



HOW TO COPE WITH THE HICCUPS AND REMAIN COMPETITIVE
A REVIEW OF AMATEUR EMERGENCY RADIO

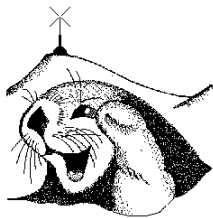
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FORWARD

Throughout the past 11+ years that I have been directly involved with amateur radio emergency communications I have written and edited many texts, articles, and operational procedures. What follows is the basic text for a presentation to the Southwestern Convention in September, 2003. For those who have read some of the information I have written or have heard me speak, much of the information may be familiar. I have borrowed liberally from previous texts I have written while adding some fresh information and viewpoints. Additionally, I have included a number of previously published outlines and operational procedures.

The article is intended to be both motivational and informational. The information is not intended for any particular group or segment of ARES or RACES, but is a general text for all communicators. For those who want more information I would suggest three sources – EMCOMM Classes through the League, ARES information published by the League, and “Management of the Amateur Radio Emergency Communications Function” an excellent book by Jerry Boyd KW7J is available through World Radio Books for \$8.00.



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INTRODUCTION

The rather whimsical title of this article hides a very serious purpose. We live in a society that is becoming more complex and smaller as technology shrinks the distances that separate us from our friends and (unfortunately) our enemies. Heavier population concentrations mean a greater potential for damage from natural and manmade disasters. One of the very real key elements to handling any disaster is communications. And, one of the key elements to this communications is the skilled amateur radio operator and the organizations that have evolved to place this volunteer at the disposal of the public.



AN OVERVIEW OF AMATEUR RADIO EMERGENCY COMMUNICATIONS

Throughout time mankind has seemed to take both work and play very seriously. And it seems that any work related task eventually also becomes some kind of recreation. The act of food gathering and defending ourselves evolved into the hobbies of hunting, fishing, hiking, etc.. Transportation turned into horse racing, auto racing, and so on.

Almost from the day Marconi started sending electronic signals though the air someone turned it into a hobby. The earliest radios had a very short range and signals had to be relayed to achieve any true distance. Thus, a group of dedicated hobbyists formed the American Radio Relay League or ARRL. About one-third of today's approximately three-quarter million American amateur radio enthusiasts belong to the ARRL which is the voice of Amateur Radio to the Federal Government and the International Radio Community.

As with any positive endeavor, hobbyists can, and do, create advances in their chosen avocations. Radio hobbyists have continued to pioneer radio research, protect past forms of radio communications, promote advances in current technology by providing a ready outlet for the use of these advances, and provide emergency communications to the local communities.

Few outside of the communications industry or amateur radio seem to understand the limitations of modern communications. Since World War II, and especially in the last twenty-five years, the advances in communication technology have made all communications appear so reliable and accessible that it seems inconceivable that failures might happen, even in times of emergency. Unfortunately, we have a false sense of security.

Telephones rely on buried and overhead cables that can be easily damaged during earthquakes, fires, and floods. Telephone circuits are always

overloaded during emergencies. Most people do not realize that phone calls can not be made out of the local Area Code during major regional emergencies because the phone companies must alter their procedures to allow for emergency traffic. Cells phone are no better. These modern marvels are actually short range hand held radios that are connected through mountain top radio repeaters to the phone system. These repeaters (or cells) are subject to failure during earthquakes and fires. The cells easily become overloaded during emergencies and then there is the limitations of the phone system, itself. Lastly, there is the problem of batteries which fail and/or can not be charged because of power failures.

Modern radios provide most of our reliable communications during emergencies. Almost every public agency has an excellent system, and many non-public agencies have good systems. Public broadcast radio is the most reliable source of emergency information for the public. During emergencies some agencies like the Red Cross do not have reliable communications. Public agency systems become overloaded, need additional capacity, and are often hard to access. Additionally, remote locations require communicators and resources to provide the needed communications. And, there is an unfortunate over reliance on telephones. The answer - the dedicated amateur radio hobbyist who can, and will, provide this needed vital resource in times of need.

In the aftermath of the terrible tragedy on September 11, 2001, Amateur Radio Operators were the major tactical communications resource for the recovery effort since most of New York City's critical communications resources were destroyed when the Twin Towers fell. Each year ARES/RACES Members give thousands of hours of their personal time in preparation for or participation in emergency incidents.

Lets look at what makes up the avocation of amateur radio emergency communications by using the two most prominent volunteer communications organizations. First, there is ARES – Amateur / Radio / Emergency / Service, and then there is RACES – Radio / Amateur / Civil / Emergency / Service.

Now, combine these two organizations into one definition: CIVIL / AMATEUR / RADIO / EMERGENCY / SERVICES, or **CARES**

Using the highlighted excerpts from my handy/dandy on-line dictionary and with a little rephrasing we get the following:

Actions which are relating to, or benefitting a citizen or citizens by a person or persons who engages in an art, science, or study activity as a pastime rather than as a profession with an apparatus used to transmit and used to receive radio signals for a serious situation or occurrence that happens unexpectedly and demands immediate action and which is a condition of urgent need for action or assistance by the exchange of thoughts, messages, or information for the employment in duties or work for another.

CIVIL - **Of, relating to, or befitting a citizen or citizens**: *civil duties*. Of or relating to citizens and their interrelations with one another or with the state: *civil society; the civil branches of government*. Of ordinary citizens or ordinary community life as distinguished from the military or the ecclesiastical: *civil authorities*. Of or in accordance with organized society; civilized. Sufficiently observing or befitting accepted social usages; not rude: *a civil reply*. Being in accordance with or denoting legally recognized divisions of time: *a civil year*. Law. Relating to the rights of private individuals and legal proceedings concerning these rights as distinguished from criminal, military, or international regulations or proceedings.

AMATEUR - **A person who engages in an art, science, study, or athletic activity as a pastime rather than as a profession**. An athlete who has never accepted money, or who accepts money under restrictions specified by a regulatory body, for participating in a competition. One lacking the skill of a professional, as in an art.

RADIO -The wireless transmission through space of electromagnetic waves in the approximate frequency range from 10 kilohertz to 300,000 megahertz. Communication of audible signals encoded in electromagnetic waves. Transmission of programs for the public by radio broadcast. **An apparatus used to transmit radio signals; a transmitter. An apparatus used to receive radio signals; a receiver.** A complex of equipment capable of transmitting and receiving radio signals. A station for radio transmitting. A radio broadcasting organization or network of affiliated organizations. The radio broadcasting industry.

EMERGENCY - A serious situation or occurrence that happens unexpectedly and demands immediate action. A condition of urgent need for action or assistance: a state of emergency.

COMMUNICATIONS - The act of communicating; transmission. **The exchange of thoughts, messages, or information,** as by speech, signals, writing, or behavior. Interpersonal rapport. The art and technique of using words effectively to impart information or ideas. The field of study concerned with the transmission of information by various means, such as print or broadcasting. Any of various professions involved with the transmission of information, such as advertising, broadcasting, or journalism. Something communicated; a message. A means of communicating, especially: A system, such as mail, telephone, or television, for sending and receiving messages. A network of routes for sending messages and transporting troops and supplies. The technology employed in transmitting messages.

SERVICE - **Employment in duties or work for another,** as for a government: *has been in the company's service for 15 years*. A government

branch or department and its employees: *the diplomatic service*. The armed forces of a nation: *joined the service right after college*. A branch of the armed forces of a nation. The performance of work or duties for a superior or as a servant: *found the butler's service to be excellent*. Work done for others as an occupation or business: *has done service for us as a consultant*. An act or a variety of work done for others, especially for pay: *offers a superior service to that of his competitors; provides full catering services*. A department or branch of a hospital staff that provides specified patient care: *the anesthesiology service*. Installation, maintenance, or repairs provided or guaranteed by a dealer or manufacturer: *a dealer with full parts and service*. A facility providing the public with the use of something, such as water or transportation. Assistance; help: *was of great service to him during his illness*. An act of assistance or benefit; a favor: *My friend did me a service in fixing the door*. Active devotion to God, as through good works or prayer. A religious rite. The serving of food or the manner in which it is served. A set of dishes or utensils: *a silver tea service*. Sports. The act, manner, or right of serving in many court games; a serve.

ARES (ARRL) - The American Radio Relay League (ARRL) coordinates many of the activities of the amateur radio community. The Amateur Radio Emergency Service (ARES) is that part of the ARRL which provides health and welfare communications for various organizations like the Red Cross in times of emergencies.

RACES (FEMA) - The Radio Amateur Civil Emergency Service (RACES) was established to provide needed back-up and secondary communications for public agencies. RACES is administered by the Federal Emergency Management Agency (FEMA) through the County Office of Emergency Service. RACES Members (when activated) are unpaid State Employees and carry photo identification as "Disaster Service Workers".

ACS – The Auxiliary Communications Service is under the auspices of the State Office of Emergency Service and is intended to combine all the various volunteer communications resources under one group. Well intentioned, it has floundered for various reasons and has not had wide spread acceptance.

WHAT WE DO - ARES is either self activated or is requested to activate by the local Red Cross Chapter, Salvation Army, Hospitals, or Emergency Medical Agency. Members are called out, an Incident Manager is assigned, and the Members are deployed as needed to provide the requested communications. Communications is provided between Hospitals, Red Cross Shelters, Emergency Operation Center(s), and other facilities. RACES is activated through the local Office of Emergency Service to provide back-up or secondary communications for a requesting Agency. Since virtually all local RACES Members are also ARES Members, many volunteers will act in both capacities. Incident management uses ARES procedures. Communications is provided between public agency facilities, Emergency Operations Center(s), Emergency Communication Center(s), and remote locations.

HOW WE DO IT - ARES / RACES has pre-staged equipment somewhere in virtually every Town at Emergency Communications Centers or Emergency Operation Centers. These facilities will be in a Fire Station, Police Station, Government Facility, or Hospital. ARES / RACES also has portable Repeaters, mobile Emergency Communications Centers, and member equipment. This equipment is further enhanced by mountain top Repeaters in secure sites with emergency power. High Frequency or HF Radio has long range capabilities and is often identified with Amateur Radio because of the large antennas needed. This type of radio is still used for long range communications and regional incidents, but is seldom needed for most local emergencies. Very High Frequency and Ultra High Frequency (VHF and UHF) Radio is most common type of radio used for emergency communications today. Much smaller in size, shorter in range, but more reliable, VHF and UHF require Repeaters placed at high elevations to extend their range. Repeaters are radios that receive a signal and then resend the signal out on a slightly different frequency. By using these Repeaters, low power hand held and portable radios can have ranges of 50 miles or more. Over 20,000 of these privately owned Repeaters are in use throughout the Nation today. Communications is not limited to voice only. Today's Ham has an arsenal of affordable and user friendly tools at his disposal. VHF and UHF portable and hand held radios range in cost from \$100 to \$500. Slow Scan Television has the ability to take and transmit digital snap shorts about every 30 seconds for easy receipt and printing miles away. The primary equipment for this task (one unit with speaker, microphone, monitor, and camera) costs less than \$400 and will transmit pictures through virtually any Ham portable radio and Repeater. Automatic position reporting devices called APRS can be set up for less than \$500 and can be carried by Hams to give real time location of their position along with direction of travel and speed. Hams can send digital messages using radio modems. Actual television is available. Although cost prohibitive to most, it is used in some local areas.



THE CURRENT STATE OF AMATEUR EMERGENCY COMMUNICATIONS

It would be grossly arrogant and foolish on my part to try to outline all of the good and bad in amateur emergency communications today. However, from my limited perspective I would like to make some observations.

The need from amateur emergency communications is real. The key question is "How do we make amateur emergency communications the most effective?".

Volunteer communications has some difficult problems to face including conflicting agendas by competing organizations, State and Federal agencies with a poor grasp of the place the Amateur has in emergency response, and overwhelmed leadership. However, we also have Division leadership that is strongly and effectively supporting amateur emergency communications and Section Managers and Section Emergency Coordinators from both the Southwestern and Pacific Divisions that are working on the problems facing us. And, we have some tools to face the problems at the local level.

First, lets see what we can do at the Section, District, and Area levels to correct problems and maximize our efforts.

PROBLEMS WITH SERVED AGENCIES – Communicate! Talk to them. Find out what they want and/or need. If it has been a while since you last talked with them, be prepared to start all over. Their leadership changes just like ours. Be prepared to give them a good overview of what we do and how we do it. We are not a solution looking for a problem, but rather, we are a solution to their problems. Execute Memorandums of Understanding and then keep them updated.

MEMBERSHIP – Keep them fresh. Keep them informed with Newsletters, E-Mail Reflectors, and regular Meetings. Regular Meetings where training can be done, ideas exchanged, problems stated and solved, technology shared, and where regular interaction can occur will solve many problems with membership apathy. Train, train, train. Exercises, concise Operational Procedures & Guidelines, and Nets will keep the membership interested and fresh. Recruit. Keep definitive Membership Lists and/or Data Bases.

SERVICES - Be prepared to offer new services like SSTV, APRS, Portable or Cross-Band Repeaters, and be prepared to handle served agency radios. Have Pre-Staged Equipment, Emergency Communications Centers (EECs), Portable ECCs ready, if possible. Keep older and useful technologies like Packet and CW active and ready. Constantly review your Mission. Be flexible and be prepared to adjust to a changing world.

By handling local issues we can solve one part of the problem and be ready for local incidents. Solving problems for handling regional incidents is going to take longer, but there is serious activity in progress.

Second, lets look at what is being done at the Division level with a new approach and maybe a new beginning.

At PacifiCon in 2001 a meeting was held for both the Southwestern and Pacific Divisions in an attempt to pull together State-wide resources. From this meeting came ARESICAL , a statement of purposes for ARES operations within the State which is attached to this Article.

At the Southwestern Convention last Fall I was again asked to hold another division-wide meeting to look at regional issues. This meeting, held this past March, was very successful.

On May 4th a meeting was held at the DX Convention in Visalia to discuss ARES issues. Regional issues were again discussed along with the need to have one cooperative effort for ARES within the State. Since Nevada and Arizona are within the Divisions and share many of California's problems and since the problems and solutions to be discussed may also affect Hawaii, the name ARES CAL became too restrictive. The acronym SPARC which represents Southwestern / Pacific ARES Resources Coordination was developed to better describe our purposes and our focus.

Last, lets review and take a moment to look at the problems and solutions.

Each one of us can become a part of the answer to the question asked earlier – "How do we make amateur emergency communications the most effective?". In an ideal world we would have one State organization that would coordinate all amateur emergency communications resources. In our less than ideal world we can make ARES the most effective organization possible at the local level, work on regional incident coordination, mutual aid, and begin to forge an effective State-Wide ARES group. By making our local organizations as effective as possible and by working with the Section Managers, Section Emergency Coordinators, and Division Leadership we can begin to build the effective State-Wide ARES we need and want while, at the same time, serving the Public with the best possible volunteer emergency communications.



IN CONCLUSION

An often told story about the man and the anchor chain will demonstrated one of my parting thoughts. It seems as though a man was walking down a dusty road pulling a large anchor chain. Another fellow sitting on a porch watching him asked why he was pulling the chain. He answered: "Well ole son, it's a whole lot easier than trying to push it.". We need to pull membership and served agencies by making ARES the best possible volunteer emergency communications resource for parallel and back-up communications during emergencies. We can do this by demonstrating through cooperation, commitment, competence, flexibility, and education that amateur radio emergency communications is the best. We need to work with RACES and other volunteer organizations to maximize our efforts. We need to renew our commitment to serving the Public. We need to constantly train and be trained to insure competence. We need to be flexible and be prepared to do what ever it takes to fulfill our primary mission – serving the Public through volunteer communications. We need to educate the Public and Served Agencies and be educated by them on what they need and when they need it.

Several years ago I was asked why ARES and RACES worked so well together in the Santa Barbara Section. An oral response and an Article both said the same thing – cooperation. What we do, and who we do it for are too important to let personal agendas, egos, politics, time, or geographical constraints hinder our efforts.

Why do we expend all the efforts on emergency communications? Why do we toil in obscurity without compensation or even a simple thank you? Let me give you one reason. Once upon a time an 11 year old boy was roused from his sleep and was rushed to a waiting car. He looked through the rain and the dark to see his home being destroyed by flood waters. He spent that night warm and safe because someone cared enough to help him and his family, provide them with transportation, and a place to stay. The home was just a couple of miles south of the Visalia Airport, the year was 1955, and I will never forget that night. Our Society gives us so much. Those of us in volunteer emergency communications are dedicated to giving some of it back and making sure that all the 11 year olds have a warm place to stay when needed.

A Review of Volunteer Emergency Communications

ELEMENTS	STENGTHS	WEAKNESSES
1 - Public & Psuedo-Public Agencies Law Enforcement Police Sheriff Highway Patrol Fire Local Fire Department California Division of Forestry U.S. Forest Service Public Works Roads Water / Sewer Flood Control Office of Emergency Service Emergency Medical – Hospitals / Ambulance Utilities – Power / Gas	Vast resources Well trained personnel Well organized	Emergency Response Training Personnel availability Reliance on phones Technology failures Overloads in emergencies
2 – Private Communications Resources Telephone InterNet CATV	Vast resources Large personnel base	Profit motives Emergency Response Training
3 – Non-communications Volunteers American Red Cross Salvation Army		Limited comm. resources Lack of communications training
4 – The Public		Unwarranted confidence Cell Phones
5 – Amateur Radio – ARES / RACES / ACS	Large private resources Strong support base Tech. unavailable to others	Underdeveloped Undertrained Underutilized

WHAT WE DO
INCIDENT TYPES

Fires
 Wild Lands - Local / Regional
 Urban
Floods / Storms - Rural / Urban
Earthquakes
 Local / Regional
Tsunamis
HazMat
 Rail
 Highway
Terrorist
Airplane Crashes

WITH COMMUNICATIONS SUPPORT TO

Red Cross
Salvation Army
Office of Emergency Services
Fire
Public Works
Hospitals & Ambulances

FOR

Evacuations
Shelters
Fire Staging
Fire Spotting
Damage Reporting
Staffing
Logistics

AND ALSO

Traffic Reporting
Community Service
Training

AMATEUR RADIO EMERGENCY SERVICE OF CALIFORNIA A STATEMENT OF PURPOSE

PURPOSE – The purpose of this document is to outline, in written form, a fundamental Statement of Purpose for the Amateur Radio Emergency Service (ARES) within California. The Section Managers of both the Southwestern and Pacific Divisions of the American Radio Relay League have reviewed this document and support its contents.

LIMITATIONS – This document is limited to portions of the American Radio Relay League (ARRL) Pacific and Southwestern Divisions within the boundaries of the State of California. This document is limited to activities by ARES. No intent is expressed or implied for activities of other amateur radio organizations. No intent is expressed or implied for specific activities of local ARES groups as they relate to their operational procedures and agreements with served agencies.

STATEMENT

FUNDAMENTAL PURPOSE - The Fundamental Purpose of ARES is to provide emergency communications in times of need to any governmental or non-profit organization needing this service.

SCOPE – Any governmental or non-profit organization needing ARES communications services will be served, if possible. The communications services will be provided so long as the Member providing the service has the expertise to provide the service and the Member is not in imminent danger. Additional services can be provided so long as the primary mission (communications) is not compromised.

COOPERATIVE ACTIVITIES – ARES, within California, is committed to working with all related volunteer communications organizations including, but not limited to, the Radio Amateur Civil Emergency Service (RACES), Auxiliary Communications Service (ACS), REACT, local search and rescue organizations, local emergency response teams, Etc..

GOALS – The Fundamental Goal of ARES, within California, is to serve the public in times of need. All other goals are secondary. Supportive goals include cooperative agreements between all ARES groups to provide a mutual aid network, a cohesive and effective radio link throughout the State, standardized training, standardized Disaster Services Worker Identification, and standardized operational procedures.

AREA OF RESPONSIBILITY - Each Section within each of the two ARRL Divisions in California maintains an ARES organization. The exact configuration of these organizations will vary from Section to Section. However, each Section does and will maintain Section Emergency Coordinators (SEC) responsible, in concert with the Section Manager, for the provision of a viable ARES resource. Under "normal" circumstances, communications needs requested of ARES will be accommodated and provided from within the Section in which the

need arises using such resources as are available. There may be instances, however, in which the needs attendant to a particular incident may exceed the resources available within the effected Section. In such a case, "mutual aid" may be requested from outside the Section and, if necessary, from outside the effected Division.

MUTUAL AID - Each Section Manager within the two ARRL Divisions covering the State of California agrees to provide, through the Section's ARES organization, such "mutual aid" communications resources as may be needed by another Section when such assistance will not jeopardize the ability to respond appropriately to a local emergency.

PROCEDURE FOR REQUESTING MUTAL AID - Mutual aid may be requested from a Section by the following process:

- the SEC (or designee) of the Section needing assistance will contact the SEC (or designee) of adjacent Section(s)
- the requesting SEC will provide a "Mission Assignment Request", i.e. the SEC will indicate the type of assistance needed, the number of operators, type of equipment, and projected duration of the need
- the receiving SEC will make every effort to accommodate the request in whole or in part. The SEC will inform his/her Section Manager of the request and the dispatch of mutual aid forces
- requests for mutual aid may be made by telephone, Internet, or on the air. Note: a state-wide "watch frequency" or set of frequencies is being developed at this time and will be provided at a later date

SECTION 1 - INTRODUCTION

1.01 INTRODUCTION TO THIS MANUAL - The purpose of this Manual is to provide the reader and/or members of ARES and/or RACES/ACS with a basic text for study and reference.

1.01.01 ACKNOWLEDGMENTS - The editor would like to thank all the individuals for their contributions to this Manual. However, so many have contributed that I fear someone may be excluded. Therefore, if you have helped, let me take this opportunity to thank you for your time and efforts.

1.01.02 DEDICATION - This Manual is dedicated to all those individuals who have given of themselves and their time to serve the local community through ARES, RACES/ACS, and Ham Radio. Tens of thousands of hours are given in anonymity each year to protect and aid the local community in times of need. This Manual is the end product of a series of previously published Manuals and Operating Procedures prepared by the Author along with countless contributions by others. This Dedication is the Author's small way of saying thank you for the gift of everyone's time and resources and their dedication to the highest principles of volunteer service and Amateur Radio

1.01.03 ADDITIONAL INFORMATION - It is the intent of this Manual to provide the reader with information on ARES with an introduction to RACES/ACS. It is strongly suggested that the reader obtain the information noted below to supplement this Manual.

Current Personnel Lists

Section Manager and Section Emergency Coordinator

District Emergency Coordinators

Emergency Coordinators and Assistant Emergency Coordinators

Current Local Training Net Procedures

Current Local ARES Procedures

Current Local RACES/ACS Procedures

Current Local Operational Frequencies

Reference Texts

ARRL Public Service Manual FSD-235

ARRL Special Events Communications Manual FSD-400

ARRL Emergency Coordinator's Manual FSD-9

ARRL Field Organization FSD-300

ARES Field Manual

1.01.04 SUGGESTED MANUAL PREPARATION

It is suggested that all members holding leadership positions prepare a loose leaf Reference Binder with this Manual and the ARRL materials noted above for reference. It is suggested that second loose leaf Reference Binder be prepared with those materials most often used - membership lists, local procedures, local frequencies, etc.. Cumbersome or complicated references are not recommended since they will tend to impede progress during an actual response. However, well organized simple Reference Binder with all the needed tools is recommended. The Reference Binder should be district specific, area specific (if needed), and user specific.

1.02 AMATEUR RADIO AND ITS PLACE IN EMERGENCIES

Amateur Radio is established by Congress through the Communications Act as a service. Amateurs have been instrumental in the development of the communications art since the early work of Hertz and Marconi, who were essentially amateurs.

In the years just before World War I, a group of amateurs in Hartford, Connecticut established the American Radio Relay League (ARRL). The primary objective of this organization was to develop the art of communications through the establishment of a series of relay stations to expedite the transmission of public service messages across the country and to foster the experimentation which ultimately lead to the transcontinental and world wide communications systems.

Since these early days, radio amateurs have established a reputation for public service communications, especially in times of crisis and special need which can not be met by the normal communications systems. In the beginning, these services were rendered spontaneously and largely on an individual basis. As time progressed, the need for and value of organization became apparent and this led to the establishment of several organized bodies with clearly defined functions.

Today, there exists in Amateur Radio a very complete and close volunteer organization of amateur radio operators dedicated to public service. Sponsored by the ARRL, a field organization has been established which includes the Amateur Radio Emergency Service (ARES) and the National Traffic System (NTS). An independently organized system sponsored by the Federal Government called the Radio Amateur Civil Emergency Service (RACES) fulfills other functions not directly addressed by ARES and together they form integral parts of the Amateur Radio Service' s Public Service effort. In the State of California RACES functions have been largely replaced by the Auxiliary Communications Service (ACS).

1.03 THE AMATEUR RADIO EMERGENCY SERVICE (ARES)

ARES, which is sponsored by the American Radio Relay League (ARRL), consists of licensed radio amateurs who have voluntarily registered their qualifications and equipment for communications duty in the public service when disaster strikes. Every licensed radio amateur, irrespective of other affiliations, is eligible for membership in ARES. The only qualification, other than holding a valid Radio Amateur Operators License, is a sincere desire to serve the public interest. ARES is essentially a local operation within the County and is self regulating and self managed.

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

ARES provides back-up communications in the event of disasters or emergencies when regular communications are disrupted or overloaded. The primary responsibility of ARES is to provide health and welfare communications.

Locally, the primary ARES responsibility is providing health and welfare communications for the American Red Cross, the Salvation Army, and any agency requesting health and welfare communications. The ARRL has national memorandums of understanding with both the American Red Cross and the Salvation Army.

ARES conducts regular training classes and exercises to insure that its members are well trained in emergency procedures and the best use is made of their individual talents. These exercises are planned and carried out so that any future emergency operations will function smoothly and effectively. These training exercises often take place in concert with regular public activities such as foot races and bicycle races. ARES provides

communications to facilitate smooth running of these events. Such exercises and procedures allow the ARES response to a crisis to be flexible and effective.

1.03.01 AMATEUR RADIO RELAY LEAGUE (ARRL) FIELD ORGANIZATION

ARES is an integral part of the American Radio Relay League Field Organization. The ARRL has fifteen geographical Divisions with each Division having three to seven Sections. Each Section has numerous Districts. Our portion of ARES is the Santa Barbara Section of the Southwestern Division.

Each of the Sections has an elected Section Manager who administers activities within their Section. The Section Managers make Section Appointees to supervise various individual activities including ARES and the National Traffic System (NTS).

Each District has an ARES District Emergency Coordinator (DEC). Each Area has an Emergency Coordinator (EC) with some Areas also having an Assistant Emergency Coordinator (AEC).

It is suggested that each ARES member familiarize themselves with the ARRL Field Organization. ARRL publications describing the ARRL Field Organization are included by reference.

1.04 THE RADIO AMATEUR CIVIL EMERGENCY SERVICE (RACES)

RACES differs from ARES in one very important respect - it is a federally regulated activity within the Amateur Radio Service. It is administered by the Federal Emergency Management Agency of the United States Government and is intended to provide radio communications during periods of local, regional, or national civil emergencies for civil preparedness purposes, only. These emergencies can include natural disasters such as fires, floods, or earthquakes, etc.. As defined by the rules, RACES is a radio communications service conducted by volunteer licensed amateurs. The service is designed to provide emergency communications to state or local civil preparedness agencies. As such, it can only operate at the specific request of a designated state or local official. The primary function of RACES is to provide secondary and back-up communications for supported safety agencies.

The main advantages of RACES are that the participants are covered by government insurance programs during their active roles and some federal funds are available to assist in the development of the program. The only disadvantage is some lack of flexibility and restrictions imposed by the Government.

1.04.01 AUXILIARY COMMUNICATIONS SERVICE (ACS)

In California the RACES functions have largely been replaced by the Auxiliary Communications Service (ACS) and the two organizations have essentially become one. The acronyms are basically interchangeable.

1.04.02 DISASTER SERVICE WORKERS (DSW)

All RACES/ACS volunteers must be registered as Disaster Service Workers to participate in RACES/ACS activities and to be covered by the State insurance program for volunteers.

1.04.03 DSW REGISTRATION AND THE EMERGENCY SERVICE

All members of RACES/ACS are Disaster Service Workers (also called Emergency Services Workers) as defined by the State of California. As such, all RACES/ACS members must be registered with the County Office of Emergency Services and must carry the

appropriate identification during RACES/ACS activities. The identification is in the form of a laminated photo identification provided by County OES.

SECTION 2 - THE ARES NETWORK

2.01 ELEMENTS OF THE ARES NETWORK

The local ARES Network is comprised of the following elements:

- A. A network of VHF/UHF repeaters.
- B. A network of VHF Digi repeaters and a Bulletin Board.
- C. Assigned VHF and UHF frequencies.
- D. Numerous Emergency Communications Centers (ECC) and Emergency Operations Centers (EOC).
- E. Assigned District Emergency Coordinators (DEC), Area Emergency Coordinators (EC) and Assistant Emergency Coordinators (AEC).
- F. High frequency facilities permanently installed at key points and backed by amateur stations throughout the County. These facilities are capable of intercontinental communications and interface with the National Traffic System (NTS), daily.
- G. A nucleus of trained operators.

2.02 ACTIVATION OF THE ARES NETWORK

Any event which disables or severely overloads the telephone system is an emergency which calls for activation of the ARES Network. Such an emergency will usually be self-evident or will be indicated by the Emergency Broadcast System. In this case, ARES members will check in on one of the Primary Emergency Frequencies and, if able, proceed to their assigned locations.

Not all emergencies will affect the telephone system. In this case, the ARES members may be alerted using a Telephone Tree / Notification List.

Notice of an EMERGENCY (declared by a responsible official), an ALERT (notification of a possible emergency), or a request for aid from some other area should activate the ARES Network. Any member of the Network receiving notice, if not a DEC, an EC, or an AEC, should contact a DEC, EC or AEC and pass on the received information. If the individual is unable to reach a responsible party, the individual should act as Net Control on the Emergency Frequency until relieved of their duties.

The DEC, any EC, or any AEC may, even without being officially notified, activate the ARES Network if there is a reasonable presumption of need.

If the contacted ARES member to contact needed ARES members.

The following information will be needed from the served agency:

- Nature of the emergency
- Location of the emergency
- Type of communications needed
- Anticipated number of communicators needed
- Name of Contact Person at the incident location

2.03 ARES RESPONSE

The first person to receive notification will act as the Incident Manager. This person will attempt to contact the DEC and the ECs or AECs by telephone. This person will ask the

contacted ECs or AECs to open the ECCs or similar facilities within the County, if conditions warrant. This person will appoint a qualified member as ARES / RACES Net Control.

The Net Control Operator will put out a QST to all members on the primary ARES / RACES Repeater, if it is available. The QST will notify all members that a drill or incident is in effect and that the ARES/RACES Net has been activated. The Net Control Operator will ask that all members monitor the frequency for further instructions. A similar QST will be given on the other local repeaters directing any listening members to monitor the primary ARES/RACES Repeater for further instructions.

If the established ECCs were not activated during the initial telephone call-out or it become necessary to activate additional facilities, the Incident Manager will ask the Net Control Operator to request that some or all of the County ECCs be staffed. The Incident Manager may find it necessary to request that temporary ECCs be activated in areas that do not have permanent facilities. In all cases, monitoring members will be requested to check-in to their local ECC on its' Simplex Frequency. This process will help eliminate unnecessary traffic on the Primary Frequency and give the local ECs and their members a more active roll in the process. The Net Control Operator will ask that each ECC report back within an established time frame with a list of members that have checked-in. The order of responsibility for the activation of each ECC will always start with the first person contacted in order of listing. First will be the local EC, then the Assistant EC, and then any qualified member of the organization.

It is important for the Net Control Operator to have control of the situation and yet remain flexible. It is not unlikely that, depending on the type of disaster, that the entire Network will be on emergency power. Each member should be prepared and should understand the use of the Simplex Frequencies, the Cross-Band Repeaters, and the Portable Packet Station. The local EC is a resource and should be used to make the task easier. Each member should obtain and study this Manual and should obtain a County ID Badge.

2.04 INCIDENT MANAGER

The individual activating the Network becomes the Incident Manager for the Emergency Net, unless and until they pass on the responsibility. The Incident Manager will evaluate the situation and decide how much of the organization should be alerted, what liaison with neighboring cities and organizations should be established, what locations should be manned and what other response is needed. They should also decide whether to alert by voice radio, packet radio, telephone, or a combination.

Depending upon the circumstances, the Incident Manager may opt to use tactical or formal message procedures. Copies of all messages shall be retained.

The Net Control designated by the Incident Manager and any stations the Net Control may designate shall keep a log of the emergency operations which shows at least the following: starting and ending time of messages, summary of important messages, summary of important events and actions.

2.05 REPORTING

The DEC shall submit a report on Public Activity Reporting Form CD-157 (copy attached) for all emergency and simulated emergency operations as soon as possible after the event, based upon logs and recollections of the various participants. This report is described in the Emergency Coordinator' s Manual which is included by reference.

SECTION 3 - THE RACES/ACS NETWORK

3.01 ELEMENTS OF THE RACES NETWORK

The local RACES/ACS Network is comprised of the following elements:

- A. A network of VHF/UHF repeaters.
- B. A network of VHF Digipeaters and a Bulletin Board.
- C. Assigned VHF and UHF frequencies.
- D. Numerous Emergency Communications Centers (ECC) and Emergency (EOC) Operations Centers.
- E. County RACES Officer, Area Emergency Coordinators (EC), Assistant Emergency Coordinators (AEC).
- F. High frequency facilities permanently installed at key points and backed by amateur stations throughout the County. These facilities are capable of intercontinental communications and interface with the National Traffic System (NTS), daily.
- G. A nucleus of trained operators.

3.02 ACTIVATION OF THE RACES/ACS NETWORK

The RACES/ACS Network can only be activated by the County Office of Emergency Services or the California Department of Forestry (C.D.F.) in some venues acting as the County Office of Emergency Services Liaison for fire related events. This is in marked contrast with the ARES network which can be activated as noted above. Any event which disables or severely overloads the communications systems of the County or City safety agencies may trigger the activation of the RACES/ACS Network. Other events related to an emergency incident may also trigger the activation. Such an emergency may often be self-evident or may be indicated by the Emergency Broadcast System. Once the RACES/ACS Network is activated, RACES/ACS members should check in on one of the two Primary Emergency Frequencies and, if able, proceed to their assigned locations. In the event the telephone system is not operating, key volunteers should be contacted via the emergency radio frequency from the County Emergency Operations Center, or the California Department of Forestry Command Post. Not all emergencies will affect the telephone system. In this case, the RACES/ACS members may be alerted using the Telephone Tree / Notification List.

SECTION 4 - DIVISION OF RESPONSIBILITIES

The responsibilities assumed by ARES and RACES/ACS are often confusing to the membership, the organization leadership, and the served agencies. This is unfortunate, but to a certain extent, it is unavoidable. The blurring of the lines of responsibility is necessary for a membership and leadership in two related organizations (ARES and RACES/ACS).

Almost every event will start out with an initial ARES response. As the event progresses the event may require a RACES/ACS involvement. The RACES/ACS response will invariably involve the same communicators involved in the ARES response since almost all members share membership in both organizations and the leadership of both organizations is essentially the same.

The determination of responsibilities can be simply discerned. If the communicator is providing health and welfare communications for the American Red Cross, Salvation Army, or other non-safety agency, then the responsibility is probably to ARES. If the communicator is providing secondary or backup communications for a safety agency, then the responsibility is almost always to RACES/ACS.

SECTION 5 - INCIDENT RESPONSE

5.01 INTRODUCTION

When an emergency event occurs most members, even the most experienced, often do not know how to respond. This is probably the least understood part of ARES and RACES/ACS and it is so basic and obvious that it is often overlooked. By reviewing the sections that follow the member should be able to determine how to respond.

5.02 INITIAL RESPONSE

Each member should let the leadership know the basics of their personal situation. Forms are available to let the leadership know the member's address, phone number, availability of equipment, license classification, etc.. The member should take the time to fill out this form and/or make sure that it is current. The forms can be obtained from your EC or the ARES DEC. The forms should be returned to the EC or DEC.

The member should have a basic understanding of the ARES, and RACES/ACS leadership. The member should especially know the name and call of their EC.

Your initial response to any event will normally be prompted by a call from an EC asking for help. Be prepared to give them a definite answer. If you are available, let them know that you are available and for how long. If you can not work on the incident let them know, but be definite. The worst possible response is a maybe. It is no crime to be unavailable because of work commitments, family commitments, health limitations, lack of transportation, or other factors. Remember, this is a volunteer organization.

5.03 LONG-TERM RESPONSE

Some events may last for several days. Working several shifts during a lengthy incident is quite common. Be prepared for this possibility. If you can work several shifts let the EC or calling party know. One precaution - do not overdo it. It is very easy to get caught up in the excitement or the real needs of an incident and push yourself too far. We have a lot of good people in the organization and most want to do their part. Your participation is important, but your welfare is more important.

5.04 ALTERNATE RESPONSES

If you can not directly participate in an event, then you may want to consider an alternate response. There is always a need for standby base stations, personnel to help with staffing the event, relieving the EC so they can directly participate in the incident, relay stations, or other duties. When you are called and if you can not directly participate, you may want to volunteer for one of these very important alternate duties.

5.05 REPORTING TO AN INCIDENT

When you receive the call for help and have volunteered, you should ascertain some basic information:

- (1) Where do you report?
- (2) Who do you report to?
- (3) Who are you relieving?
- (4) Who will you be dealing with?
- (5) When should you arrive?
- (6) What is your shift beginning and ending times?
- (7) Will you need any special equipment?

If the caller can not give you the needed information, find out how you can get it.

Upon reporting to an incident, report to the individual in-charge and let them know you are there. Then report to your assignment. If you have the initial shift, let the Net Control know that you are on-station and ready. If you are relieving someone, let them know you are there and then let Net Control know the situation.

After reporting-in, review your assignment with the person in-charge or the individual you are relieving. Go over every aspect of the assignment and get as clear a picture as possible of your responsibilities, your duties, the people you be dealing with, the type of traffic you will be handling, and any required message forms and/or documentation needed.

5.06 LEAVING AN INCIDENT

When you are relieved and are prepared to leave an incident, report to Net Control and to the individual in-charge. Knowing that you are not there can sometimes be very important to the people we serve. Go over your assignment with your relief thoroughly. The more they know the better job they can do. If you have kept records or notes, make arrangements to have the notes or copies forwarded to Net Control or a responsible party.

5.07 PERSONAL PREPAREDNESS

All ARES and RACES/ACS members are encouraged to keep and maintain a personal preparedness kit so that they can be available with the minimum of delay and be able to maintain themselves for a reasonable period of time in the event their services are needed. The following is a suggested minimum kit:

Clothing - Spare jeans, 2 shirts, 2 pair of socks, 2 changes of underwear, spare pair of shoes.

Toilet articles - shaver, toothbrush and toothpaste, wash cloth, soap, shampoo, talcum powder, cotton swabs, facial tissue, paper towels, toilet paper.

Stationary - Calendar/Diary, calculator, ball point pens, pencils, note pad, ARRL message forms, County map, phone book.

Miscellaneous - Flash light, am/fm radio, travel alarm clock, spare batteries, work gloves, personal medications, money (\$20 bill and loose change), basic tool kit, blanket or rug.

Food - Gallon of distilled water, chocolate, snacks (sealed), plastic cups.

For Mobile Operations - Hard hat, tire pump, reflective vest, tool box, fire extinguisher, waterless hand cleaner.

Radio Equipment - Copy of your license. It is suggested that portable outside antennas be included with your equipment. And, don' t forget your spare HT batteries and chargers.

SECTION 6 - COMMUNICATIONS SKILLS

6.01 INTRODUCTION

The development of communications skills is undoubtedly the most overlooked part of emergency radio. Hams, even experienced Hams, often feel that since they are licensed that they do not need to hone their communications skills. This is an unfortunate circumstance. While all Hams, irrespective of their license classification, have a considerable amount of technical skill, it does not necessarily follow that they have good communication skills. Listen to Nets in other areas and you can easily see why you need to sharpen your skills. All the fancy equipment and complex rules of operation can not make up for the developed skill of getting your message across simply and clearly.

6.02 BASIC SKILLS

There are three keys to communications during any emergency event - simplicity, accuracy, and brevity. A simple, accurate, and brief message will always be the best method of communicating. Any communication should be thought through and reviewed before it is put on the air. A lengthy complex communication with a lot of technical jargon may impress the casual listener, but if it does not convey the required information clearly or if it is inaccurate, it is pointless. Additionally, lengthy communications tie up the assigned frequencies and prevents other important traffic from being sent and received.

One last caution. Do not tie up the assigned frequencies with unnecessary traffic. One of the most common mistakes is over-identification. Giving out your call sign periodically or telling everyone you are at your assigned post several times is unnecessary and adds nothing to your assigned task.

6.03 DEVELOPING COMMUNICATIONS SKILLS

The easiest way to develop your communication' s skills is obviously to practice. The best forums for this practice are the weekly ARES Net and the local public service events. Running a Net or participating as a communicator in a local event develops your skills easily and quickly. Participation in local events is also fun and fulfilling. You get to exercise your skills and equipment while making a positive contribution to the local community.

6.04 MESSAGE FORMS

Any message transmitted during an emergency must be documented. ARES has no standardized message form for emergency traffic. Most safety agencies have their own forms that must be used.

If you are using an agency form, take the time learn the form and find out how it should be filled out. Also, find out what should or should not be transmitted. You should keep a short record of your own for further reference. Agencies make mistakes and lose things. Your back-up record may save a lot of headaches later in the emergency. After the incident your records may be invaluable in clarifying incident details or sequences of events.

6.05 BASIC MESSAGE HANDLING

When you need to send messages review some basic rules

- (1) Who is sending the message?
- (2) Who is getting the message?
- (3) What is the message about?
- (4) What is the message? Keep the message as brief as possible while still conveying the sender' s information.

- (5) Does the message need a date, a time, or a message number?
- (6) Does any technical jargon in the message need explanation?
- (7) Is the message complete?
- (8) Does the message require a reply or a response?

When you receive a message the same questions used for sending the message must be answered. If they are not, get the information before clearing the frequency and passing on the message. Do not wait until you have time later for an explanation. You won't have the time later and you may not have the opportunity to add the new or corrected information to the old traffic. Additionally, it will probably be too late to correct errors caused by the lack of information or incorrect information.

One continuing problem, especially with RACES/ACS traffic, is agency jargon. Each agency has its own language. Before you transmit any messages with agency jargon take the time to understand what is being sent. If you do not understand it, have it explained. A misunderstood message is far more damaging than the extra one or two minutes of delay it takes for the explanation of an acronym or an unfamiliar term.

6.06 INCIDENT COMMUNICATIONS

During an incident, specific procedures will have to be developed for that incident. Sometimes, this will have happened in advance of the incident. However, normally the procedures will be developed at the very beginning of the incident. Each agency has its own procedures. To outline each agencies procedures is beyond the scope of this Manual and since these procedures often change, counter-productive. However, some general statements can be made about incident communications.

TACTICAL CALLS: To expedite communications, Tactical Calls are often assigned to each tactical position (not the operator). These calls will be short and descriptive so that the caller and their location can be quickly identified and their message can be properly routed or handled. A common error in using Tactical Calls is the over-use of Ham Call Signs with the Tactical Calls. Although you are required to properly identify yourself during communications, you should minimize the use of your Call Sign and only identify yourself when necessary. Tactical Call signs do not replace Ham Call Signs, but if you have been identified as the tactical caller and have signed recently, then they know who you are and the Call Sign is redundant.

ROUTING: Messages, especially RACES/ACS messages, often will be going to a specified individual. Make sure you have the routing correct. A message that doesn't get to the intended individual is no message. If someone has to be contacted, double check the phone number or radio frequency and check for alternate contact methods. If a message has to be delivered, double check the routing and follow-up later to insure that the message arrived.

SECTION 7 - THE INCIDENT COMMAND SYSTEM

7.01 THE INCIDENT COMMAND SYSTEM

Although an in-depth review of the Incident Command System is beyond the scope of this Manual, an overview of the Incident Command System is necessary since many local agencies and all the fire protection agencies use the Incident Command System for their operations in response to emergencies. The following information gives an overview of the Incident Command System and a review of the communications element of the plan.

The National Inter-Agency Incident Management System (NIIMS) has been developed to provide a common system which fire protection agencies can utilize at local, state, and federal levels.

The Incident Command System (ICS) was developed through a cooperative inter-agency (local, State, and Federal) effort, known as FIRESCOPE. The basic organizational structure is designed to be used for all kinds of emergencies, and is applicable to both small day-to-day situations as well as very large and complex incidents.

COMPONENTS OF ICS: The Incident Command System has a number of components. These components, working together interactively, provide the basis for an effective ICS concept of operation.

- Common Terminology
- Modular Organization
- Integrated Communications
- Unified Command Structure
- Consolidated Action Plans
- Manageable Span-Of-Control
- Predesigned Incident Facilities
- Comprehensive Resource Management

INTEGRATED COMMUNICATIONS: Communications at the incident are managed through the use of a common communications plan and an incident based communications center established solely for the use of tactical and support resources assigned to the incident. All communications between organizational elements at an incident should be in plain English. No codes should be used and all communications should be confined only to essential messages. The Communications Unit is responsible for all communications planning at the incident. This will include incident established radio networks, on-site telephone, public address, and off-incident telephone/microwave/radio systems.

RADIO NETWORKS: Radio networks for large incidents will normally be organized as follows:

Command Net - This net should link together the Incident Command, key staff members, Section Chiefs, Division and Group Supervisors.

Tactical Nets - There may be several tactical nets may be established around agencies, departments, geographical areas, or even specified functions. The determination of how these nets are set-up should be a joint Planning/Operations function. The Communications Unit Leader will develop the plan.

Support Nets - A support net will be established primarily to handle status changing for resources as well as for support requests and certain other non-tactical or command functions.

Ground to Air Nets - A ground to air tactical frequency may be designated or regular tactical nets may be used to coordinate ground to air traffic.

Air to Air Nets - Air to air nets will normally be predesigned and assigned for use at the incident.

7.02 ICS AND ARES/RACES/ACS

Except as otherwise noted herein, the Incident Command System will be used as a basic framework for ARES and RACES/ACS incident/event management. Each incident and/or event will have an "Incident Manager" for amateur communications. For small and/or short-term incidents or events the Net Control will assume this position. For longer and more complex incidents or events a more structured and more complex framework will be needed.

The Incident Command System is intended to be flexible, it can be as small or as large as is needed to complete the necessary task. The key to its success lies within its structure.

7.02.01 SMALLER INCIDENTS

As noted above, the Net Control will assume the task of Incident Manager. The Net Control will make personnel assignments for tasks as needed.

7.02.02 LARGER INCIDENTS

As noted above, larger and more complex incidents and/or events will require that one individual assume the position of Incident Manager. Normally, this will be the ARES DEC, an EC, an assistant EC. However, anyone may assume this task.

INCIDENT MANAGER: The Incident Manager will be in responsible charge of the incident or event for amateur communications. He/she will make or designate a branch of the ICS responsible for making personnel assignments, for assigning control and secondary frequencies, for assigning tactical call signs, for coordinating with served agencies, and for performing any duty necessary to coordinate the amateur radio communication being done for the incident or event.

ICS STRUCTURE: The ICS structure will be setup with the Incident Manager at the top of the tree, the next two lower branches would include an Operations Branch (for incident/event traffic only) and a Logistics Branch (for incident/event related staffing and technical concerns). These two branches would operate on independent frequencies to avoid confusion. They would communicate with the Incident Manager as necessary. In larger incidents/events a third branch would be added for inter-agency coordination. The Logistics Branch would divide the staffing and technical functions into two smaller branches that would report to the Logistics Branch. The ICS tree structure should start out small, and then expand and contract with the magnitude of the incident/event.

ICS COMMUNICATIONS: It is critical to keep ARES/RACES/ACS management communications from interfering with and or confusing actual incident/event traffic. All communications within the ICS tree structure are vertical, there should be no horizontal contacts. The staffing and technical branches communicate with the Logistics Branch, in turn the Logistics Branch communicates with the Incident Manager and the Incident Manager communicates with the Operations Branch, the head of Operations Branch ie. the Net Control will then communicate with the effected controlled stations.

**AMERICAN RADIO RELAY LEAGUE
PUBLIC SERVICE ACTIVITY FORM FSD-157 (585)**

1. NATURE OF ACTIVITY (Check one or more)

COMMUNICATIONS EMERGENCY (Amateur supplied communications to replace or supplement normal communications means or which could not have been supplied by commercial means)

ALERT (Amateurs were deployed for emergency communications, but emergency situation did not develop)

SPECIAL EXERCISE (Amateurs supplied communications for a parade, race, etc.)

TEST OR DRILL (A training activity in which amateur participated)

OTHER (Specify):

2. TYPE OF EMERGENCY OR OTHER ACTIVITY:

3. DATES OF ACTIVITY:

4. PLACES OR AREAS INVOLVED:

5. NETS AND/OR FREQUENCIES USED (Including repeater call signs):

6. NUMBER OF AMATEURS TAKING PART:

NUMBER OF MESSAGES HANDLED:

7. NAMES OF ANY AGENCIES FOR WHOM COMMUNICATIONS WERE CONDUCTED:

8. CALLS OF THOSE WHO WERE OUTSTANDING:

9. FACTUAL DETAILS OF OPERATION AS IT CONCERNED AMATEUR RADIO (Be specific with places, persons, terms, and situations):

10. ADDITIONAL COMMENTS:

GENERIC MESSAGE FORM

DATE _____ TIME _____ MESSAGE NO. _____

FROM _____
ORGANIZATION _____
POSITION _____ LOCATION _____

TO _____
ORGANIZATION _____
POSITION _____ LOCATION _____

COMMUNICATOR _____

SUBJECT _____ MESSAGE _____

REPLY _____

