

# American Radio Relay League



Pacific Division

San Joaquin Valley Section



## ***WESTERN KERN COUNTY Amateur Radio Emergency Service ARES® / RACES***

### ***EMERGENCY OPERATIONS PLAN***

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***Kern County Central Valley ARC deserves recognition for driving this project to completion. Without the effort of club president Mark, WI6J it would never have been undertaken.***  
[www.w6lie.org](http://www.w6lie.org)

***The Kern Amateur Radio System Emergency Network (KARSEN) Planning Group wishes to recognize and thank: all Kern County clubs, North Florida ARES, Tulare County ARES, Stanislaus County ARES and all the others who freely offered their plans and suggestions as we updated our plan. It is still a work in progress and probably always will be.***

***I personally thank Richard, KG6DUC for proof reading this document and to Skip, N6SR for his input. To the KARSEN Planning Group – you are amazing dedicated Hams – THANK YOU!***

**Dave, W7FYV EC Western Kern County ARES®**

[www.w6lie.org](http://www.w6lie.org)

## APPENDIX LIST

Appendices A, B, and C are included in the Communications Plan document at [www.w6lie.org](http://www.w6lie.org)  
Appendices D through Z are available as separate downloads. Having them as separate documents allows for easier updating, duplicating, and training.

<b>Appendix A</b>	ARRL Divisions, Section, District and County
<b>Appendix B</b>	Western Kern County ARES®/RACES Duties
<b>Appendix C</b>	Definitions

Also available on [www.w6lie.org](http://www.w6lie.org) under the EmComm tab are the following:

<b>Appendix D</b>	The First 72 Hours
<b>Appendix E</b>	Types of Disasters We Are Likely To Encounter
<b>Appendix F</b>	Home and Family First
<b>Appendix G</b>	Western Kern County ARES®/RACES Go-Kit <b>9/1/11</b>
<b>Appendix H</b>	Supplemental Personal Survival Needs Check List
<b>Appendix I</b>	You First – Mission Second
<b>Appendix J</b>	Communication Assignments – General Information
<b>Appendix K</b>	Emergency Net Activation + <b>Road and Weather Net 9/10/11</b>
<b>Appendix K.1</b>	<b>Net Log - Portrait</b>
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<b>Appendix M</b>	Assigned Net and Radio Frequencies – Pocket Card (pdf) <b>9/1/11</b>
<b>Appendix N</b>	ARRL Standard Message Radiogram Form w/ Codes
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<b>Appendix V</b>	Existing ARRL MOU's
<b>Appendix W</b>	Pending
<b>Appendix X</b>	FSD 212 ARRL Monthly DEC/EC Report
<b>Appendix Y</b>	WKC ARES®/RACES Standardized Power and Connectors
<b>Appendix Z</b>	WKC ARES®/RACES Net Script – Excel Format <b>9/10/11</b>

## **Part 1 – INTRODUCTION**

The Amateur Radio Emergency Service (**ARES**®) consists only of valid FCC licensed amateurs (Hams) who have **voluntarily registered** (ARRL Form fsd 98 available at [www.w6lie.org](http://www.w6lie.org)) their qualifications and equipment for communications duty in the public service when disaster strikes. Every Ham, regardless of membership in ARRL or any group, is eligible for membership in the ARES. The only qualification to become an Associate Member of Western Kern County ARES is the above, plus a sincere desire to cooperate and serve, and approval of the Western Kern County ARES EC. A criminal background check may be undertaken. Additional training is required in order to hold certain other positions in the organization. Because ARES is an amateur service, only FCC-Licensed Amateur Radio amateurs are eligible for membership. **RACES** is the mechanism whereby ARES is formally activated by their "Operational Area" emergency management officials (Kern County Fire Department Office of Emergency Services [www.kerncountyfire.org](http://www.kerncountyfire.org)).

Amateur Radio participation during times of disaster to provide emergency communications is authorized by the FCC Rules and Regulations, **Part 97.§97.403 Safety of life and protection of property**. *No provision of these rules prevents the use by an amateur station of any means of radio communication at its disposal to provide essential communication needs in connection with the immediate safety of human life and immediate protection of property when normal communication systems are not available.*

This Amateur Radio Emergency Service (ARES/RACES) Emergency Operations Plan is written for Western Kern County California to assist local government Emergency Managers, Served Agencies, the local community, and amateur radio operators (Hams) in furthering a trusting relationship that better serves communication needs during an activity or an emergency. It utilizes the organizational advantages of the American Radio Relay League (ARRL® [www.arrrl.org](http://www.arrrl.org)) and the *Amateur Radio Emergency Service (ARES)® and our service to the Kern County Operational Area emergency management organization*. ARES® retains its own identity, organizational structure, personnel, and physical infrastructure while providing communications support. **Western Kern County ARES becomes a RACES unit only when officially activated by the Kern County Fire Department Emergency Services Manager.**

Information contained in this plan is compiled from several publicly accessible documents and web pages. Additionally, it contains personal experience both good and bad, in an effort to prevent repeating unfortunate mistakes. As such, individual credit, although recognized and appreciated, is not herein documented.

Much has changed since September 2001 and this plan is consistent with Homeland Security Presidential Directives HSPD 5 and HSPD 8. The ARRL has standing Memorandums of Understanding (MOU's) with the Department of Homeland Security (DHS) and the Federal Emergency Management Administration (FEMA) among others. (See **Appendix V**) We make no representations or warranties of any kind, expressed or implied, about the completeness, accuracy, reliability, suitability or availability with respect to this document or the information, products, services, or related graphics contained in this document, for any purpose. Any reliance placed on this information is therefore strictly at the readers own risk. In no event will Kern County Central Valley Amateur Radio Club (KCCVARC), ARES, or any other person, or organization mentioned herein, be liable for any loss or damage including, without limitation, indirect or consequential loss or damage, or any loss or damage whatsoever arising from loss to property, or life arising out of, or in connection with, the use of this document.

## **DISASTER DEFINED**

**The ARRL® and the American Red Cross define a disaster: "A disaster is an occurrence such as a hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, earthquake, volcanic eruption, drought, blizzard, pestilence, famine, fire, explosion, building collapse, transportation accident, or other situation that causes human suffering or creates human needs that the victims cannot alleviate without assistance."**

The Western Kern County ARES/RACES Operations Plan serves two purposes. **First**, to assist professional Emergency Managers to understand: who, what, and how professional, trained, FCC-Licensed Amateur Radio Emergency Service (ARES) volunteers can do to assist them with emergency communication functions, according to ARRL guidelines; and **Second**, to provide a systematic method for volunteer Hams to complete their **Mission** and deliver supplemental radio communication services when requested by local, State or National Emergency Managers. This document should serve as not only an operational plan but as a training resource for the amateur radio community at large. This Plan will provide Hams with a safe, professional, consistent, effective and scalable communications response under the guidance of the ARES program.

To the Hams, and on behalf of the Kern Amateur Radio System EmComm Network (KARSEN) Planning Group, thank you for volunteering your equipment, time and energy to this project. To the readers, thank you for taking your time to learn what amateur radio can do for you in linking up the "**last mile**" during an emergency or disaster. There is no intent to dictate to any of the amateur radio clubs, or faith-based organizations that comprise KARSEN how to conduct their business. It is how all of us can collaboratively train and work together for a common goal.

An essential part of achieving this mission is our attitude and the personal pride we each take in helping our mission partners and community.

### **Western Kern County *Mission* and Relationships**

***We will help our communities and Served Agencies, if requested by Served Agencies, national, state, or local emergency managers; and supplement, extend, or replace impacted commercial or government communications systems in emergency or public service situations; by using trained and FCC-licensed amateur radio operators using our own, served agency, or government-provided, amateur radio equipment and systems.***

### **OPERATIONAL AREA**

California emergency management terminology defines an "Operational Area" as the County of Kern and all political jurisdictions therein. This definition of "Operational Area" includes Eastern Kern County. The Kern County Fire Department is the lead agency for Emergency Management in the Kern County Operational Area. However, according to the ARRL definition eastern Kern County is part of a different ARRL Division and is not in the Pacific Division - San Joaquin Valley Section, rather it is in the Southwest Division - Orange County Section for ARRL administrative purposes only.

### **AMERICAN RADIO RELAY LEAGUE (ARRL) [www.arrl.org](http://www.arrl.org)**

The American Radio Relay League Inc. (ARRL) is a national noncommercial association of over 400,000 radio amateurs. Organized for the promotion of: interest in Amateur Radio communication and experimentation, for the establishment of networks to provide communication in the event of a disaster or other emergency, for the advancement of the radio art, for the public welfare; for the representation of the radio amateur in legislative matters, and for the maintenance of fraternalism and a high standard of conduct. ARRL has fifteen geographic Divisions, they are arranged into 71 administrative sections, each headed by an elected Section Manager (SM). Within the 71 Sections there are over 2,200 Emergency Coordinators tasked with providing service to their local Emergency Managers, Served Agency partners, and communities. This plan provides direction for amateur Hams in Western Kern County ARES/RACES, Pacific Division - San Joaquin Valley Section. (See **Appendix A**)

## **San Joaquin Valley Section Leadership**

### **Section Manager (SM)**

The senior ARRL official in each Section is the Section Manager who is charged with the overall responsibility for emergency radio communication activities in the section. The SM may appoint as many assistant officials as deemed necessary to ensure responsiveness and the quality of service provided. They serve at the pleasure of the Section Manager. The following describes some of the appointments.

### **Section Traffic Manager (STM)**

The STM, appointed by the SM, is responsible for coordinating National Traffic System (NTS) activities in the section. The STM is often helpful when setting up liaison circuits with other sections or counties for served agencies in California, for example, the California Office of Emergency Management or Red Cross. These daily Nets (see schedule Pg. 13) include moving welfare inquiry traffic into, and out of California during disaster operation or routing outgoing welfare traffic through the National Traffic System (NTS), including the digital systems, for rapid delivery. In such circumstances the STM coordinates the exchange and keeps the SEC and Emergency Net Manager advised of preferred routes and methods. They work closely with other NTS officials to establish and maintain routes for whatever inter-sectional or international traffic being generated. The STM assists the DECs and ECs in setting up routes for outgoing Welfare traffic.

The STM will be responsible for overseeing the choices of candidates provided by the SJV DEC for the position of California Emergency Operations Center (CA EOC) GATEway station near Sacramento, CA. Abilities, experience, available hours of operation, training, radio equipment and ability to handle traffic in a professional manner are of utmost importance to hold this position.

### **Section Emergency Coordinator (SEC)**

The Section Emergency Coordinator is appointed by the Section Manager and is responsible to the SM for emergency communications operations in the SJV section. At any time the CA OEM is involved with an emergency and requires amateur radio operators, the SEC or a designate will coordinate deployment using the resources database to provide manpower and relief. The SEC will immediately assume charge if an emergency involves two (2) or more districts, two (2) or more sections, or the CA OEM is involved in the emergency. When two (2) or more sections are involved, the SEC will represent the SJV Section and coordinate activities with the other Section SECs. In the event of the SEC's absence or temporary inability to perform his/her duties, the Section Manager assumes those duties or appoints someone to perform them during the SEC's absence or incapacity.

The ARRL San Joaquin Valley Section Manager utilizes an appointed staff to organize the section and control operations in emergency situations through an organization of Districts, each headed by a District Emergency Coordinator (DEC) reporting to a Section Emergency Coordinator (SEC).

### **District Emergency Coordinators (DEC)**

Each District is composed of local counties and ARES groups organized geographically in conjunction with a major city or county that relates to a local government emergency management organization. Each District is headed by a field-appointed District Emergency Coordinator (DEC). Each District organization is identified in Appendix A to this plan.

The DEC's are appointed by the Section Emergency Coordinator with the approval of the Section Manager. They are responsible for the supervision of Emergency Coordinators in their district. They have a major responsibility demanding a major commitment of time, energy and

personal initiative. The DEC shall collect the EC's monthly reports, file his report and forward these reports to the SEC by the 5th of the following month. These are field appointed ARRL positions and require approval from the SEC and SM. DEC's shall coordinate training programs and assist EC's in training. DEC's shall check their email at least once a day and forward any email sent by the ARRL or SJV Section staff to their membership immediately if requested.

DEC's who cannot perform their duties or will be absent from their District, advise the SEC who will be in charge. DEC's shall immediately advise the SEC when an emergency is larger than their District or is going to cross over District boundaries. The DEC shall immediately call for more resources if needed or anticipated.

### **Emergency Coordinator (EC)**

The duties of Emergency Coordinator require a serious commitment of time and effort by the volunteer who accepts the position. The EC serves at the pleasure of the local District and Section Emergency Coordinator and Section Manager. Each EC should be aware of their duties as spelled out on the ARRL website and publications, plus duties assigned by the chain of command. Each county, or in some cases a large city has an Emergency Coordinator that is appointed by the Section Manager and the staff. The Emergency Coordinator is the point of contact within their respective area for local Emergency Managers and Served Agencies to contact if emergency communications are necessary. The EC may appoint assistants as necessary with the approval of the DEC.

The EC is the chief Amateur Radio Emergency Communications official in their respective counties and are directly responsible to their DEC. The EC shall submit a report of the previous month to his DEC to be forwarded to the SEC by the 5th of the following month. EC's should meet with the local served agency leadership and develop a working relationship. The EC should explain how amateur radio operators can and will assist in providing radio communications when all else fails. Radio communications encompasses all radios and communications equipment from amateur radio, CB, state, county, Served Agency, and GMRS to get the messages delivered.

EC's should be humble and only offer a solution to assist the served agencies, being careful not to oversell the resources available. EC's shall submit their county emergency plans to the SEC no later than October 1<sup>st</sup> of each calendar year.

The EC shall immediately contact the DEC for additional manpower if the communication needs exceed his resources. EC's shall be required to appoint assistants to be determined by amateur radio operator's population in that county and for special needs.

EC's are required to check their email at least once a day and forward any email sent by the ARRL or SJV Staff to their members immediately if requested.

EC's shall be members of ARRL and may have access to their own and their member's information.

EC's who cannot perform their duties or have to be absent from their venue, must notify the DEC and advise who will be the AEC in charge.

### **NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS)**

<http://www.fema.gov/emergency/nims/AboutNIMS.shtml>

The National Incident Management System (NIMS) (HSPD 5) sets the expectation that emergency responders use the best practices and organize according to a national standard making it possible for all participants to work together in all aspects of an incident. NIMS is not a response plan. "NIMS provides a systematic, proactive approach to guide departments and agencies at all levels of government, nongovernmental organizations, and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life and property and harm to the environment." It is a dynamic comprehensive system for multi-agency coordination with a



common operating picture providing for standardized resource management that is scalable to fit the need down to the **"last mile"**.

NIMS goals are preparedness, procedures, training, qualification, and certification, of personnel and equipment. ***Personnel and organizations that have not been trained in this common NIMS framework are, from a practical standpoint, not considered capable of being of assistance.*** Consequently we are expected to have an Incident Command and Management Organization that governmental emergency managers and first responders in the field can easily recognize.

In each incident where Western Kern County ARES/RACES responds, we collect and report information to the Emergency Managers who utilize our services. This information is critical to the safety and protection of all volunteer personnel, the funding of the incident response and subsequent cost recovery. Western Kern County ARES/RACES utilizes a command structure along with General Staff and Command Staff Functions to meet the NIMS requirement. Once again, various Section officers and appointees fulfill the Command and General Staff functions by adopting common titles and terminology consistent with the Incident Command System (ICS) and also make sense to all the organizations operating using the Incident Command System within the National Incident Management System. (See **Appendix B**)

WKC ARES/RACES has adopted a command and management plan consistent with these goals. In emergency situations, WKC ARES/RACES serves that purpose by having various personnel assume emergency response duties. Each local group should seriously consider adopting an emergency organization structure that conforms to the ICS and NIMS standards.

### **INCIDENT COMMAND SYSTEM (ICS)**

[www.fema.gov/emergency/nims/IncidentCommandSystem.shtm](http://www.fema.gov/emergency/nims/IncidentCommandSystem.shtm)

The Incident Command System (ICS) is a standardized, on-scene, all-hazards incident management approach that:

- Allows for the integration of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure.
- Enables a coordinated response among various jurisdictions and functional agencies, both public and private.
- Establishes common processes for planning and managing resources.

ICS is flexible and can be used for incidents of any type, scope, and complexity. ICS allows its users to adopt an integrated organizational structure to match the complexities and demands of single or multiple incidents.

### **HOW DOES ARES FIT INTO ICS**

***Involvement in any incident where ICS is used is by "invitation only". There is no role for off-the-street, self-dispatched volunteers.*** The relationship of a group to the ICS structure will vary with the specific situation. If your group is providing internal communication support to only one Served Agency, and have no need to communicate with other agencies that are part of the ICS, you may not have any part in the ICS structure itself except through your Served Agency. If your group is tasked with handling inter-agency communications, or serves more than one agency's internal communication needs, it is likely your group will have a representative in the Logistics Section of the EOC. Kern County **VOAD** (Volunteer Organizations Active in Disasters) has a designated representative in the Kern County EOC. We belong to Kern County VOAD.



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## DEPLOYMENT SCENARIOS

### ***UNDER NO CIRCUMSTANCES WILL ANYONE FROM WKC ARES/RACES SELF-DISPATCH.***

#### **Local (City or County) Level Response**

After we take care of our **home and families first** (Appendix F) WKC ARES/RACES volunteers may answer local requests for emergency communication augmentation received from Served Agencies, local government Emergency Managers or non-government organizations. All responses must be authorized by the WKC Emergency Coordinator or their designated alternate. When a local emergency escalates geographically to a scale that extends beyond the service boundaries of WKC ARES/RACES the SJV District and Section staff must be advised.

Recognize the fact that ARES/RACES consists of volunteers. The amount, and type of help available, may vary greatly based on the warning time, type of incident or event, day of the week, or time of day. In some situations prioritization of resources is necessary prior to accepting, or declining, deployment based on the specific volunteer resources available.

***BUDDY SYSTEM WKC ARES/RACES uses a Buddy System for deployment of volunteers. Under no circumstances will a single person be deployed without a Buddy unless authorized by the EC or their alternate.***

#### **State Level Response**

When the State of California Office of Emergency Management requests emergency communication augmentation the SJV Section Manager will communicate with the WKC EC who will make the deployment selections. A validation, or **Resource Typing** process may be undertaken so the requesting agencies know the qualifications of each deployed volunteer Ham radio operator.

#### **National Level Response**

If the ARRL requests assistance from the Division or Section, the SJV Section will communicate with the WKC EC to determine the type and qualifications of the resources available. A validation process may be undertaken so the requesting agencies know the qualifications of each deployed volunteer Ham radio operator.

## Community Support Program

### Western Kern County Neighborhood HamWatch (HW) Rev. 9/1/11

Western Kern County Neighborhood HamWatch (Courtesy of Andy Gausz, KG4QCD) is a voluntary program for Hams who want to provide a helpful service to their neighbors during times of emergency, extended power outage or holiday traffic periods ([Road and Weather Net](#)). They may not wish to be part of a very formal organization, be unable to respond in a mobilized capacity and yet have a sincere desire to serve their neighbors and have minimum supplies for 72 hours. By remaining safely at home they are **sheltered-in-place** and may have communication capabilities that are not necessarily infrastructure dependent. Our Area Control Stations (ACS) are sheltered-in-place.

HW operates only as part of ARES and communicates with amateur radio stations, and nets in Western Kern County. HW stations should be recognized as a means of relaying vital situation status information between emergency nets and neighborhoods in the impacted community. As a rule, HW stations utilize designated 2 meter or VHF/UHF simplex frequencies, (Appendix M) to avoid interfering with Emergency Nets or repeaters that may be needed by ARES/RACES or other emergency operators. WKC ARES/RACES Area Control Stations fulfill this task and train each week. (See Net Schedule found on [www.w6lie.org](http://www.w6lie.org) and **Appendices K, K.1, K.2 M, & Z**)

When the infrastructure is damaged for long periods of time, such as after a major event, everybody's batteries wear out, and their generators run out of fuel, people are virtually left in the dark. This represents what emergency planners call the "**last mile**". In all major disasters the most difficult places to reach are in the "last mile" closest to the heart of the disaster. Experience has taught us that the communication links we depend on are often out-of-service for extended periods of time. Without telephone, cellular, Internet, commercial radio, or television communications and large numbers of people become disconnected from family, children, work, information, or help.

Communication isolation creates additional problems for Emergency Managers. The public feels isolated and has difficulty finding out what Emergency Managers and local government officials are planning or doing to help them. Communication Isolation can be further complicated by destruction of travel routes for access to emergency food, supplies or medicine. Downed bridges, trees and power lines make it very difficult for emergency services to reach neighborhoods or residents. It is a time when Ham Radio Operators can help.

There are three things Ham Radio operators can do in the Western Kern County Neighborhood HamWatch program.

- 1.** Neighborhood amateur radio operators can use their radios to communicate on simplex or non-emergency designated repeaters across the city and county and share information about the situation. The ability to provide contact for the traveling amateur or a link into neighborhoods provides a mild form of relief to fight against the psychological depression that often accompanies communication isolation. Just talking to people, and sharing information with neighbors helps keep people in touch with what's going on and how the community is coping with the emergency.

- 2.** Amateur radio networks can also collect situation status reports from HW stations and relay them to local Nets so the Emergency Net can keep Emergency Managers informed. This situation status information may assist officials as they plan, and coordinate a response for current needs. It's hard to organize the recovery effort without first hand information about community conditions. Emergency Managers can also relay information through Emergency Nets to neighborhood HW stations thereby providing vital information about the recovery effort and reassurance that action is being taken to help them.

- 3.** Ham radio HW stations have the ability to handle the "last mile" problem that exists when major infrastructure fails. Simple short messages (See **Appendix Q**) may be able to be relayed by radio to relatives or friends, helping reassure others that they are OK. There are two ways they can accomplish this special service: one, through an amateur radio and two, is on the Internet if it is available.

## **Part 2 - Operational Guidelines**

This section contains the operational procedures for ARES/RACES operations in the Western Kern County area of the San Joaquin Valley. These procedures should be the baseline for all ARES/RACES operations in Western Kern County, in order to assure interoperability and effective mutual-aid for area-wide disaster preparation, assessment, response and recovery. This section of the plan is intended for the Amateur Radio Operator. It contains details on the operational practices, procedures and methods for communicating.

**UNDER NO CIRCUMSTANCES WILL ANYONE FROM WKC ARES SELF-DISPATCH.**

### **Levels of Activation**

The normal situation for Ham radio communications means that on a given day there are a large number of WKC ARES operators in their cars, at work, or at home. There are also a significant number of WKC HW operators potentially available. That represents a significant organized communications resource that is not dependent on the grid in order to be effective. When a disaster strikes or threatens any San Joaquin Valley community, affected ECs and DECs may declare any of **four levels of alert** of their respective organizations:

#### **Level III -Monitoring Phase: Lowest level**

Notification to ARES operators in a specified area or functional unit (such as a Net) their services may be needed on short notice in the next 24-48 hours. It is typically issued by the SEC or, occasionally, by DEC or EC. The alert may apply to the entire Section or smaller areas. Omission of any area does not prohibit others from taking appropriate precautionary steps. The SEC usually does not issue a follow-up order raising the alert level but leaves that step to the ECs or DECs in the affected areas.

The declaration of Level III Monitoring Phase signals DECs to alert ECs, Area Coordinators, Net Managers, and other key emergency communications officials to prepare for short-notice calls. All WKC ARES personnel in the alerted areas should monitor designated net frequencies and keep in close touch. ARES operators who are alerted should prepare to be en route to duty posts within two hours or less of being assigned. Preparations may include updating "Go-kits," arranging to take time off from work, fueling vehicles, spare fuel for power generators, charging batteries, obtaining stocks of expendable batteries and testing emergency-related portable equipment, Nets operating in Level III Monitoring Phase customarily run *ad hoc* (i.e., they are not directed.) Ham radio operators and officials should monitor the appropriate frequencies for information and for possible increases in or Stand-Down from the alert status.

#### **Level II Partial -Activation Phase:**

It's descriptive of an operational status. Usually issued by DECs or the ECs, and designates Net activations or performance of specific tasks. The alert level becomes Partial Activation in an Area or District when specific duty posts are staffed and become operational. **A net typically "goes to Partial Activation" when a net control operator opens the net.** DEC, EC or alternate may place the District or local area nets, or other operating units such as WKC HW, on Partial

Activated alert.  
going beyond

Most emergencies, even severe ones, can be handled without ever

activated. When the Net Control Station (NCS) closes the net, it is the same as a Stand-Down.

**Level I Operational: The Highest possible level of alert:**

In an emergency communications operation it is useful for maintaining tight control over VHF/UHF or HF frequencies where heavy traffic and large numbers of stations

may increase traffic load on nets. **When EMERGENCY TRAFFIC is being handled**

**on any emergency net or frequency, the activated level is automatically Level I - Operational and remains so until all Emergency Traffic has been cleared. The NCS may then Stand-Down the net to Level II and resume normal Net operations.**

Full Scale Activation is usually declared at the Section level only by the SM except as stated above for Emergency Traffic. Full Scale Activation is declared by issuance of a Priority bulletin to be transmitted on all active net frequencies. It applies solely to nets and geographic areas designated in the formal order. A District EC can put the District on Full Scale by declaration, but the SEC or SM must be notified in advance or, if this is not possible, as soon as possible after taking the action.

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

**Stand-Down Phase: Formal**

The Formal Stand-Down Phase authorizes DEC's and EC's to begin the stand-down phase (Demobilization) of the activation. Stand-Down is permissive only; it does not

require that operations be shut down in the specified area. It simply advises the designated DEC's and/or EC's that no apparent reasons exists for continuing operation unless they have local requirements. The DEC and EC then may reduce operating hours, restrict operations or close down designated nets as the emergency passes and traffic loads subside.

Only the SEC or SM may declare a Stand-Down Phase for a Section net or for a District net when more than one District is involved in the emergency operation. The DEC can declare a Stand-Down Phase in the District net if the emergency operation involves the District and no Section net is in operation. Any portion of the SJV Section Plan can be activated in support of any incident in the State of California or whenever the CA OEM is activated, and specifically when mid-state relay is necessary to support operators in other ARRL sections requiring relay to/from the CA OEM.

**Net Operations**

In an effort to bridge the gap between the ARRL National Traffic System (NTS) ARRL Radiogram message forms, and the Incident Command System ICS-213 Message Form, Ham



operators should be very familiar with both forms (**See Appendices: N, & O**). While they are similar in purpose, they remain entirely different in structure. ARES operators should realize that messages they received from Emergency Management and other First Responders are going to be in the ICS-213 format. It is critical that they understand **not to modify the message, but to relay or deliver it as received.**

However, messages received from other sources will probably be in the standard ARRL format. While this format is usually very familiar to ARES personnel, it will most likely be unfamiliar to Emergency Management officials and First Responders. The ARES operator should place the ARRL-formatted message into the body section of the ICS-213 before delivering it. Thus the ARRL message remains intact, and the Emergency Management official has a document they understand. Using these procedures will enable the uninterrupted flow of message traffic, and the messages will be in a format familiar to the users and recipients.

## HF Net Operations

The SJV Section supports several major HF Nets within the Section. These nets meet daily and operate on 75 meters with an alternate on 40 meters, (See schedule and frequency below). During normal operation, these nets operate independently under the auspices of the Section Traffic Manager. SJV Section members are encouraged to join each of these nets during normal operation for training and practice in traffic handling and HF Net procedures.

**1200** (12:00 pm) Local time daily **Noontime net** on **7.268.5 Mhz**

**1530** (3:30 pm) Local time daily **Region 6 Traffic Net** on or near **7.275 MHz**

**1730** (5:30 pm) Local time daily **California Traffic Net** on **3.906 MHz**

**1900** (7:00 pm) Local time daily **Northern California Traffic Net** on **3.533 MHz**

**1900** (7:00 pm) Local time daily **Golden Bear Amateur Radio Net** on **3.975 MHz**

**2000** (8:00 pm) Local time daily **Mission Trail Net** on **3.856 MHz**

The **slow speed training session** of the net meets nightly on 3.533 MHz at 9 PM Pacific Time. Handling traffic on CW is a good way to improve your CW skills.

The **Young Ham Net** every Saturday 2:00 PM local time 145.230 -0.6 PL 100 or Echolink KR6DD-R 271122 or N6WN-R 477737

When an incident is declared in the SJV Section two nets may combine, and their activation status falls under the direction of the Section Emergency Coordinator. During emergency operation, (including here in WKC ARES) the two independent net managers will each be responsible for assigning net control station leadership positions for continuous net operation and establishing the shift change times. Shift change times should be coordinated with Emergency Management officials consistent with the Action Plan Operational Periods. This schedule will remain in effect from the initial activation of the net until the net is given the order to stand down.

**Operators who have not yet checked into the net are encouraged to listen first** to determine the status of the net before transmitting. At such time as the Section Emergency Coordinator determines the net is no longer needed, he will give the order to Stand-Down and the nets will return to their normal day-to-day operation.

## VHF Net Operations

Local VHF/UHF nets should activate per the ARES plan (See **Appendices K, K.1, K.2, L, M, Z**) ***LISTEN FIRST Before you CHECK-IN in with your NCS or Area Control Station (ACS) then be prepared to just give your call sign and your status*** (See Definitions **Appendix C**).

Remember that you need to **formally CHECK-OUT** of an established net by contacting the NCS. If there are any informal "stand alone" nets (not part of an ARES plan such as WKC HW), they should have at least one station monitoring activity on the WKC ARES Emergency Net. This station should be available to take message traffic for the neighborhoods that is not directed to the local ARES operation.

## NTS Message Handling

Amateur Radio messaging takes three basic forms in nearly all operations in which emergency communications support plays a part: (1) Administrative, (2) Formal Traffic, (3) Record Traffic. ***A copy Logs( Appendix K, K.1, K.2) - hand written, printed, or retrievable computer file) must be maintained by the originating station, any relaying stations, and the final recipient station for a period of 1 year for all Traffic.*** You may be required to forward copies to officials.

**(1) Administrative communications** support network and incident management purposes. Such communications may be informal (but logged) between two or more stations or may be in the form of Formal Traffic.

**(2) Formal Traffic** is formatted in a standard message format and transferred between two stations over Amateur Radio frequencies or using electronic means such as e-mail or FAX.

**(3) Record Traffic** is Formal Traffic in which the information is sent or received on behalf of a non-licensed "third party" and logged. Third parties include individuals, emergency management organizations and Served Agencies. Operators must obtain the name and 10-digit telephone number of the sender and record these on the message. All Formal and Record Traffic should be handled and processed using the following criteria:

- (A) The least taxing of human resources for handling, relaying, and processing.
- (B) Automatic error-correcting means.
- (C) The most reliable means for minimum delay in delivery.

This clearly indicates the use of e-mail or FAX where available for all Formal and Record traffic.

## Message Format

A standard format must be used for Formal and Record traffic throughout the SJV Section. ICS-213 forms will be used where required by the supported emergency management organization (**Appendices: N, & O**)

ARRL Message format Plain text e-mail ICS-213 form(s) (**Appendix O**)

All traffic shall be formatted with: complete TO address with names, (***CAUTION: in an EOC or ICS organization a message addressed TO a specific persons name vs. the Title of an ICS position could make a critical difference if the named person is no longer on duty. In that case the message may get filed until the named person returns.***), telephone number and any other way to deliver the message, authority by which message was sent with name, phone number, ICS position in sending/requesting organization, return routing information back to sending (radio) organization, signature of sender, call sign, phone number and name of (radio) sending organization.

All third party messages will contain the name in clear text and a telephone number of the message originator. Even if the originator has an amateur call sign, the name and phone number of the originator is still required since there will be mostly non-amateurs responding to or handling the message after it is received at the destination or EOC.

ARRL Message format should be limited to short messages (i.e. 25 words or less in the text) if voice or non error-correcting manual means (i.e. CW or keyboard modes) between two live operators will be employed through the end-to-end routing. Plain text e-mail should be used where possible, especially where the text is lengthy. Attachments to e-mail may be used with some size restrictions if e-mails are transferred via amateur radio frequencies.

## Message Precedence

The ARRL standard format prescribes four levels of message precedence: Routine, Welfare, Priority and EMERGENCY (equivalent to SOS or MAYDAY.) Net Controls must observe message precedence when dispatching traffic.

**Routine** - Nearly all of the day-to-day messages handled on amateur radio networks are assigned the default precedence of Routine ("R"). Routine traffic is generally not handled on any WKC ARES/RACES or SJV Emergency Net. The NCS should be alert to messages that may be erroneously assigned "R", containing text indicating a higher and appropriate precedence should be used.

**Welfare** - Messages regarding inquiry about (incoming) or information on (outgoing) the health and welfare of citizens within or near the incident area are assigned the precedence of Welfare ("W") falling between Routine and Priority. Each local ARES group should have a plan to handle (i.e. process) outgoing welfare traffic (Welfare Message sub-net) especially for family notification from shelters and other areas where telephone and internet services are disrupted. Where an e-mail address for an out-going Welfare message is available, the use of e-mail over radio is the first method of choice, providing doing so does not distract the radio operator from duties specifically in support of the Served Agency. Welfare messages may be handled on SJV Emergency nets at the discretion of the NCS unless Priority traffic is pending, or the net is on Level I **Full Scale Alert**. Incoming (inquiry) Welfare traffic is not included in the mission statement of a SJV Net. *Ad hoc* nets often spring up specifically to handle welfare inquiries, and NCS should make a brief announcement about every hour that such nets are operating and their frequency.

**Priority** - During emergency operations, most of the traffic handled on emergency nets will carry Priority ("P") precedence, meaning the text information is relevant to the existing emergency and therefore should be moved toward addressees as rapidly as possible. When the backlog of "P" traffic gets too large, the precedence may be subdivided by using "EOC Priority". Messages originating from, or addressed to, the local EOC or CA OEM are handled ahead of other "P" messages.

**Emergency** - The practice of using "**BREAK**" or "**BREAK - BREAK**" to announce Emergency Traffic is **strongly discouraged**; it has no universally understood meaning. Always use the international standard "**MAYDAY**", "**SOS**" or "**EMERGENCY**" to announce traffic of life-or-death importance. The standard CW signal is "SOS", sent as a string of elements. EMERGENCY traffic generally would not be handled in Formal or Record Format. Such traffic would be handled by the most expedient means available, however complete log notes must be kept because in some cases the NCS or station handling the traffic must draft a short incident report and forward it via the EC to the DEC.

### **Third Party Communications and Documentation**

It is not uncommon during an incident for Emergency Management personnel to speak directly to each other via amateur radio, bypassing briefly the preferred method of written message exchanges. There are many Emergency Management personnel who are licensed to operate an amateur radio. In those cases, they need to be allowed access to the operating position to conduct their information exchange, ***providing the frequencies used are within those allowed by their class of license***. In the event that Emergency Management personnel are not licensed (or revoked), the amateur rules of operation have a provision (**FCC Part 97.115 (b)(1)**) that allow a non-licensed person to participate via amateur radio (with a control operator). The same applies for a licensed Emergency Management person who desires to operate on a frequency not permitted by his class of license. Every amateur operator on duty in an incident should be familiar with this section of Part 97 and understand the mechanics of applying this rule. In either case, such transmissions should be entered into the operator's event log with the name/call sign of the person making the third party transmission.

### **Mid-State or County Relay**

Due to the size of the State of California the SJV Section may require stations to relay traffic due to propagation, static or weak signals. The SJV SM may make such designations as necessary.

Due to the size and mountainous terrain in Kern County WKC ARES/RACES has designated HF stations incorporated into our plan. (See page 9) Those stations may enlist relay stations as necessary in order to handle traffic.

### **Operational Deployment**

#### **Vetting by Local and State Agencies**

Volunteers in many areas are being more highly scrutinized these days. This ranges from general or criminal background checks through financial (credit scores, etc.) and personal character references. Many people who have nothing to hide look upon this as a form of invasion of privacy. To qualify for official deployment to EOC's, places where children may be present, or serving for the American Red Cross or The Salvation Army generally require a background investigation. In most cases however, the maximum degree of vetting for ARES participation is generally a criminal background check. Joining ARES does not by itself trigger any form of background check. Those who are concerned should realize however, that background checks can be made by the State without permission and that there may be a background check made without an individual's knowledge prior to an actual deployment they agree to perform.

Deployment for emergencies directed by the SJV Section may not be authorized unless the amateur radio operator has voluntarily submitted the necessary information to be officially listed. This is the only way the section can maintain a list of those willing and able to meet the needs of a deployment mission. Once the call for help comes in, it is too late to accomplish the pre-vetting necessary to determine who can commit to a deployment. The database allows us to get ahead of the storm so to speak.

#### **Volunteer Liability Issues**

Determining the protection of volunteers who provide service to the state and its political subdivisions is a complex tour involving several California statutes. California Volunteer Protection Act identifies conditions under which protection can be afforded to individual members of nonprofit volunteer organizations. The Good Samaritan Act pertains mainly to medical personnel but has been held to protect people aiding in medical responses in some situations. Much depends upon

the volunteer responding to a specific, documented, call for assistance from an authorized emergency management agency or organization. The amateur radio operator should be prepared to take full responsibility for personal injury or illness incurred in the performance of volunteer duties. Always act in a manner that is consistent with commonly accepted good practices: training for amateur radio operations, FCC rules and regulations, Served Agency policy and training. Keep in mind that you will probably be fine as long as any act or omission, and that act or omission does not constitute gross negligence or willful or wanton misconduct.

### ***This is why we do not self-dispatch.***

Good Samaritan Ruling

***DISCLAIMER: California Volunteers is providing this document as a summary of the California State Supreme Court Good Samaritan ruling. These is document are NOT intended to serve as legal counsel. California Volunteers strongly encourages you to check with your legal counsel for additional information and/or how you may minimize your own potential liability.***

California Supreme Court Issues Ruling On Good Samaritan Law

The California Supreme Court recently ruled that a "good Samaritan" statute only applies to emergency medical care, and does not protect against lawsuits based on claims of negligence in rescuing or transporting accident victims. The case is Van Horn v. Watson et al. (2008) 45 Cal.4th 322.

The case was brought by Alexandra Van Horn, who was a passenger in a car that left the road and crashed into a curb and light pole. After the accident, a friend of Van Horn's, Lisa Torti, pulled Van Horn from the car. Van Horn and Torti gave different accounts of how this occurred. Torti claimed that she saw smoke and fluids coming from the car, and she feared that it would catch fire or explode, so she carried Van Horn out of the car by lifting her. In contrast, Van Horn claimed that the car was not leaking fluid or emitting smoke, and that Torti pulled her out of the car by her arm "like a rag doll."

Van Horn was paralyzed as a result of the incident, and claimed that Torti's actions caused this injury. Van Horn sued Torti and others, but the trial court dismissed the claims against Torti before trial, finding that Torti was protected by a good Samaritan statute, Health and Safety Code section 1799.102. That statute provides in part that "[n]o person who in good faith, and not for compensation, renders emergency care at the scene of an emergency shall be liable for any civil damages resulting from any act or omission."

The case was appealed, ultimately to the California Supreme Court, which ruled in a 4-3 decision that section 1799.102 only protects people who provide emergency medical care, and does not apply when a person provides non-medical care, like moving a victim. The Supreme Court based its ruling on the legislative history and structure of section 1799.102, and found that the Legislature only meant for the statutory immunity to apply to medical care, not other emergency care. The case will now return to the trial court, which may consider whether Torti acted with "due care" in removing Van Horn from the car.

Because of this ruling, "good Samaritans" who provide non-medical care are subject to the common law rule that "a person has no duty to come to the aid of another . . . [but if] a person elects to come to someone's aid, he or she has a duty to exercise due care." If they do not exercise "due care" in rescuing or transporting victims, volunteers can be held liable for any injury they cause.

So what does this ruling mean? How will it affect good Samaritans who help victims at the scene of an emergency? First, it is important to note that the Legislature may act to overrule Van Horn. Senate Bill 39, recently introduced by Senator Benoit, would amend section 1799.102 so that it covers both medical care and non-medical care administered by volunteers at the scene of an emergency. Assembly Member Adams has introduced a similar bill, Assembly Bill 90, and Assembly Member Feuer has introduced a bill, Assembly Bill 83, which would express the Legislature's intent to examine the holding of Van Horn.

Second, nonprofit organizations and others who work with volunteers should consult with their legal counsel and risk managers to determine how to minimize their potential liability. For instance, organizations can provide training programs to help ensure that when an accident does happen, emergency volunteers know how to properly rescue and move victims.



**DISCLAIMER: California Volunteers is providing these documents as a summary of the California State Supreme Court Good Samaritan ruling. These documents are NOT intended to serve as legal counsel.** California Volunteers strongly encourages you to check with your legal counsel for additional information and/or how you may minimize your own potential liability.

**August 6, 2009 (Sacramento)** – Today Governor Schwarzenegger signed Assembly Bill 83 (Feuer/Benoit), legislation which encourages individuals to act as "Good Samaritans" and voluntarily help rescue others in peril. The legislation goes into effect immediately.

Assembly Bill 83 provides non-medical Good Samaritans the same liability protections afforded medical Good Samaritans. The bill stems from the California Supreme Court's ruling in *Van Horn v. Torti*, in which Lisa Torti rescued Alexandra Van Horn from a vehicle involved in an accident, and, in doing so, might have caused Ms. Van Horn's subsequent paralysis. The Court determined that Health and Safety Code Section 1799.102 provides liability protection only to medical professionals who provide emergency medical care. The Court's interpretation means that though Ms. Torti may have reasonably believed that removing Ms. Van Horn from a potentially explosive car was necessary to save her life, Ms. Torti may still be sued for injuries allegedly caused by the rescue. Assembly Bill 83 amends Health and Safety Code Section 1799.102 to ensure that it provides liability protections to all people, both medical and laypeople, who help out in good faith at the scene of an emergency.

### **Assembly Bill No. 83**

#### CHAPTER 77

An act to amend Section 1799.102 of the Health and Safety Code, relating to personal liability, and declaring the urgency thereof, to take effect immediately. [Approved by Governor August 5, 2009. Filed with Secretary of State August 6, 2009.] legislative counsel's digest AB 83, Feuer. Torts: personal liability immunity. Existing law provides that any person who in good faith, and not for compensation, renders emergency medical care at the scene of an emergency shall not be liable for any civil damages resulting from any act or omission.

This bill would instead provide that medical, law enforcement, and emergency personnel who in good faith, and not for compensation, render emergency medical or nonmedical care at the scene of an emergency shall not be liable for any civil damages resulting from any act or omission. This bill would also provide that any person, not including medical, law enforcement, and emergency personnel, who in good faith, and not for compensation, renders emergency medical or nonmedical care or assistance at the scene of an emergency shall not be liable for any civil damages resulting from any act or omission, as long as that act or omission does not constitute gross negligence or willful or wanton misconduct.

This bill would declare that it is to take effect immediately as an urgency statute.

#### ***The people of the State of California do enact as follows:***

SECTION 1. Section 1799.102 of the Health and Safety Code is amended to read: 1799.102.

(a) No person who in good faith, and not for compensation, renders emergency medical or nonmedical care at the scene of an emergency shall be liable for any civil damages resulting from any act or omission. The scene of an emergency shall not include emergency departments and other places where medical care is usually offered. This subdivision applies only to the medical, law enforcement, and emergency personnel specified in this chapter.

(b) (1) It is the intent of the Legislature to encourage other individuals to volunteer, without compensation, to assist others in need during an emergency, while ensuring that those volunteers who provide care or assistance act responsibly.

(2) Except for those persons specified in subdivision (a), no person who in good faith, and not for compensation, renders emergency medical or nonmedical care or assistance at the scene of an emergency shall be liable for civil damages resulting from any act or omission other than an act or omission constituting gross negligence or willful or wanton misconduct. The scene of an emergency shall not include emergency departments and other places where medical care is usually offered. This subdivision shall not be construed to alter existing protections from liability for licensed medical or other personnel specified in subdivision (a) or any other law.

(c) Nothing in this section shall be construed to change any existing legal duties or obligations, nor does anything in this section in any way affect the provisions in Section 1714.5 of the Civil Code, as proposed to be amended by Senate Bill 39 of the 2009–10 Regular Session of the Legislature.

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(d) The amendments to this section made by the act adding subdivisions (b) and (c) shall apply exclusively to any legal action filed on or after the effective date of that act.

SEC. 2. This act is an urgency statute necessary for the immediate preservation of the public peace, health, or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting the necessity are: Because the state has long encouraged Californians to assist others facing danger in an emergency, and the ability to do so without fear of potential suit has been thrown into question by the recent California Supreme Court decision of Van Horn v. Watson, (2008) 45 Cal.4th 322, decided on December 18, 2008, this legislation clarifying the intent of the Legislature needs to go into effect immediately so as to avoid any confusion in this important area of the law.

## Tools In Our EmComm Toolbox

### Analog Modes

#### FM Voice (VHF / UHF)

FM Voice is used primarily in the VHF and UHF bands for short-distance simplex and service to local communities. All Amateurs with Technical class licenses or higher above are legally able to operate on any of the FM voice frequencies and modes 50 MHz. Refer to WKC Communications Chart (**Appendix L & M**)

#### SSB Voice (HF)

(Page 14) for frequency and schedules of the California Nets.

### Digital Modes

The SJV Section, in keeping with one of the goals of our hobby, endorses advancing new technologies and modes. It is strongly recommended that all DEC's and EC's in each area work with local clubs, independent groups and individual amateurs to establish any or all of these available modes to be used when needed in emergency situations and for the advancement of the hobby.

Digital modes are used on all frequencies to transmit data and/or voice using digital formats which have various digital properties such as FEC (Forward Error Correction) and Checksums to insure accurate and complete transmission of data. There are currently several modes of digital transmission which are sometimes used throughout the SJV Section:

#### WinLink 2K

WinLink 2000 (WL2K) is a system that utilizes Packet VHF/UHF and Pactor or Winmor on HF to seamlessly provide email exchange with any email address in the world WITHOUT the need for local internet connectivity. [Not available in Kern County.](#)

#### APRS®

Automated Position Reporting System (APRS) mode has been around a long time and is a very inexpensive mode that provides a big bang for the cost. It has great potential for daily events such as parades, bike events, and in an emergency. One of the advantages is the reduction of voice traffic that is provided visually.

#### D-Star

D-Star is an emerging digital transmission mode which is primarily focused on the 2-meter, 70-cm and 23-cm bands for voice and high-speed data. This mode has significant new capabilities that are of interest to ARES and the emergency management community that we serve. Specifically, the ability to transmit simultaneous voice-and-data without external interfaces is of primary interest, and the ability to connect to another area or location such as an EOC or between local command post or areas. This mode has the ability to transmit standardized forms such as the ICS-213 which is a NIMS standard. [Not available yet in Kern County.](#)

#### ECHOLINK

This is a digital VOIP tool used by some emergency organizations.

#### PSK31

Phase Shift Keying at 31 bit rate.

#### Packet

A form of packet switching technology used to transmit digital data via radio or wireless communications links.

## Drills and Training

### EMCOMM Training for First Responders

In an established policy with the CA OEM in Sacramento, it is required of the SJV Section to maintain a list of amateurs who have completed the required courses, availability, correct home address, contact information and drivers license number. The CA Database was created to provide a source for this and other data required immediately. The county governments who we support are required by FEMA to ensure all participants, employees and volunteers, be trained in the Incident Command System (ICS) and the National Incident Management System (NIMS) in order to receive reimbursement funding for and cost recovery. Consequently, deployable individuals at the State or Local level must take these training requirements seriously for both operational integration and cost recovery.

The on-line courses listed below are appropriate for ARES members to take to obtain certificates in order to be prepared to participate in modern EMCOMMs supporting Emergency Management Authorities (EMA). As a minimum, all ARES members should be familiar with ICS 100b and ICS 700A. DECs and ECs must develop and document requirements for ARES members' participation in local and District incidents. It should be coordinated with the appropriate Emergency Management Agencies.

The SJV ARRL Section requires ARES members complete these classes in order to meet the local requirements. ARES members being deployed outside the home ARES District, SJV Section, or outside the State of California, must have certification for ICS 100b, ICS 200b, ICS 700A, and ICS 800b.

### ON-LINE TRAINING COURSES

#### 1. ARRL Amateur Radio Emergency Communications Courses

Main link – <http://www.arrl.org/online-courses>

Course catalogue – <http://www.arrl.org/online-course-catalog>

##### **Introduction to Amateur Radio Emergency Communications (EC-001)**

This course has been revised and is from ARRL but the old version is on [www.w6lie.org](http://www.w6lie.org) under the EmComm Tab. The

two

Review Power Point programs are very good.

**Advanced Emergency Communications** (Combined L2 and L3 from before.) requires the Section Managers recommendation and approval for DECs and above. It will be available shortly in a revised version.

#### 2. National Incident Management System Courses – No cost

Main link – <http://training.fema.gov/is/crslst.asp>

IS-00100 - **Introduction to the Incident Command System (ICS 100)**

<http://training.fema.gov/EMIWeb/IS/IS100b.asp>

IS-00200 - **ICS for Single Resources and Initial Action Incidents (ICS 200)**

<http://training.fema.gov/emiweb/is/is200b.asp>

IS 00700 - **National Incident Management System (NIMS)** an Introduction

<http://training.fema.gov/emiweb/is/is700a.asp>

IS-00800 - **A National Response Plan (NRP,)** an Introduction (IS 800)

<http://training.fema.gov/emiweb/is/is800b.asp>

IS-00802 – **Emergency Support Function (ESF-2) - Communications**

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<http://training.fema.gov/emiweb/is/is802b.asp>

## Training Hams for Emergency Communications Preparedness **Rev. 10-10-11**

To be effective in this post 9/11 and post-Katrina world amateur radio Emergency Communications are being brought into the 21<sup>st</sup> Century. Not only does this require more sophisticated technology than the 1990s but also additional training and requirements for security reasons. The Department of Homeland Security (DHS,) FEMA, the American Red Cross, the ARRL, and a host of other organizations have proposed requirements for volunteer Hams. Training is required in two areas: (1) Ham Radio practices, and (2) Interfacing amateur radio operators working with Served Agencies and other communicators during incidents into the NIMS and ICS framework.

ARES member training is a multi-level structure based on an individual's desire to participate and their placement within the organization. Training is an essential element of emergency preparedness. All WKC ARES members are required, to the extent possible, to maintain the basic level training that begins with reading this Communications Plan and:

### **Basic level** for **Associate Members** consists of:

Weekly Net, Monday at 7:00 PM, on 145.150 (-) PL 100 & 146.910 (-) PL 100  
Events where ARES provides support communications for the public or a Served Agency. (The Neighborhood Ham Watch Program is staffed by Associate Members – See page 11)

Some subject matter presentations offered by the local radio clubs and other EmComm organizations. [Have a current ARRL Form fsd-98 on file with WKCARES.](#)

**Level One** requires satisfactory performance in Basic Level activity, training, and approval of a signed ARRL fsd 98 Application Form (available at [www.w6lie.org](http://www.w6lie.org) under Emergency Communications Tab). Additional documented training must be provided to show successful completion of the ARRL Emergency

Communications course Level One, or completing the review of that course, and completing of FEMA IS 100b Introduction to Incident Command System (ICS) and satisfactory participation in ARES, events and activations. **Rev. 10-10, 2011**

**Level Two** requires satisfactory performance in the Basic Level, Level One and Documented successful completion of FEMA ICS training courses IS200b, IS700a.

**(1)** Radio networking within the home county will be developed by the local ARES/RACES group. These will interface with other networks as outlined in the SJV Section Plan. Ham Radio Operating procedures will be developed by the local ARES/RACES group. Training will include net and message traffic handling procedures. Periodic drills at various levels of participation will be planned.

**(2)** At least minimum training in the basic concepts of the National Incident Management System (NIMS) is indicated for even the most casual participation (i.e. second operator at a city EOC, etc.). Operating from the County EOC, Served Agency site, shelter, Incident Command Post (ICP), etc, will likely require additional training in NIMS. Additionally more NIMS training may be required for those deploying outside the home District or the State. Whatever NIMS courses are required at any level of participation may be taken online for free (except ICS300 and 400). Where there is a sufficient number of local hams (10 or more) arrangements can usually be made for a formal classroom presentation for these courses. The basic introduction to NIMS class would take less than two hours in a classroom setting.



## **Appendix A – ARRL**

### **American Radio Relay League 225, Main Street Newington, CT 06111-1494**

#### **ARRL Divisions, Section, District and County**

The fifteen geographic Divisions of ARRL are arranged into 71 administrative sections, each headed by an elected Section Manager (SM). Within the 71 Sections there are over 2,200 Emergency Coordinators tasked with providing service to their local Emergency Managers, Served Agency partners, and communities.

California is divided between two ARRL Divisions. The ARRL Pacific Division has seven (7) Sections: State of Nevada, State of Hawaii, East Bay, Sacramento Valley, San Francisco, San Joaquin Valley, and Santa Clara Valley. The ARRL Southwest Division has five (5) Sections: State of Arizona, Los Angeles, San Diego, Orange, and Santa Barbara Sections.

The **San Joaquin Valley Section (SJV)** includes 12 counties in the central valley of California: Western Kern, Tulare, Kings, Fresno, Madera, Mariposa, Merced, Stanislaus, Tuolumne, Calaveras, San Joaquin, and Mono.

**Section Manager (SM)** Dan Pruitt, AE6SX

**Assistant Section Managers (ASM)** John Lee, K6YK and Bob Hervatine, N2NS

**Affiliated Club Coordinator (ACC)** Charles McConnell, W6DPD

**Section Emergency Coordinator (SEC)** Edward Hanna, KF6FIR

**District Emergency Coordinator (DEC)** Hal Clover, KC5LUB

**Western Kern County Emergency Coordinator (EC)** Dave Merritt, W7FYV

**Official Observer Coordinator (OOC)** Victor Magana, N1VM,

**Section Traffic Manager (STM)** Fred Silveira, K6RAU, (Page 15)

**Public Information Coordinator (PIC)** Craig Carter, K6QI

**Technical Coordinator (TC)** Dave Smith, W6TE.

## Appendix B

### WESTERN KERN COUNTY ARES/RACES DUTIES

#### **EMERGENCY COORDINATOR**

**The Emergency Coordinator (EC)** in addition to responsibilities outlined on page 7 the EC is also responsible for the all ARES/RACES activities in Western Kern County. The EC assures that personnel are trained and ready to respond to incidents occurring in Western Kern County, as well as the mobilization and dispatch of ARES/RACES personnel to other areas. The EC will check their e-mail at least once a day.

Mutual Aid assignments: - The EC is the local contact for all Served Agencies and any other Emergency Manager requesting assistance with communications or other assignments.

The Section Emergency Coordinator (SEC), usually on the recommendation of the District Emergency Coordinator (DEC), appoints the EC. The EC may appoint Assistant Emergency Coordinators (AEC's) to assist in the discharge of their duties.

#### **COMMAND STAFF**

**Liaison Officer:** The Liaison Officer is responsible for coordinating with representatives from cooperating and assisting agencies. The Liaison Officer maintains a good working relationship with the Emergency Services Manager for Kern County, VOAD and all Served Agencies. The Liaison Officer keeps the EC informed of specific group needs, and assists the EC with any other assigned duties as required. The Liaison Officer will check their e-mail at least once a day.

**Public Information Officer (PIO):** Vacant at this time.

**Safety/Weather Officer:** The Safety/Weather Officer monitors the overall safety of the ARES/RACES operation and in addition functions as the *Weather and Training Officer*. The position is responsible for keeping Command and General Staff informed of overall safety concerns including weather conditions during an operational period. As Weather Officer monitors local NOAA broadcast radio as well as other media or activity and determines what precautions ARES/RACES personnel need to take while setting up and/or operating their field stations. The Safety Officer will immediately inform the EC and other staff of any sudden safety or weather change that could create a hazard for ARES/RACES personnel responding to, or deployed, on an incident. The Safety Officer has a collateral function as *Training Officer*. The training function includes assessment of training needs, requested training, and review of lesson plans to ensure consistency and interoperability among the various groups in Western Kern County. The Safety/Weather Officer will check their e-mail at least once a day.

#### **GENERAL STAFF**

##### **ASSISTANT EMERGENCY COORDINATORS**

**Assistant Emergency Coordinators (AEC):** Are appointed by the EC, with the approval of the KARSEN Planning Group, to assist the EC in various assignments and administrative duties. An AEC's may fill in for the EC when absent. All AEC's will check their e-mail at least once a day. The EC may appoint as many AEC's as deemed appropriate to coordinate activity.

The **Operations Officer (AEC)** may fill for the EC during the EC's absence, keeps the EC briefed on all activities and assists the EC with ARES administrative and field operations. The Operations Officer is authorized to activate the ARES/RACES organization at the request of Kern County OES. The Operations Officer keeps the EC informed of all tactical decision, strategy decisions, and operation of the various Nets and Sub-Nets. The Operations Officer must be reasonably ready to respond and is a member of the KARSEN Planning Group. The Operations Officer assures Incident Action Plans are prepared and all operational duties are carried out during incidents. This position also keeps the records of all Nets, forwards those records to the Administrative Officer, and assists the EC with any other assignments as required. The Operations Officer is responsible for the training and assignment of ARES/RACES members who perform Area Control Station (ACS) or Net Control Station (NCS) duties. The Operations Officer assures all ACS and NCS operators are provided with a current schedule, net roster, preamble and other related paperwork. The Operations Officer keeps the EC, Safety/Weather Officer and Liaison Officer informed about net participation and training needs. This position is also responsible for keeping the EC, Command Staff, and General Staff up to date on the needs and activities of the groups in their area. The Operations Officer must check their e-mail at least once a day.

The **Planning Officer** is the Chairperson of the KARSEN Planning Group. The Planning Officer is responsible for calling meetings and setting the agenda for the KARSEN Planning Group. The Planning Officer is responsible for monitoring all activity proposed or underway in Western Kern County and conducting planning meetings, preparing Incident Action Plans, status reports, resource demobilization plans, VOAD and such other duties as required with the approval of the EC. This position is also responsible for keeping the EC, Command Staff, and General Staff up to date on the needs and activities of the groups comprising KARSEN. The Planning Officer must check their e-mail at least once a day.

The **Logistics Officer** is responsible for keeping a database of all specialized amateur radio equipment available for use in the field regardless of ownership. Any specialty equipment belonging to the government, Served Agency club or other organization will be included in the inventory if it's going to be made available in an emergency. The Logistics Officer assures that equipment is available during an incident. The Logistics Officer keeps detailed records of: deployment of this equipment, recovery of the equipment after deployment, as well as the condition of the equipment upon deployment and after recovery. The Operations Officer, Logistics Officer, Planning Officer and EC work together to decide what equipment and training are needed for the assignment, and determine who is qualified for assignment to which equipment. The Logistics Officer is also responsible for keeping the EC, Command Staff, and General Staff up to date on the needs and activities of the groups in their area and keeps them informed regarding the resources available. The Logistics Officer assists the EC with any other assigned duties as required. The Logistics Officer must check their e-mail at least once a day.

The **Administrative Officer** keeps, maintains, and develop accurate and timely records of ARES/RACES membership information, training levels, training certificates, call-out lists, planning meeting records, and assures the ARES/RACES Personnel Data is updated as needed. The Administrative Officer also ensures that software used in ARES/RACES is, within reason, available free of charge from credible on-line sources. With the approval of the EC the Administrative Officer maintains all member information, and prepares and distributes updated rosters as needed. The Administrative Officer assures that the EC, Command Staff, and General Staff have up to date rosters of personnel and their training levels, and telephone lists necessary to contact Served Agencies, Emergency Managers and other groups. The Administrative Officer makes recommendations to the KARSEN Planning Group on training and arranges training sessions, sites and equipment. The Administrative Officer prepares the monthly ARRL fsd 212 Report for the EC's signature in accordance with the due date schedule. The Administrative Officer assists the EC, Command Staff and General Staff in a support role and such other duties as required. The Administrative Officer must check their e-mail at least once a day.

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**AEC West** may fill in for the EC and is responsible for Greater Bakersfield (KCCVARC), ERC, and SATERN Groups. AEC West is a member of the KARSEN Planning Group and may activate the ARES/RACES organization in their area at the request of Kern County OES. The AEC East shall immediately inform the EC and Operations Officer if such activation is requested. AEC West makes recommendations to the KARSEN Planning Group. This area extends from the mouth of the Kern River Canyon along the foothills to the western boundary of Kern County. AEC West will maintain a friendly liaison with KCCVARC, ERC and SATERN and will assist with coordination, training needs, and activity in those areas. This position is also responsible for keeping the EC, Command Staff, and General Staff up to date on the needs and activities of the groups in their area. The AEC West must check their e-mail at least once a day.

**AEC East** may fill in for the EC and is responsible for the Kern River Valley (SARG), Tehachapi, and Bear Valley groups and maintaining liaison with the Eastern Kern County EC. AEC East may activate the WKC ARES/RACES organization to support any group in their area at the request of Kern County OES. The AEC East shall immediately inform the EC and Operations Officer if such activation is requested. AEC East is a member of, and makes recommendations to the KARSEN Planning Group. This area extends east from the mouth of the Kern River Canyon along the foothills to approximately the Pacific Crest Trail. AEC East will maintain a friendly liaison with the EC for the Eastern Kern County area and will assist with coordination, training needs, and activity in those areas. This position is also responsible for keeping the EC, Command Staff, and General Staff up to date on the needs and activities of the groups in their area. The AEC East must check their e-mail at least once a day.

## Appendix C

### DEFINITIONS

- ADEC** – Assistant District Emergency Coordinator. ADECs are field appointed ARRL positions by the DEC and require approval from the SEC and SM.
- ACS** – Area Control Station. Acts as a control point for a smaller geographic area using simplex.
- AEC** – Assistant Emergency Coordinator. Appointed by local EC with approval of DEC.
- APRS®** – Automatic Packet Reporting System – A digital system that transmits and displays data on maps on computer screens. Highly effective as a parallel to voice circuits.
- ARES®** – ARES and Amateur Radio Emergency Service are registered service marks of the American Radio Relay League, Incorporated, and are used by permission.
- Administrative communications** support network and incident management purposes.
- CA EOC** – State of California Emergency Operations Center in Sacramento
- CAOEM** – California Office of Emergency management.
- CEM** – County Emergency Manager or County Emergency Management
- Check-IN** – When checking in on a net give the NCS your call sign and your status – (See Status)
- Check-OUT** – Don't leave a net in progress after checking in without advising the NCS.
- Communications emergency** as defined the FCC occurs when normal communications systems are disrupted in a specified area.
- County** – Any geographical jurisdiction assigned to an EC. A county.
- County Warning Point** – A county public safety site, such as a Sheriffs dispatch office that functions 24 hours a day. It is a principal contact point for the State Warning Point.
- DEC** – District Emergency Coordinator, an ARRL field appointment in charge of activities in a cluster of counties comprising a District.
- Disaster** –The ARRL and the American Red Cross define a disaster as: "...an occurrence such as a hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, earthquake, volcanic eruption, drought, blizzard, pestilence, famine, fire, explosion, building collapse, transportation accident, or other situation that causes human suffering or creates human needs that the victims cannot alleviate without assistance."
- Distress traffic** – Any traffic relating to an acute, immediate threat to human safety or property; i.e., SOS, MAYDAY, or EMERGENCY traffic.
- District** – Two or more counties, or portions of counties assigned to a DEC.
- Division** – For ARRL purposes there are 15 Divisions nationwide. Western Kern County is in the Pacific Division, San Joaquin Valley Section. See also Section.
- EC** – Emergency Coordinator. An ARRL field appointee who supervises emergency planning and operations in a specified geographical area. Reports to the DEC.
- EMA** - Emergency Management Agency
- Email** – Electronic messages exchanged over the Internet or local computer network.
- Emergency** – any situation in which human life or property is threatened. The emergency ceases when relief agencies have no further need for our services. (See Disaster)
- Emergency Net** – A group of Amateurs using the same frequency and associated side frequencies to support emergency relief measures.
- EOC** – Emergency Operating Center; an emergency logistical and communication headquarters.
- ESF** – Emergency Support Function. Each of the 16 ESF's is a group of people in an EOC dealing with specific kinds of problems.
- FEMA** – Federal Emergency Management Agency "Formal traffic" – is written using a designated message form. It is used when Amateur Radio operators relay information between third parties.
- FCAT** - Forward Command Assistance Team – A forward deployment management team that travels into an incident area where AREC members are affected by a high impact event that produces trauma.
- Formal Traffic** is formatted in a standard message format and transferred between two ham radio stations over Ham radio frequencies or using electronic means such as e-mail or FAX.

- GATEway** Stations – The GATEway network is comprised of selected HF voice stations that also have access to local VHF/UHF voice networks. Fixed stations providing liaison between two nets.
- GPS** – Global Positioning System
- HAZMAT** – Hazardous Materials
- Informal communications** – Radio exchanges between two people not requiring verbatim relay to any third party. Classified as non-traffic, not handled on emergency nets.
- Last mile** - describes the area in the heart of a disaster that is totally or partially cut off from established communication infrastructure.
- Level I – *Maximum*** level of activation in the Western Kern County Plan.
- Level II – *Partial*** activation.
- Level III – *Monitoring*** Phase notice to members to prepare for deployment on very short notice.
- LGL** – Local Government Liaison is an appointment made by the State Government Liaison (SGL) for any specific task.
- MARS** – Military Auxilliary Radio Station (May be Army, Navy/Marine Corps or Air Force)
- MOU** – Memorandum of Understanding: Also known as an SOU Statement of Understanding. A non-binding written document outlining what the ARES will do for a Served Agency and what the Served Agency will do for ARES.
- NM** – Net Manager
- NOAA** – National Oceanic and Atmospheric Administration – Home agency for the National Weather Service
- NCS** - Net Control Station. Functions a net control for a wide area or is function specific.
- NTS** – National Traffic System
- NWS** – National Weather Service. See also SkyWarn.
- RACES** – Radio Amateur Civil Emergency Service – RACES organizations, where they exist in California; operate at the County level under direct control of the County Emergency Management Director.
- Record Traffic** is Formal Traffic in which the information is sent or received on behalf of a non-ham radio licensed “third party. ” Third parties include individuals, EMA’s and served agencies.
- Section** – Administrative unit headed by elected Section Manager (SM). California has 9 Sections 5 are part of SJV Section: East Bay, Sacramento Valley, San Francisco, San Joaquin Valley, Santa Clara Valley. *Note – **Eastern Kern County and the County of Inyo** are part of the **Southwestern Division** of ARRL consisting of the State of Arizona, and the Los Angeles, Orange, San Diego, and Santa Barbara Sections.*
- SEC** – Section Emergency Coordinator – ARRL appointed field position by the SM. Official responsible for all emergency communications activities within a section.  
Secondary Net – A communications channel associated with the primary emergency net used for traffic handling and other time-consuming net business.
- Self-Dispatch** – Going out on your own without approval or prior permission – “lone wolf”.
- Service Information** – Handling notes attached to a message form.
- Service Message** – Radiogram relating to handling of another message.
- SET** – Simulated Emergency Test.
- SGL** – State Government Liaison is an ARRL field appointment made by the Section Manager. The role is that of interface between amateur radio and all facets of state government.
- Side Frequency** – Secondary Net
- SITREP** – Situation Report – message reporting status of emergency related activities.
- SOU** – Statement of Understanding, See MOU
- SM** – Section Manager – the elected head of an ARRL Section.
- Stand Down** – Notifying status allowing officials at their discretion to shut down operations when they complete their emergency related duties.

- Status** – When checking IN on a net you should inform the NCS of your status. There are only three statuses: ASSIGNED = you have an assignment already and state what it is;  
AVAILABLE = Your family is provided for and you are staged and ready to go within 1 hour;  
OUT OF SERVICE = Your family is not safe and you unable to respond in less than 1 hour.
- STM** – Section Traffic Manager
- SWO** – State Watch Office – Communications center at CAOES. Operates 24 hours a day, every day.
- SWOAS** – State Watch Office Amateur Station – An amateur station located at the State Watch Office in the State Emergency Operations Center in Sacramento. It is activated by the CAOES Operations Officer when needed. It is staffed by amateurs recruited by the LGL who has that role, and serves the roles given to it by the CAOES Operations Officer. Usually that will include receiving input from the GATEway stations, including SITREP's and the SEC's and transmitting traffic for particular county Emergency Managers from the CAOES. It will NOT usually include receiving or transmitting messages to individual amateurs unless they are serving County Emergency Managers or SEC's.
- Tactical Traffic** – Spoken instructions or consultation on the air. No third party communication occurs.
- Tracking Number** - A number issued by the CAEOC for each restoration activity.
- Traffic** – Any exchange of information between two or more Amateur Radio stations.
- Traffic Log** – A Log of Incoming/Outgoing Traffic at an Amateur station. See **Appendix K, K.1, or K.2**