primary	147.150	KC2QVT	+600	127.3	FM		Yes
Burlington	ARES Secondary	145.470		-600	127.3	FM		Yes
Burlington		448.325		-5Mhz	127.3	FM		Yes
Camden	SCERN	440.24375	KC2EOC/R	+5Mhz		C4FM/DN	*SCREN	Yes
Camden	Primary	146.895	K2EOC/R	-600	91.5	FM		Yes
Camden		145.370	NJ2CH	-600	91.5	FM/C4FM	Cherry Hill	Yes
Camden		442.150	N2KDV	+5Mhz	156.7	FM/P25	Camden	Yes
Camden		145.390	K2DX	-600	91.5	FM	Monroe Twp.	Yes
Camden		146.565		Simplex				
Cape May	Primary	147.240	W2CMC/R	+600	146.2	FM		Yes
Cape May		443.600		+5MHZ	146.2	FM		Yes
Cape May		146.415		Simplex	203.5	FM		
Cape May	SKYWARN	147.420	SKYWARN	Simplex	XMIT 203.5	FM		
Cape May		446.025		Simplex	203.5	FM		
Cape May		927.500	W2CMC/R		100.0			Yes
Cape May		28.475		Simplex	-----	USB	Cape May	
Cape May		7.215		Simplex	------	LSB+/- 5	Cape May	
Cape May	APRS	144.390	W2CMC-15	Simplex	------	Digipeater		Yes
Cumberland	SCERN	445.31875	KC2TXR/R	-5MHz		C4FM/DN	*SCREN	Yes
Cumberland	Primary	147.255	KC2TXB	+600	179.9	FM		Yes
Cumberland		448.125	KE2CK	-5MHZ	192.8	FM	Upper Deerfield	Yes
Cumberland		147.540		Simplex		FM		

County	Tactical #	Output	Call	Split	PL	Modes	Location	Backup Pwr
Cumberland		145.070	KC2TXB-10	Simplex		Winlink		
Gloucester	SCERN	440.10625	KC2LNB/R	+5MHZ		C4FM/DN	*SCREN	Yes
Gloucester	Primary	147.180	W2MMD/R	+600	131.8	FM/C4FM	Pitman	YES
Gloucester		442.100	W2MMD/R	+5MHZ	131.8	FM/C4FM	Pitman	YES
Gloucester		224.66	W2MMD/R	-1.6M	131.8	FM	Sewell	YES
Gloucester		146.535		Simplex	------	FM		
Gloucester		28.465		Simplex	------	USB		
Mercer	ARES Primary	147.105	W2MER	+600	123.0	FM	West Windsor	YES
Mercer	SKYWARN	146.460	N2RE	+1Mhz	131.8	FM	Lawrenceville	YES
Mercer	ARES Secondary	146.670	W2ZQ	-600	131.8	FM/C4FM	West Trenton	YES
Mercer	ARES	147.555		Simplex	----	FM		
Mercer	RACES	224.230	NJ2EM	-1.6MHz	67.0	FM	Lawrenceville	YES
Mercer		442.650	W2ZQ	+5MHz		C4FM	West Trenton	YES
Mercer		144.390	W2MER	Simplex	-----	APRS	West Windsor	YES
Mercer		144.390	N2ARC	Simplex	-----	APRS	Princeton	YES
Ocean	NORTH1	449.825	WA2RES/R	-5Mhz	131.8	FM/C4FM	Toms River	YES
Ocean	SOUTH1	146.700	N2NF/R	-600khz	192.8	FM/C4FM	Tuckerton	Auto Batt/Gen
Ocean	TAC1	144.310		Simplex	-----	FM	Primary Simplex	
Ocean	TAC2	146.505		Simplex	-----	FM	Primary Simplex	
Ocean	TAC5	445.950		Simplex	-----	FM	Primary Simplex	
Ocean	TAC6	445.975		Simplex	-----	FM	Primary Simplex	
Ocean	801	3.9700		Simplex	-----	LSB	Primary HF SSB	
Ocean	401	7.2300		Simplex	-----	LSB	Primary HF SSB	
Ocean	101	28.355		Simplex	-----	USB	Primary HF SSB	
Ocean	801D	3.5845		Simplex	-----	USB	Primary HF Digital	
Ocean	401D	7.1200		Simplex	-----	USB	Primary HF Digital	
Ocean	101D	28.118		Simplex	-----	USB	Primary HF Digital	
Ocean	WNLK	145.010	WX2NJ-10	Simplex	-----	WINLINK RMS PACKET	Bayville	
Ocean	D-STAR	445.36875	WA2RES B	-5MHZ		D-STAR	Berkeley	Auto Batt/Gen
Ocean	SCERN	446.9750	WA2RES/R	-5MHZ		C4FM/DN	Harvey Cedar Link to SCERN	YES
Ocean	NORTH2	145.170	WA2RES/R	-600khz	131.8	FM	Manchester	Auto Batt/Gen
Ocean	SOUTH2	146.835	WU2E/R	-600khz	127.3	FM	Manahawkin	Manual Gen
Ocean	SHORE	446.9750	WA2RES/R	-5MHZ	131.8	FM	Harvey Cedar	YES
Ocean	APRS	144.390	BARNGT & TOMRVR	Simplex	-----	Digipeater	Barnegat & Toms River	YES
Ocean	TAC3	147.405		Simplex	-----	FM	Secondary Simplex	
Ocean	TAC4	147.565		Simplex	-----	FM	Secondary Simplex	
Ocean	TAC7	446.025		Simplex	-----	FM	Secondary Simplex	
Ocean	TAC8	446.050		Simplex	-----	FM	Secondary Simplex	
Ocean	802	3.9965		Simplex	-----	LSB	Secondary HF SSB	
Ocean	402	7.2640		Simplex	-----	LSB	Secondary HF SSB	

County	Tactical #	Output	Call	Split	PL	Modes	Location	Backup Pwr
Ocean	102	28.347		Simplex	-----	USB	Secondary HF SSB	
Ocean	802D	3.5830		Simplex	-----	USB	Secondary HF Digital	
Ocean	402D	7.0640		Simplex	-----	USB	Secondary HF Digital	
Ocean	102D	28.121		Simplex	-----	USB	Secondary HF Digital	
Salem		445.03125	NJ2SC/R	-5MHZ		FM/C4FM	*SCREN	Gen Back-up
Salem		146.625	W2KEJ/R	-600	131.8	FM/C4FM		Gen Back-up
Salem		147.550		Simplex		FM		Gen Back-up

*SCERN – Southern Counties Emergency Repeater Network includes Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Salem Counties through internet system. Ocean County is linked for inter-county communications within SNJ. R- 3/24/2020

Appendix K: Memorandum of Understanding & Agreements

ARRL National:

American Red Cross

Citizen Corps (Department of Homeland Security)

Federal Emergency Management Agency (FEMA)

SKYWARN (National Weather Service)

Local County Level Agreements and Memorandums of Understanding:

Consortium – 7 Counties RACES Organizations:

The Southern Counties Emergency Repeater Network (SCERN) is a mutual aid consortium consisting of the RACES organizations of New Jersey's seven southern counties: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester and Salem. The primary mission is to operate a digital repeater network capable of passing voice and data as needed in emergency situations to support the Southern New Jersey Medical Coordination Center and their served facilities. This does not preclude our support of County and Local EOCs as well as other activities. We look to work cooperatively with ARES and other amateur radio emergency organizations to develop a cooperative effort in Southern New Jersey.

SCERN was made possible by the Southern New Jersey Medical Coordination Center with the support of the seven southern county's Offices of Emergency Management.

Support Agreement

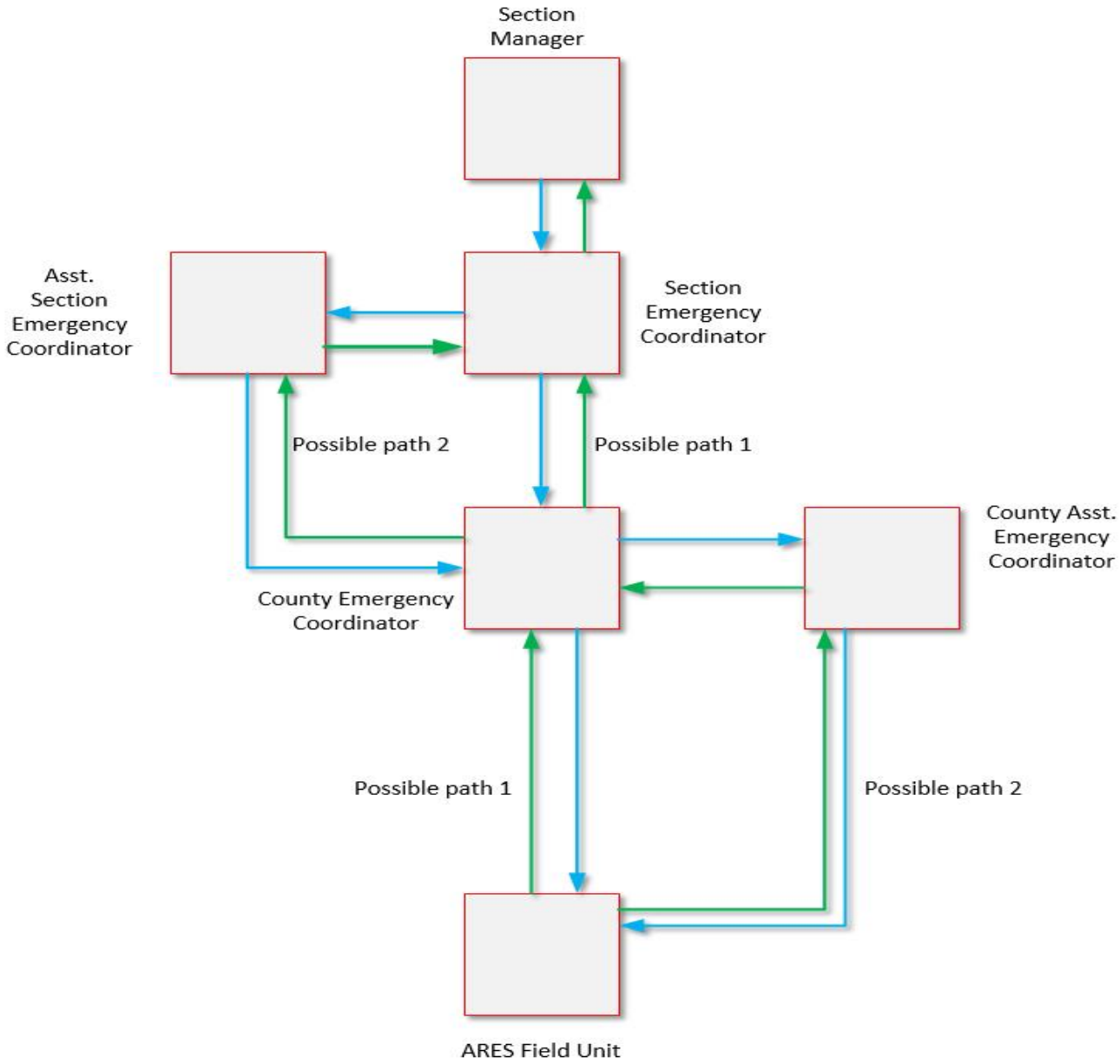
Mercer County - Provides Red Cross Center in Princeton with operators for three operating positions and provides backup operations for State EOC in West Trenton, as necessary.

Appendix L: Basic ARES Hierarchal Information Flow Chart

Basic ARES Hierarchal Information Flow Chart

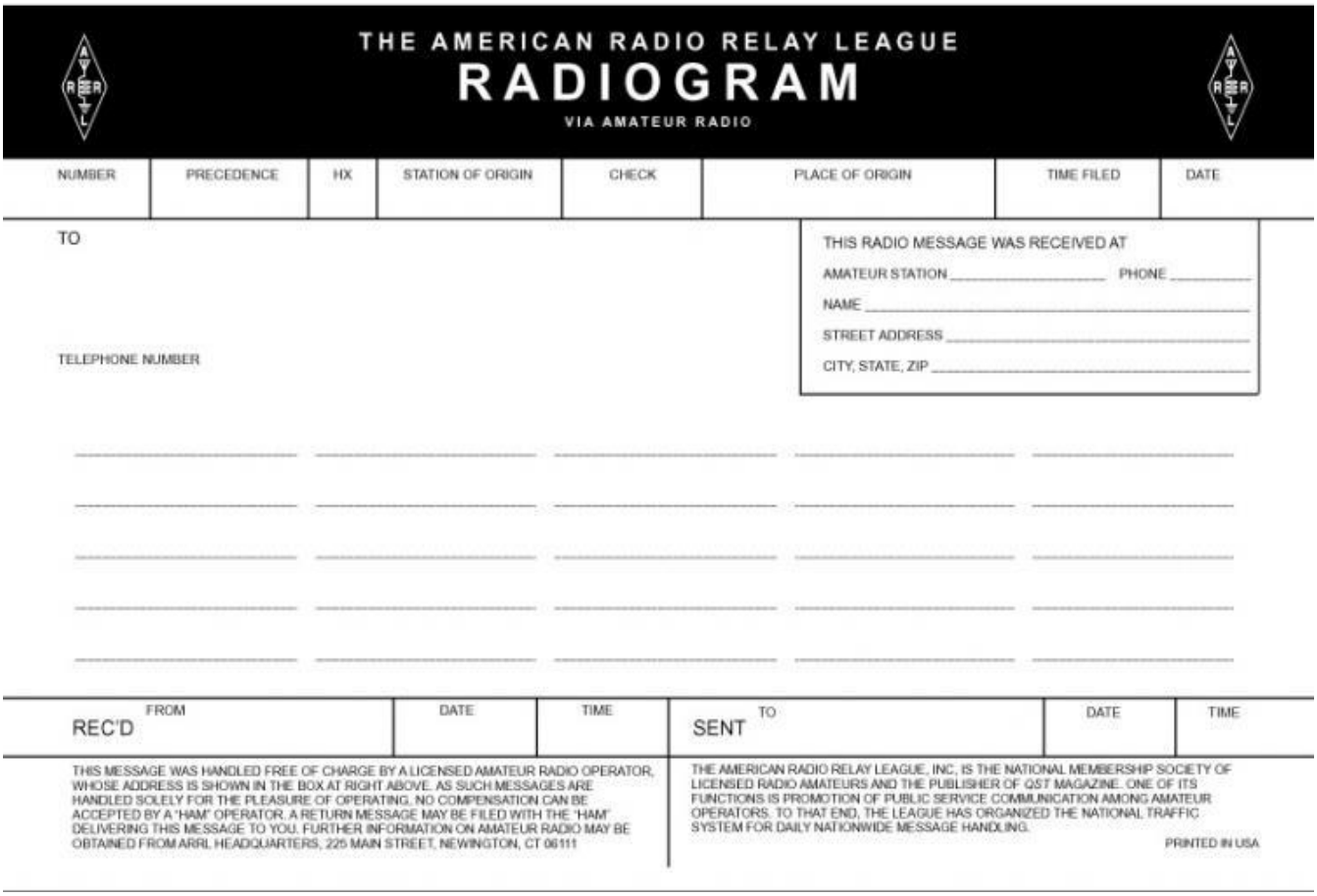
GREEN is up-flow
BLUE is down-flow

With the exception of the flow between the Section Manager and the Section Emergency Coordinator in the top two tiers, the upflow of information may stop at the relevant point on the chart. This limits information overload to the Section Level when the information may not be needed. Communications between levels not connected below by arrows should be avoided.



Appendix M: ARRL Message Format Information

ARRL RADIOGRAM



THE AMERICAN RADIO RELAY LEAGUE

RADIOGRAM

VIA AMATEUR RADIO

NUMBER	PRECEDENCE	HX	STATION OF ORIGIN	CHECK	PLACE OF ORIGIN	TIME FILED	DATE

TO

TELEPHONE NUMBER

THIS RADIO MESSAGE WAS RECEIVED AT

AMATEUR STATION _____ PHONE _____

NAME _____

STREET ADDRESS _____

CITY, STATE, ZIP _____

FROM REC'D	DATE	TIME	TO SENT	DATE	TIME

THIS MESSAGE WAS HANDLED FREE OF CHARGE BY A LICENSED AMATEUR RADIO OPERATOR, WHOSE ADDRESS IS SHOWN IN THE BOX AT RIGHT ABOVE. AS SUCH MESSAGES ARE HANDLED SOLELY FOR THE PLEASURE OF OPERATING, NO COMPENSATION CAN BE ACCEPTED BY A "HAM" OPERATOR. 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.

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Appendix N: Relief Emergency · Routine Messages Recommended Precedence's

The letters ARL are inserted in the preamble in the check and in the text before spelled out numbers, which represent texts from this list. Note that some ARL texts include insertion of numerals and text. Example: NR 1 R W1AW ARL 5 NEWINGTON CONN. DEC 25 DONALD R. SMITH 164 EAST SIXTH AVE NORTH RIVER CITY MO PHONE 73-3968 ARL FIFTY ARL SIXTY ONE BT DIANA. For additional information about traffic handling, consult The ARRL Operating Manual, published by ARRL, or the NTS Methods and Practices Guidelines. (ARRL Form FSD-3)

Group One—For Possible "Relief Emergency" Use

ONE	Everyone safe here. Please don't worry.
TWO	Coming home as soon as possible.
THREE	Am in _____ hospital. Receiving excellent care and recovering fine.
FOUR	Only slight property damage here. Do not be concerned about disaster reports.
FIVE	Am moving to new location. Send no further mail or communication. Will inform you of new address when relocated.
SIX	Will contact you as soon as possible.
SEVEN	Please reply by Amateur Radio through the amateur delivering this message. This is a free public service.
EIGHT	Need additional _____ mobile or portable equipment for immediate emergency use.
NINE	Additional _____ radio operators needed to assist with emergency at this location.
TEN	Please contact _____. Advise to standby and provide further emergency information, instructions or assistance.
ELEVEN	Establish Amateur Radio emergency communications with _____ on _____ Mhz.
TWELVE	Anxious to hear from you. No word in some time. Please contact me as soon as possible.
THIRTEEN	Medical emergency situation exits here.
FOURTEEN	Situation here becoming critical. Losses and damage from ____ increasing.
FIFTEEN	Please advise your condition and what help is needed.
SIXTEEN	Property damage very severe in this area.

SEVENTEEN	REACT communications services also available. Establish REACT communication with _____ on channel _____.
EIGHTEEN	Please contact me as soon as possible at _____.
NINETEEN	Request health and welfare report on _____ . (State name, address and telephone number.)
TWENTY	Temporarily stranded. Will need some assistance. Please contact me at _____.
TWENTY ONE	Search and Rescue assistance is needed by local authorities here. Advise availability.
TWENTY TWO	Need accurate information on the extent and type of conditions now existing at your location. Please furnish this information and reply without delay.
TWENTY THREE	Report at once the accessibility and best way to reach your location.
TWENTY FOUR	Evacuation of residents from this area urgently needed. Advise plans for help.
TWENTY FIVE	Furnish as soon as possible the weather conditions at your location.
TWENTY SIX	Help and care for evacuation of sick and injured from this location needed at once. Emergency/priority messages originating from official sources must carry the signature of the originating official.

Group Two—Routine Messages

FORTY SIX	Greetings on your birthday and best wishes for many more to come.
FORTY SEVEN	Reference your message number _____ to _____ delivered on _____ at _____ UTC.
FIFTY	Greetings by Amateur Radio.
FIFTY ONE	Greetings by Amateur Radio. This message is sent as a free public service by ham radio operators at _____. Am having a wonderful time.
FIFTY TWO	Really enjoyed being with you. Looking forward to getting together again.
FIFTY THREE	Received your _____. It's appreciated; many thanks.
FIFTY FOUR	Many thanks for your good wishes.
FIFTY FIVE	Good news is always welcome. Very delighted to hear about yours.

FIFTY SIX	Congratulations on your _____, a most worthy and deserved achievement.
FIFTY SEVEN	Wish we could be together.
FIFTY EIGHT	Have a wonderful time. Let us know when you return.
FIFTY NINE	Congratulations on the new arrival. Hope mother and child are well.
***SIXTY**	Wishing you the best of everything on _____.
SIXTY ONE	Wishing you a very Merry Christmas and a Happy New Year.
***SIXTY TWO**	Greetings and best wishes to you for a pleasant _____ holiday season.
SIXTY THREE	Victory or defeat, our best wishes are with you. Hope you win.
SIXTY FOUR	Arrived safely at _____.
SIXTY FIVE	Arriving _____ on _____. Please arrange to meet me there.
SIXTY SIX	DX QSLs are on hand for you at the _____ QSL Bureau. Send _____ self-addressed envelopes.
SIXTY SEVEN	Your message number _____ undeliverable because of _____. Please advise.
SIXTY EIGHT	Sorry to hear you are ill. Best wishes for a speedy recovery.
SIXTY NINE	Welcome to the _____. We are glad to have you with us and hope you will enjoy the fun and fellowship of the organization.

** Can be used for all holidays.*

ARRL Recommended Precedence's

Please observe the following ARRL provisions for PRECEDENCES in connection with written message traffic. These provisions are designed to increase the efficiency of our service both in normal times and in emergency.

EMERGENCY--Any message having life and death urgency to any person or group of persons, which is transmitted by Amateur Radio in the absence of regular commercial facilities. This includes official messages of welfare agencies during emergencies requesting supplies, materials or instructions vital to relief of stricken populace in emergency areas. During normal times, it will be very rare. On CW/RTTY, this designation will always be spelled out. When in doubt, do not use it.

PRIORITY--Use abbreviation P on CW/RTTY. This classification is for a) important messages having a specific time limit b) official messages not covered in the emergency

category c) press dispatches and emergency-related traffic not of the utmost urgency d) notice of death or injury in a disaster area, personal or official.

WELFARE--This classification, abbreviated as W on CW/RTTY, refers to either an inquiry as to the health and welfare of an individual in the disaster area or an advisory from the disaster area that indicates all is well. Welfare traffic is handled only after all emergency and priority traffic is cleared. The Red Cross equivalent to an incoming Welfare message is DWI (Disaster Welfare Inquiry).

ROUTINE--Most traffic in normal times will bear this designation. In disaster situations, traffic labeled Routine (R on CW/RTTY) should be handled last, or not at all when circuits are busy with higher precedence traffic. Note--the precedence always follows the message number. For example, a message number may be 207R on CW and "Two Zero Seven Routine" on phone. FSD-3 (5/05)

Sources of ARRL Forms and Procedures

The following forms and procedures are available at www.arrl.org/public-service-field-services-forms :

ARRL Radiogram Form

FSD-3: ARRL Numbered Radiograms

FSD-218: Amateur Message Form (Relief Emergency, Routine Messages & Recommended Procedures)

FSD-220: Handy Operating Aid

FSD-244: Amateur Radio Disaster Welfare Message (Quick form for disaster welfare messages)

ARES Field Resource Manual #5439

APPENDIX O: GENERAL MESSAGE (ICS 213)

1. Incident Name:		
2. To:	POSITION:	
3. FROM:	POSITION:	
4. SUBJECT**:**	5. Date:	6. Time:
7. MESSAGE:		
8. Approved By: Name:	Signature:	Position:
9 REPLY:		
10. Replied by:	Name:	Signature/Position: Date/Time:

ICS 213 General Message

Purpose: The General Message (ICS 213) is used by the incident dispatchers to record incoming messages that cannot be orally transmitted to the intended recipients. The ICS 213 is also used by the Incident Command Post and other incident personnel to transmit messages (e.g., resource order, incident name change, other ICS coordination issues, etc.) to the Incident Communications Center for transmission via radio or telephone to the addressee. This form is used to send any message or notification to incident personnel that requires hard-copy delivery.

Preparation: The ICS 213 may be initiated by incident dispatchers and any other personnel on an incident.

Distribution: Upon completion, the ICS 213 may be delivered to the addressee and/or delivered to the Incident Communication Center for transmission.

Notes:
• The ICS 213 is a three-part form, typically using carbon paper. The sender will complete Part 1 of the form and send Parts 2 and 3 to the recipient. The recipient will complete Part 2 and return Part 3 to the sender. Consider adding a sequence number on the Incident Name line for tracking and logging.
• A copy of the ICS 213 should be sent to and maintained within the Documentation Unit.
• Contact information for the sender and receiver can be added for communications purposes to confirm resource orders.

Block Number	Block Title	Instructions
1	Incident Name (Optional)	Enter the name assigned to the incident. This block is optional.
2	To (Name and Position)	Enter the name and position the General Message is intended for. For all individuals, use at least the first initial and last name. For Unified Command, include agency names.
3	From (Name and Position)	Enter the name and position of the individual sending the General Message. For all individuals, use at least the first initial and last name. For Unified Command, include agency names.
4	Subject	Enter the subject of the message.
5	Date	Enter the date (month/day/year) of the message.
6	Time	Enter the time (using the 24-hour clock) of the message.
7	Message	Enter the content of the message. Try to be as concise as possible.
8	Approved by • Name • Signature • Position/Title	Enter the name, signature, and ICS position/title of the person approving the message.
9	Reply	The intended recipient will enter a reply to the message and return it to the originator.
10	Replied by • Name • Position/Title • Signature • Date/Time	Enter the name, ICS position/title, and signature of the person replying to the message. Enter date (month/day/year) and time prepared (24- hour clock

Sources of more information //www.fema.gov/media-library/assets/documents/33548

Appendix P: National Incident Management System

NIMS – Provides a nationwide template enabling Federal, State, local governments, and private-sector organizations to work together.

National Incident Management System

During any emergency or disaster, the National Incident Management System (NIMS) will be utilized by all emergency response agencies to manage an emergency incident/disaster or a non-emergency planned event. Scope and magnitude of an incident will determine level and complexity of the management structure. NIMS outlines three conceptual areas pertinent to incident and event response including:

- Communication & Information Management
- Resource Management
- Command and Management structures

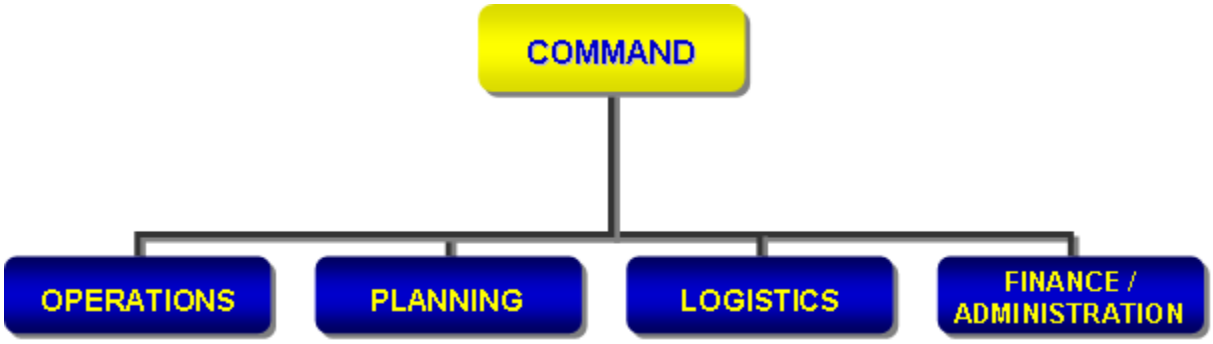
NIMS provides three structures for managing events all with different roles and responsibilities. The three structures are:

- Incident Command System
- Unified Command
- Multi-Agency Coordination Systems (Emergency Operation Centers)

For information on NIMS is available in FEMA Courses IS-100 and 700

Appendix Q: Incident Command System

The Incident Command System is designed to expand, or contract as needed. As an incident escalates span of control may expand requiring branch, group, and division positions of the Incident Command System to be staffed. Additionally, the following sections may be established and expanded as dictated by event.



Command – An Incident Commander is responsible for overall coordination and direction of all activities at the incident. Determination of which agency will function as on-scene incident commander will be in concert with the agency/person having three components:

• Responsibility through plans, policy, and inter-agency coordination

• Authority under local, state, or federal law

• Expertise with major functional components of the emergency

Major responsibilities of an Incident Commander include:

• Provide for safety and welfare of emergency responders

• Protect, remove, and provide care for endangered civilians

• Control and stabilize the incident

• Conserve and protect the environment and property during and after an incident

An Incident Commander may elect to establish command staff positions to assume responsibilities for key activities, that are not part of the line organization. All these positions may not be required on all incidents or may be assumed by the Emergency Operations Center. These positions answer directly to the Incident Commander.

REFERENCES:

The following references were used in the development of this document:

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R-03/24/2020 ~ WB2ALJ