

Ventura County

Amateur Radio Emergency Service

Radio Amateur Civil Emergency Service

Operations Manual

Sep 9, 2005

Table of Contents

Section 1 - Introduction

1.1	Amateur Radio and it's Place in Emergencies	1
1.1.1	The Amateur Radio Emergency Service (ARES)	1
1.1.2	The National Traffic System (NTS)	2
1.1.3	The Radio Amateur Civil Emergency Service (RACES)	2
1.2	Purpose	3
1.3	Objectives	3
1.4	About this Document	4
1.5	Reference Documents	5

Section 2 - ARES Organization

2.1	General	1
2.2	National and Division Organization	1
2.3	Section Organization	1
2.4	District Organization	2
2.5	Ventura County ARES Management	3
2.5.1	District Emergency Coordinator (DEC)	4
2.5.2	Deputy District Emergency Coordinator (Deputy DEC)	6
2.5.3	District Assistant Emergency Coordinator (District AEC)	6
2.5.4	Local Area Emergency Coordinator (EC)	7
2.5.5	Local Area Assistant Emergency Coordinator (AEC)	9
2.5.6	Official Emergency Stations	9
2.6	General ARES Membership	9

Section 3 - RACES Organization

3.1	General	1
3.2	Office of Emergency Services	1

3.3	RACES and ARES Interaction	1
3.4	Membership Requirements.	1
3.5	RACES Radio Officer (RO)	2
3.6	Assistant RACES Radio Office (ARO)	3
3.6.1	Administration	3
3.6.2	Facilities	3
3.6.3	Computers	4
3.6.4	Packet	4
3.6.5	Traffic Coordinator	4
3.6.6	Training	4

Section 4 - Scheduled Operations and Training

4.1	General	1
4.2	District Nets	1
4.2.1	Local Area Net	1
4.2.2	District Voice Net	1
4.2.3	District Packet Net	1
4.2.4	HF/Digital Nets	2
4.3	ARES Meetings	2
4.3.1	District Meeting	2
4.3.2	Local Area Meetings	2
4.4	Availability	2
4.5	Training	3

Section 5 - Net Control Operating Procedures

5.1	What Is a Net Control Operator	1
5.2	Weekly Local Area Nets	3
5.3	District Voice Net	3
5.4	District Packet Net	3

5.5	Net Procedure for Emergencies	4
5.6	Net Control Guidelines	4

Section 6 - Incident Organization

6.1	Incident Command System	1
6.2	ICS Sections	2
6.2.1	Planning Section	2
6.2.2	Operations Section	2
6.2.3	Logistics Section	2
6.2.4	Finance/Administration Section	3
6.3	ICS Operations	3

Section 7 - Incident Management

7.1	General	1
7.2	Operational Levels	1
7.3	Mobilization	1
7.3.1	Levels of Response	2
7.3.2	Notification of Personnel	3
7.4	Initial Operations (Set Up)	4
7.4.1	Staffing	5
7.4.2	Net Control	5
7.4.3	Incident Command Liaison	6
7.4.4	Local Area Operations	6
7.5	Sustained Operations	7
7.6	Closing Operations	7
7.6.1	ARES Incident Reports	8
7.6.2	ARES/RACES Incident Critique	8

Section 8 - Individual Preparedness and Assignment

8.1	Prior to an Event	1
-----	-------------------	---

8.2	When an Emergency or Potential Emergency Situation Arises	1
8.3	In an Emergency, Anyone Can Start Up a Net and Proceed with the Following2	
8.4	Traveling To the Assignment	2
8.5	Communicators Guidelines	3

Section 9 - IOC Operational Procedures

9.1	Composition Of An ARES/RACES Team	1
9.2	Coordination With The IOC Point Of Contact	2
9.2.1	Initial Contact	2
9.2.2	Meeting The Team	3
9.2.3	Setting Up The ARES/RACES Radio Station	3
9.2.4	Reviewing The Operations Planning With The Customers	3
9.2.5	Meeting With The Customer Organizations	4
9.3	Team Leader Additional Responsibilities	7
9.3.1	Keeping The Customer Happy	7
9.3.2	Scope of Communications Support	7
9.3.3	Interaction With The Press	8
9.3.4	Staffing Levels And Scheduling Team Relief	9
9.4	Measuring ARES/RACES Team Performance	9
9.5	Records Requirements	10
9.5.1	IOC Log	10
9.5.2	Message Forms	10
9.6	Direct Customer To Customer Voice Communications	12
9.7	Concluding The Mission	12
9.8	Mission Report	13

Section 10 - Creating a Professional Image

Appendix A - Acronyms

Appendix B - Web Forms and Lists

Appendix C - Frequency List and Schedules

Appendix D - Suggested Equipment List

10.1	Personal Gear	1
10.2	Miscellaneous	1
10.3	Radio Gear	1
10.4	Antenna Gear	2
10.5	Tools	2

Appendix E - District Voice Net Format

Appendix F

Uniform Specification

Section 1 - Introduction

1.1 Amateur Radio and it's Place in Emergencies

The Communications Act of 1934 established Amateur Radio as a service. Amateurs have been instrumental in the development of communications ever since the early work of Hertz and Marconi, who were essentially amateurs as distinct from professionals as there was no established profession at the time of their extraordinary accomplishments.

In the years just before World War I, a group of amateurs in Hartford, Connecticut established an organization, the American Radio Relay League (ARRL - web site: www.arrl.org), whose primary objective was to develop the art of communication through the establishment of a series of relay stations to expedite the transmission of public service messages across the country and to foster the experimentation which ultimately led to transcontinental and world wide communications systems.

Ever since these early days, Amateurs have established a reputation for public service communications, especially in times of crisis and special needs which cannot be met by the regular communications systems. In the beginning, these services were rendered spontaneously and largely on an individual basis. As time progressed, the need for, and the value of organization became apparent; this led to the establishment of several organizations with clearly defined functions.

Today, there exists in Amateur Radio a very complete and tight volunteer organization of Amateur Radio operators dedicated to public service. Sponsored by the ARRL, a field organization has been established which includes the Amateur Radio Emergency Service (ARES) and the National Traffic Systems (NTS). An independently organized system, sponsored by the Federal Government, called the Radio Amateur Civil Emergency Service (RACES) fulfills other functions not directly addressed by ARES and together, the two form integral parts of the Amateur Radio's public service effort.

1.1.1 The Amateur Radio Emergency Service (ARES)

The purpose of ARES is to provide backup communications for official organizations during an emergency when their normal communications structures are not able to provide adequate service. RACES operations are initiated by the request of the management of the Incident Command System. ARES does not handle routine non emergency Health & Welfare communications. Those are handled by NTS.

ARES consists of licensed radio amateurs who have voluntarily registered their qualifications and equipment for communications duty in the public service when disaster strikes. Every licensed radio amateur, regardless of other affiliations, is

eligible for membership in ARES. The only qualification other than holding a valid Amateur Radio operator's license is a sincere desire to serve in the public interest. ARES, essentially a local operation within the Ventura County, is self regulating and managed.

These Amateur Radio operators have equipment suitable for emergency operations – many have expended substantial sums of money in state-of-the-art electronic equipment and emergency power supplies.

ARES conducts regular training classes and exercises so that any future emergency operation will be carried out smoothly and effectively. These training exercises often take place in concert with regular public activities such as boat races, foot races, and bicycle/walking events for which ARES provides communications to facilitate general public safety. Such exercises and procedures allow the ARES system to be tailored in scale to the different type of crises which may occur from time-to-time.

1.1.2 The National Traffic System (NTS)

The National Traffic System is used to move long-distance messages from origin to destination. Further it provides the training of Amateur Radio operators in the handling of formal radiogram traffic in efficiently directed nets. A radiogram is simply a form used to document the information being sent or received (similar to a telegram format).

NTS operations are concentrated on the high frequencies (HF), but local nets on UHF/VHF frequencies have become popular as the ideal place to distribute traffic for delivery. The ARRL Net Directory lists the nets available for members.

1.1.3 The Radio Amateur Civil Emergency Service (RACES)

RACES was founded in 1952 and differs from ARES in that it is a federally regulated activity within the Amateur Radio Service. It is administered by the Federal Emergency Management Agency (FEMA) of the United States Government and is intended to provide emergency radio communications for civil preparedness purposes only, during periods of local, regional or national civil emergencies. These emergencies are related to the immediate safety of life, and/or the immediate protection of property and can include natural disasters such as fire, floods, and earthquakes. As defined by the rules, RACES is a radio communications service conducted by volunteer Amateur Radio operators to provide emergency communications to state or local civil preparedness agencies. As such, it can only operate at the specific request of the designated state or local official.

The main advantages of RACES are that Government insurance programs cover the participants during their active roles and some Federal funds are available to assist in the development of the program. The Government restricts RACES operations to one hour per week for communication drills during non-emergency periods of operations. Through special arrangement with the RACES Radio Officer (RO) an extension to no more than 72 hours twice in any calendar year may be authorized.

1.2 Purpose

The purpose of this document is to furnish essential information to Ventura County Amateur Radio Operators, for use in disaster or other emergency situations. It has been prepared to provide the following types of information for use by local ARES/RACES members:

1. Provide general procedures for use by individual amateurs.
2. Define the organization and management structure of ARES and RACES for Ventura County.
3. Define a basic organizational structure for ARES/RACES response to all types of incidents.
4. Identify management, personnel and equipment resources.
5. Provide information on available communication paths, nets, and traffic gateways for emergency use.

Note: All emergency communications are legal.

1.3 Objectives

There are an infinite variety of situations in which local ARES/RACES members may be called to provide communications in support of an emergency nature. The following categories of communications requirements are listed in the order of priority in which the particular need would receive ARES/RACES response and resources:

1. Primary or backup tactical, logistical and administrative communications support to Red Cross, fire, police, government or other agencies during periods of local emergency or when Ventura County is designated as an evacuation center by nearby metropolitan areas.

2. Primary communications support for non-emergency message traffic including Health and Welfare inquiries and other traffic of a personal nature during periods of emergency in Ventura County or nearby areas.
3. Public Service support to provide community service for public health and safety and, secondarily, to provide training exercises for ARES/RACES personnel.

1.4 About this Document

This document is to be used as a reference document for all ARES/RACES personnel. As such, it is three-hole punched to permit placement in a binder. As a living document, the plan will be reviewed and revised as required and change pages issued or replaced. It is suggested that personnel use a binder large enough to hold this plan. The main body of the plan discusses the general day-to-day operation of ARES, RACES and the theoretical incident operations.

This plan is subject to an annual review; the Appendices will be updated/reviewed semiannually; and the phone lists will be updated every two months, or as required. Contact your local area Emergency Coordinator for changes.

Sections 2 and 3 provide an introduction to the organization and structure of ARES and RACES. They provide a basis for the names of the various positions used throughout the document.

Sections 4 and 5 provide information on the routine, scheduled ARES/RACES operations and training.

Section 6 provides an introduction to the Incident Management structure and how ARES/RACES fits into the overall incident response organization.

Section 7 provides guidance for those ARES/RACES leadership positions who are involved in the planning, management, or control of an incident.

Section 8 provides recommendations for ARES/RACES members on how to prepare for assignment to an incident team and how to report to the assignment and return home afterwards.

Section 9 provides guidance for those ARES/RACES members assigned to an Emergency Operations Center during an incident. Basically, this is the real heart of the operations.

Section 10 provides some important issues to be considered by all ARES/RACES members on providing a professional image to our customers.

1.5 Reference Documents

FCC Part 97: Amateur Radio Service

Subpart A – General Provisions

Subpart B – Station Operating Standards

Subpart C – Special Operations

Subpart D – Technical Standards

Subpart E – Providing Emergency Communications

Subpart F – Qualifying Examinations Systems.

FSD-235 Public Service Communications Manual. Published by ARRL, no date.

FSD-300 ARRL Field Organization Pamphlet.

ARES Forms are available at: <http://www.arrl.org/FandES/field/forms/>

Section 2 - ARES Organization

2.1 General

This section provides information on the Section, District, and Area organizations, which are in place to respond to emergency situations. Job descriptions are included for reference by amateurs designated to fill specific positions in this District organization.

2.2 National and Division Organization

The American Radio Relay League (ARRL) is the largest organization of radio amateurs in the United States. It was founded in 1914 and serves as the official voice of Amateur Radio in dealings with government agencies. The ARRL is a not-for-profit organization, governed by a board of directors elected every two years by League members. The Southwestern Division (Arizona and Southern California) is represented by an elected Director, who also provides coordination between the Section Managers in the Arizona, Los Angeles, Orange, San Diego and Santa Barbara Sections.

2.3 Section Organization

The Santa Barbara Section, established as a Section for the ARRL, is organized in accordance with ARRL guidelines and includes the following counties: Santa Barbara, San Luis Obispo, and Ventura (See Figure 2-1). The Section is administered by a Section Manager (SM) who is elected by the Section ARRL membership. The Section Emergency Coordinator (SEC), who is appointed by the SM, supervises ARES activities in the Section and reports to the Section Manager. Ventura County is organized as a district of the Santa Barbara Section.

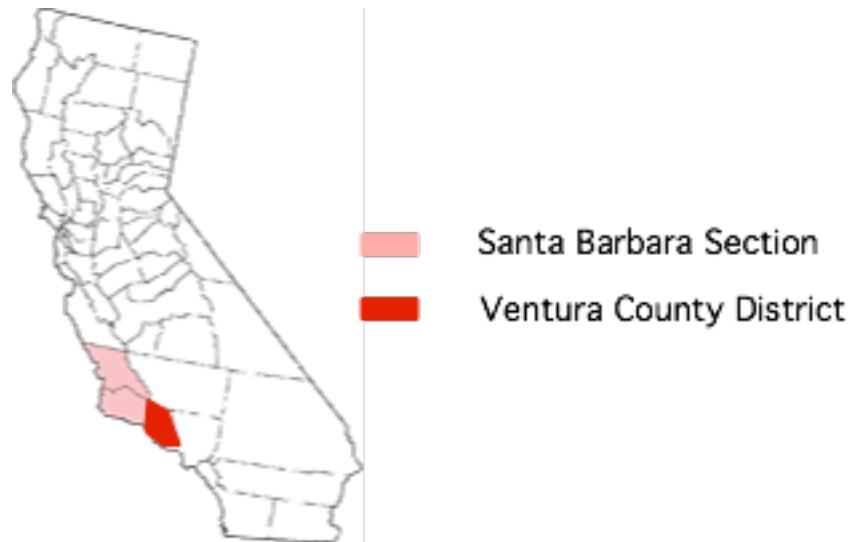


Figure 2-1 Santa Barbara Section

2.4 District Organization

Ventura County ARES is the organization, which provides overall management of Amateur Radio emergency activities within Ventura County (hereafter referred to as the District). ARES functions within the District for operations, whether for training or actual emergency. This organization also coordinates staffing and equipment resources on a District-wide basis. The District is divided into eight local areas that contain their own local area Emergency Coordinator (EC) and members (See Figure 2-2 for a map of the 8 areas). The local areas are as follows:

Area	Location
1	Simi Valley
2	Conejo Valley (Thousand Oaks, Newbury Park, Oak Park and Westlake Village)
3	Camarillo/Somis
4	Oxnard/Port Hueneme/Point Mugu
5	Ojai Valley
6	Ventura
7	Santa Paula/Fillmore/Piru
8	Moorpark

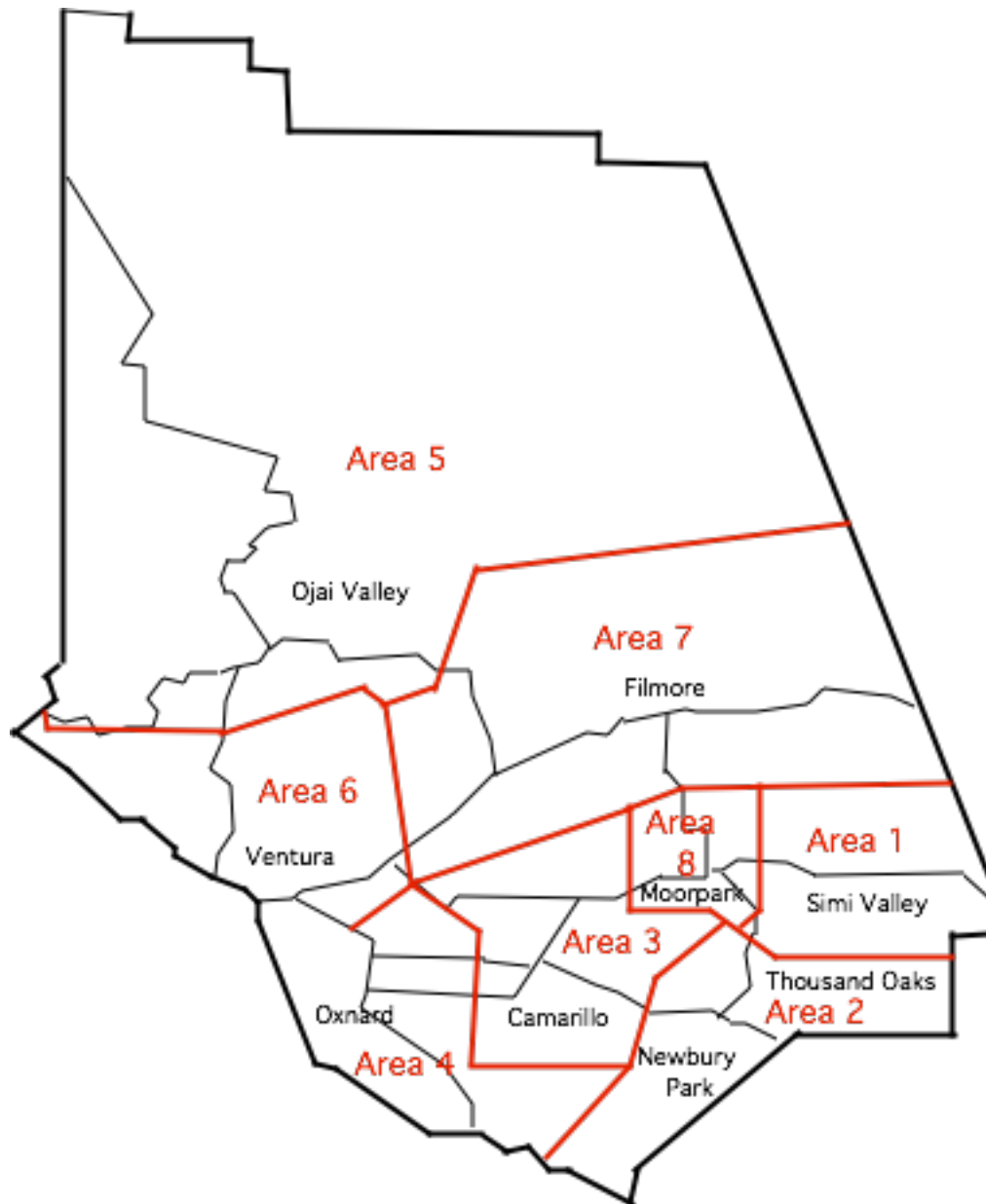


Figure 2-2 The Local Areas of the District

2.5 Ventura County ARES Management

Figure 2-3 shows the Ventura County ARES Management Structure. The paragraphs below discuss each position and give job descriptions.

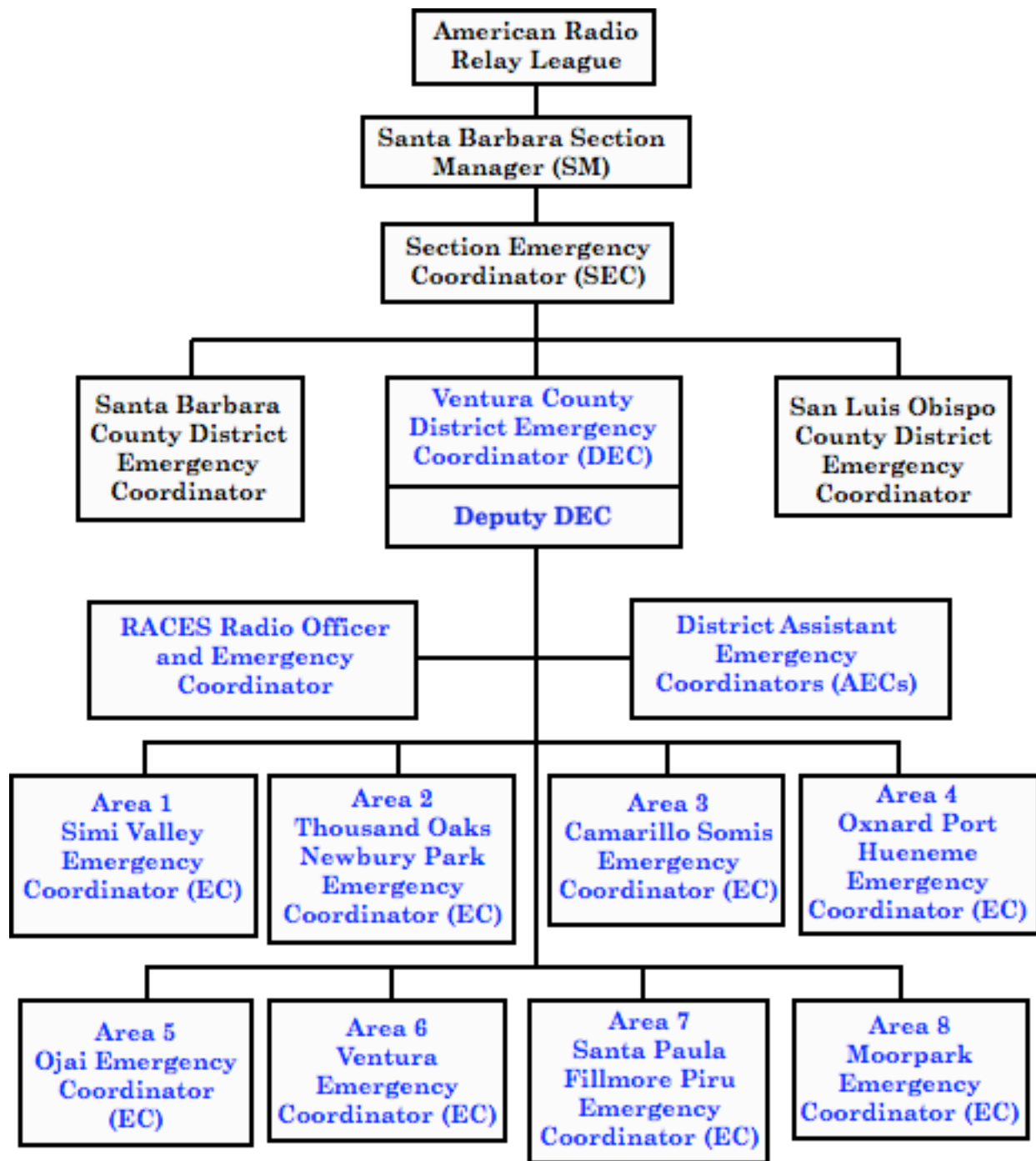


Figure 2-3 Ventura County ARES District Management Structure

2.5.1 District Emergency Coordinator (DEC)

The ARES District Emergency Coordinator is appointed by the Santa Barbara SEC to supervise the efforts of local Emergency Coordinators within the District. The

DEC must be a full ARRL member with at least a Technician class license. In Ventura County, the DEC is also the RACES Radio Officer.

The following duties shall be performed by the DEC and/or personnel assisting the DEC.

1. Coordinate the training, organization and emergency participation of Emergency Coordinators (EC's) in the District.
2. Make local decisions in the absence of the SEC, or through coordination with the SEC, concerning the allotment of available communicators and equipment during an emergency.
3. Coordinate the interrelationship between local emergency plans and between communications networks within the District.
4. Act as a backup for the local areas without an EC and assist in maintaining contact with governmental and other agencies within the District.
5. Provide direction in the routing and handling of emergency communications of either a formal or tactical nature, with specific emphasis being placed on Health and Welfare (H&W) traffic.
6. Recommend EC appointments to the SEC.
7. Coordinate the documenting and reporting of ARES activities in the District.
8. Act as a model emergency communicator as evidenced by dedication to purpose, reliability and understanding of emergency communications.
9. Be conversant in National Traffic System (NTS) routing and procedures. Establish an emergency traffic plan and an operational liaison with local and Section NTS nets, particularly for handling Welfare traffic in an emergency situation.
10. Have an understanding of the locale and role of all vital governmental and volunteer agencies that could be involved in an emergency.
11. Hold regularly scheduled meetings of all ARES leadership (ECs, AECs, etc.) within the District.
12. Establish an emergency communications plan for the communities and agencies that will effectively utilize ARES members to cover the needs for tactical and formal welfare message traffic within the District. Establish a

viable working relationship with all Federal, State, County, and private agencies operating within the District, which might need the services of ARES in emergencies.

13. Establish working relationships and mutual assistance agreements with adjacent ARES districts.
14. Establish District communications networks and periodically test those networks by conducting realistic drills and community service events.
15. Establish and maintain a database of all ARES members within the District.
16. In times of emergency, evaluate the communications needs of the District and assign available ARES personnel to respond quickly to those needs. The DEC will assume authority and responsibility for emergency response and performance by personnel under his/her jurisdiction.
17. Appoint Assistant Emergency Coordinators (AEC) for specific duties within the District.

2.5.2 Deputy District Emergency Coordinator (Deputy DEC)

The Deputy DEC shall assist the DEC in the responsibilities described above, and during the absence of the DEC or in the event the DEC is unable to serve, shall have all of the duties and responsibilities of the DEC. The SEC (at the recommendation of the DEC) appoints the Deputy DEC as an Emergency Coordinator (EC) with Ventura County specified as the area of jurisdiction. The Deputy DEC must be a full ARRL member with a least a Technician class license.

2.5.3 District Assistant Emergency Coordinator (District AEC)

District AECs are appointed by the DEC for specialized tasks and are not in the chain of command. These AECs are appointed on an as-needed basis. A district AEC must be a full ARRL member with a least a Technician class license. The following are current District AEC positions.

- Adjacent District Liaison. Establishes a working relationship with the assigned ARES district (e.g., Santa Barbara District or Northwest District of Los Angeles Section.).

- Training Officer(s). Plans, arranges and prepares training for ARES personnel. Works with local ECs in meeting training activities. Coordinates with Red Cross, RACES and other agencies relating to training activities.
- Database Coordinator. Maintains current record of all ARES personnel in the District. Works with staffing officer during incidents.
- Records. Prepares and maintains minutes of all ARES District meetings. Maintains copies of incident reports and news publications about ARES.
- Public Information Officer (PIO). Develops and maintains personal contact with local news media. Seeks out, develops and distributes articles about ARES within the District. Promotes public and Amateur Radio awareness of ARRL and ARES.
- Net Control Coordinator (NCC). Recruits, trains, schedules and/or coordinates net control operators for the District net. Develops net procedures and advises DEC on net operations.
- Specialty Team Leader. Organizes, recruits, trains, schedules, and coordinates communicators for the assigned specialty team. Develops team procedures and advises the DEC on team operations.

2.5.4 Local Area Emergency Coordinator (EC)

The ARES Emergency Coordinator (EC) is a key team player in ARES on the local emergency communications scene. Working with the DEC and Official Emergency Stations, the EC prepares for, and engages in management of communications needs in disasters. The EC must be a full ARRL member with a least a Technician class license. The following duties, while the responsibility of the local area EC, may be performed by ARES personnel assisting the EC.

1. Promote and enhance the activities of ARES as a voluntary, non-commercial communications service for the benefit of the public.
2. Manage and coordinate the training, organization and emergency participation of interested amateurs working in support of the local communities, and agencies.
3. Establish an emergency communications plan for the communities and agencies within the assigned local area.

4. Establish a working relationship with all private agencies and city governments in the assigned local area.
5. Establish local communications networks run on a regular basis and periodically test those networks by conducting realistic drills.
6. In times of disaster, evaluate the communications needs of the area and respond quickly to those needs. The EC will assume authority and responsibility for emergency response and performance by ARES personnel under his/her jurisdiction.
7. Do all that is possible to further the favorable image of Amateur Radio by dedication to purpose and a thorough understanding of the mission of Amateur Radio.
8. Attend the District meetings and pass information to the local members.
9. Recruit and train local Amateur Radio operators in ARES practices and procedures.
10. Hold regularly scheduled meetings of all ARES members within the local area. The DEC and representatives of adjacent ARES local areas should be invited to these meetings. The purpose of these meetings is for coordination of local emergency communications plans, training, and exchange of ideas relative to ARES.
11. Establish and maintain records of all ARES members within the local area of the District. Provide this information to the District database coordinator.
12. Appoint local area Assistant Emergency Coordinators (AECs) for specific duties within the local area of the District. Recommend amateurs for District and/or section appointments.

It is important to provide an Emergency Coordinator (EC) that posses the knowledge and training necessary to fulfill the requirements of the position. In order to do this, each candidate for Area EC shall serve as an Assistant Emergency Coordinator (AEC) for a minimum of one year prior to becoming an EC. This can be accomplished at the Area or County level. Its is preferred that the potential ECs serve under an existing Area EC. However, if there is none, the EC candidate will assume the EC responsibilities with the title of AEC. If, after the year's term, the candidate meets all the requirements (listed below) and is deemed capable by the DEC, he/she will be recommended for appointment to EC by the Section Emergency Coordinator.

Requirements for EC candidates during the trial period are the following:

- Must maintain membership in ARRL
- Must be registered as an ARES member
- Attend the District meetings (A record of attendance should be maintained)
- Participate in at least one training activity
- ICS training
- Register with RACES
- Demonstrate leadership skills and initiative

2.5.5 Local Area Assistant Emergency Coordinator (AEC)

The local area AEC is appointed by the area EC to assist that EC in the responsibilities described above. The AEC may be appointed for specific duties or as a general assistant to the EC. In the absence of the EC an AEC may be appointed by the DEC to fulfill the duties of the EC.

2.5.6 Official Emergency Stations

Amateur Radio operators interested in participation in emergency communications may be appointed as Official Emergency Stations by the SEC at the recommendation of the EC or DEC. In addition to operating within their own local areas, they should be able to assist in “off shore” emergencies, such as those which frequently occur in foreign countries. The requirements for this appointment are available from the ARRL or SEC.

2.6 General ARES Membership

The only requirement for membership is a desire to serve and holding any current Amateur Radio license. To become a member, one must fill out the Ventura County ARES Membership Application (see Appendix B) and return it to the local EC. All members will receive a membership card.

ARES members are encouraged to attend training classes, participate in training activities, register as a RACES communicator and obtain a Red Cross identification card.

Section 3 - RACES Organization

3.1 General

This section describes the Radio Amateur Civil Emergency Service (RACES) organization and operations.

The RACES organization in Ventura County provides essential communications during period of National, State or local emergency or upon request from the appropriate government authority. RACES are mobilized when there has been a government declaration of a state of emergency. Additionally, the RACES organization allows for operation under the FCC RACES regulations in the event of a Presidential Declaration of an Emergency.

3.2 Office of Emergency Services

The Ventura County Office of Emergency Services (OES) is responsible for RACES activation. The main task for RACES is to provide a communications link from the Emergency Operations Center (EOC) to each of the cities in the county, and to provide links to the State OES, if necessary. The County OES may also designate additional communication links to various facilities such as hospitals, as deemed necessary.

3.3 RACES and ARES Interaction

In order to share the resources of the amateur community effectively, emergency preparedness and training comes under the jurisdiction of Amateur Radio Emergency Services (ARES) organization.

Amateur Radio operators are encouraged to maintain membership in both ARES and RACES. This allows ARES operation in certain situations without the government activating RACES. In the event that RACES is mobilized, the shift from an ARES activity to a RACES activity flows smoothly. ARES and RACES operations are identical except for the position name changes.

3.4 Membership Requirements.

All amateurs that participate in RACES must be enrolled as Disaster Services Workers in the Communications Class in accordance with Section 3100 (et seq.) of the California Government code, complete a Personal Information form, and sign a Loyalty Oath/Affirmation. A background check will be performed by the Ventura County Sheriff's

Department on all RACES applicants. The personal information and background checks are necessary because of the sensitive situations in which RACES members often serve. All RACES personnel are issued identification cards by the County OES.

RACES membership application cards are obtained from the local Area EC. The Area EC endorsement of the application form is required prior to processing by Disaster Worker Services. Renewals are subject to EC review and recommendation for continuing service.

3.5 RACES Radio Officer (RO)

The Ventura County Office of Emergency Services appoints the Ventura County RACES Radio Officer (RO). The Office of Emergency Services generally appoints the ARES DEC as the Radio Officer.

The duties of the RO are as follows:

1. Coordinate the training, organization and emergency participation of all RACES members in Ventura County.
2. Make decisions in conjunction with the ARES leadership concerning the allotment of available communicators and equipment during an emergency.
3. Coordinate the interrelationships between local emergency plans and between communication networks within the County.
4. Provide direction in the routing and handling of emergency communications of either a formal or tactical nature.
5. Coordinate the documenting and reporting of RACES activities in the County.
6. Act as a model emergency communicator as evidenced by dedication to purpose, reliability, and understanding of emergency communications.
7. Have understanding of the locale and role of all vital governmental and volunteer agencies that may be involved in an emergency.
8. Establish an emergency communications plan for the communities and agencies that will effectively utilize RACES members to cover the needs for tactical and formal message traffic within the County.
9. In time of emergency, evaluate the communications needs of the County and assign available RACES personnel to respond quickly to those needs. The RO will

assume authority and responsibility for emergency response and performance by RACES personnel under his/her jurisdiction.

10. Appoint Assistant ROs (ARO) for specific duties within the County.

3.6 Assistant RACES Radio Office (ARO)

The RO, to provide support for the RACES activities, appoints several Assistant RACES Radio Officers (AROs) in the areas of Administration, Facilities, Computers, Packet, Traffic Coordination, and Training. The RO may appoint additional AROs as required.

The duties of the AROs are as follows:

3.6.1 Administration

1. Implement and maintain message and record keeping processes in the RACES Operations Centers (ROCs) including log books, paper, pencils, forms, etc.
2. Recommend changes to the facilities as needed to support the necessary administration.
3. Review and update emergency plans, RACES plans, and other documentation that refer to RACES capabilities.

3.6.2 Facilities

1. Maintain the RACES equipment at the various RACES sites.
2. Arrange for additional support equipment as required by the RACES organization.
3. Coordinate with County personnel to solicit support to add equipment, remote relay sites, and perform maintenance to ensure the systems are operating properly.
4. Coordinate with County and other organizations the installation and utilization of mobile equipment.
5. Maintain a facilities information notebook to document equipment and facility capabilities.

3.6.3 Computers

1. Establish computer systems to support all RACES efforts.
2. Develop or specify computer programs necessary to carry out the objectives.
3. Coordinate with all other assistant ROs to satisfy their computer requirements including packet systems.
4. Specify computer systems for purchase by participating agencies that will be compatible with the overall requirement.

3.6.4 Packet

1. Establish packet networks between cities and participating agencies.
2. Recommend network relay systems necessary to affect complete County and inter-County coverage.
3. Support the efforts of each city in establishing packet systems and other digital networks.
4. Coordinate with local packet bulletin board stations (BBS) for use by RACES.

3.6.5 Traffic Coordinator

1. Coordinate with local repeater groups as to the availability of their systems/ equipment to support emergency communications.
2. Establish procedures and networks to provide tactical communications links to the neighboring counties and the California State Government.

3.6.6 Training

1. Develop curriculum to cover topics necessary to train RACES communicators.
2. Arrange for instructors, schedules, and meeting areas for training.
3. Conduct training drills in conjunction with the ARES Training Officer.

Section 4 - Scheduled Operations and Training

4.1 General

This section covers the normal, non-emergency operations of ARES. The purpose of these operations is to prepare for emergency operations through the use of training exercises and community support events.

4.2 District Nets

The ARES membership is requested to participate in a weekly net; the time, date, and frequencies are listed in the Appendix C. The networks are divided as follows:

- Local Area Net(s)
- District Voice Net(s)
- District Packet Net(s)

4.2.1 Local Area Net

The local area nets meet prior to the District net to keep the members in the local area informed, solicit any messages for the area or District, and create a list of those members who have checked in (who will be participating in the District network). This both enables the dissemination of information and provides an efficient means of checking in at the District net. At the close of net, all members are requested to change frequency to the District voice net.

4.2.2 District Voice Net

The goal of the District voice net is to accomplish communication exercises, pass messages and exchange information (e.g. announcements and activities) to all ARES members. The selected frequency should have the maximum District coverage. (Refer to Appendix E for net format.)

4.2.3 District Packet Net

The District packet nets are held prior to the District voice net to allow members to test their packet radio circuits. The goal is to practice message-handling procedures and to keep informed of new developments concerning this mode of communications.

4.2.4 HF/Digital Nets

HF Digital Nets are not presently integrated into ARES/RACES. However, there is an opportunity here to be able to improve communications with other Districts that needs to be investigated.

4.3 ARES Meetings

There are three types of ARES meetings held in the District. They are as follows:

- District Meeting
- Local Area Meetings
- General ARES Meeting

4.3.1 District Meeting

There will be regularly scheduled meetings of the District ARES membership. The purpose of these meetings is to maintain contact between the areas, disseminate information, and plan future activities and training. All ECs are expected to attend or send a representative. All ARES members are invited to attend the District ARES meetings. Pertinent information from the District meeting should be passed on to local area ARES members via the ECs.

4.3.2 Local Area Meetings

There will be regular meetings held by the local EC for each area. The purpose of the meetings are to disseminate information from District meetings, disseminate information from local officials, planning local events, training and social networking.

4.4 Availability

Each leadership official shall notify the next level of management, up and down, of extended periods of absence from the District. Leadership should also be aware of regular periods of absence (like leaving the area to go to work).

For example: An area EC leaves for a week's vacation. The DEC (or acting DEC) should be informed, as should the local area AEC. If there is no AEC, someone within the area

should be appointed to act in the ECs absence (or the DEC may appoint someone to cover that area during the EC's absence).

4.5 Training

Training is provided by Ventura County ARES to prepare ARES members to provide efficient emergency communications. Training for ARES members consists of, but is not limited to the following:

Introduction to ARES

Introduces ARES procedures.

Traffic Handling

Covers traffic handling procedures.

Net Operations

Covers participations/ controlling of nets.

Incident Command System

Covers the Incident Command System (ICS).

Prerequisite to being dispatched to an ICS base camp.

In addition, there are classes on RACES operations and how to use the RACES equipment. Some agencies that utilize ARES, such as the Red Cross also conduct their own courses. ARES members are encouraged to attend these courses to familiarize themselves with how the user agency operates.

ARES members should contact their EC or the County training officer for information on the current classes and class schedules.

Section 5 - Net Control Operating Procedures

This section describes Net Control operations and the duties of the Net Control Operator both for the weekly ARES nets and for nets during emergency operations.

5.1 What Is a Net Control Operator

A Net Control Operator (NCO) is the Directory of Network communications and is a dispatcher. As such, it is important to know what is going on:

- the location of communicators and agencies,
- how many people are involved,
- how the personnel are equipped,
- the frequencies/nets available.

This information is vital to properly directing these resources.

The role of an NCO is similar to that of a traffic cop. This requires continuous judgments. As the traffic cop resides in the middle of the intersection, an NCO is placed in the middle of traffic net. In each case the visibility needed to carry out the job must be obtained. A traffic cop sees cars approaching and directs them according to the flow of road traffic, always away from accidents and points of congestion. The NCO directs message traffic so it flows in a smooth manner by assigning stations to simplex frequencies or repeaters depending on their available communications routes. The NCO is sensitive to priority and precedence. Both traffic directors have to sometimes make decisions that send personnel on routes other than that desired so that the overall task is properly accomplished.

The traffic cop must be nearly unbending in the execution of the task. Cars must move exactly as directed. The same is true for the NCO. The NCO must take control and be in control of the situation at all times or there is no control. The NCO's job is to prevent a log jam. To prevent a log jam the key is to be ASSERTIVE! For example: if the NCO directs a station to pass one piece of traffic, the NCO must be assertive if the communicators attempt to pass a second piece of traffic without authorization. It would seem a natural thing to do from the communicator's viewpoint. However, he/she may not be aware of high priority traffic or traffic that has been waiting longer than their second message.

Assertiveness must never be aggressive in nature or tone and must be done in a manner that does not strain relations with the working stations or the personnel on the net. The key is that authority must be exercised tactfully but firmly and with fairness, yet without delay of decisions.

Key Functions of an NCO are as follows:

- Control Frequencies. Establish a primary frequency and control it and coordinate the use of other established frequencies.
- Sort Traffic. Sort traffic by priority and distance. Emergency is first. Priority is second. Welfare is third, and routine is fourth. Distance between is the next parameter. Stations physically close can use simplex frequencies.
- Logging. Log times, names/calls, destinations and key data. The log may be the only record in a legal action.
- Net Shutdown. The operation is not completed until everyone is home.

The NCO may be located almost any place. Normally, the NCO is located at a facility such as the RACES Operations Center (ROC) or the Red Cross Headquarters. However, Net Control can be directed from the operator's home. It is desired to have the NCO located in a secure location away from noise and confusion.

Some items that the NCO should have include the following:

- A 2-meter and 220 MHz radio. A second 2-meter radio and scanner are also highly recommended.
- Batteries, power sources, and antennas positioned for best coverage and operation.
- Maps of the area, including AAA county maps, Thomas Brothers, and U.S. Forest Service. (Maps mounted with a plexiglass cover and grease pencils to mark are useful).
- Forms, paper, and pencils. A telephone and a telephone directory are a must, along with rosters of local ARES/RACES personnel.
- Knowledge of repeaters and the areas they serve. (Take time to get to know the repeaters of the county. Note autopatch capabilities and linking capabilities, and local area of coverage.)

5.2 Weekly Local Area Nets

On Tuesday nights, ARES has local and county wide ARES nets. Each area conducts their own local area net, run by a local NCO, prior to the county-wide net. The ARES membership should check into their local area net to obtain information particular to their local area. The local NCO will be called upon by the county-wide NCO during the county-wide ARES net to list the ARES members and guests that checked into each local area net, and any traffic or announcements they may have.

When you have checked into a net, do not leave the frequency until the NCO has closed the net unless you have previously notified the NCO or asked permission. At the conclusion of the local area net, you will be asked to switch over (if necessary) to the county-wide net on 146.880 (-). Appendix C lists the local area nets.

5.3 District Voice Net

After the ARES local area nets, ARES conducts a District voice net. This net is run by an NCO. Although it is not necessary, the NCO should use the net format script shown in attachment F; it makes for a more orderly net. The NCO should also follow all FCC requirements for station identification during the net.

First the preamble is given. Secondly, the District Emergency Coordinator (DEC), the Deputy DEC(s), and the RACES Radio Officer are called. Then the NCO polls the area's local NCOs for their list of checkins from the local nets. It is at this time that traffic, announcements, and informal contact for the District net are listed. Any ARES members or guests that did not check into their local area net should wait until the county NCO asks for late, visitor, or missed checkins. After roll call is complete, the formal written traffic is handled, followed by announcements and informal contacts.

After the traffic, announcements, and informal contacts are complete, the NCO solicits late checkins and any late traffic or announcements. When there is no further traffic or checkins, the postamble is given, and the net is closed. It is recommended that the District NCO monitor the net frequency for a short period afterwards.

5.4 District Packet Net

The District packet net is held weekly. Message forwarding, mail-box, and operator at the terminal are provided to allow ARES members to participate on a regular basis.

5.5 Net Procedure for Emergencies

In the event of a possible or actual emergency situation, any ARES member can start up a net to collect data. **Never dispatch anyone anywhere without proper authorization.** You can have individual operators report on conditions around them, list the individual operators availability, and other pertinent data. This data should be compiled and made available to the DEC or EC when they come up on the frequency.

When ARES or RACES is officially mobilized, the Incident Communications Officer (ICO) will assign an operator to continue as the NCO. An assistant NCO should also be appointed.

Should the conditions warrant, the ICO may decide to let the net become informal, allowing each operator to contact one another directly without asking permission of the NCO.

5.6 Net Control Guidelines

- Do not use angry comments over the air. Courtesy is contagious. Please and Thank You are the most powerful tools at your disposal. (However, we need always remember to keep conversation short and at a minimum).
- Carry out your assignment with the following in mind: To provide communications in the most efficient and flexible manner possible.
- Do not discuss event details (victim names or circumstances) over the air unless directed by the operation leaders. There are no exceptions! Always be accurate and stick to the official facts as you know them. Information taken out of context or overheard may be inaccurate.
- When you are tired or need a break, get relief! Do not be a hero. Zombies do not operate well and they make many mistakes.
- Summarize your information and safeguard your logs for future reference. At the close of the incident, submit your log to the Records and Reports Manager or as otherwise directed.

Section 6 - Incident Organization

6.1 Incident Command System

The Incident Command System (ICS) is the model tool for command, control, and coordination of a response and provides a means to coordinate the efforts of individual agencies as they work toward the common goal of stabilizing the incident and protecting life, property, and the environment. ICS uses principles that have been proven to improve efficiency and effectiveness in a business setting and applies the principles to emergency response.

We live in a complex world in which responding to emergencies, from single-car accidents to large-scale disasters, often requires cooperation among several agencies. In an emergency, ARES/RACES personnel may be called upon to help with the response. Thus, emergency response operations are not “business as usual.”

Federal law requires the use of ICS for response to HazMat incidents. Many States, including California, have adopted ICS as their standard for responding to all types of incidents. The ICS organization is built around five major components:

- Command.
- Planning.
- Operations.
- Logistics.
- Finance/Administration.

The relationship among these components is shown in Figure 6-1. ARES/RACES operations are under the direction of the Logistics Section.

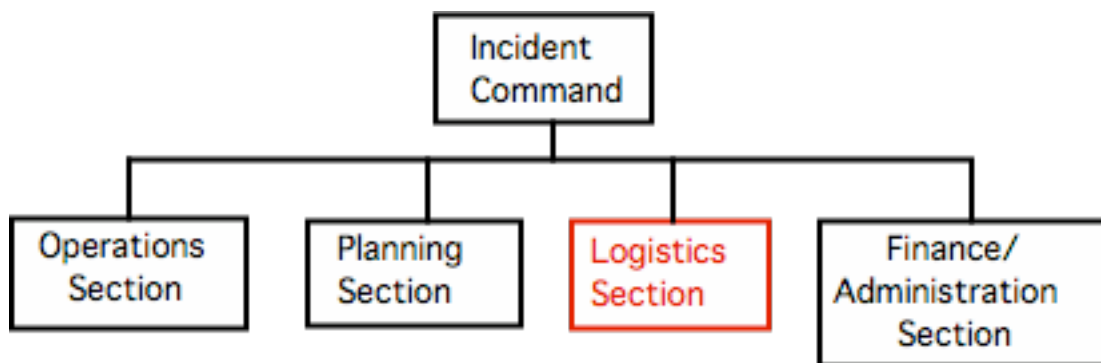


Figure 6-1 ICS Organization

In small-scale incidents, all of the components may be managed by one person, the Incident Commander. Large-scale incidents usually require that each component, or section, is set up separately. Each of the primary ICS sections may be divided into smaller functions as needed.

6.2 ICS Sections

The ICS organization has the capability to expand or contract to meet the needs of the incident, but all incidents, regardless of size or complexity, will have an Incident Commander. A basic ICS operating guideline is that the Incident Commander is responsible for on-scene management until command authority is transferred to another person, who then becomes the Incident Commander.

The command function is directed by the Incident Commander, who is the person in charge at the incident, and who must be fully qualified to manage the response. Initially, the Incident Commander will be the senior first-responder to arrive at the scene. As additional responders arrive, command will transfer on the basis of who has primary authority for overall control of the incident. As incidents grow in size or become more complex, the responsible jurisdiction or agency may assign a more highly qualified Incident Commander.

6.2.1 Planning Section

In smaller events, the Incident Commander (IC) is responsible for planning, but when the incident is of larger scale, the Incident Commander establishes the Planning Section. The Planning Section's function includes the collection, evaluation, dissemination, and use of information about the development of the incident and status of resources.

6.2.2 Operations Section

The Operations Section is responsible for carrying out the response activities. The Operations Section Chief reports to the Incident Commander and determines the required resources and organizational structure within the Operations Section. The Operations Section directs and coordinates all operations.

6.2.3 Logistics Section

The Logistics Section is responsible for providing facilities, services, and materials, including personnel to operate the requested equipment for the incident. ARES/

RACES personnel provide communications under the directions of the Logistics Section.

6.2.4 Finance/Administration Section

The Finance/Administration Section tracks incident costs and reimbursement accounting.

6.3 ICS Operations

Ventura County maintains an Emergency Operations Center (EOC) in the County Government Center as part of the county's emergency preparedness program. The EOC is where department heads, government officers and officials, and volunteer agencies gather to coordinate their response to an emergency event.

During a large incident, the county would activate the EOC. The DEC, or ARES/RACES ICO, would normally be at the EOC to coordinate ARES/RACES activities with the various agencies involved with the incident. In coordination with the ECs, plans for staffing the various operational sites requested by the Logistics Section will be established. The ECs would be responsible for identifying the operators from their area for the various positions required and notifying them when and where they need to be.

In smaller incidents, the EOC may not be activated, but the same basic structure is followed. The ARES/RACES ICO would likely be in proximity to the overall IC. The particular ECs involved in a smaller incident may be limited to the specific area involved with some assistance from adjoining areas.

During the incident, ARES/RACES operators will be handling formal traffic between the ICS Section organizations. The specific nets to be used will be established by the DEC or EC as appropriate. ARES/RACES operators can be assigned to any of the Operations Section or support organization sites as the need arises.

Section 7 - Incident Management

7.1 General

This section defines the ARES/RACES operation in the event of an incident.

This section covers mobilization, levels of response notification of ARES/RACES members and management, and initial, sustained, and closing operations. All members need to be thoroughly knowledgeable of this part of the plan and its associate procedures in order to participate effectively during an incident.

7.2 Operational Levels

There are three levels of ARES/RACES operation for communicators. These are as follows:

- a. Alert - Awareness of a potential operation. This may occur prior to mobilization. Communicators should check in and state their availability and capabilities (i.e., equipment and special abilities.)
- b. Standby – Prepare to be activated. This usually occurs at mobilization, but may occur just prior to mobilization. At this point, assignments may be made.
- c. Activation – To dispatch a communicator to an assigned position (either staged or on site). Additional information on being dispatched is included in paragraph 7.3)

7.3 Mobilization

Mobilization is defined as moving into action to support another agency. Communicators are not to be activated until ARES and/or RACES is officially mobilized. Communicators are responsible for their own safety and should take no action that places them in personal jeopardy. ARES/RACES will be mobilized for any incident that dictates the use of Amateur Radio to augment normally available telephone or public service agency radio services. Such an incident includes, but is not limited to the following:

- Major earthquake
- Flooding
- Firestorms affecting residential areas
- Hazardous chemical spills requiring evacuations
- Extended telephone service failure
- Extended power failure.

A local, County, State or Federal agency, the Red Cross or similar agencies initiate actual mobilization in response to a request. ARES/RACES officials will implement the mobilization depending on the level of response required (refer to paragraph 7.3.1)

In the event of an (actual or suspected) emergency, all ARES/RACES members are to monitor either the designated District frequency, or an active local area frequency for instructions. (Refer to Appendix C for a list of the frequencies)

Any ARES/RACES member may start an informal net to determine the extent of a potential emergency, list communicators' availability to respond, and to notify a responsible official of the situation. Upon mobilization, the leadership and members will be notified (refer to paragraph 7.3.2) and a staffing officer shall be appointed. Communicators may be activated (dispatched to assigned locations). Activation is divided into the following two categories:

Staged: Placed in a non-active location in close proximity to an incident (in preparation to being dispatched on site.)

On Site: Placed in an active location for the operation.

NOTE: When on site, you may not be actively utilized. Be prepared for long periods of inactivity.

7.3.1 Levels of Response

The level of mobilization depends on the level of activity required. There are three designated levels of response, which are as follows:

Response for a Level 1 Incident:

Level 1 is for incidents of local impact only – partial or full activation confined to a local area. The incident may require personnel resources from other areas, but the incident is contained in one area.

The local area EC will assume (or assign) the Incident Communications Officer (ICO) position and shall keep the DEC informed of activities and any out-of-area requirements.

ARES/RACES personnel in the local area shall be activated first with additional personnel from adjacent areas as required, primarily for relief and support assignments.

Response for a Level 2 Incident:

Level 2 is for incidents involving two adjacent areas or requiring adjacent area support.

The first EC responding will initially assume or assign the ICO position.

ARES/RACES personnel in the area(s) of involvement shall be activated first with additional personnel from adjacent areas as required, primarily for relief and support assignments.

Response for a Level 3 Incident:

Level 3 is for incidents involving several areas. This may require out-of-District resources: The possibility exists that RACES will be mobilized. Level 3 responses occur as a result of a single or multiple major incident(s) (i.e., earthquake) or as a result of a Level 2 response being upgraded.

The first EC responding will temporarily assume or assign the ICO position.

7.3.2 Notification of Personnel

The ARES/RACES notification parallels the level of responses. Any ARES/RACES members aware of a potential incident should check in on the designated District frequency to establish communication with the ARES/RACES leaders and members. Any member should notify the local area EC of a potential incident, and in turn, the EC should notify the DEC and local area membership of same, by phone or on established radio frequencies. Notification is given both “up and down” (next higher, next lower) for the purpose of establishing effective networks and availability.

Leaving a message on an answering machine or voice mail is risky: Attempt a direct contact or obtain an assistant to make the necessary contacts. After the contact is made follow the DEC/RO instructions or standby until authorization is approved by EOC staff.

The purpose of notification is not to tie-up the established emergency frequencies, but to inform any member monitoring, and acquire a list of available communicators equipped to assist when ARES is officially mobilized.

Notification For a Level 1 Incident:

1. Contact the local EC or AEC of the incident in question by telephone or on the established local frequency. If a local EC or AEC cannot be contacted request assistance from the District DEC, RO, Deputy DECs or AECs.
2. The local area EC shall notify the DEC/RO of the incident.

Notification For a Level 2 Incident:

1. Contact the local EC or AEC of the incident in question by telephone or on the established local frequency. If a local EC or an AEC cannot be contacted, request assistance from the District DEC, Deputy DECs or AECs.
2. The local area EC shall notify the adjacent area EC or AEC and the DEC or RO.

Notification For a Level 3 Incident:

1. Contact the local EC or AEC of the incident in question by telephone or on the established local frequency. If a local EC or an AEC cannot be contacted, request assistance from the District DEC, Deputy DECs or AECs.
2. The local area EC shall notify the adjacent area EC or AEC and the DEC or RO.
3. The local area EC shall alert ARES/RACES members to prepare for assignments.
4. The DEC or ICO shall notify the SEC and SM.

7.4 Initial Operations (Set Up)

The Incident Communications Officer (ICO) shall determine the appropriate extent of response by consulting with user agency personnel, other ECs (if necessary), and past experience. The ICO shall identify the locations to be staffed and the urgency in doing so. The ICO shall appoint a net control operator and user agency liaison representative (IC Liaison). If the user agency request ARES or RACES to provide a liaison/radio communicator at the Incident Command (IC) location, one shall be assigned. The ICO shall appoint qualified personnel to other incident management positions as needed. The ICO shall provide status information to the DEC or RO as necessary. The ICO shall estimate the time duration of the incident and, if necessary, initiate scheduling of replacement personnel. The ICO shall advise the DEC or RO if the incident is expected to

continue beyond eight hours. The ICO shall coordinate and if necessary, direct operations during the incident.

7.4.1 Staffing

If possible, the ICO shall appoint a Logistics Manager to handle staffing requirements at the beginning of the incident. Communicators (with their own radio equipment) shall be assigned to all field locations, agency headquarters, shelter sites, etc., as needed. If the incident is projected to extend beyond four hours, the Logistics Manager shall schedule replacement communicators as needed. Communicators shall not be scheduled for more than eight hours per day. The Logistics Manager shall provide staffing assignments data and status to the ICO.

Personnel being dispatched should be advised of the following information:

The actual site location and person to whom they should report

Approximate duration of assignment

Personal equipment to bring (radio and communications equipment, food, sleeping bags, etc.)

Radio frequencies used enroute. (Check in before departing and when arrival on site)

Emergency Contact (for families to contact the communicator)

When establishing the team for an IOC, make sure the team has enough personnel to accomplish the functions in Section 9.1. In particular if the team is going to have significant customer traffic there needs to be enough operators to be able to have people to work with the customers and others to handle the communications links.

7.4.2 Net Control

The ICO should appoint a net control operator (NCO). The net control station may be located away from the user agency and incident sites. Net control shall maintain control of the net frequency, establishing traffic priority as necessary. Net control shall maintain a log of significant traffic items and communicators arriving/leaving assignment locations. Net Control shall allow use of the frequency for other (non-incident) traffic on a non-interference basis.

The ICO will establish a net control location and field communications to the following criteria:

Net Control should be located away from congested activities and should not be at the incident site. Net Control may be located in an amateur's home, Red Cross Chapter Offices, RACES Operation Center (ROC), Emergency Operations Center (EOC), or other suitable location.

The net control station and the major EOC stations should not have to be taken off frequency to perform liaison or administrative functions. Such disruptions create delays in traffic handling and create a negative image of RACES/ARES operations for other agencies. There should be adequate equipment available for operators performing liaison and administrative functions to be able to operate independently. Likewise, the NCO should not be burdened with additional duties. The NCO should have an additional communicator assigned to copy messages and keep records freeing the operator to concentrate on net operations.

NOTE: As soon as the communications center is operational, so notify the user agency.

Field Communications, when required, should be located near Incident Command (IC) and links set up as required.

7.4.3 Incident Command Liaison

The communicator assigned as liaison to Incident Commander (IC) shall identify him/herself to the IC upon arrival, and advise the Incident Commander that he/she is an ARES /RACES communicator and is there on behalf of the user agency. The IC Liaison shall relay tactical messages between the IC and the user agency, and shall provide incident status to both the ICO and the user agency. The IC Liaison shall have had ICS training, and have proper identification. The IC Liaison shall not release any information to news media personnel, even in casual conversation.

7.4.4 Local Area Operations

Local area personnel should be prepared to help their local officials (Fire, Police, etc.) as required, with their auxiliary communications. This request may come down through EOC or ARES/RACES channels.

7.5 Sustained Operations

The purpose of sustained operations is to bring the incident response into full operation while always evaluating the situation with an eye toward closure. During sustained operations the ICO evaluates the requirements of the incident and fills all necessary open management positions on the incident organization chart (Figure 6-1). Also, the ICO must consider the communicator's personal needs (such as meals, sleeping facilities and restrooms) as well as long-range staffing and equipment requirements. Throughout sustained operations, functional group managers and the ICO continue to re-evaluate the incident. Sustained operations occur after the incident extends beyond eight hours; by the time the third shift comes on duty, the sustained operations should be in place.

7.6 Closing Operations

Securing the Operation:

The final operations of an incident deals with shrinking the incident organization in an orderly manner; tying up all the loose ends. At closure it is necessary to verify that the following items are accomplished:

The user agency notifies ARES/RACES as to official closures.

All future shifts are notified that the operations are securing and they are not to respond as scheduled.

All equipment is secured and returned.

All personnel are returned safely from their assignments.

De-briefing meetings are scheduled and held.

Net control closes.

Once this is complete the ICO notifies the DEC or RO that the operations is secure.

After the Operation:

After the incident, each ICO is responsible for attending any de-briefings and incident critiques. Each ICO is further responsible for the Incident Report and Critique and any other post-incident paper work required.

7.6.1 ARES Incident Reports

Each ICO and functional group manager will file a report with the DEC.

In Level 1 incidents the DEC may elect to pass on the report as is to the SEC.

In Level 2 incidents the DEC may hold a debriefing meeting with all ICOs. The ICO reports and meeting notes will be compiled for the Incident report.

In Level 3 incidents the DEC shall hold a debriefing meeting with all ICOs and functional group managers. The SEC may choose to attend the mandatory debriefing. The DEC will create the report.

7.6.2 ARES/RACES Incident Critique

In Level 2 and 3 incidents, the DEC or RO may elect to hold a critique meeting of the incident operations which shall be open to all participating members. All ICOs (and Net Control operators) should attend this meeting. The purpose of the meeting is to review the full incident and offer positive criticism of the ARES/RACES operation and their interface with other agencies on ways of improving future operations. Actions items should be issued and followed up.

Section 8 - Individual Preparedness and Assignment

The following steps should be taken in the event of a disaster or potential problem. ARES/RACES members should be thoroughly familiar with these procedures prior to an incident.

8.1 Prior to an Event

1. Maintain supplies (communications and personal) in your automobile for emergency preparedness. (For ideas, refer to the Suggested Equipment List in Appendix D).
2. Carry your emergency identification (ARES card, Red Cross ID, RACES Disaster Worker ID) with you.
3. Prepare and discuss a family emergency plan. In the event of a major disaster (the big one), this will give you peace of mind which will make you a better communicator. (You can't be caring for strangers if you are preoccupied with concern for your loved ones).

8.2 When an Emergency or Potential Emergency Situation Arises

NOTE: If your location is potentially hazardous, move to a safe place and then continue with the following:

1. Do a quick evaluation of the situation in your immediate surroundings.
2. Contact the local area EC, either by radio or telephone, and appraise him/her of the incident.
3. Monitor 146.88 or the local area repeater (see Appendix C) and listen for developments. If the repeater is down, monitor its output frequency or the County simplex frequency, 147.570.
4. Contribute only if the information is beneficial. Do not ask unnecessary questions or contribute to the confusion.
5. If it will not interfere, let net control know that you are available.

8.3 In an Emergency, Anyone Can Start Up a Net and Proceed with the Following

1. Request a status of what has been observed in the field.
2. Start taking names of operators on frequency that are available to help.
3. Brief the DEC or any ECs as they report in and await their decision as to the status of the net.
4. Relinquish net control upon request of the Incident Communications Officer (ICO).

CAUTION: Do not dispatch operators to an incident until authorized to do so by the ICO.

8.4 Traveling To the Assignment

The safety of team members is a primary concern of the ARES/RACES leadership. To help ensure their safety, ARES/RACES leadership needs to know the location of team members and their status at all times. To accomplish this, each team member is required to contact the ICO or his designate prior to leaving for an assignment and again when they arrive at the site. The information conveyed to the ICO should include the route that individuals plan to follow to the assignment and when they expect to arrive. This information will be critical in locating a team member if he/she does not arrive at the assignment when expected.

Above all, each team member is responsible for his/her own safety. Team members must be constantly aware of what is going on around them and not go anywhere or do anything that would risk their own safety. If a team member can not reach his/her assigned location because of dangerous conditions in route or at the site, then the team member should report that to the ICO. The ICO can either provide the team member with safe alternate routing to the site or another assignment. If the site where a team is deployed becomes dangerous, the team should leave as quickly as possible. If conditions are not yet critical, the team should report their condition to the ICO before leaving the assignment. The ARES/RACES leadership may know the safest routes to leave the site. If the situation at the site deteriorates so quickly that there is not time to contact the ICO, then the team should leave immediately and report in to the ICO as soon as they are in a safe location. Remember, the team is involved to help solve the problem, not become part of it. A team member who becomes injured has just become part of the problem. Therefore, personal safety is each team member's number one job.

A team member should of course contact the ICO if they encounter trouble in route to the assignment. Team members should do the following if they are blocked from reaching their assigned site by law enforcement personnel:

- a) Inform the law enforcement personnel that the team is part of an emergency communications team dispatched to the site. This explanation must include the name of the agency that dispatched the team.
- b) If the law enforcement personnel still do not allow the team to proceed, then the team must follow the directions of the law enforcement personnel without further questions.
- c) Do not argue with law enforcement people.
- d) The team must report the problem to the ICO after withdrawing in accordance with law enforcement directions.
- e) ARES/RACES leadership will resolve the problem through the appropriate chain of command and direct the team on how to proceed.

One of the problems during a wide spread emergency, such as an earthquake, is trying to determine the extent of the damage. To aid in the disaster assessment task, team members should notify the ICO of any significant problems or events that they observe while in route to their assignment.

8.5 Communicators Guidelines

When you are dispatched proceed with the following steps. Follow all of the guidelines which are designed for your safety and protection and an efficient communication operation.

1. Before being dispatched you should be given the following information:
 - The actual site location and personnel to report (a contact person).
 - Approximate duration of assignment.
 - Personal equipment to bring (radio and communications equipment, food, sleeping bags, etc).
 - Radio frequency(s) to use in route.

- Emergency Contact (for your family to contact you in the event of a family emergency).
2. Always wear proper ID badges in plain sight. In most cases you will be required to have a Red Cross ID in order to get into a base camp. Disaster Worker ID is required in a RACES incident. (It is suggested that you carry all the required ID with you in the event of an emergency).

NOTE: Operators are cautioned to use their privileges wisely, only using their identification to access areas to which they have been officially dispatched. (Abuse of privileges could jeopardize our relationship with the user agency(s)). The DEC, RO, ICO, or EC of the affected area are the only ones authorized to visit the different camps and command centers.

3. Proceed to your assigned location; while enroute, notify net control.

NOTE: Do not go into a disaster area until told to do so; then use good common sense.

- Stay out of danger.
 - Do not block roads.
 - Observe and make reports from a safe distance.
 - Do not argue with law enforcement. If they will not let you through, politely back off, call in the problem and let an EC call the officers agency to clear the way.
4. At your duty station, check in as requested and begin operations.

WARNING: If a situation arises which poses danger to you or your personal property, remove yourself from the situation and then immediately inform net control. Please use good common sense!

During your assigned duty, use the following guidelines:

- Keeping calm and organized is a goal. If you find yourself floundering, please take a break and ask for assistance.
- Maintain an informal log of activities, which should be handed over to the next shift operator. When coming on shift the following information should be known:

- Net/Communication Frequency(s)
- Net Control station ID
- Incident site tactical call
- Incident site rules and personnel
- Current ICO (name and call sign)
- What time relief should be scheduled

- On the air discipline

- Speak clearly and distinctly

- Think out the answer before keying the mike avoiding unnecessary chatter and excess of words (don't think on the air). This is not a rag chew.

- Keep it formal and professional. Remember that during an emergency our performance is being monitored (and graded) by a number of people, agency, news media, and public which may be listening in. (Law enforcement officials have expressed concern about our on-the-air discipline - you never know who is listening).

- Never use break or break break unless you have a real emergency. To break into a conversation, use your tactical call sign.

- Use affirmative for yes and negative for no.

- Use assigned tactical call signs. Minimize use of operator call signs; identify per FCC requirements.

- Be careful in use of acronyms and jargon - Do not use Q codes.

- Do not use the term IC or ICS in reference to ARES/RACES. IC and ICS refer to the Incident Commander and there is only one (which is not ARES/RACES).

- Observe the rules of the incident site in which you are operating (unless authorized to deviate from them).

- We are communicators.

- Decisions: Do not make decisions that should be made by officials. All incident communication decisions are made by the ICO - avoid making commitments without ICO approval. In the event a commitment has to be made in the absence of the ICO, be sure to do the following:

- Let the user (person to whom you are making the commitment) know it is only temporary until final approval by the ICO.
- Inform the ICO as soon as he/she is available. Final approval for honoring the commitment will be decided by the ICO.

Non-communications assignments: Should someone try to give you a non-communications assignment, clear it with the ICO first. However, a communicator assigned to an incident site may be requested to assist with a non-communications task if it does not interfere with communications responsibilities.

- Amateurs serving an agency must refer all questions to the agency or incident PIO. When approached by the news media during an incident, refer them to the incident Public Information Officer (PIO).

WARNING: Under all circumstances, DO NOT EXPRESS YOUR OPINION TO THE NEWS MEDIA.

- When handling traffic which involves expenditure of funds by any agency (supplies, dispatching equipment, and so forth) request and retain a written authorization. This is a matter of legal self preservation.
 - Do not hesitate to hand your microphone over to non-hams (agency personnel, who may not be hams). It may save some confusion if they can communicate directly. The communicators responsibility is to see that the operation is maintained within FCC regulations.
5. When your assignment is complete and you have been released from duty, notify net control with the following information.
- Your name and call sign, the name and call sign of the person replacing you, if any.
 - Pertinent information for the ICO (if site is shutting down operations, projected activities at the site, etc.)
 - Time of departure from your site and your destination (home, chapter house, a friends, etc.). If you will be traveling through a dangerous area, also report your expected route.
 - Your estimated time of arrival at your final location.

6. When you reach your final destination, be sure to notify net control that you have arrived safely, and whether or not you will be monitoring the frequency. If you are available for another shift, please notify net control (or staffing coordinator) of your availability.

Section 9 - IOC Operational Procedures

Incident Operations Centers are established based on the requirements of the incident such as a Red Cross shelter or a school. They can range from a single communicator with an HT to a portable setup with multiple operators. These procedures should also be used for EOC operations. The procedures in this section are based on having multiple operators available. There should be at least two at an IOC, but the incident requirements and personnel availability may necessitate a single operator.

A number of different organizations may be represented at a large IOC. For example, a city IOC may have people from Administration, Planning, Finance, Public Works, Health and Safety, Park District, School District, and Law Enforcement all present in the IOC. This type of IOC is typically set up in a large meeting room with tables designated for each of the individual organizations and situation charts arranged around the periphery of the room. More than fifty people could be present in the IOC at any time. On the other hand, it may just be a few.

9.1 Composition Of An ARES/RACES Team

A large IOC team will consist of a team leader, voice operator, packet operator, and several message handlers. Smaller teams should have at least a voice operator and a message handler. The ICO will establish the requirements for the IOC team.

The team leader is responsible for directing the team's activities, interfacing with the IOC management, and resolving any team related problems.

The radio operators are responsible for actual transmission and reception of message traffic. The voice radio operator transmits and receives short command and control messages, status messages, and information queries and replies. The packet operator uses radio computer communication networks to send and receive long text messages, lengthy lists of logistic information, and detailed status reports that are difficult to send via voice radio because of their length. In addition, the packet operator may occasionally be asked to send sensitive information since packet transmissions tend to be more secure than voice. The packet operator may also operate a second voice radio if voice traffic is heavy and there is no packet information to be sent or received.

The message handlers are critical to the success of the ARES/RACES mission. Message handlers are the interface between the radio operators and the various organizations (the customers) at the IOC. The customers are the originators and recipients of the message traffic. The message handlers bring calm and order to a hectic communications environment that could quickly get out of control. The message handlers work with the customers to transcribe their message traffic into formal written messages. The message

handlers ensure that each written message contains the necessary message handling information, including message priority, time and date created, name of the person and organization to which the message is to be sent, name of the person and organization generating the message, and any authorization that may be appropriate. When a message handler completes the composition of a message, he/she hands the message to a radio operator for transmission. The radio operators are thus buffered from the customers and can concentrate on net activities and on transmitting and receiving written message traffic. Messages which the radio operators receive from other sites are given to message handlers for delivery to the customers. The team leader also works as a message handler when not involved in management tasks.

9.2 Coordination With The IOC Point Of Contact

9.2.1 Initial Contact

The first task of the ARES/RACES team leader upon arriving at an IOC is to coordinate with the customer contact. The team leader will introduce himself/herself as the ARES/RACES team leader.

Hopefully the customers will be expecting the team and know what the team's function is. If this is not the case, then the team leader must brief them including:

- The mission of the ARES/RACES team,
- The agency that dispatched the ARES/RACES team to the IOC, and
- The types of communication services that the team can provide.

If necessary, the team leader will initiate a dialog between the customers and the agency dispatching the team to coordinate the team's role at the IOC. If area telephone and cell phone service is down, this communications will need to be via an ARES/RACES communication link and may be the first opportunity that the IOC has to talk with its controlling agency.

It is important to remember that the ARES/RACES team works for the customers. The team has been sent to the IOC by the ARES/RACES leadership, at the request of the IOC or the IOC's parent agency, to provide the them with communications support.

9.2.2 Meeting The Team

The team leader will introduce the remainder of the ARES/RACES team once the role of the team has been confirmed. The team will be introduced to the customers as the initial ARES/RACES operators assigned to the site.

9.2.3 Setting Up The ARES/RACES Radio Station

With the assistance of the customers, a location within the IOC will be identified for setting up the ARES/RACES radio station. The team members will set up the station and check into the designated nets.

An ARES/RACES team will often be directed to set up the radio station in a room or office that is normally used by others. Do not assume that the team has blanket permission to use whatever is in the room. Explain to the customers exactly which tables, desks and other resources in the room would be useful in setting up the radio station. Receive explicit approval from the customers before using these items. Once approval has been granted, proceed with the set up being very careful not to damage anything in the room. In particular, the team must be very careful to protect the personal property of the people who normally work in the area. Carefully remove items from the tops of the desks and tables, and put these items in a safe place for the duration of the operation. Do not use office supplies or office equipment without explicit permission to do so. The team has no legitimate reason to open desk drawers, file cabinets, or other storage areas. The team is expected to bring with them all office supply materials that they will need. These supplies are part of the radio station and as important to the success of the operation as the radios, antennas, and batteries.

9.2.4 Reviewing The Operations Planning With The Customers

The team leader will review the ARES/RACES IOC Operations Plan with the customers, making changes as needed, while the team members are setting up the station. The operations plan should be updated at this time to cover:

- Conditions at the site that may affect the team's operation and the team's safety.
- Escape routes if conditions at the site or in the area deteriorate quickly.
- The availability of working telephones, fax machines, Internet access, and other forms of communications that can be used by the ARES/RACES team.

- The location of sanitary facilities.
- The location of water and food sources.
- Eating arrangements.
- Areas that can be used for resting.

The availability of working telephones, fax machines, and Internet access is very important. During many types of emergencies (fires, floods, Hazmat spills, etc.), these facilities may be available and should be used by the ARES/RACES team as appropriate. For example, there is no reason to laboriously transmit a long list of needed supplies over a voice net, or even over packet, if the list can be easily faxed to its destination.

The ARES/RACES operations plan for the IOC must be maintained throughout the mission. Changes to the plan should be made as they occur, including changes in:

- The customers
- The organizations being served at the IOC
- The ARES/RACES frequencies being used by the IOC
- The ARES/RACES nets in which the IOC is participating,

The current operations plan must be handed off to the next team leader during shift changes.

9.2.5 Meeting With The Customer Organizations

As a part of the planning process, the team leader will meet with each of the organizations at the IOC. These organizations will become the customers that the ARES/RACES team will serve.

The team leader will brief each of the organizations on:

- The communication services that the ARES/RACES team is prepared to provide.
- The security of traffic transmitted by amateur radio.

- Amateur radio transmissions are not secure.
- Anyone with a scanner can pick up and listen to amateur radio voice transmissions.
- Amateur radio packet transmissions are more secure in that the general public usually does not have the equipment needed to receive packet transmissions.
- Because transmission are not secure, care must be taken in sending sensitive information over amateur radio networks.
- Information must normally be sent and received as formal messages with each message containing:
 - The time and date when the message was generated,
 - Message priority (Emergency, High, Routine, Low),
 - Who the message is to be sent to, including the person's name, organization, and location as appropriate,
 - Who is sending the message (person's name, organization, and location), and
 - The message text.
- Note that written authorization must be received from the appropriate agency official prior to transmitting a message involving the expenditure of money or the allocation of resources.
- Messages may be given to the ARES/RACES message handlers either in written form or verbally.
- Messages will travel quicker and more accurately through the radio networks if given to message handlers in written form.
- The ARES/RACES team leader should provide the IOC organizations with simple blank message forms that they can use to compose their written messages.
- To ensure proper message accountability and tracking, each message form must contain only one message.

- Message handlers will check the written messages for clarity and ensure that each message contains the necessary message handling information.
- Message handlers will add a unique message number to each written message.
- After being checked and given a message number, the message will be given to a radio operator for transmission.
- Radio operators will only transmit messages that are written out on message forms.
- The message handlers will transcribe verbal messages and requests from customers into written format, using the blank message forms, prior to giving the messages to a radio operator for transmission.
- Message forms will be placed in the radio message log after being transmitted.
- Radio messages from other locations will be received by the radio operators.
- A message handler will use a two part paper (original plus copy) message form to copy down the text of a message as it is received. Note that two blank message forms separated by a piece of non-smudge carbon paper works very well.
- The appropriate message handling information will also be written on the form as the message is received.
- The radio operator should use a tape recorder to record the message as it is received so that the message can be played back if the message handler has trouble copying part of the message. The use of tape recorders to record incoming messages greatly improves net efficiency by minimizing the need to resend messages.
- When the message form is completed, the message handler will place the copy in the radio message log and deliver the original to the addressed person/organization at the IOC.
- Direct voice communications between customers
- Occasionally an emergency message will be so critical that there simply is not time for normal message handling.

- When this occurs, amateur radio becomes a conduit for third party direct customer to customer voice communications.
- A customer requiring this level of communications must so notify a message handler.
- The message handler will immediately take the customer to a radio operator.
- The radio operator will work with net control and the site being contacted to set up a third part link between the two sites.
- Once that is done, the radio operators at each site will hand their microphones to the two people needing to communicate.
- When their emergency communications is completed, radio operations at the two sites will revert to normal procedures.

9.3 Team Leader Additional Responsibilities

The team leader will be responsible for resolving any ARES/RACES related problems that occur at the IOC during the mission. Problems will be resolved by coordinating with the site customers and with ARES/RACE leadership as appropriate.

9.3.1 Keeping The Customer Happy

The team leader's goal is to keep the customers happy by providing the best service possible. The service provided by the team is radio communications support. If the customers request the team to perform other duties, those duties must first be approved by the ARES/RACES leadership. If these other duties are beyond what the team is prepared to do, or authorized to do, then the team leader must so inform the customer in a polite manner, realizing that the customers are probably under considerable stress due to the situation.

9.3.2 Scope of Communications Support

While the team's primary role is to provide the IOC with communications support, this support may be broader than just amateur radio support. Communications support may mean any function that also includes communications. Thus the support provided by the ARES/RACES team may include:

- Amateur radio communications support.
- Handling message traffic for organizations at the IOC over their communication channels.
- Serving as a radio dispatcher for the IOC using their radios.
- Handling computer emergency message traffic for the IOC over the internet.
- Helping other organizations at the IOC set up their radio and computer equipment.
- Resolving interference problems.
- Helping other organizations get connected to the internet.

It is the responsibility of the ARES/RACES team leader to coordinate each request for communications support with the customers and with ARES/RACES leadership. This must be done to ensure that the ARES/RACES team members are utilized in the most effective manner, in accordance with the IOC's priorities and possibly those established by higher authorities beyond the IOC being served.

9.3.3 Interaction With The Press

The press is likely to be present in any emergency situation. The problem with ARES/RACES team members speaking with the press is that anything that they say will likely be reported only in part or taken out of context. As a consequence, what gets reported often conveys a much different perception of the situation than the team member intended. Nothing gets an organization more upset than reading or hearing a press report of their operations which they did not authorize and which may be very damaging and misleading. As a result, ARES/RACES team members are not to speak with the press. If a team member is hounded by the press, then he/she should refer the press to the ARES/RACES team leader. The team leader is not allowed to make any statements to the press either. What the team leader can do, however, is to get the press away from the team, so that the team can do their work, and take the press over to the IOC's Public Information Officer. The Public Information Officer, or equivalent, is the only person at the IOC authorized to give statements to the press. This policy keeps the ARES/RACES team out of trouble.

9.3.4 Staffing Levels And Scheduling Team Relief

The team leader is responsible for maintaining the site team at the appropriate staffing level. The size of the team must be increased if the message traffic is overwhelming the team. The team can be reduced in size if the work load is light. The required size of the team may vary over a 24 hour period and over several days.

The team leader is also responsible for requesting relief for team members, including him or herself, in the form of multiple shifts as appropriate. During a shift change, the current team leader must provide the team leader of the next shift with the following information:

- The current ARES/RACES IOC operations plan,
- Net/Communication frequencies,
- Net Control station ID,
- IOC tactical call,
- Current ICO (Incident Communication Officer name and call sign),

9.4 Measuring ARES/RACES Team Performance

The customers will measure the performance of the ARES/RACES team by how quickly and accurately the team sends messages and receives replies. The responsiveness of the team will be determined primarily by the message handlers and secondarily by the efficiency of the radio communication nets. The team's responsiveness will be judged poor if customers must stand in line waiting for a message handler to take their message. Conversely, the team's responsiveness will be perceived as excellent if a message handler is always available to accept a message as soon as a customer has one to send. A customer will presume that he/she has been served (his/her message is in the system) once the message has been given to a message handler. It is this perception of the team's responsiveness that makes the role of message handler so important.

In situations where the traffic volume is very heavy, the team leader should seriously consider training support personnel at the IOC to be message handlers. A message handler does not need to be a licensed amateur radio operator. This on the spot training strategy may free up some of the ARES/RACES message handlers to serve as additional radio operators to move the large volume of traffic.

9.5 Records Requirements

One of the critical functions of the IOC team is to keep records. Obviously larger teams will find it easier to keep detailed records. However, even the one person team needs to keep accurate records of who the operators at the IOC are and the times they were on site. In addition, a critical requirement is to keep a written record of all traffic. Message forms provide this if duplicates are created. In the case where the customer speaks directly to another, keep a short log of who was speaking and the gist of the message.

Message records may be critical in case there are legal issues that arise afterwards concerning the handling of traffic.

9.5.1 IOC Log

Each team leader must keep an individual log book containing an account of all significant team related activity that occurred at the site during his/her shifts, including a description of any problems that occurred and the resolution of those problems. Each entry in the log must be accompanied with the time and date that the event or activity occurred. Team leader log book entries are often the only way, at a later date, to reconstruct what really happened. Because of their potential importance, log entries must contain enough detail to be useful. At a later time it may be important for the ARES/RACES leadership to obtain a copy of a team leader's log book. If a copy is required, the team leader has an obligation to provide the requested copy. However, good business practice dictates that team leaders should never relinquish control of their individual log books since their log books are the only records that they have of what actually occurred on their shifts.

There is a detailed IOC Log form available (see Appendix B) that can be used as the basis for record keeping. Portions of that log should be filled out when possible particularly if there are going to be multiple shifts of operators. That form provides the next shift with the information necessary for them to keep operations going without having to reestablish all the customer contacts etc.

During a shift change, the current team leader must brief the next team leader on all events and activities that have occurred which may be important to the next shift. The team leader being briefed should make notes of these events as the initial entries in his/her log book for the upcoming shift.

9.5.2 Message Forms

Transcribing verbal messages from customers into a written message format is a labor intensive job for the message handlers. The accuracy and speed of message

handling will be greatly enhanced if customers write their messages on message forms before giving them to a message handler. If this is done, all the message handler needs to do is check the message for completeness and readability. Once checked, the written message can be given directly to a radio operator for transmission. Customers will be more likely to write out their own messages if they are given simple message forms to use. The critical items to get included in each message are the message number, the time it was given to the IOC team, who its from, who its to be sent to, and the text. Other fields on the ARRL message form may be used, but are likely to be confusing to the IOC customers.

The from and to addresses on messages must be complete and accurate. The response may not be sent back via ARES/RACES and incorrect or incomplete addresses may significantly delay the receipt of the response.

Message handles must ensure that each message contains a message number so that the message can be easily identified and tracked. Message numbers should be added to messages by the message handlers, not the customer, to ensure consistency in message numbering. The message number needs to be sufficiently unique so that messages during a particular period of operation can be easily identified and tracked. The message number should also be tied to a specific message handler so that the message handler can be identified if there is a question about the message. An easy numbering system that achieves these requirements is to use the message handler's amateur radio call suffix, followed by the time and date when the message was generated, as the message number. For example, a message number of RZ 1435 11 15 02, would be generated by message handler KJ6RZ for a message generated at 1435 on November 15, 2002. Note however, that the time and date already appears on the message form to the right of the MH field. Thus all the message handler needs to do to generate a unique message number is to place his/her call suffix in the MH field in the upper left hand corner of the message form. The message handler could place his/her complete call in the MH field, however, the call suffix is usually adequate and requires less time to enter than a full call. If the message handler does not have an amateur radio license, then the message handler's initials should be placed in the MH field.

The simple message form discussed above works very well for single hop traffic, that is, traffic in which a message is transmitted directly from its originating station to the addressed destination site without passing through any intermediate locations. Most traffic for local and county emergencies is of this type. In contrast, a multi-hop message travels from the originating station, through one or more intermediate radio stations, before finally arriving at the addressed destination site. Multi-hop traffic is required whenever terrain or long distances prevent the originating and destination stations from directly communicating. Handling multi-hop voice traffic is considerably more difficult than single hop traffic because of the steps necessary to avoid introducing errors in a message as it is relayed from one

radio station to the next. The ARRL National Traffic System (NTS) message forms and procedures have been developed over the years to successfully handle multi-hop voice traffic. The NTS forms and procedures should be used if multi-hop traffic is needed.

9.6 Direct Customer To Customer Voice Communications

Occasionally an emergency message will be so critical that there simply is not time for normal message handling. When this occurs, amateur radio becomes a conduit for third party direct customer to customer voice communications. A customer requiring this level of communications must so notify a message handler. The message handler will immediately take the customer to a radio operator. The radio operator will work with net control and the site being contacted to set up a third party link between the two sites. Once that is done, the radio operators at each site will hand their microphones to the two people needing to communicate. When their emergency communications is completed, radio operations at the two sites will revert to normal procedures.

9.7 Concluding The Mission

The team leader shall bring the mission to an orderly close when:

- The IOC customer determines that the team's services are no longer needed, or
- The ICO directs the mission at the IOC to be terminated.

The team leader shall ensure that both the ICO and the Net Control are aware that the mission is being terminated.

Messages currently being handled will be transmitted or received as appropriate. No additional messages will be accepted.

The duties of the team members following the stations shut down will be determined prior to closing the station.

- Team members may be redeployed to other sites in accordance with a redeployment schedule, or
- Team members may be released from duty.

The frequency to be used by team members for communicating with net control when leaving the site for redeployment or returning home shall be determined. Members are required to notify net control when they leave the site, indicate the route that they will

follow, and report in when they reach their next assignment or arrive home. This communications allow net control to ensure that members safely arrive home or to their next assignment.

Final permission to shut the radio station down must be obtained from net control. Once permission is received, the radio station will be shut down, disassembled, and packed up in preparation for leaving the site. Again, extreme care must be exercised by the team to avoid any damage to the area in which they have been working.

- Return any items that were borrowed from the site,
- Dispose of all trash,
- Clean up the area,
- Carefully replace items that were removed from desks and tables, and
- Restore the area as much as possible to the condition that it was in prior to arrival of the team.

The team leader must note in his/her log any damage that occurred and report this damage to the customers and to the ICO.

The team leader will meet with the customers while the clean up is in progress to receive any final comments, suggestions, or requests that the customers may have concerning the ARES/RACES activities at the IOC. This is an opportunity for the team leader to thank the customers for all the help and support that the IOC personnel provided to the ARES/RACES team. When clean up is completed, the team leader will notify the customers that the team is leaving the site and the team will depart.

9.8 Mission Report

Following the IOC mission, the team leader will submit a written report of the mission to the ICO. The written report shall include:

- A written summary of the mission activities,
- Details on any problems that occurred during the mission and the resolution of those problems,
- What could have been done to improve the effectiveness of the mission (lessons learned), and
- Copies of the message logs.

Prior to writing the mission report, the team leader should conduct a mission debrief with all team members, and with the site customers if possible, to ensure that the report contains an accurate account of everything that occurred during the mission. If the IOC Planning Form has been properly maintained, then it can be edited to become the mission report. This is much easier for the team leader to do than writing a report from scratch. The outline format of the IOC Planning Form is also easier to read.

Section 10 - Creating a Professional Image

Public service communications rendered by amateurs is based on a series of factors. Specifically, amateurs must be accepted by authorities, and once accepted, our continued ability to contribute in times of disaster is based on the efficiency and effectiveness of our performance. While acceptance, image, efficiency, and effectiveness are all important to the on-going working relationships between amateurs and police/fire officials, it is the initial acceptance that is often difficult to achieve.

The primary question then, is how amateurs can be more readily accepted by local public safety personnel. A significant part of the answer is understanding something about what appeals to the police officers and fire fighters, and what does not.

Police and fire officials tend to be very cautious and skeptical concerning those who are not members of the public safety professions. This posture is based primarily on experiences in which well intended but somewhat overzealous volunteers have complicated/jeopardized efforts in emergencies. The amateur operator or other volunteer who wishes to be of assistance must be aware of this perception.

The police have generally had their fill of groupies or hangers on. They can ill afford to tolerate frustrated individuals who have always wanted to be police officers or fire fighters, but for one reason or another have never reached that objective. There seems to be an abundance of people, especially during a crisis, who, if given any opportunity to assist in an official capacity, will quickly overstep the limits of their authority and responsibility. In their zest, such persons often inhibit the actions of trained personnel; but worse yet, they make an already dangerous situation even more so by their reckless abandon. With rare exception, amateur radio operators do not fall into this category. The problem is, however, that police officers in the midst of stressful operations may have extreme difficulty in distinguishing between those volunteers who are problem makers.

Those very few hams who behave emotionally, are overzealous in offering their services or in describing their abilities, or who abuse the established limits of their authority, are doing the amateur fraternity a real disservice. The typical police officer or fire fighter, like the typical civilian, does not understand the vast differences among various radio services, the types of licensing involved, or the high level of expertise and discipline that is characteristic of the amateur service.

Moreover, keep in mind that state-of-the-art technology, and the capabilities that technology affords us amateurs, are foreign to most police officers and fire fighters. When an amateur arrives on the scene and jumps out of the vehicle with a handheld in each fist and two more clipped to the belt, all squawking at once, officials simply do not know how to respond. They are either overwhelmed by equipment they do not understand or so awestruck that they try to avoid what they perceive as threatening.

How amateur radio volunteers are accepted depends on establishing a track record of competent performance in important activities. It begins with convincing officials that amateur radio volunteers offer a cost effective (otherwise known as tax free) substitute for functions previously paid for by the taxpayers. To do this, local radio amateurs must first demonstrate that they are organized, disciplined, and reliable, and have a sincere interest in community service. It is very important that we conduct ourselves in a professional manner that is compatible with public safety officials. This includes not only your professional conduct, but your on the air bearing as well. Keep communications formal, joking and laughing should be kept at a minimum. There is a time and place for everything, and during an incident is not one of them!

Appendix A - Acronyms

AEC	District Assistant Emergency Coordinator
ARES	Amateur Radio Emergency Service
ARO	RACES Assistant Radio Officer
ARRL	American Radio Relay League
DEC	District Emergency Coordinator
EC	Area Emergency Coordinator
EOC	Emergency Operations Center
FEMA	Federal Emergency Management Agency
H&W	Health and Welfare
IC	Incident Commander
IC Liaison	ARES/RACES liaison to the Incident Commander
ICO	ARES/RACES Incident Command Officer
ICS	Incident Command System
IOC	Incident Operations Center
NCO	Net Control Operator
NTS	National Traffic System
OES	County or State Office of Emergency Services
RACES	Radio Amateur Civil Emergency Service
RO	RACES Radio Officer
SEC	ARRL Section Emergency Coordinator
SM	ARRL Section Manager

Appendix B - Web Forms and Lists

- 1 Ventura County ARES Membership Application
<http://>
- 2 Ventura County Area Map
<http://>
- 3 ARRL Message Form
<http://www.arrl.org/FandES/field/forms/fsd218.pdf>
- 4 ARRL Emergency Reference Card
<http://www.arrl.org/FandES/field/forms/fsd255.pdf>
- 5 ARRL Radiogram
<http://www.arrl.org/FandES/field/forms/RADIOGRM.pdf>
- 6 ARRL Numbered Radiogram Messages
<http://www.arrl.org/FandES/field/forms/fsd3.pdf>
- 7 ARRL Operating Information
<http://www.arrl.org/FandES/field/forms/fsd220.pdf>
- 8 Ventura County ARES/RACES web site
<http://home1.gte.net/res19999/home.htm>
- 9 CVARC Web Page
<http://www.cvarc.org>

Appendix C - Frequency List and Schedules

The following list is used in ARES/RACES operations. The list is shown as it is programmed into RACES radios throughout the County. This is for the Kenwood TM-241; for the TM-2550, exceptions to the list are shown in footnotes 1&2. Check the Ventura County ARES/RACES web site at <http://home1.gte.net/res19999/home.htm> for the latest information on frequencies.

Mem No.	Rx Freq	Off set	PL	Repeater ID	Comments
01	147.93	-	127.3	AD6SV	Area 1 Simi Valley Repeater
02	146.850	-	94.8	K6AER	Area 2 Thousand Oaks Repeater
03	147.915	-	127.3	WB6ZTQ	Area 3 Camarillo Repeater
04	146.97	-	127.3	WB6YQN	Area 4 Oxnard Repeater
05	145.40	-		N6FL	Area 5 Ojai Repeater
06	147.765	-	127.3	N6AHI	Area 6 Ventura Repeater
07	146.985	-	127.3	WB6ZTX	Area 7 South Mountain SMRA Repeater
08	145.28	-	100.0	KN6OK	Area 8 Moorpark simplex
09	146.88	-	127.3	WA6ZTT	County Repeater (SMRA Sulpher Mtn)
10	147.57	S			Ventura County RACES simplex
11	147.48	S			Area 1 Simi Valley simplex
12	147.555	S			Area 2 Thousand Oaks simplex
13	146.55	S			Area 3 Camarillo/Somis simplex (ARES simplex)
14	146.505	S			Area 4 Oxnard/Port Hueneme simplex
15	146.52	S			Area 5 Ojai Valley simplex
16	147.51	S			Area 6 Ventura simplex
17	147.54	S			Area 7 Santa Paula/Filmore simplex
18	146.535	S			Area 8 Moorpark simplex

Mem No.	Rx Freq	Off set	PL	Repeater ID	Comments
19+					Unassigned/for local use

The same list sorted by areas:

Area	Primary Frequency	Primary Offset	Primary PL	Simplex Frequency
1	147.93	-	127.3	147.48
2	146.850	-	94.8	147.555
3	147.915	-	127.3	146.55
4	146.97	-	127.3	146.505
5	145.40	-		146.52
6	147.765	-	127.3	147.51
7	146.985	-	127.3	147.54
8	145.28	-	100.0	146.49
County	146.88	-	127.3	146.55 (ARES) 147.57 (RACES)

District Meetings

District meetings are held at 7:30 PM on the first Monday of odd months (January, March, May, July, September, and November). Meetings are generally held at a different facility each month so that members can become familiar with these facilities and their locations. The location of each meeting will be announced on the Tuesday evening County Net prior to the meeting.

Appendix D - Suggested Equipment List

This is a suggestion only. Stock only what you consider necessary.

10.1 Personal Gear

- Assorted clothes, (jacket, gloves, hat, boots, socks, raincoat)
- Soap, cloth, towel
- Tooth brush & paste
- Plate & utensils for eating
- 1 gal. Thermos -- water
- Toilet paper
- Sleeping bag, cot, pillow
- Small shovel
- Insect repellent
- First Aid kit
- Misc. personal comfort items
- Matches, stove, lantern
- Change for pay phones
- Flashlight (and spare batteries)
- Watch
- Binoculars
- Compass

10.2 Miscellaneous

- ARES/RACES/Red Cross ID
- Driver's License
- Amateur License
- Money, keys
- Maps including Thomas Bros/Ventura
- Notebook, clipboard, paper, pencils, pens
- Pencil sharpener, eraser
- Card table & chairs
- Thumb tacks, masking tape
- Operator aids (radiograms, log forms)
- Operator manual
- Roster
- Fire Extinguisher

10.3 Radio Gear

- 2m, 220 HTs, Extra Batteries/Charger
- Mobile Units, 2m, 220
- Batteries, adapters, chargers
- RF power amplifier
- Microphones, headphones, boom mike, headset

Scanner
Watt/SWR meter
Broadcast receiver
External speaker

10.4 Antenna Gear

Mobile antennas
Magnet mount antenna w/ 2M/220 whips
Two 50-foot sections of coax w/PL-259s
Misc. coaxial adapters (barrel, BNC, PL-259) & connectors
Collapsible mast
Collapsible antenna
Guy line (cord/rope)
Stakes

Power
Portable lighting (120V/12V florescent)
Spare auto fuses
Jumper cables - car
Spare radio fuses
Spare batteries (flashlight, BC radio)
AC Generator, fuel, oil
Extension cords 100 ft (Break out box)
2 prong-3 prong adapters
Battery charger
12V battery gel cells NiCads
Cigarette lighter adapters
Mobile power cords, adapters
Power cord - battery clips - cigarette light adapter
AC to 12Vdc power supply

10.5 Tools

VOM
Solder Iron & solder
Assorted screwdrivers slot/phillips
Assorted pliers needle-nose/cutters etc.
Assorted wrenches
Hex Key (allen) wrenches
Knife, hammer, hatchet
Hookup wire
Wire nuts
Electrical tape
Duct tape
Crescent wrench

Scissors

[Okay, You put all this in your car and there isn't room for you let alone power to drive anywhere!!] Use discretion in deciding what to stock, the list is a suggestion only.

Appendix E - District Voice Net Format

QST, QST, QST. This is <your name and call sign>, Net Control for the Ventura County ARES/RACES net. Is there any emergency or priority traffic on frequency?

This net meets every Tuesday at 1930 hours local time on the WA6ZTT repeater. This net is also linked to the SMRA 224.02 repeater, and the SMRA WB6ZTW Grant Park repeater.

In case there are problems on this repeater, please go to the output frequency 146.88 simplex as a backup. If the output frequency is unusable, then please switch to the RACES simplex frequency, 147.57.

We are a group of Radio Amateurs meeting the emergency and civic needs of our county. When checking in, please give your call, city, and any traffic you may have.

I will poll the 8 areas followed by six meters, packet, visitor, late, and missed check-ins. Roll Call will now begin:

AA6VH County DEC (Dave)

KE6NYT Deputy DEC (Dan)

Area 1 Simi Valley: Frank, KI6OQ

Area 2 Conejo Valley, Thousand Oaks, Newbury Park: Ken, KJ6RZ

Area 3 Camarillo, Somis: Larry, AD6QJ

Area 4 Oxnard, Port Hueneme: Richard W6HWK

Area 5 Ojai Valley: Wayne, W6OEU

Area 6 Ventura City: Wayne, N6WIX

Area 7 Santa Paula, Fillmore, Piru: Larry, W6UHC

Area 8 Moorpark: Rick, KQ6NO

Six Meter checkins (George, KN6LA).

Packet Checkins (Dan, KE6NYT)

Visitor, Late, and Missed checkins.

Formal traffic first.

Call each station with traffic.

Postamble:

This has been the Ventura County ARES/RACES net. This net meets every Tuesday at 1930 on WA6ZTT and linked stations. Thank you for your interest and participation. We urge any non-member stations interested in ARES/RACES to contact your local EC, this station, or leave a message on the ARES/RACES voice mail at 654-2941.

This is <your name and call sign>, net control, closing this net at <XX:XX> hours local time. After the linked systems are reset, the frequency will be clear.

Appendix F Uniform Specification

The following describes the optional uniform used by the Ventura County ARES/RACES. Having a uniform facilitates recognition by government or private user agencies with whom we might serve or come in contact. It gives a more professional appearance.

Shirt:

Long or short sleeve, yellow. The name patch is black, with yellow letters, and is placed over the right breast pocket. The title patch is also black with yellow letters, and is placed over the left breast pocket. The title patch indicates your title (District Emergency Coordinator, Emergency Coordinator, Assistant Emergency Coordinator, or it may say ARES or ARES/RACES). The right sleeve has the ARRL ARES patch, black with yellow letter.

Ordering:

For up to date information on order see

<http://www.rain.org/~jkrigbam/Yellow-Shirt.html>

Questions:

Contact Dave Gilmore.