Stanislaus County ARES

Amateur Radio Emergency Services
Public Service Emergency Communications

ARES Manual

for

Members and Emergency Response Agencies

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Acronyms

AEC	Assistant EC.
ARES	Amateur Radio Emergency Services
ARRL	American Radio Relay League.
CAP	Civil Air Patrol.
CDF	California Department of Forestry
CP	Command Post
DWI	Disaster Welfare Inquiry.
EC	Emergency Coordinator.
EMS	Emergency Medical Services.
EOC	Emergency Operations Center.
FCC	Federal Communications Commission.
HAZMAT	Hazardous Materials
HT	Handheld Transceiver
ICS	Incident Command System.
L/R	Logistics/Resources.
MARS	Military Affiliate Radio System.
MRE	Meal, Ready to Eat.
NCS	Net Control Station.
OES	Office of Emergency Services.
RACES	Radio Amateur Civil Emergency Service.
SARA	Stanislaus Amateur Radio Association.
SC ARES	Stanislaus County ARES.
SEMS	Standardized Emergency Management System.
SET	Simulated Emergency Test.
TNC	Terminal Node Controller.
USFS	United States Forest Service.

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Plan Distribution

1. Each Stanislaus County ARES Member (70)
2. SC ARES EC (10)
3. SC ARES AEC (10)
4. Stanislaus County OES Director, Russ Richards (2)
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Forward

This manual is published by the Stanislaus County Amateur Radio Emergency Services (SC ARES) for use by SC ARES members and by supported agencies. It outlines the policies and practices of SC ARES, which operates under the auspices of the ARRL and in conjunction with the State of California Office of Emergency Services (OES). Some of the material for this manual has been adapted from the "ARES Communications Operations Guide," published on the Internet by Bill Pennington, WA6LSA, and is used with his permission. The author wishes to thank Bill and all the others who have contributed to the preparation of that manual. The material included herein is intended as a plan and guide for the operations of SC ARES, but as is common in emergency situations, modifications may be required from time to time in the field. However, members should adhere as closely as possible to the procedures provided in this manual, which should provide for the most efficient and professional communications assistance possible. Corrections and suggestions for improving this manual are solicited, and updates may be issued as the need exists. The author wishes to thank the members of SC ARES who contributed to and assisted in the preparation of this manual, especially Chuck KC6YCH, Larry WB6GJT, and Russ N6JTA.

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Stanislaus County ARES
Manual for Members and Emergency Response Agencies

1.0 INTRODUCTION:

The Stanislaus County Amateur Radio Emergency Services (SC ARES, referred to in the rest of this manual as ARES) is composed of FCC licensed Amateur Radio operators who have voluntarily registered their capabilities and equipment for public service communications duty.

Under Federal regulations, Amateur Radio public service communications are furnished without any compensation of any kind.

ARES functions under this Manual at the direction of the Stanislaus County Emergency Coordinator (EC), who is appointed by the American Radio Relay League (ARRL), San Joaquin Valley Section Manager. The EC may appoint Assistant EC's as needed for ARES to function properly.

ARES personnel are prepared to respond during emergencies by a continual training program, and by maintaining their radio equipment and other response items in excellent condition. The team consists only of those who want to help, and who are dedicated to staying prepared to render radio-communications assistance during emergency conditions.

1.1 Scope and Purpose:

The purpose of this plan is to provide a written guide containing the minimum information that would be needed in an emergency. Each emergency is different and flexibility to provide an adequate response to each is a necessity.

The primary responsibility of ARES is to furnish communications in the event of a disaster, when regular lines of communications fail, are inadequate, or are congested due to the increase in calls for service or information.

All drills, training and instruction shall be carried out to ensure readiness to respond quickly in providing effective amateur emergency communications whenever an occasion may arise.

1.2 Authority:

ARES operates under the authority of the Stanislaus County Office of Emergency Services (OES), and the Stanislaus County Assistant Director for OES, Russ Richards, or his designee. ARES is organized under the auspices of the American Radio Relay League, the San Joaquin Valley Section Manager, and the San Joaquin Valley Section Emergency Coordinator. Operational control is under the county OES.

1.3 Rights and Responsibilities of ARES Volunteers:

Rights and responsibilities are mutual and inseparable. You can ensure enjoyment of the one only by exercising the other. The rights of all of us depends on responsibility by each of us. To secure and expand our rights, therefore, you must accept these responsibilities as individual members of an organization.

1.3.1 Rights of ARES Volunteers:

1. The right to be treated as a co-worker; not just free help.
2. The right to a suitable assignment.
3. The right to know as much as possible about the organization; policy, people and programs.
4. The right to participate in activities.
5. The right to quality training.
6. The right to sound guidance and direction.
7. The right to proper working conditions.
8. The right to promotion and a variety of experiences.
9. The right to be heard; to have a part in the planning.
10. The right to recognition, through promotion, reward and expression of appreciation by professionals.

1.3.2 Responsibilities of ARES Volunteers:

1. ARES personnel are expected to report for duty during any unscheduled call-up by the Stanislaus County Assistant Director of OES. During a disaster, personnel are expected first to ensure the well-being of their families before reporting for duty.
2. To attain certification under the ARES Certification Program. To participate in as many of the weekly nets, monthly interface meetings, periodic Simulated Emergency Tests, and ARES supported civic events as possible.
3. Be fully responsible for our own actions and for the consequences of those actions. Freedom to choose carries with it the responsibility for our choices.
4. Respect the rights and beliefs of others. In a free society, diversity flourishes. Courtesy and consideration toward others are measures of a civilized society.
5. Give sympathy, understanding and help to others. As you hope others will help you when you are in need, you should help others when they are in need.
6. Do your best to meet your own and our families' needs. By helping ourselves and those closest to you, you become productive members of an organization, you contribute to the strength of that organization.
7. Respect and obey the rules, regulations and guidelines. These are mutually accepted rules, regulations and guidelines by which, together, we maintain a fully operational organization. These rules, regulations and guidelines are the foundation of an organization. That foundation should provide an orderly process for changing these rules, regulations and guidelines. It also depends on your obeying these rules, regulations and guidelines once they have been freely adopted.
8. Respect the properties of others, both private and public. No one has the right to what is not his or hers. The right to enjoy what is yours depends on your respecting the right of others to enjoy what is theirs.
9. Share with others your appreciation of the benefits and obligations of your rights. Rights shared are strengthened.
10. Participate constructively in the organizational life. An organization depends on an active membership. It depends equally on an informed membership.
11. Help your rights survive by assuming responsibility for their defense. Your rights cannot survive unless you defend them. Their security rests on the individual determination of each of us

to help preserve them.

12. Respect the rights and meet the responsibilities on which your organization depends. This is the essence of a functioning organization. Maintaining it requires our common effort, all together and each of us individually.

1.4 Emergency Management.

There are four phases of emergency management in which all activities can be grouped. ARES activities can occur during any of these phases. The following is a short definition of each:

PREPAREDNESS: Preparing to handle an emergency. This includes plans or preparations to save lives and to help response and rescue operations. Evacuation plans and stocking food, water and other supplies, are all examples of preparedness activities taken before an emergency occurs.

RESPONSE: Responding safely to an emergency. This includes actions taken to save lives and prevent further property damage in a disaster or emergency situation. Response is putting your preparedness plans into action. Seeking shelter from a tornado or turning off gas valves after a earthquake are both response activities. Response activities take place during an emergency.

RECOVERY: Recovering from an emergency includes actions taken to return to a normal, or even a safer situation following an emergency. Recovery includes getting financial assistance to help pay for repairs. Recovery activities take place after an emergency.

MITIGATION: Preventing future emergencies or minimizing their effects. This includes any activities that might prevent an emergency from happening again, or reducing the severity of unavoidable emergencies. Buying flood or fire insurance for your home and business are examples of mitigation activities. Mitigation takes place both before and after an emergency takes place.

After examining the above four phases we can see that emergency management is a full circle of never ending activities. No mater where you live, or what emergencies have occurred in the past, emergency management is working to insure that when an emergency does happen, a minimum of life and property will be effected.

2.0 ARES MEMBERSHIP AND CERTIFICATION:

2.1 ARES Membership.

All licensed Amateur radio operators are eligible for membership in the Stanislaus County Amateur Radio Emergency Services (ARES) organization. The only requirements, besides being currently licensed, are a willingness to help provide communications in a time of local, regional or national emergency, and the submission of two signed application forms. Those forms are the American Radio Relay League's (ARRL) "Amateur Radio Emergency Service Registration Form" and the "Governor's Office of Emergency Services Local and State Registration Information", including signing the "Loyalty Oath or Affirmation" at the bottom of that form. The latter item assures liability coverage during performance of official ARES duties, and is required of all ARES members.

2.2 Stanislaus County ARES Certification Program.

Stanislaus County ARES operates a certification program to improve the operational skills and capabilities of its members, and thus the effectiveness of the organization. There are five levels of certification in the program, from Level V (the introductory, or "Volunteer" level), to Level I (the "Emergency Communications Specialist" level). There are equipment and training objectives associated with each level, from the basic requirements of any 2 meter transceiver and a signed application as required for ARES membership at Level V, to the advanced training and operational experience, and more varied list of available equipment required of the Level I member. The certification program requirements checklist is attached **(Appendix A)**.

Each member will maintain their own checklist, and initial or check off each item as they accomplish it. When the requirements for a certification level have all been met, the member will present the checklist to the EC, AEC, or other authorized ARES official for confirmation. That official, upon confirmation of any items they consider appropriate, will sign off on the checklist for the level presented, and return the checklist to the member. Finally, the official will update the ARES Certification Status list to reflect that advancement.

3.0 ACTIVATION:

3.1 Activating the Plan.

Activation is called only by the Stanislaus County Assistant Director of OES. The Stanislaus County ARES is activated during the time of an emergency incident, when a need for emergency communications is perceived. Amateur radio operators may be requested by any city, Red Cross, civil preparedness, or similar official. Anybody desiring the assistance of ARES must make every effort to contact the Assistant Director (or his designee) to request ARES activation. In the event he cannot be reached, contact the ARES Emergency Coordinator or Assistant Emergency Coordinator, (or any other ARES member acting in their stead) who will contact the Assistant Director. Upon notification that the Assistant Director has authorized activation of ARES, the requesting agency will be contacted by ARES and appropriate support will be provided.

Any member of ARES who for any reason suspects a communications emergency exists should monitor the assigned net for activity **(See Appendicies B & C)**. If local telephone service is available, the members may be notified by phone.

3.2 Establishing the Net Control Station.

If telephone service is available, the telephone tree will be activated. This recall roster is distributed to ARES members, and updated periodically. Upon the awareness or notification that a communications emergency exists, members of ARES will check into the ARES Emergency Net on the Stanislaus Amateur Radio Association's (SARA) repeater on 145.390 MHZ, minus offset, PL 136.5, with 147.540 MHZ simplex as an alternate. Mobile units will be activated and assigned duties. The EC will assume Net Control, or designate another station as Net Control Station (NCS). Control will be performed from the NCS home base station or a designated EOC. This station will be extensively utilized during a communications emergency and shall have full emergency power capabilities to ensure continuous operation.

3.2.1 Initial Duties of the Net Control Station.

The Stanislaus County Emergency Net will be called to order by the NCS. Members of ARES will check in to the net from their mobile and base stations to await further instructions. Mobile units are dispatched to "Immediate Need" assignments as requested by the served agencies. Operators on home stations are coordinated to effectively operate the NCS station. All other stations will be placed on a "Staged Units" list at the NCS station. An appointed alternate station may conduct check-in and assignment responsibilities.

3.3 Mobilization And Initial Follow-Up Procedures.

In the event that Stanislaus County ARES is called upon to help organize mutual aid assistance or emergency communications, the following procedures should be followed as closely as possible. Some of these procedures could vary depending on the circumstances surrounding the specific incident.

1. The requesting agency will contact the Stanislaus County Assistant Director of OES, Russ Richards, his designee, or the Incident Commander.
2. The Assistant Director, designee, or IC will contact the ARES EC and direct the call-up of the ARES.
3. The first person notified by the EC is responsible to insure the call-up is completed and personnel are informed of the current information.
4. Set up the initial work schedule while the call-up is being completed. (This may require an assistant to be assigned to follow up on the personnel not initially contacted via the call-up procedures.)
5. If the ARES team is depleted then the EC will contact the OES Director and request state resources for mutual aid. Upon approval, the EC will set up an ongoing schedule for assistance or operators as the situation requires.

3.4 Operator Initial Responsibilities.

3.4.1 Receive Assignment.

When you have been selected to go to an incident, there is some important information you must have before you leave:
1. The first information is reporting location, not only where the incident is but where at the incident should you check-in.
2. At what time are you supposed to be there?
3. What is your communications frequency and radio call designator?
4. What is the travel route if the assignment is remote from your usual operating area?
5. If your agency uses it, what is your order or request number?
6. This information is obtained from the person giving you the assignment. Write the information down and verify it for accuracy.

3.4.2 Check-In.

Upon arrival at the scene of your assignment, you will need to check in at the site and with Net Control. At formal Incident Command System (ICS) assignments, you will check in with an on-scene check-in official, as follows:
1. When you have arrived at the incident, you must check-in. Check-in officially logs you in at

the incident. You only check-in once.

2. Check-in not only logs you in , but also provides release and demobilization information.

3. Check-in locations will be clearly marked at the entry point to authorized check-in points such as the Incident Base, the Command Post, helibases, and staging areas. Check-in can also be accomplished by reporting the information to your Division Supervisor.

4. A check-in recorder will be at all check-in locations. The recorder will want to know:
   a. What agency you are from.
   b Your name or designator.
   c. Your assignment.
   d. Any other ICS qualifications you have.
   e. Where you left from.
   f. What type of transportation you used, and
   g. An order or request number if assigned one.

5. On simple incidents, this function may be taken care of by the agency dispatch center.

3.5 Emergency Response Plans.

ARES may be called upon to support a number of different types of emergencies. Response Plans have been developed for four of the most likely support requirements: Severe Weather (including floods), Technological Hazards (including HAZMAT's), Medical Emergencies, and Animal Control Emergencies **(Appendix D)**.

4.0 OPERATIONAL PROCEDURES:

4.1 General Personnel Responsibilities:

4.1.1 ARES Emergency Coordinator Responsibilities:

The ARES Emergency Coordinator (EC) is the focal point of the ARES organization. This person should have the supervisory, management and leadership qualities needed to head an organization of volunteers who will have to perform under stress when the need arises. This person will display interest, dedication, and professionalism. The EC should be an expert in emergency communications and set an example for organizational personnel to follow. More specific responsibilities follow:

1. To act as liaison to the served agencies within the area of jurisdiction.
2. Insure that the agencies understand the ARES communications program.
3. Integrate and maintain a close and harmonious relationship with RACES, VIP, MARS and CAP organizations that operate within the area of jurisdiction.
4. Insure that ARES personnel are used as frequently as possible in special events for training purposes, exercises and real emergencies.
5. Encourage all amateur radio groups within the jurisdiction to participate in or establish emergency communication organizations.
6. Recommend changes or updates of the ARES Communications documentation to the agency.
7. Coordinates the ARES Communications, organization and emergency participation of personnel and equipment (resources) within the area of jurisdiction.
8. Provide direction in the routing and handling of, first, tactical and logistical or, second, health and welfare communications traffic.

9. Coordinates the reporting and documentation of the ARES Communications organizational resources and its activities within the area of jurisdiction.
10. Act as a model emergency communicator as evidenced by dedication to purpose, reliability and understanding of emergency communications.
11. Assign personnel to perform the duties of the EC in your absence.
12. Assign personnel to act as Training Officer and any other positions as required.
13. Follow the check list when setting up and operating an emergency or training net.

4.1.2 Net Control Station (NCS) Responsibilities:

The Net Control Station has total responsibility for and total authority over a net while in session, even over the EC or the alternate. The outcome of an exercise and/or a real emergency situation will rest in the hands of the Net Control. There should be several members of the ARES organization well trained in net control procedures and standard traffic handling/operating procedures as required in a formal directed net. Have the trained Net Control's take turns (monthly with the next months' NCS as alternate for this month's NCS) and be responsible for the months training plan. Here are some points to remember.

1. You are in charge of the net but don't push your weight around. One of your jobs is to teach net discipline by setting the example.
2. Be on time and handle traffic on the net in a timely manner. Don't let the net get too informal and waste time.
3. Know your operators and their locations. You need to know how and where your net fits into the situation at all times.
4. Insure that your equipment and antennas are in good working condition. You always need to be heard by every station possible. Insure there is an alternate NCS standing by in case you do go off the air.
5. Generally the EC, but sometimes you, sets the net frequency. Know your alternates. If a contact is already in progress on frequency and refuses to move, than go to a secondary or change frequency a few KHz. Know how to tell intentional from accidental interference. The agency ARES does not own any frequency. Whoever is there first should get to stay. The precedence of the traffic may help determine, after mediation, who gets the frequency.
6. Get all the information you can (situation, station locations, shift lengths, frequencies, agency of primary responsibility etc...) before you put your net into service.
7. Keep a log of every net operation. The FCC has dropped logging requirements, however, unless you have an exceptional memory you will forget some things that you shouldn't. If traffic gets heavy and you have to send operators to other frequencies, you need to know where they went. The call signs of the operator, time, subject, and precedence for each piece of traffic as a minimum.
8. This is one position (probably the only one) that can operate from an operators home. As long as there is an alternate communication channel (including telephone) that will provide the ARES Coordinator with a way to send and receive instructions.

NOTE: This position should never operate from a command post (CP) or emergency operations center (EOC) as a separate station if there is a high volume of traffic. This would place all of the highest traffic load stations in one location and increase the possibility of errors and interference. If the traffic load is light the NCS and CP/EOC station/operator can serve the dual function.

Everyone will have their own style but if these recommended guidelines are followed by each net control operator the net should work out very well.

4.1.2.1 Network Identification

Approximately every half hour, the Net Control Station should make an over-the-air status announcement. This will clarify what type of operation is being conducted for people who have just started monitoring the net. The following scripts are suggested for this announcement:

1. ***If the repeater* IS required *for exclusive use by ARES:***

"This is _____(Call, Name)_____, Net Control for the Stanislaus County Amateur Radio Emergency Service net. Due to the current emergency situation (state the incident name, if known), ARES has been activated and is utilizing this Stanislaus Amateur Radio Association repeater on 145.390 Mega Hertz (or other). At this time, the repeater is reserved for exclusive use by ARES participants. All other traffic please use alternate means of communication. Stanislaus County ARES wishes to thank the SARA club for use of its repeater. This is Net Control, _____(Call)_____, out."

2. ***If the repeater* IS NOT required *for exclusive use by ARES:***

"This is _____(Call, Name)_____, Net Control for the Stanislaus County Amateur Radio Emergency Service net. Due to the current emergency situation (state the incident name, if known), ARES has been activated and is utilizing this Stanislaus Amateur Radio Association repeater on 145.390 Mega Hertz (or other). Because of the current low volume of official ARES traffic, the repeater is available for routine amateur radio operation. It is requested that routine traffic be kept brief, and give way to any official ARES traffic when requested. Stanislaus County ARES wishes to thank the SARA club for use of its repeater. This is Net Control, _(Call)_, out."

3. ***If the repeater is being used for an ARES* EXERCISE or TEST:**

"This is _____(Call, Name)_____, Net Control for the Stanislaus County Amateur Radio Emergency Service net. We are conducting an exercise at this time, there is no actual emergency situation. The repeater will be returned to normal service at the conclusion of the exercise. Stations with emergency traffic may come on at any time."

4.1.3 Operators Responsibilities:

All operators need to know what to do and how to do it when it comes to operating on a ARES net. Each operator has a duty to be self-disciplined. One operator who does not make an effort to be the best they can be could cause the net to be less than it should be. Here are some tips that all operators should heed.

1. Make sure you go to the correct frequency. Delays caused in getting all operators on frequency effect the whole net.
2. Be on time and handle traffic on the net in a timely manner. Don't let yourself get too informal and waste time.
3. Respond to the instructions of the NCS. Always go through the NCS for any of your requests. Let the NCS run the net, resist the temptation to help.
4. Insure that your equipment and antennas are in good working condition. You always need to be heard by every station possible. Do your best to have whatever type of equipment that may be

needed in any type of situation. Use the minimum transmitter output power required to maintain a solid contact. Keep batteries charged.

5. Know your equipment. Understand its operation. You may have to adapt to an unusual situation. Have a mini check list for every piece of equipment you may use in the field **(Appendix E)**. Another operator may have to use your equipment while you are not present. Be prepared.

6. Know your area of responsibility. (city, county etc...) Keep current maps for an area at least a 250 mile radius. You may assist neighboring ARES organizations inside their areas via mutual aid.

7. Get all information you can (situation, location, frequencies, shift length, agency of primary responsibility, reporting time, etc...) before going into action. A detailed description of the commonly supported facilities in Stanislaus County, their location, radio equipment and access information, is attached **(Appendix F).**

8. Do not leave the net without permission of the NCS. When temporary time off is needed or you wish to close your station check out with the NCS first.

9. Be brief when transmitting to the NCS. Keep everything short and simple.

10. Know how the net runs. Learn the recommended net and traffic handling procedures. Participate in training sessions and exercises. Practice will pull everything together.

11. REMEMBER, AS OPERATORS, WE PASS ON TRAFFIC EXACTLY THE WAY WE RECEIVE IT. If you have a question, ask it. Do not assume anything where a piece of traffic is concerned.

12. KNOW THE PRIORITY FOR EACH PIECE OF TRAFFIC. If it's too high, a more important message may get delayed. If too low, your message may get delayed. Timely delivery is just as important as the content of a piece of traffic.

13. Insure, where possible, that you have each piece of traffic in writing. A later reference or correction may be required. We can't remember, exactly, the content of each piece of traffic.

4.2 Networks:

4.2.1 Basic Network Types.

There are basically six types of network (net) operations that are used within ARES Communications. There is the Weekly (check-in) Net which is used to pass on information or to provide some training. The Training Net is used for just that, training, and any type of exercise. There is the Service Net on which the management of incident communications operation(s) takes place. There is the Welfare Net on which health and welfare traffic is handled. The Logistics/Resource (L/R) Net is where the logistics communications for an incident takes place and the Tactical Net is where actual incident tactical traffic is handled. These nets can be combined in any fashion if the traffic pressure is not too great. Just ensure that the precedences are used correctly.

1. A **Weekly Net** can be used to disseminate ARES information for the use of the members. Net Control Stations (NCS) can be set on a schedule, lets say monthly, and the next month's NCS can be this month's alternate. Run the check-in in a directed, formal manner. (Good training.) The NCS can also be responsible for any training. (The teacher always learns more than the student.) The net may be opened for informal traffic for a few minutes so that ARES personnel can get together (if they want) and chat in an informal atmosphere. In some cases this may be the only way personnel can get to know each other better, and therefore become a better team.

(Common modes: voice and packet.)

2. Training Nets can occur at any time. During the Weekly Net or during any period designated for an exercise. Service, Welfare, L/R and Tactical traffic (explained below) should be exercised at this time. Actually any type of training that the NCS, EC or Training Officer can think up is appropriate. Practice formal net activities (prowords, etc..), use of maps or any equipment. Traffic handling, including precedences, should be a must. Standard net times do not have to be used, however, the time selected should allow for maximum participation. Remember, the text of all exercise messages both voice and packet should contain a line, both before and after, which contain the word "DRILL". (Common modes: voice and packet.)

3. The **Service Net** (sometimes referred to as the "Resource Net" and therefore not to be confused with the Logistic/Resource Net) is generally not very formal, however, it is still a directed net. All stations must go through NCS in order to participate. Amateur call signs and operators names are used. The Service Net is the management net for other nets used in an incident. This is the place all operators go to get their assignments and other instructions from the EC. Volunteers are directed to this net to find out what is going on and what to do. Shifts, schedules, equipment requirements and directions to operating locations are given out on this net. Some land-line coordination is also used. Generally all traffic conducted on this net has a routine precedence. Higher precedences may come into play under unusual conditions, but this is rare. (Common mode: voice.)

4. The **Welfare Net** is a directed, formal net. Usually this is the majority of traffic that ARES will handle. Incident traffic is always number 1. Precedences for welfare traffic can be welfare through EMERGENCY. Evacuees, victims and even some incident workers are who this traffic is used for. Food, shelter, clothing, welfare of individuals and incident information for evacuees and victims is the traffic content. (Common modes: voice and packet.)

5. The **Logistics/Resource (L/R) Net** (Often referred to as the Log Net.) This is a directed and formal net. Incident personnel, food, quarters, vehicles, equipment and supply information is the meat of the traffic. Traffic can be taken off of the land-line direct or via auto-patch or phone patch. Most will be passed on in writing. The precedences will be routine through EMERGENCY with most being priority. (Common modes: voice and packet.)

6. The **Tactical Net** is always handled in a directed, formal manner. The NCS has complete control of all of the net operations. (Very important.) Operators names are rarely used and tactical call signs are almost always used. All traffic is handled using specific procedures (prowords, etc...). Only traffic related to the specific incident is handled on the net. Even the ARES Coordinator has to gain the permission of Net Control in order to perform official ARES business on the net. There is no chit-chatting on the net. Most of the traffic is third party, mostly written but some verbal. (Including auto-patch or phone patching.) The precedence of the traffic will vary from routine through EMERGENCY. Most will be priority and some welfare (given time). (Common mode: voice.)

There are always exceptions to every rule and the above guidelines are not cast in concrete. There is always a better way to do something and the nets mentioned above can be molded to fit whatever the incident requires. However, they must always be well managed and organized or they will not provide the public with the service they require at the time.

ALL OPERATORS SHOULD GET THEIR TRAFFIC FROM INCIDENT PERSONNEL IN WRITING. Operators and their equipment represent a communications medium. We pass on traffic exactly as given to us. If there is a question, ask for clarification

before sending traffic. When you understand or are told to send as is, do it. Then get ready for more.

4.2.2 Network Operations

4.2.2.1 Network Operation and Traffic Handling Procedures.

Voice operations is the primary mode used in emergency communications. It is the most efficient way to handle the basic short messages used in all types of nets. Voice is also the best way to manage packet nets. There are many ways to enhance voice operations and improve both the accuracy and efficiency.

A directed, formal net is the most efficient and accurate method for managing any type of traffic net. The Net Control Station (NCS) will manage the traffic flow and all other types of contacts on the net. Formal operations include the use of tactical call signs, the phonetic alphabet, correct pronunciation of figures, use of procedure words (Prowords) and correct priority of traffic **(Appendix G & H)**.

Knowledge of the phonetic alphabet and proper pronunciation of figures (numbers) will help during poor conditions and spelling unusual words (medical terms etc...) and with addresses or map coordinates. Understanding the use of procedure words (prowords) will also help improve the quality of traffic handling by helping provide a clear understanding of what is being said.

Callsigns are needed to be able to tell who is who. Tactical call signs are basically used in emergency communications to do just that. As hams we are required to give our amateur call signs every 10 minutes and at the end of every contact. This means that four call signs will be given during each contact. Don't over do it. Too many call signs will just prolong the contact and probably waste valuable air time on a busy net. See the examples for proper use of amateur and tactical call signs.

When a station needs to contact another station in order to pass a piece of traffic, first he must contact the NCS and ask permission to do so. At this time the NCS will list the traffic with its priority in the proper place in line (first come, first served, if there is a line of traffic waiting with equal priority). When it is your turn the NCS will give you permission to call your station.

Once contact has been made then the initiating station can pass their traffic when the receiving station says they're ready. Don"t rush things. This can be difficult during the excitement of participating in an emergency situation but experience on exercises and during incidents will help to control this. Use the proper message format. Using the following steps will help.

1. Enunciate each word clearly and slowly. Don't drag it out but, again, don't rush it.
2. Send a cluster of only two to four words, or a convenient short phrase, at a time and pause a few seconds before the next cluster, or phrase, is passed.
3. For long pieces of traffic, break about every 15 to 25 groups and allow the receiving operator to catch up and ask for fills (repeat groups).
4. On unusual or difficult words, spell them, phonetically. (Example: "difficult, I spell, Delta-India-Foxtrot-Foxtrot-India-Charlie-Uniform-Lima-Tango, difficult".)
5. With initials, like IRS, spell them phonetically. (Example: "initials, India-Romeo-Sierra".)
6. With figure groups give each figure individually. (Example: thirteen would be given as "figures, wun-tharee.)

Once the message has been sent, give the receiving operator a chance to ask for any fills

that they may require. For long pieces of traffic (25 or more groups) the sender may want to include a group or check count. This way the receiver can just count the groups to check for any missed groups. Once the receiving station confirms receiving the traffic, that station assumes responsibility for delivering it.

4.2.2.2 Directed, Formal Net Procedures And Tactical Call Signs.

The Stanislaus County Emergency Net will be called to order by the Net Control Station (NCS). Members of SC ARES will check into the net from their mobiles and base stations to await further instructions. Mobile units are dispatched to "Immediate Need" assignments as requested by the served agencies. Operators at home stations are coordinated to effectively operate NCS "Key Stations."

"**Operational Guidelines:**" Stations shall not transmit unless invited to do so by Net Control, or when trying to contact Net Control. The only exception to this is a station having **EMERGENCY** traffic.

Tactical call signs are often used to identify a station instead of the regular amateur call sign. When an operating location is set up it will probably be there for several days. Generally there would be two or three operators each day. Obviously this would be too many call signs to try to remember. This is where a tactical call sign proves to be an asset. The call sign is usually assigned according to location (FIRE BASE), or the duties (NET CONTROL). Sometimes unit numbers (UNIT 3) are used.

They are assigned by the agency you are currently working for, the ARES Coordinator, or Net Control in that order. Operators do not make them up or assign them. If there is a suggestion then request the call sign or the change through Net Control, the ARES Emergency Coordinator or agency in that order. The change should only be one that would help improve operations. Use the tactical call signs at the beginning of the contact.

Tactical call signs should be used during exercises. This will familiarize all operators with their use.

The amateur call signs of the operators currently on the air should be announced once at the end of every contact (a series of exchanged transmissions between two or more stations) and at least once every 10 minutes during prolonged contacts as per FCC regulations. Perhaps during "quiet times" the Net Control can perform a "roll call, radio check" every 10 minutes.

EXAMPLE:

EOC: NET CONTROL, This is EOC. OVER.
NCS: This is NET CONTROL. OVER.
EOC: I have traffic for UNIT 3. OVER.
NCS: Call your station. OVER.
EOC: ROGER. K6???. OUT.
NCS: N7!!!. OUT.

The most important thing to remember about tactical call signs is that they help keep the traffic flow both fast and accurate.

Tactical call signs during packet operations would provide the same benefits as in voice. However, this is sometimes difficult as the terminal node controllers (TNCs) don't provide enough space in the MYcall or MYALIAS or MYPBS calls. Abbreviations may be called for.

One of the most difficult operating procedures for most amateurs to follow is that of participating in a contact during emergency communication operations. Most are used to very informal conversations. Call signs are over-used and unless someone specifically signs off it is sometimes hard to tell if the conversation is over. Both excessive use of call signs and the sloppy "sign off" can not be tolerated on a relatively busy emergency net. Too much time is wasted and some confusion occurs. The best rule is:

The station who initiates a contact will also terminate that contact.

The following example, using tactical call signs, is the preferred way to conduct a contact during emergencies. See the Appendix for definitions of the Prowords. EXAMPLE:

ROCKY CANYON: NET CONTROL This is ROCKY CANYON. OVER.
NET CONTROL: This is NET CONTROL. Go ahead ROCKY CANYON. OVER.
ROCKY CANYON: I have traffic for FIRE CAMP. OVER.
NET CONTROL: Call your station. OVER.
ROCKY CANYON: ROGER. WA3??? OUT.
NET CONTROL: N7!!! OUT.
ROCKY CANYON: FIRE CAMP. This is ROCKY CANYON. OVER.
FIRE CAMP: This is FIRE CAMP. OVER.
ROCKY CANYON: I have traffic for the Fire Information Officer. OVER.
FIRE CAMP: Send your traffic. OVER.
ROCKY CANYON: ROGER, traffic follows.
BREAK.
Thirty structures have been destroyed since 0900 July 12.
OVER.
FIRE CAMP: ROGER your traffic. OVER.
ROCKY CANYON: ROGER. WA3??? OUT.
FIRE CAMP: K6??? OUT.

The proword "OVER" leaves no doubt as to whose turn it is, and the proword "OUT" insures that everyone knows the contact has ended.

Notice, the station who initiated the contact also terminated the contact by signing OUT first. Everyone participating knows that the contact is definitely over and the frequency is clear for other traffic. Each station used their tactical call sign only once at the beginning and their amateur call sign once at the end in each contact, yet there is no confusion as to who is speaking or who they are speaking to. This is a good thing to practice as often as possible. A good time to do this is during the formal session of periodic training nets. .

4.3 Messages.

4.3.1 Formal and Verbal Message Handling

Providing back-up and emergency message transmission is the basic purpose of the ARES operation. Depending upon the nature of the operation, including such parameters as volume and importance of messages, who is being supported, etc., those messages may require **formal written** handling, or may be handled in the more **informal verbal** manner. The formal handling requires the use of the **ARES Message Form (Appendix I)**. The verbal format is just that, the message is passed verbally without being written down on the Message Form, although it is good

operating practice to write the message down as sent and received to help ensure accuracy.

4.3.1.1 Formal Written Message Handling.

Formal written message handling shall be utilized whenever the requirements of the operation dictate it. This may be due to the heavy volume of message traffic, the importance of the traffic, or the level of the agency being served. Formal handling may be requested at any time by the ARES EC or the NCS.

The ARES Message Form will be utilized for formal written message handling. The operator will ensure the originating official has completely filled in the "From," "To," "Message," "Date" and "Time" blocks at the top of the form. All written messages must be signed by the official who originates the message, and include the title of the originator. The ARES operator will then assign a sequential message number and transmit the message. When a reply is received (if required), the remainder of the Message Form will be filled out, and the response will be delivered to the originating official.

The ARES operator will maintain a Message Log (**Appendix J**), adapted from the ICS-214 form. This log will include a list of message numbers, for both outgoing and incoming messages.

A second message form is included in the Appendix (**Appendix K**). This is the ARRL Radiogram message form, which will be used for Health and Welfare messages. Follow the instructions on the form for its usage.

4.3.1.2 Informal Verbal Message Handling.

Informal verbal message handling shall be utilized whenever the requirements for formal message handling are not met. This may at some times be at the judgement of the individual operator, and could depend upon the importance or complexity of individual messages. It is possible that some messages will be handled in the informal style, and others will be handled in the formal style.

Informal verbal messages should be logged in on the message log sheet even though there is no written message.

4.3.2 Message Precedence Defined.

A message precedence of "**EMERGENCY**" "Priority" "Welfare" or "Routine" shall be assigned to all messages, as defined below:

"The following ARRL precedences are for use in connection with verbal or written message traffic. They are designed to increase efficiency both in normal times and especially during emergencies.

1. **EMERGENCY** - Any message having life or death urgency to any person or group of persons, which is transmitted by Amateur Radio in the absence of regular commercial facilities. This includes official messages of welfare agencies during emergencies requesting supplies, materials or instructions vital to relief of stricken populace in emergency areas. On PACKET/AMTOR/CW/RTTY this designation will always be spelled out.
2. **PRIORITY** - Use abbreviation P on PACKET/AMTOR/CW/RTTY. This classification is for important message having a specific time limit and official messages not covered in the emergency category and press dispatches and emergency related traffic not of the utmost

urgency and notice of death or injury in a disaster area, personal or official.

3. **WELFARE** - This classification, abbreviated W on PACKET/AMTOR/CW/RTTY, refers to either an inquiry as to the health and welfare of an individual in the disaster area or the reply to such an inquiry that indicates all is well. Welfare traffic is cleared/handled only after all emergency and priority traffic has been cleared. The Red Cross equivalent to an incoming welfare message is DWI (Disaster Welfare Inquiry).
4. **ROUTINE** - Most traffic in normal times will bear this designation. In disaster situations, traffic labeled Routine ® on PACKET/AMTOR/CW/RTTY) should be handled last or not at all when circuits are busy with higher priority traffic. **Most traffic handled on amateur circuits in normal times will fall into this category."**

4.4 Shadow Operations.

The shadow operator should be an organization's best. Shadow operations are mobile or portable and generally conducted under more difficult conditions than other operations. There is no time to look up rules or procedures as the operator is always on the move. The vast majority of the traffic will be verbal, not written.

The operator is usually assigned to shadow, or constantly stay with, the Incident Commander or an Information Officer. These officials travel everywhere within the affected area. Often, in the performance of their duties, they will approach potentially hazardous areas. They will not put the operator into a dangerous situation. They are experts in their fields and can be trusted to make the right decisions.

They almost always use official vehicles, often pickups and 4 wheel drive, and therefore an operator's equipment must "plug into" that vehicle.

Generally a minimum of 25 watts on VHF/UHF FM will be required to provide efficient mobile communications. This means that handhelds will require an external amplifier. A magnetic mount antenna will also be required.

Portable operations are even more difficult in that the power radiated from a 5 watt handheld's six inch antenna is greatly reduced as compared to that of the mobile installation. A ½ or 5/8 wavelength, telescoping gain type antenna is almost a must. A way to keep the antenna away from the attenuating effects of the operators body is also a good idea. There are "tactical suspenders with handheld holsters and battery pouches" much like the police and the military wear available from military/police catalog sales outlets. This will place the radio high on the chest where the antenna can clear the body and therefore improve operation. Spare batteries are a must. As a shadow, an operator will be in the field for up to 12 hours. A battery pack that will take standard AA alkaline (or regular carbon) batteries is extremely useful. Generally the agency in charge of an incident will have these batteries in stock and available to the shadow operator. A speaker/mic with ear phone or boom mic/earphone is also very useful in high noise areas.

Another way to improve portable operations is to use a mobile dual band full duplexing transceiver as a repeater in conjunction with a handheld. Properly set up, this will allow excellent portable operation as long as the operator is within a reasonable distance of the mobile repeater.

This is probably one of the most interesting operating positions in amateur radio. Only well trained, experienced and properly equipped operators should fill this position.

4.5 Incident Command System.

During emergency situations, the **Incident Command System** (ICS) will be activated.

This system provides an organizational framework to manage the operations and personnel involved in working the incident. ARES personnel operate under the direction of the Director of OES and the Incident Commander. Assignments may be made by the Planning Section, and may support any function of the ICS. An ICS organizational structure chart is attached (**Appendix L**).

5.0 WEEKLY NET, DRILLS, TESTS AND ALERTS:

5.1 ARES Weekly Net.

ARES holds a weekly net at 2000 hrs Wednesday on the 145.390 repeater owned by the Stanislaus Amateur Radio Association. This is a formal directed net which is called to order by the Net Control, and a roll call is taken. Only active ARES members are called during roll call, those who check in less frequently will check in during the "late or missed" member portion. Visiting stations are also invited to check in. The ARES officers make their reports, there is then a training session, followed by general discussion and a closing roll call. There may also be occasional calls for simplex check-in following the net on 28.495 MHZ, or other designated frequencies. A record of Weekly Net check-ins and simplex check-ins is maintained as part of the certification program. A Net Script is attached (**Appendix M**) and a Net Check-In Roster will be distributed and updated separately.

5.2 Drills, Tests and Alerts.

An annual test will be conducted in October in conjunction with the nationwide ARRL Simulated Emergency Test (SET). The SC ARES will regularly supply public safety communications in conjunction with local events, to test the effectiveness of the operation. The SC ARES holds an "interface" meeting on the first Saturday of every month. At the discretion of the EC, the ARES will be activated unannounced via the telephone tree at least twice per year.

The appendix also contains a list of ARES officers (**Appendix N**), a list of important phone numbers (**Appendix O**) and a list of Stanislaus County emergency support frequencies commonly used by various agencies during an emergency (**Appendix P**).

Appendix A

Stanislaus County ARES

Training and Certification Program

18 Feb 98
Rev: Original

Name of Trainee: _____ **Call:** _____

Level V (VOLUNTEER):

Equipment:
- Any 2M Transceiver, power source, antenna: _____

Training:
- Current ARES application & Loyalty Oath on file w/ EC: _____

EC Certified Level V: _____

Level IV (BASIC EMERGENCY COMMUNICATOR):

Level V Certification PLUS:

Equipment:
- 2M or 2M/70cm Handheld Synthesized Radio: _____
- Alkaline battery pack for HT: _____
- 5/8 wave or better gain antenna for HT: _____
- Earphone for HT: _____
- Resource Book, including:
  - Map of Stanislaus County: _____
  - Steno type spiral notebook: _____
  - Zipper pouch w/ pencils/pens: _____
  - Set of all ARES message forms: _____
  - SC ARES Resource Handout (Phone tree, Net roster, Net Script): _____

Training:
- Participate in 6 weekly ARES nets: _____
- Participate in 1 ARES simplex net (HF or VHF): _____
- Attend 1 ARES monthly meeting: _____

EC Certified Level IV: _____

Level III (ADVANCED EMERGENCY COMMUNICATOR):

Level IV Certification PLUS:

Equipment:
- Portable 2M antenna (J-Pole, wire ground plane, etc): _____
- Mag-mount 5/8 wave 2M antenna _____
- 50 ft RG58 mini coax or better w/ 2 SO-239 connectors: _____
- Connectors (SO-239 to SO239 barrel, SO-239 to BNC male, PL-259 to BNC female, preferably 2 each): _____
- 72 hr food supply (such as 9 MRE's, canned food, water (2 qt min), light snacks, etc): _____
- Misc Items (Pocket knife, roll electrical tape, 50 ft nylon rope, first aid kit, $5 in paper & change): _____
- Flashlight and spare batteries (AA size): _____
- Add ARES member manual, w/ EOC & hospital addresses to Resource Book: _____

Training:
- Visit all county EOC's & Hospitals, familiar with location of equipment & antenna drops: _____
- Participate in 6 more ARES weekly nets: _____
- Attend 2 more ARES monthly meetings _____
- Participate in 1 more ARES simplex net: _____
- Present a training session on approved subject _____
- Learn basic ICS terms and structure _____

EC Certified Level III: _____

Stanislaus County ARES

Training and Certification Program

18 Feb 98
Rev: Original

Name of Trainee: _____ **Call:** _____

Level II (OFFICIAL EMERGENCY STATION):

Level III Certification PLUS:

Equipment:
- 2M or 2M/70cm Mobile Radio, 25 watt min, or a 25 watt or better amplifier: _____
- Power cable w/ cigarette ltr plug for mobile radio: _____
- Power cable w/ alligator clips and "ARES" (cigarette lighter) connector: _____
- Spare fuses for all equipment: _____
- Scanner radio for local Public Service freq monitoring: _____
- DC power supply for HT, scanner, and other equip: _____

Training:
- Participate in 6 more ARES weekly nets: _____
- Participate in 1 more ARES simplex net: _____
- Attend 2 more ARES monthly meetings: _____
- Present 1 more training topic on weekly net: _____
- Participate in ARES Simulated Emer Test (SET): _____
- Participate as Net Control Station on 2 weekly nets: _____
- Participate as a radio operator in an ARES or SARA sponsored Public Service Event: _____

EC Certified Level II: _____

Level I (EMERGENCY COMMUNICATIONS SPECIALIST):

Level II Certification PLUS:

Equipment:
- 70 cm handheld or mobile capability: _____
- Hi capacity rechargable 12 volt battery (gel-cell or similar) with "ARES" connector: _____
- Fluorescent Light (12 volt) with "ARES" connector: _____

Training:
- Participate in 6 more ARES weekly nets, serving as NCS in 1 of those nets: _____
- Participate in 1 more ARES simplex net: _____
- Attend 2 more ARES monthly meetings _____
- Participate in 1 more ARES or SARA sponsored public service event: _____
- Demonstrate knowledge in area of SEMS/ICS by writing an SET utilizing the two disaster management systems as the training topic: _____
- Demonstrate knowledge of the required paperwork involved in any call-up by completing the paperwork needed during the SET you wrote: _____

EC Certified Level I: _____

Appendix B

Primary and Alternate Net Frequencies

The primary and alternate frequencies will almost always remain the same. If there is a change everyone will be notified. The use of repeaters has been cleared with the owner(s)/controller(s) ahead of time. This will be reconfirmed immediately before use by the ARES Coordinator or the alternate. Do not go to a frequency until told by the NCS.

VHF frequencies.

Voice, Repeater:

1. Primary:	145.390 (-) (136.5)	(Stanislaus Amateur Radio Assn Repeater, Mt Oso)
2. Secondary:	145.110 (-) (136.5)	(SARA Low Level Repeater, Doubletree)
3. Alternate:	146.355 (+) (156.7)	(WA6OYF Repeater, Memorial Hospital)

Simplex:

1. Primary:	147.540
2. Secondary:	144.225
3. Alternates:	As Required from Group C

UHF frequencies.

Voice, Repeater:

1. Primary:	440.225 (+) (136.5)	(Stanislaus Amateur Radio Assn Repeater, Mt Oso)
2. Secondary:	As Required	

Simplex:

1. Primary:	As required, not assigned.

HF frequencies.

Voice, Daytime:

1. Primary:	28.495 +/-
2. Alternates:	7.295 or As Required

Voice, Nighttime:

1. Primary:	3.995 +/-
2. Alternates:	7.295 or As Required

Appendix C
California Statewide 2-Meter Simplex Frequency Plan

California has developed a statewide 2-Meter Simplex frequency plan, designed to minimize interference between ARES operations in adjoining counties. The state is divided into seven operating areas, with 2-Meter simplex frequencies assigned to each area. The following is the plan for Stanislaus (Group C).

For actual emergency operations, four channels are provided for interagency and intercounty communications. They are common to all seven frequency groups. They are designated COMM-1 through COMM-4.

A sample county plan utilizing the available frequencies is presented for Group E. Stanislaus has not designated such a usage plan at this time. The following pages list what counties are in each group, and the assigned frequencies for each of those groups.

GROUP C (CHARLIE) (Stanislaus County ARES)

Ch:	Freq:	Designation:
1	144.120	COMM-1
2	144.140	COMM-2
3	144.160	COMM-3
4	144.180	COMM-4
19	**144.225**	**<<Stanislaus County ARES Secondary Simplex Frequency>>**
20	145.545	
21	145.650	
22	145.755	
23	146.490	
24	147.420	
25	147.525	
55	146.520	National Calling Frequency
56	145.695	Alert Frequency
	147.540	**>>>>Stanislaus County ARES Primary Simplex Frequency. <<<<** (Not part of official state plan).

SAMPLE CHANNEL ASSIGNMENTS

ONE GROUP "E" COUNTY'S FREQUENCY PLAN

Ch.	Frequency	Usage/Notes	
1	144.120	COMM-1 Common Coordinating	
2	144.140	COMM-2 Common Coordinating	
3	144.160	COMM-3 Common Coordinating	
4	144.180	COMM-4 Common Coordinating	
34	144.255	Countywide administrative (although countywide, in most counties will probably be a repeater pair outside of this plan)	
35	145.575	East county command	TAC 1
36	145.680	West county command	TAC 2
37	145.785	Fire net	TAC 3
38	146.535	Police/Sheriff net	TAC 4
39	147.450	Public Works	TAC 5
40	147.555	Shelters	TAC 6
55	146.520	National Calling Frequency	TAC 7
56	145.695	Alert Frequency: recruiting, resource order coordination	

California State 2 Meter Simplex Plan
County Groups:

Group A: Del Norte, Tehama, Sonoma, Sacramento, San Mateo, Inyo
Group B: Trinity, Yuba, Napa, San Joaquin, Santa Cruz, Fresno.
Group C: Siskiyou, Glenn, Sierra, Sutter, Alpine, Marin, Stanislaus, San Benito, Kern.
Group D: Modoc, Butte, Solano, Amador, Santa Clara, Mariposa, Tulare.
Group E: Lassen, Nevada, Yolo, Contra Costa, Mono, Merced, San Luis Obispo.
Group F: Plumas, Colusa, El Dorado, San Francisco, Calaveras, Madera, Monterey.
Group G: Shasta, Lake, Placer, Alameda, Tuolumne.

GROUP A (ALPHA)

1	144.120	COMM-1
2	144.140	COMM-2
3	144.160	COMM-3
4	144.180	COMM-4
5	144.195	
6	145.515	
7	145.620	
8	145.725	
9	146.460	
10	146.580	
11	147.495	
55	146.520	National Calling Frequency
56	145.695	Alert Frequency

GROUP B (BRAVO)

1	144.120	COMM-1
2	144.140	COMM-2
3	144.160	COMM-3
4	144.180	COMM-4
12	144.210	
13	145.530	
14	145.635	
15	145.740	
16	146.475	
17	147.405	
18	147.510	
55	146.520	National Calling Frequency
56	145.695	Alert Frequency

GROUP C (CHARLIE) (Stanislaus)

1	144.120	COMM-1
2	144.140	COMM-2
3	144.160	COMM-3
4	144.180	COMM-4
19	144.225	
20	145.545	
21	145.650	
22	145.755	
23	146.490	
24	147.420	
25	147.525	
55	146.520	National Calling Frequency
56	145.695	Alert Frequency

GROUP D (DELTA)

1	144.120	COMM-1
2	144.140	COMM-2
3	144.160	COMM-3
4	144.180	COMM-4
26	144.240	
27	145.560	
28	145.665	
29	145.770	
30	146.505	
31	147.435	
32	147.540	
55	146.520	National Calling Frequency
56	145.695	Alert Frequency

GROUP E (ECHO)

1	144.120	COMM-1
2	144.140	COMM-2
3	144.160	COMM-3
4	144.180	COMM-4
33	144.255	
34	145.575	
35	145.680	
36	145.785	
37	146.535	
38	147.450	
39	147.555	
55	146.520	National Calling Frequency
56	145.695.	Alert Frequency

GROUP F (FOXTROT)

1	144.120	COMM-1
2	144.140	COMM-2
3	144.160	COMM-3
4	144.180	COMM-4
40	144.270	
41	145.590	
42	146.430	
43	146.550	
44	146.595	
45	147.465	
46	147.570	
55	146.520	National Calling Frequency
56	145.695	Alert Frequency

GROUP G (GOLF)

1	144.120	COMM-1
2	144.140	COMM-2
3	144.160	COMM-3
4	144.180	COMM-1
47	144.285	
48	145.605	
49	145.710	
50	146.445	
51	146.565	
52	147.480	
53	147.585	
55	146.520	National Calling Frequency
56	145.695	Alert Frequency

Appendix D

Emergency Response Plans

To be distributed separately.

Appendix E

ARES Recommended Personal Equipment Checklist

"Certification" Radio Equipment

2 Meter or 2M/440 Handheld Radio (IV)
Alkaline battery pack for HT (IV)
Alkaline batteries for battery pack (IV)
5/8 wave or better gain antenna for HT (IV)
Resource book (Map, notebook, message forms, pencils/pens) (IV)
Resource handout (recall roster, net script, net roster) (IV)
Members Manual (III)
Portable 2M antenna (J-Pole, wire ground plane, etc). (III)
Mag mount 5/8 wave 2M antenna. (III)
2, 4, 10, 50 ft coax cables w/ PL-259's (III)
Connectors (SO-239 to SO-239 barrel, SO-239 to BNC male, PL-259 to BNC female, preferably 2 each. (III)
Misc items (pocket knife, roll elect tape, 50 ft nylon rope, first aid kit, $$) (III)
Flashlight & spare batteries (III)
25 watt 2M or 2/440, or 25 watt amp (II)
Power cable w/ cigarette ltr plugs for all mobile radios (II)
Power cable w/ alligator clips and "ARES" (Cigarette lighter) connector (II)
Spare fuses for all equipment (II)
Scanner radio for local Public Service freq monitoring. (II)
DC power supplies for HT, scanner, etc (II)
440 MHZ handheld or mobile capability (I)
Hi capacity rechargeable 12v battery (gel cell Or similar) with "ARES" connector (I)
Fluorescent light (12 volt) (I)

Additional Radio Equipment

HF Radio Equipment
Antenna Switches
3 to 5 ft interconnecting antenna masts
VHF/UHF Base Antenna
12v soldering iron
3 outlet cigarette lighter adapter
12v DC to 110v AC Inverter
Extension cord, 9 ft.
Small tool case
Ziplock and trash bags
ARRL Message Forms
County Disaster Worker ID Card
ARES Roster, Phone Tree, Net Scripts
ARES Message Forms
ARES Planning Forms
Stanislaus County Map (Compass or AAA)
Earphone/Headphone
External Microphone for HT
Steno type spiral notebook
Pens, Pencils, clipboard
Fishing Line
Spare fuses for all radio power cords

Personal Equipment

72 hr food supply (9 MRE's, canned foods, Water (2 qt min), light snacks, etc). (III)
>>PRESCRIPTION MEDICINES
Extra Clothing.
Inclimate Weather Clothing
Non-prescription medications/Toiletries
"Coffee Can Survival Kit"
AM/FM Radio and/or Portable TV
Bottle of alcohol
Rubber Boots
Driver License
ARES ID Card

Appendix F
ARES Facility Interfaces

Doctors Medical Center, Modesto:

Facility Location: 1441 Florida Ave., Modesto CA. Take McHenry north of city center, or south of Briggsmore about ½ mile to Orangeburg Ave. Turn west one block to Florida Ave. Turn north to the Emergency entrance, park in the surface lot or the parking garage.

Access Instructions: Check in at Security Guard station inside Emergency Room entrance. Communications Room is through the double door, turn right 10 feet, turn left 15 feet, turn left 10 feet, turn right and it's the room on the right. The Comm Room is across the hall from the Nurses Station. The Security Guard will escort you in.

Points of Contact: Focal Point is Emergency Department Manager, Jackie DeBeche, 576-3407, page 569-6005, or her boss Graham Pierce 576-3939, page 569-2282. Call them if you can't get in for an operation. If after hours and need their help, call hospital operator at 578-1211 and have them call them at home. Operational focal point is the ER Charge Nurse, 576-3609. This person is located near the Comm Room. For routine scheduled access, contact Ms. DeBeche or Charge Nurse. Maintenance, Ms. DeBeche. To enter the secure ER area where the Comm Room is, talk to the Security Guard or Triage Nurse, both are outside the secure area.

Equipment: There is six feet of antenna cable terminated in a BNC connector coiled up on the left end of the table in the Comm Room. There is 115v AC and a phone available. The room may be noisy during an operation; headphones are advised. Rubber duck antennas do not work in the comm room. The antenna works on both 2M and 440 MHz. On 20 Feb 98, the 2M SWR was 1.05:1, with 50 ohms impedance.

Comments: The security is absolute; you need security approval to enter. The room is relatively small and could be congested and noisy.

Memorial Hospital, Modesto:

Facility Location: 1700 Coffee Rd., Modesto. North-east corner of intersection of Briggsmore and Coffee Aves. ER is in the south-west corner of the facility, nearest the intersection. ER entrance is near main hospital entrance.

Access Instructions: Check in at ER desk and talk to Security (Public Safety) when you arrive. Easiest way to Comm Room is through door at left end of ER counter, back about 20 feet, and around corner to left. Room is immediately to your left.

Points of Contact: Security (Public Safety), 572-7233. Charge Nurse, 526-4500, ext 6962. For routine access, clear with Penny Hastie or Vickie Seaman at 526-4500, ext 6011. Talk to security when you arrive. For actual operation, contact Security, Charge Nurse, or enter at Medi-Flight entrance at the Disaster Control Facility (see next write-up).

Equipment: The hospital has provided a 12 volt power supply (Astron RS7A) and 2 meter transceiver (Kenwood 211A). They are permanently mounted under the upper cabinet shelf, near the right end of the room. The attached antenna works on 2M and 440 MHz. On 20 Feb 98 on 2M, it had an SWR of 1.1:1, with 50 ohms impedance. The antenna has a PL-259 connector which you can disconnect and use with your transceiver if you wish (a barrel connector and several feet of antenna cable is required). The power supply is hard wired to the transceiver, and probably not available for other equipment unless the wire is cut. It is expected that new equipment (transceiver, power supply) will be provided by Memorial Medical Center by mid-1998.

Comments: The Public Safety Director coordinates medical emergency situations. The guards

(Public Safety) know where the equipment is located. The Comm Room is relatively cramped, and may be noisy during an operation. Headphones are advised.

Stanislaus County Disaster Control Facility, Modesto:

Facility Location: 1700 Coffee Rd., near the helipad at Memorial Medical Center. This facility will coordinate regional medical response during a disaster. Entrance is at the Medi-Flight entrance, immediately adjacent to the helicopter pad at the rear of the hospital. The ARES station at the Memorial ER will still be maintained.

Access Instructions: Go to the entrance marked "Medi-Flight" immediately adjacent to the helipad at the rear of Memorial Medical Center, off of Spanos Rd. (The helicopters point at the entrance) Follow the instructions on the keypad to announce your presence and purpose, you will be let in. An escort will take you to the communications room. It can be reached by going to the back of the room you entered, turn right, then right again. A door is labeled "Communications."

Points of Contact: Teri Norton, 526-4500 ext.7422, or Frank Erdman, 572-7056. Both are very familiar with ARES and the services we provide. You can reach the DCF console direct at 572-7263, which is always manned and answers "Stanislaus Control." They can reach Teri or Frank at any time for access permission, if the person on duty won't admit you.

Equipment: An ARES station is being installed by the DCF at one of the four consoles in the Medi-Flight Communications Room. Exact configuration is unknown as this writeup is being prepared, but should be available by mid-1998. You may bring your own equipment if you wish, but the installed equipment should suffice. Headphones are advised and should be brought by you..

Comments: The Stanislaus County Disaster Control Facility was located at Stanislaus County Hospital (now SC Health Services Agency), then moved to Doctors Medical Center when Stanislaus County changed purpose. The DCF contract was then competed, and Memorial won. The facility is brand new. The ARES station at Memorial ER is still available, but all communications, both DCF and Memorial ER, is expected to be conducted from the DCF. The antenna will be mounted high on the hospital tower, giving good wide-area coverage for simplex operation if necessary.

Stanislaus County Health Services Agency, Modesto:

NOTE: (Mar 1998) This facility no longer has an ER. The old ER area is now an "Urgent Care" facility, but with Ambulance access it may be used in an emergency. The ARES drop still exists, and is expected to be maintained.

Facility Location: 1030 Scenic Dr. South side Scenic Ave, ½ mile west of Coffee. Building is the three story cream colored building. Enter the NE corner near the wheelchair ramp.

Access Instructions: Check in at the guard station, show the ARES/Stanislaus County ID tag, he will let you thru the coded door. The ARES drop is in the room just behind the nurses station, to the right. In the room, the antenna is mounted on the wall immediately to the right as you enter.

Points of Contact: The Charge Nurse on duty in Urgent Care (558-7196). We talked to B. Miller, Unit Coordinator Urgent Care, same number. Facility engineering is at 558-7125.

Equipment: There are two drops at this location. They terminate at a two-connector plate on the wall, with two SO-239 plugs. Both are labeled "SC ARES." On 23 Mar 98 they were tested on 2 meters. All SC ARES repeaters could be hit. The left plug had an SWR of 1.8:1 and impedance of 80 ohms. The right plug had an SWR of 1.2:1, with an impedance of 45 ohms. They were not

tested for operation on 440. There is a table and chair available, but the room is also used by doctors to dictate notes. Expect it to be noisy and crowded. A nearby fluorescent light makes any attempt with a rubber duck unusable. There is a phone and 115 v AC available. Expect noise, use headphones.

Comments: The "radio" room is used by doctors for dictation, and is directly off the nurses station. Expect noise and congestion.

Oak Valley Hospital, Oakdale:

Facility Location: 350 S. Oak Ave., Oakdale, CA. Coming into town from Riverbank, the first stoplight is Oak Ave. Turn south (right), go through a stop sign, & after a block the hospital is on your right. Follow signs around back to the Emergency Room entrance at the far end.

Access Instructions: Check in at reception desk, identify yourself. Contact person is the ER Charge Nurse, (848-4144). The Communication Room is in the Surgeon's Lounge. Go through the double doors then about 40 feet to end of the hall, turn left about 10 feet, the room is on the right. The door may be locked, ER nurse has key.

Points of Contact: For routine access, contact Vivian Thompson (848-4144), Steve Mahoney (848-4179) or Roy Levivett (848-4177) before arrival. During operation, ER Charge Nurse is at 848-4144.

Equipment: There is an SO-239 wall jack just inside the door, about 5 feet above the floor. There is a couch under the jack. You will need a cable (recommend 10 feet) with appropriate connectors. There is 115v AC power and phone nearby. The antenna works on both 2M and 440 MHz. It is possible but not recommended to hit repeaters on a rubber duck. On 20 Feb 98, the 2M SWR was 1.5:1, with 75 ohms impedance.

Comments: This is the surgeons' lounge, and they will use it from time to time. There is a table in the room, but not convenient to the antenna jack. You may have to use the couch for a table and chair. The lounge may be a bit crowded and noisy. Headphones and a clipboard are recommended. Make sure you don't lock yourself out of the room. The Nurses Station is about 100 feet away, through several locked doors; be sure you can return to your station when passing messages.

Emanual Medical Center, Turlock:

Facility Location: 825 S. Delbon Ave., Turlock. North-east corner of Delbon and N. Olive Ave. Entering town from Hwy 99, take Monte Vista Ave. exit and drive east toward town. Pass Geer Rd about 3/4 mile to N. Olive, turn right (south) about 3/4 mile. Hospital is on the left. Emergency Room entrance is off of N Olive, main entrance off of Delbon.

Access Instructions: During day you can walk to location, but check in at ER nurses station. At night, a guard will have to escort you. There is an ARES antenna drop in the ER Dr's. Lounge, but you should go to the "Disaster Control Center", also known as the "Administrative Computer Room" where disaster response is coordinated. Best to get an escort or specific directions for this room. Room is normally locked, need somebody to let you in. During emergency/disaster, room will be manned and is the focal point of hospital activities. All messages should be able to be delivered to and answered by personnel in that room.

Points of Contact: Room coordinator is John Almond (KO6QK), Biomedical Services Supervisor (668-5255 work, 632-3428 home). Alternate POC is Lynn Leatherman, Communications department (669-2359 work, 632-1646 home). Hospital coordinator during emergencies is the "Administrator on Call" (call hospital at 667-4200, ask for him). Usually the Administrator will be

Bob Moen or his designee.
Equipment: In Doctor's Lounge, SO-239 is wall mounted behind dresser and below TV just to right as you enter the room. Room is small, and Dr. may be sleeping in room. This drop may be eliminated by the hospital soon. The "Administration Computer Room" has a VHF drop, and an HF drop. Both are behind a metal plate along the wall on the right side of the room as you enter the room. The HF drop is the cable with the black wrap around it about 3 in. from the connector; it is currently not hooked up. The VHF cable has no wrap, and is terminated with a PL-259. A barrel connector and appropriate cable for your radio is required. AC is available, no phones are currently installed. There is a table and chair. Both 2 meters and 440 work. All SC ARES repeaters could be hit. On 23 Mar 98, the 2 meter SWR was 1.5:1, impedance was 50 ohms.
Comments: It was stated that all messages should be passed to and from the Administrator On Call, who will be in communications with this room. A rare event may be the loss of internal hospital communications, in which case the drop in the Dr's lounge may be used as a comm point for an amateur link between the ER and the Administrative area. Two ARES people would be needed, and they would be very busy.

Del Puerto Hospital, Patterson:

The Emergency Room at this facility is scheduled to be closed down in the near future, and as such it was not examined for this report. (May 1998).

Mountain Valley Emergency Medical Services (EMS) Agency:

Facility Location: 1101 Standiford Plaza, Suite D1, Modesto. Northwest corner of Standiford Ave and Colonial Dr., about 1/4 mile east of Tully Rd. Office is nearest the corner.
Access Instructions: Walk in. Communications Room is the very corner conference room.
Points of Contact: Doug Buchannon (Disaster Coordinator), Fred Claridy (Communications). Both 529-5085.
Equipment: No equipment currently installed. For 2M, you will need an outside antenna. This can be an antenna mounted outside somehow, with cable strung out the window, or with a cross-band transceiver in your vehicle. A roof antenna may be installed soon. There is 115v AC and phones available nearby. Cell phones work.
Comments: This agency coordinates regional medical services during an emergency. You cannot hit the 145.390 repeater from inside the room without your own external antenna or cross-band repeater. The 440.225 machine can be hit without outside assistance..

Stanislaus County EOC:

Facility Location: Stanislaus County Services Building, 1100 H St. Corner of 11th and H St. downtown Modesto, building takes up whole block..
Access Instructions: EOC is in the basement, down the elevator or thru the underground parking garage. Access is strictly controlled, you must have name approval to enter past the guard station. Russ Richards (the Assistant Director of OES in Stanislaus County) or his designee is the contact point for approving ARES access. You will be issued an EOC badge which must be turned in when you leave. Located in the lower level conference room, where SARA used to meet..
Points of Contact: Russ Richards or his designee in the EOC. Page him 576-9905, leave number. Also Mike Wilkinson in the EOC, Fire Chief of Consolidated Fire. Or explain to guard station that you are here to relieve the ARES operator.

Equipment: There is an antenna drop in the corner of the room to the left of the main entrance, near the cabinets, with a PL-259. There are 3 or 4 coax drops from the ceiling at the corner, look for the one marked 2 meters. You must bring everything else. A table and chair may be provided, first person to set up must request. 115 v AC is available. SWR not checked yet, but worked well in February 1998 activation.

Comments: This is Stanislaus County's answer to a War Room. The chiefs of all agencies involved in working the emergency will be here, or have designees here. They know who you are, and will be willing to work with you. A headphone may be advisable, but not absolutely required. Be careful not to pass information you hear over the air until it is officially released. The facility will be moved to Oakdale Rd., north of Standiford, by early to mid 1999.

American Red Cross, Modesto:

Location: 1230 6th St., Modesto. 6th St is one-way northbound, get on it from the vicinity of J, K, etc and head north. Red Cross is where the street turns right. Turn right, and park in lot behind building. Be sure to lock up, security is a problem here.

Access Instructions: Check in at front desk when you arrive. Should be no problem, they will know who you are. The comm room is to the right as you enter the building, two doors down the hall on the right. The room contains other Red Cross equipment.

Points of Contact: Raul Juvera, 523-6451 (work) or page at 574-8485, is the Emergency Services Coordinator. Gloria Klink, 523-6451 can also be contacted. Jim Call, KE6HVB, works communications for the Red Cross, and knows the ARES set up well.

Equipment: There is an antenna drop in the comm room, near the right outside corner. 115v AC and a phone are nearby.

Comments: The other comm equipment in the room is extensively used, and can cause a lot of noise. Headphones are advised to reduce mutual interference. This Red Cross headquarters is a focal point for shelter management during floods and other evacuation events, and other ARES stations will be set up at the various shelters. The ARES antenna is inoperable in May 98, repair is planned. Meanwhile, a good 5/8 placed in the window is minimum required.

Pacific Bell, Modesto:

Location: 1025 13th St between J and K St. Located inside the large but unmarked Pacific Bell building. Entry is the central door on 13th St, by escort or magnetic card only.

Access Instructions: Access is strictly controlled by entry magnetic badge only, or escorted. Contact Mike Heenan (W7MH), 579-0920 (home) or 578-7858 (work) for access. Comm room is on third floor, take elevator, turn left, then left again, "Mobile Radio" room is on left.

Points of Contact: Mike is the station trustee and should be contacted for all activities.

Equipment: Pac Bell maintains an HF station with an NVIS antenna, and SCG transceiver and antenna tuner. It can work HF packet throughout the state with other Pac Bell offices. It is primarily used for Pac Bell operations, with other Pac Bell locations, using commercial HF frequencies. It can be used for disaster traffic on amateur bands to the state OES and other locations. They also have 2 meter and 440 MHz rigs, with packet and appropriate antennas. All amateur radio equipment is provided, and complete UPS back-up power is standard.

Comments: This station is set up both for Pac Bell statewide company communications and for emergency use on amateur radio bands. Access to the facility is strictly controlled. Possible uses include Net Control, wide area simplex (near-200 ft high antenna), HF packet, etc. In an appropriate emergency situation, it is available (with proper access permission) for ARES use.

Appendix G

Prowords

DEFINITIONS OF PROWORDS

Procedure words and signs (prowords) help speed communications as well as help insure accuracy of messages. They are often able to express complex phrases or instructions in a word or two. They are distinctive sounding and their meaning is clear. This is helpful, especially under marginal and poor conditions. They are only effective, however, if everyone understands them and uses them correctly.

Below are the definitions of the prowords most commonly used.

PROWORD	DEFINITION
OVER:	This is the end of my transmission to you and response is necessary.
OUT:	This is the end of my transmission to you and no answer is required or expected.
ROGER:	I have received and understood your last transmission. It does not mean "yes" or signify agreement.
AFFIRMATIVE:	Yes.
NEGATIVE:	No.
CLOSE:	I am closing my station.
WAIT:	I must pause for a few seconds.
ALL BEFORE:	The portion of the message to which referenced is all that which proceeds (use next known word here).
ALL AFTER:	The portion of the message to which referenced is all that which follows (use last known word here).
BREAK:	I am indicating the separation of the text from the other parts of the message.
RELAY:	Transmit this traffic to or for other stations. Use CALL SIGN(s).
SAY AGAIN	Repeat all or portion indicated of last message.
CALL SIGN:	The word group that follows is a CALL SIGN.

UNKNOWN STATION: Call sign/identity of a station is unknown.

MAYDAY: International distress call in emergencies.

DRILL: Word used to indicate that the text of a message is not real and is for exercise purposes only.

TO: "ADDRESS GROUP" or "CALL SIGN" to whom the message is going.

FROM: "ADDRESS GROUP" or "CALL SIGN" of message originator.

GROUPS: The number of words, "INITIAL" and "FIGURE" groups within the "TEXT" of a message. In exercises include the proword DRILL or TEST as part of the "TEXT".

TEXT: The body of a message. Includes DRILL or TEST in the lines before and after actual TEXT in exercises.

ADDRESS GROUP: Group containing the "TO" and/or "FROM" address, or "CALL SIGN(s)".

CORRECTION: I have made an error, transmission will continue from the last correct word.

CORRECT: You are correct.

THIS IS: This transmission is from (your "CALL SIGN").

MORE TO FOLLOW: There is more traffic following this message.

EMERGENCY: Message precedence is (highest) EMERGENCY.

PRIORITY: Message precedence is (2nd highest) PRIORITY.

WELFARE: Message precedence is (3rd highest) WELFARE.

ROUTINE: Message precedence is (lowest) ROUTINE.

I SPELL: I will spell the next word phonetically.

FIGURES: The next word group is, or begins with, numbers.

INITIALS: The next word group is, or begins with, letters.

WRONG: Your last transmission is not correct.

DIRECT: A station is copied directly, no RELAY is required.

LETTER THE TEXT: There is a word or words missing. Repeat the first letter or number of each word or group phonetically.

WORDS TWICE: Transmit each phrase or word twice

Appendix H

International Phonetic Alphabet

There is no such thing as the term "common spelling" in ARES work. If there is a proper name to be transmitted, always spell it out using the International Phonetic Alphabet. Do not improvise a phonetic alphabet; if you don't know the International Phonetic Alphabet, now is a good time to learn it and use it in your daily operations.

A Alpha	**F** Fox-trot	**K** Kilo	**P** Papa	**U** Uniform
B Bravo	**G** Golf	**L** Lima	**Q** Quebec	**V** Victor
C Charley	**H** Hotel	**M** Mike	**R** Romeo	**W** Whiskey
D Delta	**I** India	**N** November	**S** Sierra	**X** X-ray
E Echo	**J** Juliet	**O** Oscar	**T** Tango	**Y** Yankee
				Z Zulu

Many times radio conditions are poor and words must be over-exaggerated to be understandable. In general, speak very slowly and distinctly to carry through static or weak signals. The following list provides pronunciation of numbers in poor conditions:

One - "Wun" **Two** - "Too" **Three** - "Tharee"

Four - "Fower" **Five** - "Fiyuv" **Six** - "Siks"

Seven - "Sevven" **Eight** - "Ate" **Nine** - "Niner"

Zero - "Zearow" (The number "zero" is not to be pronounced as "oh."

ARES MESSAGE FORM

Stanislaus County ARES (Amateur Radio Emergency Services)

MSG#_____ **PRECEDENCE:** (EMERGENCY) (Priority) (Welfare) (Routine)

==========(PLEASE PRINT)==========

FROM:_____AGENCY:_____

TO:_____AGENCY:_____

MESSAGE:_____

_____

_____

_____

_____

Signed:_____Title:_____Date___/___/___Time:_____

==========

******** **MESSAGE CENTER USE ONLY BELOW THIS LINE** ********

RECEIVED AT RADIO ROOM: Date:___/____/____Time:_____

OPERATOR COMMENTS:_____

MESSAGE SENT: _____>_____ Date:____/____/____Time:_____
(FROM CALL) (TO-CALL)

========== **RESPONSE** ==========

RETURN MESSAGE:_____

_____

_____

_____

_____

RECEIVED FROM: _____> _____ Date:____/____/____Time:_____
(FROM CALL) (TO-CALL)

DELIVERED TO:_____ Date:____/____/____Time:_____

Appendix J
SC ARES Message and Activity Log

UNIT LOG ARESICS-214	1. INCIDENT NAME	2. DATE PREPARED	TIME PREPARED
4. UNIT DESIGNATOR	5. UNIT LEADER (NAME & POSITION)	6. OPERATIONAL PERIOD	

7. PERSONNEL ROSTER ASSIGNED

NAME	ICS POSITION	HOME BASE

8. ACTIVITY LOG

TIME	MAJOR EVENTS

Appendix K
ARRL Radiogram

AMATEUR RADIO DISASTER WELFARE MESSAGE

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

TO

MESSAGE RECEIPT OR DELIVERY INFORMATION
OPERATOR AND STATION _____
SENT TO _____
DELIVERED TO _____
DATE _____ TIME _____

Telephone Number

(CIRCLE NOT MORE THAN TWO STANDARD TEXTS FROM LIST BELOW)

ARL ONE — Everyone safe here. Please don't worry.

ARL TWO — Coming home as soon as possible.

ARL THREE — Am in _____ hospital. Receiving excellent care and recovering fine.

ARL FOUR — Only slight property damage here. Do not be concerned about disaster reports.

ARL FIVE — Am moving to new location. Send no further mail or communications. Will inform you of new addres when relocated.

ARL SIX — Will contact you as soon as possible.

ARL SIXTY FOUR — Arrived safely at _____ .

TIME	DATE	TELEPHONE	SIGNATURE

THE AMERICAN RADIO RELAY LEAGUE
RADIOGRAM
VIA AMATEUR RADIO

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

TO

THIS RADIO MESSAGE WAS RECEIVED AT
AMATEUR STATION _____ PHONE _____
NAME _____
STREET ADDRESS _____
CITY AND STATE _____

Telephone Number

REC'D FROM	DATE	TIME	SENT TO	DATE	TIME

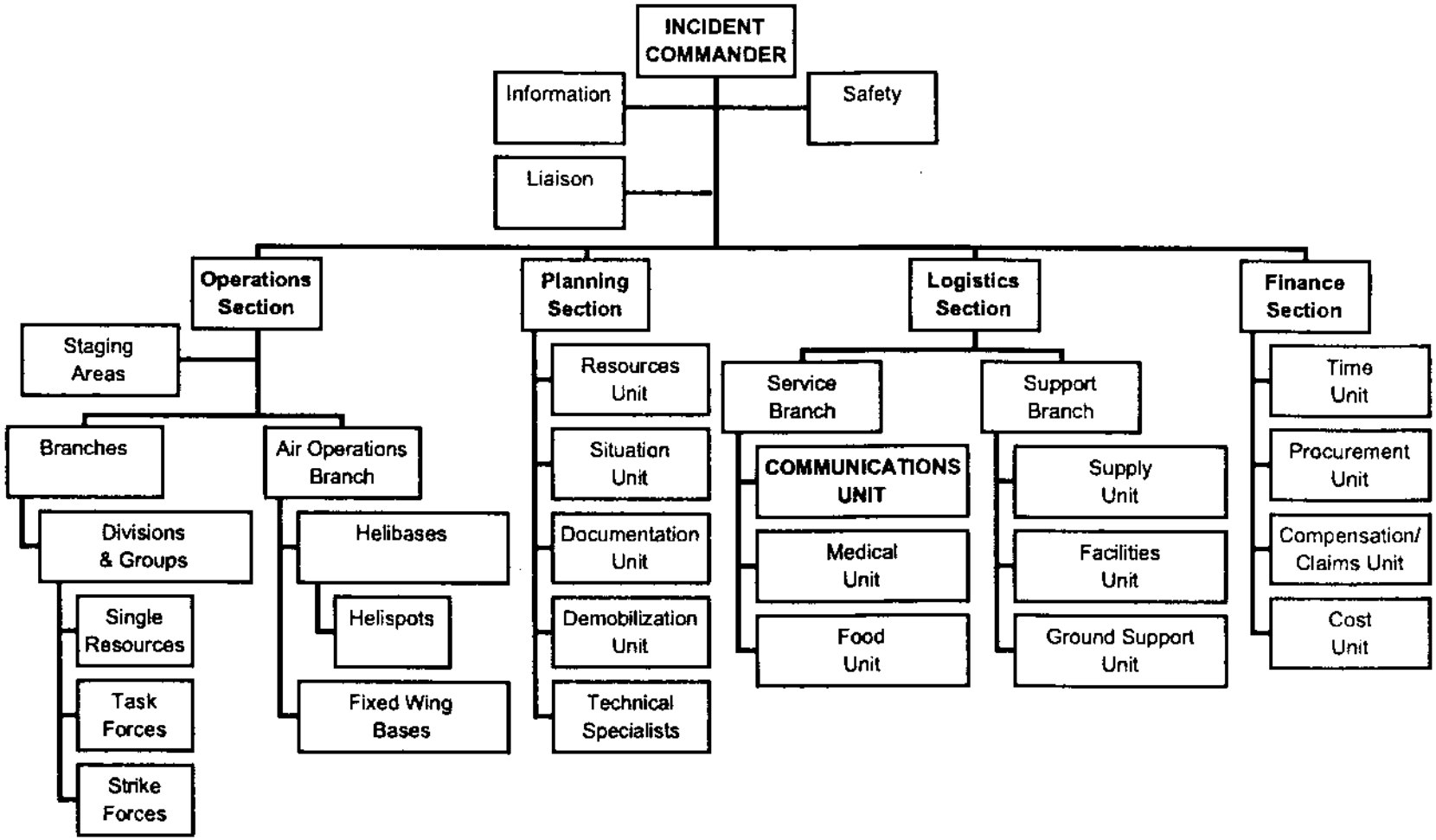
THIS MESSAGE WAS HANDLED FREE OF CHARGE BY A LICENSED AMATEUR RADIO OPERATOR WHOSE ADDRESS IS SHOWN IN THE BOX AT RIGHT ABOVE. AS SUCH MESSAGES ARE HANDLED SOLELY FOR THE PLEASURE OF OPERATING. NO COMPENSATION CAN BE ACCEPTED BY A "HAM" OPERATOR. A RETURN MESSAGE MAY BE FILED WITH THE "HAM" DELIVERING THIS MESSAGE TO YOU. FURTHER INFORMATION ON AMATEUR RADIO MAY BE OBTAINED FROM A.R.R.L. HEADQUARTERS, 223 MAIN STREET, NEWINGTON, CONN. 06111

THE AMERICAN RADIO RELAY LEAGUE, INC., IS THE NATIONAL MEMBERSHIP SOCIETY OF LICENSED RADIO AMATEURS AND THE PUBLISHERS OF QST MAGAZINE. ONE OF ITS FUNCTIONS IS PROMOTION OF PUBLIC SERVICE COMMUNICATIONS AMONG AMATEUR OPERATORS TO THAT END. THE LEAGUE HAS ORGANIZED THE NATIONAL TRAFFIC SYSTEM FOR DAILY NATIONWIDE MESSAGE HANDLING.

FSD-244 (2/90)

Appendix L

Incident Command System



Note: ARES functions in the "Communications Unit," but may be called upon to suppoort any unit in the ICS system.

Stanislaus County Amateur Radio Emergency Service
ARES Weekly Net Script

Opening the Net:

QST, QST, QST.This is._____(Call,Name) in_____(City), Net Control,
opening the Stanislaus County Amateur Radio Emergency Services weekly net. This is a directed net. Please do not transmit unless called by net control. All stations checking in, please do not leave the frequency without properly checking out. This does not mean you cannot leave, just please check out prior to doing so. Stations with traffic for the net, please indicate to net control when you check in. During roll call only ARES members will be called, however visiting station will be accepted afterwards. For stations interested in joining the ARES organization, information will be provided before the closing roll call.

{Check for emergency traffic prior to roll call}

Opening Roll-Call:

Roll call follows:
Please respond with your call sign and certification level:
{Call roll}.
Do we have any late or missed members?
Do we have any visiting stations?

Conducting Net Traffic:

1. {Call priority stations for announcements or training}:
    a. Stanislaus County Emergency Coordinator: Ed, KF6FIR.
    b. Stanislaus County Assistant EC: Bob, KC6TVE.
    c. Training Officer: Paul, W6UHF.
    d. Network Operations Officer: Lucian, KF6NPG.
    e. Records Officer: John, W6PY
    f. Weather Officer: Mark, WB6BJN.
    g. Other Officers Reports.
2. {Call any stations for traffic listed during roll call}.
3. Do we have any other traffic for the net?

Concluding the Net:

At this time we wish to thank the Stanislaus Amateur Radio Association for the use of the WD6EJF repeater. Stanislaus ARES has adopted several alternate frequencies for official activities. The 2-meter simplex frequency is 147.540 MHz. HF single sideband frequencies are 3.995 MHz, 7.295 MHz and 28.495 MHz. This regular 2-meter net meets every Wednesday night at 20 hundred hours' local time, and is open to all amateurs interested in emergency communications. We invite any operator interested in amateur radio emergency communications to join Stanislaus County ARES. If you want more information on ARES operations and membership, contact our Emergency Coordinator, Ed, at his Website WWW.KF6FIR.NET or by his pager (209) 236-4310.

Closing Roll Call:

Please respond to the closing roll call.

Closing the Net:

This is_____(Call), net control for Stanislaus County ARES, closing the net at
_____ hrs local time, and returning the repeater to open service.

07/29/2003

Stanislaus County ARES Officer List

Stanislaus County Assistant Director, Office of Emergency Services: Gary Hinshaw

Stanislaus County Emergency Coordinator: Ed Hanna, KF6FIR

Stanislaus County Assistant EC: Bob Kimball, KC6TVE

Stanislaus County Training Officer: Paul Owen, W6UHF

Stanislaus County Net Operations Officer: Lucian Thomas, KF6NPG

Stanislaus County Logistics Officer: {open}

Stanislaus County Records Officer: John Bohling, W6PY

Stanislaus County Weather Officer: Mark Lemmons, WB6BJN

Stanislaus County Liaison Officer: (open)

ARRL San Joaquin Valley Section Manager: Charles McConnell, W6DPD

ARRL San Joaquin Valley Section EC: Kent Lebarts, K6IN

ARRL San Joaquin Valley District EC: John Bohling, W6PY

07/29/2003

Appendix O

List of Important Phone Numbers

Stanislaus County Office of Emergency Services	558-6453
Stanislaus County Communications	525-7911
Stanislaus County Sheriff's Department	525-7912
Stanislaus County Animal Services	558-7387
SC EOC Recorded Message (Hotline)	571-5858
Modesto Police Department	572-9500
Ceres Police Department	538-5714
Patterson Police Department	892-5071
Newman Police Department	862-2902 or 800-273-4911
Waterford Police Department	874-2349
Turlock Police Department	668-5550
Oakdale Police Department	847-2231
Hughson Police Department	525-7920
California Highway Patrol (Modesto Office)	545-7440
CHP Dispatch Center (Merced)	357-6922
Stanislaus Consolidated Fire	525-4650
Stanislaus County Fire Warden	525-4658
Stanislaus Co Environmental Resources (Haz-Mat)	525-4150
AMR Ambulance	800-913-9193
Medi-Flight of Memorial Hospital	572-7050
Mountain-Valley EMS Agency	529-5085
ARES Emergency Coordinator	526-2107 (h), 558-8490 (w), or 569-3094 (p)
ARES Assistant EC	523-5952

Appendix P

Stanislaus County Area Public Service Radio Frequencies

158.730	Sheriff's Department	F-1 "Dispatch"
158.865	Sheriff's Department	F-3 "Information"
154.920	Sheriff's Department	F-4 "C.L.E.M.A.R.S."
158.760	Ceres Police Dept.	F-1 "Dispatch"
158.760	Oakdale Police Dept.	F-1 "Dispatch"
158.850	Turlock Police Dept.	F-1 "Dispatch"
156.210	Waterford Police Dept.	F-1 "Dispatch"
460.375	Modesto Police Dept.	F-1 "Dispatch"
460.500	Modesto Police Dept.	F-2 "Information"
42.520	CHP	"Yellow" Base-to-Car
42.300	CHP	"Yellow" Car-to-Base
151.430	Fish & Game	"Dispatch"
153.770	County Cons. Fire	F-1 "Dispatch"
154.430	County Cons. Fire	F-2 "Fireground"
153.890	County Cons. Fire	F-3 "Dispatch"
155.940	Modesto City Fire	F-1 "Dispatch"
154.370	Modesto City Fire	F-2 "Tactical"
154.295	Modesto City Fire	F-3 "Tactical"
154.190	Turlock City Fire	F-1 "Dispatch"
154.325	Oakdale City Fire	F-1 "Dispatch"
154.280	State OES Fire	"White" Mutual Aid
151.355	CDF	"State Net"
151.265	CDF	"Region Net"
151.175	CDF	Toulumne/Calaveras
151.460	CDF	Mariposa/Merced
151.445	CDF	W. Stanislaus County
168.750	USFS	Stanislaus Nat. Forest
154.400	Merced County Fire	F-1 "Dispatch"
155.115	Stanislaus County LG-1	Animal Control/Parks
155.325	Memorial Medi-Flight	Air Ambulance Dispatch
155.385	VHF Med-Net	Ambulance to Hospital
463.000	UHF Med Net	Ambulance to Hospital
47.420	American Red Cross	"Dispatch"
153.755	Stanislaus Co. OES	"Dispatch"