Yolo County Amateur Radio Emergency Services
Emergency Communications Plan

Mission Statement

The principal mission of the Yolo County Amateur Radio Emergency Services (hereafter, Yolo County ARES) group is to provide emergency communications for the communities within the County of Yolo when called upon.

Statement of Purpose

In Section 97.1 of the Amateur Radio Service rules, the FCC describes the fundamental purpose of the Amateur Service, which includes these five principals:

1. Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications.
2. Continuation and extension of the amateur’s proven ability to contribute to the advancement of the radio art.
3. Encouragement and improvement of the amateur radio service through rules which provide for advancing skills in both the communications and technical phases of the art.
4. Expansion of the existing reservoir within the amateur radio service of trained operators, technicians and electronics experts.
5. Continuation and extension of the amateur’s unique ability to enhance international goodwill.
Emergency Communications Plan

The Emergency Communications Plan of Yolo County ARES endorses and promotes all of the above statements listed in the Statement of Purpose. The Emergency Communications Plan also addresses the role of Yolo County ARES activities in potential emergency situations, and with the various government and nongovernment agencies which may request its services. It will establish emergency response for Yolo County ARES members to follow depending on the type of emergency, and the agency being served.

Most important, this emergency plan is an ever-evolving guide for Yolo County ARES members to follow in emergency situations. Since each situation is unique, flexibility to provide an adequate response to each is a necessity.

The members of Yolo County ARES are to conduct periodic drills, training and other instruction to ensure readiness in implementing the Yolo County ARES Emergency Response Plan.

Description of Yolo County ARES

1. Yolo County ARES is comprised of FCC licensed amateur radio operators who have voluntarily registered their capabilities and equipment for public communications duty.

2. Yolo County ARES operates under federal regulations, which state that amateur radio public service is to be rendered without compensation of any kind.

3. A goal of Yolo County ARES is to provide trained amateur radio operators for emergency communications for civilian, government and general public under the guidance of the Yolo County ARES Emergency Coordinator (EC) and leadership team.

4. Yolo County ARES seeks to develop and maintain cooperative relationships with the: Yolo County office of the American Red Cross’s Capitol Region Chapter (hereafter, Yolo Red Cross); Yolo County Office of Emergency Services (hereafter, Yolo County OES); Yolo County Sheriff’s Department; the California Department of Forestry and Fire Protection (hereafter, CAL FIRE); Woodland Healthcare clinic and hospital; and with volunteer units that work with these agencies (see Appendix A).
5. Yolo County ARES, under existing agreements of understanding between the American Radio Relay League (ARRL) Sacramento Valley Section and the Yolo Red Cross, will provide emergency communications services for Yolo Red Cross.

6. Yolo County ARES has established a base station located within Yolo Red Cross. This base station may be used by the appointed Net Control Operator for an emergency response.

7. Yolo County ARES uses the amateur radio repeater, KE6YUV, located on Berryessa Peak in Yolo County, as its primary repeater. Yolo County ARES also uses the amateur radio repeater, N6QDY, located on Bald Mtn. in Yolo County, as its secondary repeater. A third amateur radio repeater, K6JRB, located on the campus of the University of California, Davis, may be used as well. All of these facilities are for emergency preparedness nets, training, drills, and emergency situations. The operating frequencies for the repeaters are listed in Appendix B, Band Plan.

8. Activating the Emergency Response Plan

8.1. In the event of an emergency in Yolo County, Yolo County ARES can be notified by a private or public service agency, by a member of Yolo County ARES or other amateur radio operator. The EC or Assistant Emergency Coordinator (hereafter, AEC) should be notified by radio or telephone as soon as possible.

8.2. Once an emergency or potential emergency condition has been identified, the EC, AEC, or designated Net Control Station (hereafter, NCS), will contact Yolo County team members by email and/or phone. Throughout this call up period, the NCS will announce the appropriate emergency level over the primary repeater. All team members will standby and monitor the repeater. If indicated, a roll call will be conducted.

9. Mobilization Procedure

9.1. Upon awareness or notification of an incident requiring emergency communications, members of Yolo County ARES will monitor the primary repeater and be ready to check in when called upon by the NCS. In the event that the primary repeater is not available, Yolo County ARES members are to monitor the simplex frequency of the repeater along with monitoring the secondary repeater.

The high frequency (hereafter, HF) bands of 75M phone frequency of 3.987 MHz, will also be used for communicating outside the range of the repeaters.
The alternate 40M emergency frequency of 7.230 MHz, may also be used. If ARES teams throughout the Sacramento Valley Section use these listed HF frequencies, the designated NCS of Yolo County ARES is to move up or down the band approximately 10 kHz or more to find an open frequency.

9.2. The EC or AEC in charge may assume net control, or he or she may assign a Net Control Station operator. The NCS usually shall not be located in the area affected by the emergency. The Yolo ARES NCS may be located at Yolo Red Cross, the Yolo County Fairgrounds, a member’s home station, or a mobile communications van.

9.3. Yolo County ARES may activate an Emergency Control Center of Yolo County ARES team members when appropriate, for wide-scale emergencies. The designated site of the Emergency Control Center is Yolo Red Cross, located in the City of Woodland. Wide-scale emergencies may require assistance from operators outside Yolo County, on a mutual assistance basis to ensure adequate staffing. All requests for outside assistance must go through the EC and/or the Section Emergency Coordinator (hereafter, SEC).

9.4. When an emergency exists outside of Yolo County, the EC may ask for volunteer Yolo County ARES team members to standby and be available to respond if and when requested by another EC or official agency. However, adequate coverage for Yolo County must be maintained at all times during an emergency.

10. Duties of the Net Control Station

10.1 Initial duties of the NCS will be to develop a roster of available ARES members and coordinate the assignment of these operators with the EC or AEC in charge.

10.2 The NCS will maintain a list of assignments and establish shifts of no greater than twelve hours in duration.

10.3 The NCS will also develop and maintain a list of amateur radio operators who are not registered ARES, but who volunteer their assistance. Assignments from this list will be coordinated with the EC or AEC, after a brief orientation and proper registration.

10.4 Liaison station will be assigned to the following repeaters (see Appendix B):

10.4.1 Within Yolo County (required):
10.4.1.1 The Berryessa Amateur Radio Klub’s (hereafter, BARK), KE6YUV repeater.
10.4.1.2 The Valley Emergency Repeater Association’s (hereafter, VERA), N6QDY repeater.
10.4.1.3 The UC Davis Amateur Radio Club’s (hereafter, UCDARC), K6JRB repeater.
10.5 Outside of Yolo County (if required):
   10.5.1 Sacramento Amateur Radio Club’s (hereafter Sacramento ARC), W6AK repeater.
   10.5.2 Sacramento ARES’, N6ICW repeater.
   10.5.3 Sacramento Valley ARES’, WD6AXM repeater.

10.6 The NCS will maintain on-the-air discipline to ensure efficient and effective operations.

10.7 Tactical call signs will be used to denote location or function to facilitate communications. To conform to FCC rules and regulations, FCC assigned call signs need only be used at the end of each communication and at least every ten minutes during a communication.

10.8 The NCS operator(s), assistance NCS, or an assigned monitor will establish and maintain the Incident Radio Communication Plan for the duration of the emergency (see Appendix C), and maintain a log of all radio traffic and incidences which will serve as a permanent record of the emergency.

10.9 If communications cannot be maintained due to poor propagation or signal strength, the NCS will assign relays at suitable locations to be determined by the nature and extent of the emergency.

11 Operations

11.1 Stations will normally direct all communications through NCS except when traffic is classified as an emergency. The use of good judgment determining what constitutes an emergency is essential.

11.2 Formal message traffic should be in writing and signed by the originating official to ensure authenticity and accuracy.

11.3 Message handling, precedence and form will be according to General Message Form ICS 213 (see Appendix D). The protocol for Yolo County ARES is to use plain language in all communication conducted on its assigned VHF frequencies. Communications conduct on the HF frequencies will use the “Q” system as described in Appendix E.

11.4 Formal message traffic should always be in standard form, and numbered consecutively by the originating station.
11.5 Digital modes may be preferred for high volume point-to-point communications between network hubs and as part of an integrated all-mode network.

12 ARES mutual assistance frequencies for the Sacramento Valley Section.

12.1 For inter-county command and control communications, mutual aid, and administrative purposes; whether it be operations, or (more likely) logistical, the information listed below are designated for use by ARES leaders, official emergency stations, and other appropriate emergency communications traffic. (See Appendix F for additional information.)

12.2 For local/on-scene, tactical, and all routine and welfare traffic, please make your contact and move to another frequency when possible. Use simplex whenever possible. Appendix F shows mutual assistance frequencies for ARES.

13 Drills, Tests, and Training

13.1 The Yolo County ARES Net meets, on the air, every Monday evening at 2000hrs (8pm), local time, on the KE6YUV repeater. This repeater is available to Yolo County ARES for the dissemination of information such as bulletins, drill announcements, tests, training, and actual emergencies.

13.2 Yolo County ARES meets monthly for a meeting of members and/or training. The meetings are every third Tuesday of each month and starts at 1900hrs (7pm), local time, at the Yolo Red Cross in the City of Woodland.

13.3 The EC or a designated AEC may activate an unannounced drill, test, or simulated call up to test readiness.

13.4 Training functions may include participation in local public service events and other activities that improve skills in communication, organization, operating discipline and judgment; and formal meetings, classes, drills, and training sessions.

13.5 Yolo County ARES strongly encourages participation in public service events to both provide service to communities and to allow members to gain operating experience.
14 Emergency condition nomenclature.

14.1 Levels

14.1.1 Level One – All Clear. No potential or actual emergency conditions that may require Yolo ARES operations have been identified.

14.1.2 Level Two – A potential emergency activation may occur in Yolo County or elsewhere. Standby and prepare for possible activation.

14.1.3 Level Three – An emergency or disaster exists. A Net has been activated. Monitor the Net frequency for further instruction.

14.2 Watches and warnings.

14.2.1 Severe Thunderstorm Watch – A severe thunderstorm watch will be issued when conditions are favorable for development of severe thunderstorms. Standby and prepare for possible activation.

14.2.2 Severe Thunderstorm Warning – A severe thunderstorm warning is issued when severe thunderstorms are occurring and have been spotted or detected by weather radar. The National Weather Service of Sacramento (hereafter, NWS), defines a severe thunderstorm as having winds 50kts (58MPH) or hail greater than ¾” in diameter. A Net may be activated. Monitor the Net frequency for further instructions.

14.2.3 Red Flag Fire Watch/Red Flag Watch – A hazardous condition issued by the NWS equivalent to a Level Two emergency and implemented by CAL FIRE. All ARES/VIP Volunteers standby for possible activation.

14.2.4 Red Flag Fire Warning/Red Flag Warning – Same as Red Flag Watch above, but red flag patrols and lookouts will be activated at the discretion of CAL FIRE.
APPENDIX A

Served Agencies

American Red Cross Sacramento-Yolo/Lake Chapter
120 Court Street
Woodland, CA 95695
(530) 662-4669

California Forestry and Fire Protection District
Brooks Fire Station
14023 State Route 16
Brooks, CA
(530) 796-3506

City of Davis Fire Department
Main Fire station
1818 5th Street
Davis, California 95616
(530) 765-3400

University of California, Davis Campus
Emergency Operations Communication
279 Hoagland Hall
1 Shields Ave
Davis, CA 95616
(530) 754-2559 office
Woodland Health Care and Clinic
1325 Cottonwood Street
Woodland, CA 95695
(530) 669-5308

Yolo County Emergency Communications
Yolo County Office of Emergency Services
120 West Main Street, Suite E
Woodland, CA 95695
(530) 666-8920

Yolo County Sheriff
2500 Gibson Road
Woodland, CA 95695
(530) 668-5287
Appendix B

Yolo County ARES Band Plan
Approved: March, 2012

Primary Repeater Frequencies

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>NAME</th>
<th>FREQUENCY</th>
<th>OFFSET</th>
<th>PL/CTCSS</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>R1BARK</td>
<td>146.9700  MHz</td>
<td>Negative (-)</td>
<td>123.0 Hz (T Sql or Encode/Decode)</td>
<td>BARK, KE6YUV</td>
</tr>
<tr>
<td>1st Backup</td>
<td>R2VERA</td>
<td>147.2550 MHz</td>
<td>Positive (+)</td>
<td>123.0 Hz (Tone or Encode Only)</td>
<td>VERA, N6QDY</td>
</tr>
<tr>
<td>2nd Backup</td>
<td>R3UCD</td>
<td>145.4500 MHz</td>
<td>Negative (-)</td>
<td>203.5 Hz (T Sql or Encode/Decode)</td>
<td>UC Davis ARC, K6JRB</td>
</tr>
</tbody>
</table>

Primary Simplex Frequencies

<table>
<thead>
<tr>
<th>NAME</th>
<th>FREQUENCY</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARES1</td>
<td>147.5100 MHz</td>
<td>Yolo County ARES Local, On-Scene Frequency</td>
</tr>
<tr>
<td>ARES2</td>
<td>147.5400 MHz</td>
<td>Yolo County ARES Local, On-Scene Frequency</td>
</tr>
<tr>
<td>ARES3</td>
<td>445.9150 MHz</td>
<td>Yolo County ARES Local, On-Scene Frequency</td>
</tr>
<tr>
<td>ARES4</td>
<td>445.1800 MHz</td>
<td>Yolo County ARES Local, On-Scene Frequency</td>
</tr>
<tr>
<td>RED</td>
<td>147.4200 MHz</td>
<td>Unofficial American Red Cross Simplex Frequency</td>
</tr>
<tr>
<td>CALL2</td>
<td>146.5200 MHz</td>
<td>National VHF Calling and Wilderness Frequency</td>
</tr>
<tr>
<td>CALL7</td>
<td>446.0000 MHz</td>
<td>National UFH Calling and Wilderness Frequency</td>
</tr>
</tbody>
</table>

Secondary Simplex Frequencies

<table>
<thead>
<tr>
<th>NAME</th>
<th>FREQUENCY</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALL6</td>
<td>52.5250 MHz</td>
<td>National HF FM Calling and Wilderness Frequency</td>
</tr>
<tr>
<td>CAL6A</td>
<td>50.4000 MHz</td>
<td>National HF AM Calling and Wilderness Frequency</td>
</tr>
<tr>
<td>ARES5</td>
<td>51.5400 MHz</td>
<td>Yolo County ARES Local, On-Scene Frequency</td>
</tr>
<tr>
<td>ARES6</td>
<td>51.5600 MHz</td>
<td>Yolo County ARES Local, On-Scene Frequency</td>
</tr>
</tbody>
</table>
APPENDIX C

<table>
<thead>
<tr>
<th>Incident Radio Communication Plan</th>
<th>1. Incident Name</th>
<th>2. Date/Time Prepared</th>
<th>3. Name of Preparer</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Basic Radio Channel Utilization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Repeaters</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary, 2 meters</td>
<td>146.970 MHz</td>
<td>-PL123.0</td>
<td></td>
</tr>
<tr>
<td>Liaison, 2 Sac Area</td>
<td>147.195 MHz</td>
<td>-PL123.0</td>
<td></td>
</tr>
<tr>
<td>Liaison, 2 M Sac Area</td>
<td>146.910 MHz</td>
<td>-PL100.0</td>
<td></td>
</tr>
<tr>
<td>Liaison, 2 m Yuba/Sutter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Simplex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary, 2 meters</td>
<td>146.550 MHz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Cross/ARES Freq.</td>
<td>147.420 MHz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UC Davis/ARES</td>
<td>146.475 MHz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARES Calling Freq.</td>
<td>146.550 MHz</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX D

General Message (ICS FORM 213-0S)

Purpose. The General Message is used by:
- Incident personnel to record incoming messages which cannot be orally transmitted to the intended recipients;
- Command Post and other incident personnel to transmit messages to the Incident Communications Center for transmission via radio or telephone to the addressee;
- Incident personnel to send any message or notification to incident personnel which requires a hard-copy delivery;
- Incident personnel to place resource orders.

Preparation. This form is prepared by any incident personnel needing to transmit a hard-copy message. The recipient should send a timely reply to the originator, as necessary.

Distribution. Upon completion, the General Message may be hand-carried to the addressee or to the incident Communications Center for transmission. Originator retains a copy of the form. All completed original forms MUST be given to the Documentation Unit.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item Title</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Incident Name</td>
<td>Enter the name assigned to the incident.</td>
</tr>
<tr>
<td>2.</td>
<td>Date and Time of Message</td>
<td>Enter the date and time of message origination.</td>
</tr>
<tr>
<td>3.</td>
<td>To</td>
<td>Enter name and ICS position of message recipient.</td>
</tr>
<tr>
<td>4.</td>
<td>From</td>
<td>Enter name and ICS position of message sender.</td>
</tr>
<tr>
<td>5.</td>
<td>Subject</td>
<td>Indicate the message subject.</td>
</tr>
<tr>
<td>7.</td>
<td>Reply</td>
<td>This section to be used by the unit/person who receives the message to reply to your message.</td>
</tr>
<tr>
<td>8.</td>
<td>Signature/Position Date/Time of reply</td>
<td>Enter name and position of person replying to this message. Enter date (month, day, year) and time of reply (24-hour clock).</td>
</tr>
</tbody>
</table>
ICS-23 (ARES VERSION)

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>PRECEDENCE (CIRCLE ONE)</th>
<th>FROM STATION</th>
<th>CHECK</th>
<th>PLACE OF ORIGIN</th>
<th>TIME FILED</th>
<th>DATE FILED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EMERGENCY Priority H&amp;W Routine</td>
<td></td>
<td></td>
<td></td>
<td>:</td>
<td>/ /</td>
</tr>
</tbody>
</table>

INCIDENT NAME (optional):

TO: 
POSITION: 

FROM: 
POSITION: 

SUBJECT:

MESSAGE BODY:

| 5  | 10  | 15  | 20  | 25  | 30  | 35  | 40  | 45  |

RECEIVED FROM: Print name
INITIALS: POSITION: 

RECEIVED BY: (Call sign) RECEIVED TIME: RECEIVED DATE: 

REPLY

<table>
<thead>
<tr>
<th>MESSAGE NUMBER</th>
<th>FROM STATION</th>
<th>CHECK</th>
<th>PLACE OF ORIGIN</th>
<th>TIME FILED</th>
<th>DATE FILED</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Message number above)</td>
<td></td>
<td></td>
<td></td>
<td>:</td>
<td>/ /</td>
</tr>
</tbody>
</table>

| 5  | 10  | 15  | 20  | 25  | 30  |

RECEIVED FROM: Print name
INITIALS: POSITION: 

RECEIVED BY: (Call sign) RECEIVED TIME: RECEIVED DATE: 

ICS-23 Compliant Amateur Radio Message Form — Yolo County ARES 03/13/12

14
APPENDIX E
ARRL QN Signals For CW Net Use

QNA* Answer in prearranged order.

QNB* Act as relay Between _____ and _____

QNC All net stations Copy. I have a message for all net stations.

QND* Net is Directed (controlled by net control station).

QNE* Entire net stand by.

QNF Net is Free (not controlled).

QNG Take over as net control station.

QNH Your net frequency is High.

QNI Net stations report In.*.

I am reporting into the net. (Follow with a list of traffic or QRU).

QNJ Can you copy me?

Can you copy _____?

QNK* Transmit message for _____ to _____

QNL Your net frequency is Low.

QNM* You are QRMing the net. Stand by.

QNN Net control station is _____

What station has net control?

QNO Station is leaving the net.

QNP Unable to copy you. Unable to copy _____

QNQ* Move frequency to _____ and wait for _____ to finish handling traffic. Then send him traffic for _____

QNR Answer _____ and Receive traffic.

QNS* Following Stations are in the net. *(Follow with list.)
Request list of stations in the net.

**QNT**  I request permission to leave the net for _____ minutes.

**QNU**  The net has traffic for you. Stand by.

**QNV**  Establish contact with _____ on this frequency. If successful, move to _____ and send him traffic for _____

**QNW**  How do I route messages for _____?

**QNX**  You are excused from the net.* Request to be excused from the net.

**QNY**  Shift to another frequency (or to _____ kHz) to clear traffic with _____

**QNZ**  Zero beat your signal with mine.

---

* For use only by the Net Control Station.

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**Notes on Use of QN Signals**

The QN signals listed above are special ARRL signals for use in amateur CW nets only. They are not for use in casual amateur conversation. Other meanings that may be used in other services do not apply. Do not use QN signals on phone nets. Say it with words. QN signals need not be followed by a question mark, even though the meaning may be interrogatory.

---

**International Q Signals**

A Q signal followed by a ? asks a question. A Q signal without the ? answers the question affirmatively, unless otherwise indicated.

**QRA**  What is the name of your station?

**QRG**  What's my exact frequency?

**QRH**  Does my frequency vary?

**QRI**  How is my tone? (1-3)
QRK  What is my signal intelligibility? (1-5)
QRL  Are you busy?
QRM  Is my transmission being interfered with?
QRN  Are you troubled by static?
QRO  Shall I increase transmitter power?
QRP  Shall I decrease transmitter power?
QRQ  Shall I send faster?
QRS  Shall I send slower?
QRT  Shall I stop sending?
QRU  Have you anything for me? (Answer in negative)
QRV  Are you ready?
QRW  Shall I tell _____ you’re calling him?
QRX  When will you call again?
QRZ  Who is calling me?
QSA  What is my signal strength? (1-5)
QSB  Are my signals fading?
QSD  Is my keying defective?
QSG  Shall I send _____ messages at a time?
QSK  Can you work break-in?
QSL  Can you acknowledge receipt?
QSM  Shall I repeat the last message sent?
QSO  Can you communicate with _____ direct?
QSP  Will you relay to _____?
QSV  Shall I send a series of V’s?
QSW  Will you transmit on _____?
QSX  Will you listen for _____ on _____?
QSY  Shall I change frequency?
QSZ  Shall I send each word/group more than once? (Answer, send twice or _____)
QTA  Shall I cancel number _____?
QTB  Do you agree with my word count? (Answer negative)
QTC  How many messages have you to send?
QTH  What is your location?
QTR  What is your time?
QTV  Shall I stand guard for you _____?
QTX  Will you keep your station open for further communication with me?
QUA  Have you news of _____?

Abbreviations, Prosings, Prowords

CW  PHONE (meaning or purpose)
AA  (Separation between parts of address or signature.).
AA  All after (use to get fills).
AB  An before (used to get fills).
ADEE  Addressee (name of person to whom message addressed).
ADR  Address (second part of message).
AR  End of message (end of record copy).
ARL  (Used with "check," indicates use of ARRL numbered message in text).
AS  Stand by; wait.
B  More (another message to follow).
BK  Break; break me; break-in (interrupt transmission on CW. Quick check on phone).
BT  Separation (break) between address and text; between text and signature.
C  Correct; yes.

CFM  Confirm. (Check me on this).

CK  Check.

DE  From; this is (preceding identification).

HH  (Error in sending. Transmission continues with last word correctly sent.)

HX  (Handling instructions. Optional part of preamble.) Initial(s). Single letter(s) to follow.

IMI  Repeat; I say again. (Difficult or unusual words or groups.)

K  Go ahead; over; reply expected. (Invitation to transmit.)

N  Negative, incorrect; no more. (No more messages to follow.)

NR  Number. (Message follows.)

PBL  Preamble (first part of message)

N/A  Read back. (Repeat as received.)

R  Roger; point. (Received; decimal point.)

SIG  Signed; signature (last part of message.)

SK  Out; clear (end of communications, no reply expected.)

TU  Thank you.

WA  Word after (used to get fills.)

WB  Word before (used to get fills.)

N/A  Speak slower.

N/A  Speak faster.
APPENDIX F

Sacramento Valley Section
AMATEUR RADIO EMERGENCY SERVICE MUTUAL ASSISTANCE GUIDE MARCH 2004

SACRAMENTO VALLEY SECTION ARES MISSION STATEMENT
The mission of the Sacramento Valley Section ARRL/ARES is to prepare for and provide emergency communications to both public and private agencies and the general public. The ARES recruits licensed amateur radio operators and maintains rosters of trained, skilled, disciplined and equipped individuals and teams experienced in fixed, mobile and field station operation. This free service is provided in a coordinated and organized manner. Our goal is to provide the best possible emergency communications radio networks capable of handling third party tactical and formal message traffic locally, regionally, nationally, and internationally anytime normal means of communications fail or are overloaded.

PREFACE
This guide is not intended to supersede, replace, or negate any local ARES plans. It is intended primarily for ECs, AECs, DECs, SECs, and others who serve in a leadership capacity. It is recommended, however, that all EMCOMM personal be familiar with its contents. It is assumed that persons reading this guide are trained, disciplined operators, are familiar with "FCC Part 97" ARRL operating procedures, local emergency plans, and the Incident Command System (ICS).

OPERATIONAL AREA
The Sacramento Valley Section is a 20 county area.
District 1: Lassen, Modoc, Siskiyou, Trinity;
District 2 Butte, Glenn, Shasta, Tehama;
District 3: Colusa, Sacramento, Yolo, Yuba and Sutter;
District 4: Alpine, Amador, El Dorado, Sierra, Placer, Nevada, Plumas.

This section is bordered on the north by the Oregon Section, on the east by the Nevada Section, on the west by the San Francisco Section, and on the south by the San Joaquin Valley Section and East Bay Sections. ARRL and other EMCOMM Officials in adjacent, sections, divisions and states are invited to familiarize themselves with this plan.

THE AMATEUR RESOURCE
As any EC knows, trained, disciplined, and dedicated volunteer amateur radio operators are in short supply. Your ARES team could be quickly overwhelmed, even in a relatively minor emergency activation. This guide will help you decide when, and how, to summon assistance.

THE LEADERSHIP STRUCTURE
The Emergency Coordinator is the leader of the ARES team at the local level. It is his or her role to ensure that the amateur radio operator volunteer resource is utilized to the best advantage. The EC may
have any number of AEC’s. An AEC may function as a liaison person with a "served agency," may provide coordination in a remote locality, or (more typically) is a "specialist" (e.g. digital communications, public information, computers, etc.). Ideally, all AEC’s will be capable and ready to function as an alternate EC. The EC has many “bosses”. He (or she) works in cooperation with the director or manager of a "served agency." Within the ARES structure, the EC (or "acting EC") reports to the DEC. The DEC reports to the SEC. The SEC reports to the Section Manager. If your immediate superior is not available, report to the person at the next highest level. An EC may occasionally work under the direction of another EC. (E.g. - when an EC has responded into another EC's jurisdiction with a team of ARES operators).

MUTUAL ASSISTANCE PROTOCOL
When an emergency or disaster event requiring auxiliary communications appears imminent, or has occurred, the EC should alert or activate the team immediately. It is better to "scramble" everyone and not be needed, than to be too late. "Denial" that an event may occur, or has occurred, is not uncommon. A so-called "false alarm" provides training, promotes awareness, and will help to evaluate a team's ability to respond.

The same principles apply with reference to summoning outside help. The "we can handle it" syndrome is common. As soon as you suspect that mutual assistance may be needed, notify your DEC or SEC. If agency authorities are reluctant or disagree, you as the EC, may still notify your DEC or SEC that a Mutual Assistance request may be forthcoming. [NOTE: In jurisdictions where the EC is also the RACES Officer, and/or the CDF-VIP HAMCO, this will be relatively easy; but in places where the RO or HAMCO are not coordinating with the ARES, this may be awkward.] Also, be sure to notify everyone to "stand down" when the threat or emergency has subsided.

COORDINATING YOUR RESOURCES
As an EC, DEC, or SEC, your primary job is to "coordinate" the amateur radio resource for your area. During an actual event, be sure to THINK...AND PLAN AHEAD. Talk to local officials and attempt to determine what will be needed for emergency or auxiliary communications in 12, 24, 48, 72, or more hours down the road. Develop a plan, and put it into motion.

The FIRST RESOURCE is the locally registered, trained, and equipped ARES team members. The SECOND RESOURCE is the registered and trained ARES members or a team from a nearby jurisdiction. The THIRD RESOURCE are the amateur operators who just "show up" This phenomenon, known as "convergence" is common in emergency and disaster situations. These helpers are usually undisciplined and unfamiliar with ARES procedures and the emergency plan; and they often cause more problems than they solve. However, there are exceptions, so it is important that each individual be evaluated and judged on his or her own merits. This can be time consuming, so it is suggested that you delegate that task to an AEC (or possibly a visiting EC). Those that are selected to work should be given an orientation to the ARES plan and procedures, and be briefed on the incident. Then, they must be registered with ARES and the served agency.

CALLING FOR ASSISTANCE
The maximum shift (work period) should be 12 hours. This includes you! As soon as you decide that outside help will be needed in order to provide relief for your operators, MAKE THE CALL. Follow the "chain of command" and get the "wheels in motion"! If you are unable to contact your DEC, SEC or the SM, it is acceptable to contact a neighboring EC and summon help. But, since the DEC or SEC will be looking at "the larger picture", regarding Mutual Assistance, it is imperative that you notify your DEC, SEC, or SM as soon as possible. When you make the call for assistance, inform the DEC or SEC about how long the assistance will be needed.
State the name the agency that they will be serving, the name of the authorizing official, and advise if the agency will be providing meals, sleeping accommodations, and mileage reimbursement. All responding volunteers are required to log times and mileage. Volunteers from outside California must log their odometer readout when they enter the state.

REMEMBER:
1. Only skilled, disciplined, equipped and registered ARES personnel should respond in Mutual Assistance situations; and all personnel should be directed to a command post or staging area to “sign in”. If not already registered, every volunteer must be registered with the “served agency”, before they are assigned to the field. Be sure to have the registration forms or logs readily available.
2. Responding teams should be given clear directions to the command center or staging area. Inform them of a “talk-in frequency” (it could be shared with operations, but ideally it will be a frequency dedicated to logistics.)
3. As a general rule, an ARESMAT (ARES Mutual Assistance Team) should come with its own leader(s). (The ICS recommends a 1-to-5 ratio). A team may be given a specific task and utilized as a team. Or, individuals may be assigned to work with your team members, or (once oriented to the operation) they may be given independent assignments.
4. Circumstances usually change rapidly. But, if at all possible, use the outside help you have summoned; and utilize their skills as much as possible. Some may be leaders, others may have technical skills, computer skills, traffic handling, clerical or other valuable skills.

SCHEDULES
The preferred modes of communication for mutual assistance requests, coordination, and scheduling are telephone and e-mail. In events where these commercial services are inoperable or unavailable, use packet or other amateur digital modes if possible. Voice radio communications are the least preferred for these administrative purposes. "QSTs" ARES bulletins, updates, mobile, and tactical communications are, of course, appropriate on SSB or FM phone. Nets or schedules are necessary to ensure that the flow of information is maintained, and to manage resources effectively. During events that may require mutual assistance, these recommended schedules be implemented for "command and control". 10 minutes before the bottom of every hour (e.g. 1320 to 1330) a VHF ARES leadership net will convene. Ten minutes after the bottom of every hour (e.g. 1330 to 1340) there will be a HF ARES leadership net. The “top of the hour” is then available for local nets. (Please see next page for the designated frequencies)

ARES MUTUAL ASSISTANCE FREQUENCIES -SECTION LEVEL (SV SECTION - ALL DISTRICTS)
Each county’s emergency plan will list the designated, frequencies for intra-county communications. For inter-county "command and control" communications, mutual-aid, and administrative purposes; whether it be operational, or (more likely) logistical, the frequencies listed below are designated for use by ARRL leaders. (AECs, ECs, DECs, SECs, SMs, Official Emergency Stations, Official Relay Stations, and other appropriate EMCOMM traffic). For local tactical and all routine and welfare traffic please make your contact and move to another frequency when possible. Use simplex whenever possible.

145.45- Red Bluff - District 1 and 2 (north Central Valley). Alternate: 444.950+ (110.9) Red Bluff
146.91- (91.5) -Fredonyer Peak - District 1 and 2 (northeastern CA - Lassen / Modoc).
146.085+ (127.3) MHz Sutter Buttes - District 3 and 4 (south central valley).
3987 kHz (+ or -) LSB is the primary HF frequency.
7232 kHz (+ or -) LSB is the secondary HF frequency.
3987 kHz (+ or -) LSB is the alternate nighttime HF frequency.

Yolo County ARES
Emergency Communications Plan
Revised: March, 2013
NOTE: 3992, 7230, adn 3987 kHz are California OES -ACS frequencies.  
147.42 MHz FM simplex is the unofficial national frequency for ARES / American Red Cross communications.

147.57 MHz FM simplex has been adopted in some areas as the ARES / SAR frequency DIGITAL communications will be on normal established channels selected by the digital operators on duty.