

# 2012 Statewide Medical and Health Exercise

November 15, 2012



Yolo County Amateur Radio Services<sup>®</sup> (ARES)

Exercise Report

November 21, 2012

**This Report Yolo County Public Health was  
prepared by:**

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November 17, 2012

# **California Hospital Drill Report – Yolo County Amateur Radio Emergency Services to Yolo County Public Health Medical Health Operational Area Coordinator (MHOAC)**

**November 15, 2012**

## **Yolo County, Sacramento County, and Adjacent Counties**

### **Drill Objective**

To test the ability of amateur radio operators to establish communication channels on amateur radio bands for health care entities in Yolo County and surrounding Counties.

### **Four tasks are scheduled for the November 15th California Hospital Drill**

**Task #1, 12:00 PM, Noon, Yolo County Emergency Operations Center (EOC),** to communicate with California Emergency Management Agency, (Cal EMA).

Test Yolo County EOC for communications with Cal EMA. The test was run on the W6AK repeater and on 80, meters lower SSB. The amateur radio operator was Gary Matteson, WA6TQJ. The contact was Brenna Howell, Interim Coordinator Sacramento County Office of Emergency Services - Planner (916) 202-2635 or Dennis Plessas, Coordinator Yolo County Office of Emergency Services, (916) 874-4670.

### **Task #2, 2:00 pm, Sutter Davis Hospital to contact Woodland Memorial Hospital via amateur radio.**

The test was run on the K6JRB repeater. The amateur radio operator at Sutter Davis was Bryce, K7WDO. The amateur radio operator at Woodland Memorial Hospital was Jerry Young, KG6TEN. Gary, WA6TQJ, was the back up operator at Woodland Memorial Hospital. The contact for Woodland Memorial was Sara McCarthy, Nursing Supervisor, (530) 933-5600. The contact for Sutter Davis Hospital was Vinnie Ryan, e-mail: [ryanv@sutterhealth.org](mailto:ryanv@sutterhealth.org).

### **Task #3, 2:30 pm, Sutter Davis Hospital to make contact with three Sacramento Area Sutter Hospitals.**

This task was in conjunction with the Hospital going on emergency power. All contacts were to be made on W6AK Repeater. The three hospitals and the respective amateur radio contacts were:

Sutter Health Emergency Management, Jonathan, WQ6F, (916) -496-1116

Sutter General, Dave, KI6ZDI, (916) 733-8338

Sutter Memorial, Jim, KJ6MOU, (916) 733-3029

Sutter Davis, Bryce, K7DWO (530) 406-0103

The Woodland Memorial and Sutter Davis contacts were the same as listed in Task #2.

See Attachment 1 California Sutter Davis Hospital Net Control Preamble and Roster

#### **Task #4, 5:00 pm Wrap up of the November 15th California Hospital Drill.**

This task was conducted on the K6JRB repeater as primary and W6AK as tactical. WA6TQJ was net control for K6JRB. KG6SJT was net control on W6AK repeater. The following were the sub tasks: Yolo County Public Health was to check-in and send a message to Yolo County Hospitals and health care providers. The person initiating the message was Dana Cary, Emergency Preparedness, Supervisor, Yolo County Public Health. (530) 666-8709. This activity will be conducted on the K6JRB repeater. A roll call followed to determine who copied Dana Cary's message. Each station was asked to summarize their Drill activities.

See Appendix D: California Hospital Drill Wrap Up Net Control Script

See Appendix C: The California Hospital Drill Wrap up Net log on the W6AK repeater

### **Drill Amateur Radio Repeaters**

K6JRB, located on the UC Davis Campus, 145.450 MHz, 203.5 Hz tone, negative offset.

W6AK, located on the Cal Trans Building in Downtown Sacramento, 146.910 MHz, 162.2 tone, negative offset.

KE6YUV, located on Berryessa Mountain, in Yolo County, 146.970. MHz, 123 Mhz tone, negative offset.

HEART Net, located on UC Davis Medical Center in Sacramento, 444.300 MHz, 77 MHz tone, negative offset.

*See California Hospital Drill Summery of Contacts*

### **Observations on Tasks**

**Task #1** was conducted at the Yolo County Emergency Operating Center

Yolo County EOC was able to connect with the State Office Emergency Services, at CAL EMA on W6AK repeater,

Brenna Howell, Interim Coordinator Sacramento County Office of Emergency Services- Planner was the Yolo County EOC contact. She made verbal contact with the Cal EMA Office over amateur radio frequencies.

Tests were made on 80 meter HF SSB, Lower Side band. High noise levels prohibited solid contacts. The station did hear and was heard by, Cal EMA, W6EME, and UC Davis Vet Hospital, N6JOA.

**Task #2** was at the Woodland Memorial Hospital and the Sutter Davis Hospital

The two hospitals successfully contacted each other on the KE6YUV Berryessa Repeater. Sara McCarthy, of the Woodland Memorial Hospital was at the station.

Attempts by the two hospitals to contact one another on the K6JRB and W6AK repeater were not successful, due to the fact that Woodland Memorial Hospital did not have a base station. Only a mobile station was used at the Woodland Memorial Hospital.

**Task #3** was the establishment of out-of-county contacts for the Sutter Davis Hospital.

The Sutter Davis Hospital was able to contact Sutter Memorial Hospital, KJ6MOU, in Sacramento on the Berryessa Repeater.

#### **Task #4**

The message for this task was received by Gary WA6TQJ from Dana Cary, Emergency Preparedness Supervisor and MHOAC for Yolo County. This message was then retransmitted to participants of the California Hospital Drill on the K6JRB repeater and the W6AK repeater. This activity required two nets to operate simultaneously starting at 5:00 pm. On the UC Davis repeater, K6JRB, six Drill participants checked -in and confirmed receipt of the message. On the Sacramento repeater, W6AK, fourteen Drill participants checked-in and twelve stations confirmed receipt of the message. Please see Attachment 3 for list of stations.

### **Recommendations**

#### **Task #1**

The equipment at the Yolo County EOC needs to be tested and in some cases repaired. Dennis Plessas, Coordinator, has agreed to work with Yolo County ARES personnel to resolve issue.

- (1) A 2 meter base station did not turn on.
- (2) Tests of the two dual band VHF antennas revealed a wide range of results. The antennas need to be examined for damage.
- (3) The HF antenna did not tune on 40 meter or 80 meter bands. The traps on this antenna need to be examined for continuity.
- (4) The Dual Band VHF Transceiver needs to have amateur radio repeaters programmed into the unit. The unit presently has no channel installed.

- (5) Attempts to contact Solano EOC were made and e-mail exchanges took place. For future drills, there is now a recognition by each EOC of the others operating frequencies. The Solano EOC operates on 441.15 MHz, tone 77 Hz, negative offset for North Solano Command, 145.31 MHz, tone 88.5 MHz, negative offset for South Solano Command. They also have Packet capability on 145.73 MHz simplex no tone.

## **Task #2**

The Woodland Memorial Hospital needs to repair or replace its VHF antenna and re-establish a base station. Mobile operations from the Woodland Memorial only worked through the Berryessa Repeater (the Berryessa Repeater was the designated back up for this task).

## **Task #3**

Both the HF and VHF antennas at the Sutter Davis Hospital need to be examined for continuity and appropriate coax.

- (1) The 80 meter antenna has been found to need repair.
- (2) The VHF antenna appears to have some coax problems that need to be addressed. The reception of the W6AK repeater in Sacramento is marginal, whereas the UC Davis Vet Med with a similar configuration about 5 miles away has adequate signal from W6AK.
- (3) UC Davis and the Sacramento Amateur Radio Club plan to link the K6JHRB repeater to the W6AK repeater will provide a much improved service.

## **Task #4**

The need to have two net controls operating the UC Davis Repeater K6JRB and the Sacramento Repeater W6AK brought complexity to this task. The mobile station in the Woodland area had difficulty finding a location with adequate path to either the Davis or the Sacramento Repeater.

- (1) UC Davis and the Sacramento Amateur Radio Club plan to link the K6JHRB repeater to the W6AK repeater will provide a much-improved service.
- (2) A procedure where by Net Control conduct a test transmission prior to running their net proved to be a critical element. This procedure was used on the W6AK repeater but not on the K6JRB repeater. Net Controls operating 50 watts from nearby the K6JRB repeater run the risk of overdriving the system. 5 watts of power should be used within in a one mile radius of the base of the repeater.
- (3) The Operation Plan indicated that the Net Control for W6AK was to operate from the Yolo County Public Health. Initial tests showed marginal capability when using mobile

rigs with 50 Watts of power and roof mounted gain antennas. On the day of the drill the path almost disappeared and caused the Net Control to move to another site. The Yolo County Public Health needs to consider the installation of an antenna for amateur radio bands and an operating station within the building. At the last minute, an option to use the Yolo County Communication Systems 15 channel hand held transceivers was tested. The unit was found not to work inside buildings within Woodland and there was no reception from outside the UC Davis Campus EOC location.

Signed by: \_\_\_\_\_ Yolo County Emergency  
Coordinator, Amateur Radio Emergency Services ARES

Date: -----



# California Hospital Drill, November 15, 2012 Summary of Contacts

Station Initiating Call	Amateur Call	Name	Time	Station Receiving Call	Amateur Call	Name	Mode	Band/Freq
<b>Inter Yolo County Traffic</b>								
Yolo Co Public Health Operations Center	Katie	Katie	12:10 PM	Yolo Co Assist EC ARES	WA6TQJ	Gary	CAHAN	Internet
Yolo County Emergency Operations Center	WA6TQJ	Gary	12:40	Sutter Davis Hospital	K7WDO	Bryce	W6AK Rpt	2 Meters
Yolo County Emergency Operations Center	WA6TQJ	Gary	1250	UC Davis Vet Hospital	N6JOA	Charlie	W6AK Rpt	2 Meters
Woodland Memorial Hospital Mobile	KG6TEN	Jerry	2:30	Sutter Davis Hospital	K7WDO	Bryce	Berressa Rpt	2 Meters
Yolo County Assist. EC ARES	WA6TQJ	Gary	5:05	Woodland Memorial Hospital Mobile	K6JRB	Jerry	K6JRB Rpt	2 Meters
Yolo County Assist. EC ARES	WA6TQJ	Gary	17:06	Sutter Davis Hospital Operations Center	K7WDO	Bryce	K6JRB Rpt	2 Meters
Yolo County Assist. EC ARES	WA6TQJ	Gary	5:07	UC Davis Student Health - Mobile	N6OLO	Pamela	K6JRB Rpt	2 Meters
Yolo County Assist. EC ARES	WA6TQJ	Gary	5:08	UC Davis Vet Hospital Operation Center	N6JOA	Charlie	K6JRB Rpt	2 Meters
Yolo County Assist. EC ARES	WA6TQJ	Gary	5:09	American Red Cross, Woodland	K6WLS	Ken	K6JRB Rpt	2 Meters
Yolo County Assist. EC ARES	WA6TQJ	Gary	5:10	Yolo Co ARES Member, Woodland	K6KN	Bill	K6JRB Rpt	2 Meters

## Yolo County to Sacramento County Traffic

Yolo Co Assist EC ARES	WA6TQJ	Gary	10:00 AM	Sacramento OES	N6SNO	Frank	W6AK Rpt	2 Meters
UC Davis EOC	K6JRB	John	11:30 AM	UC Davis Medical Center	KE6WWR	Jeff	Heart Net	2 Meters
Yolo County Emergency Operations Center	WA6TQJ	Gary	12:00 PM	Cal Emergency Management W6EMA	KG6IFV	Mike	W6AK Rpt	2 Meters
Yolo County Emergency Operations Center	WA6TQJ	Gary	12:00 PM	Cal Emergency Management W6EMA	KG6IFV	Mike	SSB LSB	3960
Yolo County Emergency Operations Center	WA6TQJ	Gary	12:10	American Red Cross Sac Region	K6PON	Donna	W6AK Rpt	2 meter
Yolo County Emergency Operations Center	WA6TQJ	Gary	12:11	Sutter Memorial Hospital	KJ6MOU	Jim	W6AK Rpt	2 meter
Yolo County Emergency Operations Center	WA6TQJ	Gary	12:13	Mercy Hospital	WG6CFS	Charles	W6AK Rpt	2 meter
Sutter Davis Hospital Operation Center	K7WDO	Bryce	12:30	Cal Emergency Management W6EMA	K6G6IFV	Mike	SSB LSB	3960
Sutter Davis Hospital Operation Center	K7WDO	Bryce	12:35	UC Davis Vet Med	N6JOA	Charlie	SSB LSB	3960
Sutter Davis Hospital Operation Center	K7WDO	Bryce	12:40	Cal Emergency Management W6EMA	KG6IFV	Mike	W6AK Rpt	2 Meters
Yolo County Emergency Operations Center	WA6TQJ	Gary	1:00	UC Davis Medical Center	KE6WWR	Jeff	Heart Net	2 meter
Woodland Memorial Hospital Mobile	WA6TQJ	Gary	1:30	UC Davis Medical Center	KE6WWR	Jeff	Heart Net	2 meter
Woodland Memorial Hospital Mobile	WA6TQJ	Gary	1:40	Sacramento OES	N6SNO	Frank	W6AK Rpt	2 meter
Sutter Davis Hospital Operation Center	K7WDO	Bryce	2:25	Sutter Memorial Hospital	KJ6MOU	Jim	W6AK Rpt	2 Meters
Yolo County EC ARES	KG6SJT	Greg	5:05	American Red Cross Sac Region	K6PON	Donna	W6AK Rpt	2 Meters
Yolo County EC ARES	KG6SJT	Greg	5:06	Mercy Hospital	WG6CFS	Charles	W6AK Rpt	2 Meters
Yolo County EC ARES	KG6SJT	Greg	5:07	Sutter General Hospital	KJ6MOU	Jiim	W6AK Rpt	2 meters
Yolo County EC ARES	KG6SJT	Greg	5:08	Sutter Emergency Management	W6QF	Jonathan	W6AK Rpt	2 Meters
Yolo County EC ARES	KG6SJT	Greg	5:09	Yolo County Red Cross	K6WLS	Ken	W6AK Rpt	2 Meters
Yolo County EC ARES	KG6SJT	Greg	5:10	Sacramento Fire/CERT	KI6ZWW	John	W6AK Rpt	2 Meters
Yolo County EC ARES	KG6SJT	Greg	5:10	Amador County ARES EC	AG6EL	Craig	W6AK Rpt	2 Meters
Yolo County EC ARES	KG6SJT	Greg	5:11	Cal State University	KC6MHT	Steve	W6AK Rpt	2 Meters
Yolo County EC ARES	KG6SJT	Greg	5:12	Sac Amateur Radio Club Board Member	KI6DQB	Jeff	W6AK Rpt	2 Meters
Yolo County EC ARES	KG6SJT	Greg	5:13	Sac Amateur Radio Club Board Member	W6LFR	Lee	W6AK Rpt	2 Meters

## Yolo County to Other County Traffic

Yolo County EC ARES	KG6SJT	Greg	5:14	Amador County	KJ6WYY	Diana	W6AK Rpt	2 Meters
Yolo County EC ARES	KG6SJT	Greg	5:15	Martall in Amador County	KJ6HRO	Ron	W6AK Rpt	2 Meters
Yolo County EC ARES	KG6SJT	Greg	5:16	Pioneer in Amador County	KI6DWP	John	W6AK Rpt	2 Meters
Yolo County EC ARES	KG6SJT	Greg	5:16	Volcano in Amador County	N6XD	Ken	W6AK Rpt	2 Meters

## **AFTER ACTION REPORT**

### **CALIFORNIA HOSPITAL DRILL FOR YOLO AND SACRAMENTO COUNTIES**

#### **AMATEUR RADIO COMMUNICATIONS – SUTTER DAVIS HOSPITAL**

This report is a synopsis of the amateur radio communication drills conducted on Thursday, November 15, 2012 from the perspective of the amateur radio operator located at Sutter Davis Hospital, Bryce Birkman, K7DWO.

#### **Activity** (Times may be approximate)

- 1145: Began monitoring frequencies established for the Yolo and Sacramento County hospital drills. 80 meter band, 3.960 MHz, LSB -- K6JRB repeater located at UC Davis, 145.450 MHz, negative offset, PL 203.5 Hz -- W6AK repeater located in the Sacramento downtown area, 146.910 MHz, negative offset, PL 162.2 Hz.
- 1155: 80 meters – N6JOA, Vet Med Teaching, UCD signed on “monitoring”, signal 4/8.
- 1200: Designated time for Drill #1, communications between Yolo County EOC and Cal EMA on 80 meters and W6AK. Nothing heard on 80 meters. Various “noon net” communications heard on W6AK which were extremely weak, fading, and covered with considerable static. General signal 2/4 with QRN and QSB.
- 1225: W6AK – heard what appeared to be WA6TQJ calling Cal EMA. High QRN/QSB. Although barely readable, traffic seemed to indicate parties were going to attempt contact on 80 meters. Nothing heard on 80 meters.
- 1235: 80 Meters – Heard WA6TQJ briefly, content or contact unknown. I attempted communications with WA6TQJ but did not establish contact. During Drill #4 debriefing N6JOA related he heard me and signal was readable but with considerable static.
- 1235 – Continued monitoring 3.960 MHz, and K6JRB and W6AK repeaters as before.
- 1355: Nothing heard on 3.960 MHz. Received a transmission from WA6TQJ via the K6JRB repeater. Signals strong in both directions. Various traffic on W6AK repeater with varying degrees of readability and QRN.
- 1355: Transmitted five (5) minute alert on K6JRB repeater regarding net for Drill #2.

- 1400: Opened net for Drill #2 via K6JRB. Called for Yolo County hospitals and health care facilities to check in. Began receiving series of repeater keying with no audio. Continued attempt to operate net but without success because of ongoing series of continuing interference with repeater. One or more stations seemed to try to check in but were unable to do so because of repeater keying. There are several possible causes for this interference to include: 1) Malfunction of Sutter Davis equipment, 2) Deliberate keying and interference by parties unknown, 3) Malfunction of the equipment of drill participant/s attempting to check in such as microphone failure, VOX failure, overdriven modulator, or other equipment problem, or 4) participants attempting to check in who were out of range or otherwise masked from the repeater who were able to trigger the repeater but masked to the extent that the audio component of the signal was impaired.
- #1. Malfunction of Sutter Davis equipment is improbable. The malfunction, if Sutter Davis', would have had to be frequency and time specific for only the time of Drill #2. Clear 2-way communications between Sutter Davis and other stations were established via at least three repeaters, including the K6JRB repeater, both before and after this incident.
- #2. Unlikely but not unheard of. The nature of the interference was very specific both in frequency and timing. Deliberate interference with communications is strictly prohibited by FCC regulations.
- #3/4. Most probable cause of interference. However, once noted by the operators that net control was experiencing difficulties with reception they should have discontinued transmissions to clear the net for other traffic.
- 1425: As Davis Sutter hospital to Woodland Memorial hospital communication was the objective of Drill #2 I requested KG6TEN, Woodland Memorial operator, via K6JRB repeater to shift to the KE6YUV "BARK" repeater. Contact was established with KG6TEN with reasonable readability. WA6TQJ and KJ6MOU (Sutter Memorial hospital) also checked in. WA6TQJ was intermittently cutting out with strong signal when readable. KJ6MOU was readable with difficulty and static.
- 1430: Sacramento Sutter hospitals opened a net for Drill #3 on the W6AK repeater. Extreme difficulty receiving, signal weak with high level of static. Contact was established with KJ6MOU (Sutter General hospital) on this repeater but reliability of extended traffic was doubtful.
- 1450: Discontinued monitoring frequencies and secured equipment.
- 1645: Began monitoring K6JRB and W6AK repeaters in anticipation of wrap-up Drill #4.
- 1700: Net opened by WA6TQJ for Drill #4 on the K6JRB repeater. Check in by several stations followed. Generally strong signals and readability from all stations. Gave wrap up report.
- 1718: Secured from drills.

## **Observations**

1. Communications via K6JRB repeater were clear and strong between stations within Yolo County. Stations outside Yolo County had markedly reduced signal.
2. Communications via W6AK repeater with Sacramento County stations were extremely compromised by QRN and QSB and could not be considered reliable.
3. 80 meter communications, although not fully established could prove to be a reliable intra-county link.
4. During Drill #2 I, as net control, upon being unable to establish communications with any stations should have advised all stations to shift to an alternate frequency. Although I did call for a shift it was not timely, and involved only the Woodland Memorial station albeit the objective of the drill was to establish communications with Woodland Memorial.
5. Examination of Sutter Davis' antenna system revealed two issues that could be the cause of the high level of static noted by N6JOA when I tried to contact WA6TQJ on 80 meters and the compromised receive signals via the W6AK repeater. These issues, respectively, are the Sutter Davis Titan HF antenna has a broken counterpoise and both the HF and VHF/UHF antenna runs appear to be RG-58/U. Neither of these problems would be discovered during the course of routine tests because the operator would not attempt communications with stations that were unreadable or compromised by static and would consider the reception normal.

## **Recommendations**

1. Repair the counterpoise for the Sutter Davis Titan HF antenna
2. Determine if the full length of the antenna runs are RG-58/U. If so I recommend replacing the entire runs with a coax that has lower losses such as LMR-400.
3. Woodland Memorial hospital should consider installing, as a minimum, a base VHF/UHF station. Communications relying upon an operators personal equipment operated from outside the facility does not provide the level of reliability necessary in an emergency situation.

## **Conclusions**

Because Sutter Davis was only directly or indirectly involved with drills #2, #3 and #4 I will only address these three.

Drill #2: Communication between Sutter Davis and Woodland Memorial hospitals – successful, reliable communications established even with difficulties on primary frequency.

Drill #3: Communications among Sutter hospital system in Sacramento and Yolo counties – marginally successful. Sutter Davis had extreme difficulty receiving reliable communications on primary frequency.

Drill #4: Wrap up – successful. Reliable and strong transmission to net control and reception from all stations checking in. Successfully received practice message.

Submitted//

Bryce Birkman, K7DWO, Sutter Davis operator

**November 13, 2012 Edition**

**California Hospital Drill November 15, 2012 Operational Plan**

**Yolo County and Sacramento County Tasks**

**Gary Matteson, Assistant Emergency Coordinator Yolo County ARES**

We now have four tasks schedule for the November 15th California Hospital Drill. The net's Primary Frequency 145.450 MHz, 203.5 Hz tone, negative offset (UCDARC Repeater located on the Davis Campus). The tactical side of the net is on the W6AK located in Sacramento 146.910 MHz, 162.2 Hz. negative offset. There is a back-up frequency, Berryessa repeater, 146.970 MHz, 123 Hz , negative offset. Please note that all messages will be handle in the ICS 213 Format.

**Task #1, Noon for Yolo County EOC.**

Test Yolo County EOC for communications with Cal EMA. The test is to be run on the W6AK repeater and on 80 lower SSB . The amateur radio operator is Gary Matteson, WA6TQJ. The contact is Brenna Howell, Interim Coordinator Sacramento County Office of Emergency Services - Planner (916) 202-2635 or Dennis Plessas, Coordinator Yolo County Office of Emergency Services, (916) 874-4670.

**Task #2, 2:00 pm for Sutter Davis Hospital contact via amateur radio with Woodland Memorial Hospital.**

The test is to be run on the K6JRB repeater. The amateur radio operator at Sutter Davis will be Bryce, K7WDO. The amateur radio operator at Woodland Memorial Hospital is Jerry Young, KG6TEN. Gary, WA6TQJ, will be the back up operator at Woodland Memorial Hospital. The contact for Woodland Memorial is Sara McCarthy, Nursing Supervisor, (530) 933-5600. The contact for Sutter Davis Hospital is Vinnei Ryan, e-mail: [ryanv@sutterhealth.org](mailto:ryanv@sutterhealth.org),

**Task #3, 2:30 pm is for Sutter Davis Hospital to make contact with three Sacramento Area Sutter Hospitals.**

This task will be in conjunction with the Hospital going on emergency power. All contacts will be made on W6AK Repeater. The three hospitals and the respective amateur radio contacts are:  
Sutter Health Emergency Management, Jonathan, WQ6F, (916) -496-1116  
Sutter General, Dave, KI6ZDI, (916) 733-8338  
Sutter Memorial, Jim, KJ6MOU, (916) 733-3029  
The operator at Sutter Davis will be Bryce, K7DWO (530) 406-0103

The Woodland Memorial and Sutter Davis contacts are the same as listed in Task #2.

**Task #4, 5:00 pm is a wrap up of the November 15th California Hospital Drill.**

This task is to be conducted on the K6 JRB repeater as primary and W6AK as tactical. KG6SJT will be net control on K6JRB repeater. The following are the sub tasks. Yolo County Public Health will check-in and send a message to Yolo County Hospitals and health care providers. The person initiating the message will be Dana Cary, Emergency Preparedness, Supervisor, Yolo County Public Health. (530) 666-8709. This activity will be conducted on the K6JRB repeater. A roll call will follow to determine who copied Dana Cary's message. Each station will be asked to summarize their Drill activities.

Roll Call for Yolo County agencies on K6JRB repeater

Woodland Memorial Hospital, Jerry, KG6TEN (530) 662-0355

Sutter Davis Hospital, Bryce, K7WDO, (530) 406-0103

UC Davis Student Health, Pamela, N6OLO, (530) 574-1750

UC Davis Vet Hospital V.E.R.T. Team Charlie, N6JOA (530) 574-1750

American Red Cross in Woodland, Ken, K6WLS, (530) 662-2747

Yolo Public Health, Gary, WA6TQJ (530) 219-6777

Roll Call for Sacramento County agencies on W6AK repeater

American Red Cross Region in Sacramento, Donna, K6PON, (916) 823-5156

Sacramento Blood Source, Linda, KI6LOC, (916) 972-0552

Sacrament Medical Reserve Corps. Linda, KI6LOC (916) 972-0552

UC Davis, Medical Center in Sacramento, Jim Gunn or Heart Net Control (916) 734-7091

Mercy Hospital, Charles, WG6CFS, (916) 574-2915

Sutter General, Jim, KJ6MOU, (916) 733-3029

Sutter Memorial, Dave, KI6ZDI, (916) 733-8338

Sutter Emergency Management, Jonathan, W6QF, (916) 496-1116

# **List of Participants in Yolo/Sacramento County State of California Health Services Drill**

**Drill Date: November 15, 2012**

**Drill Objective: to test the ability of amateur radio operators to establish communication channels on Ham bands for Health Care entities in Yolo and Sacramento Counties**

**Drill Organizer: Gary Matteson, WA6TQJ, Assistant Emergency Coordinator, Yolo County, Tel: 530-219-6777**

**Drill Amateur Radio Repeaters: Primary K6JRB Repeater, 145.450 MHz (203.5 Hz tone negative offset); Secondary W6AK Repeater 146.910 MHz (162.2 Hz tone with negative offset); Back-Up Secondary Repeater, Berryessa, negative offset, Repeater, 146.970 MHz (123 Hz tone, negative offset)**

## **Locations in Yolo Co.**

Sutter General - Davis  
Woodland General-Woodland  
Student Health -UCD -Davis  
Vet Med Teaching -UCD- Davis  
Yolo Red Cross -Woodland  
Yolo County Public Health-Woodland  
Yolo County ARES Net Control 5:00 pm Net

## **Amateur Call**

K7DWO  
KG6TEN  
N6OLO  
N6JOA  
K6WLS  
WA6TQJ  
KG6SJT

## **Name of Operator e-mail of operator**

Bryce Birkman [blkirk@hotmail.com](mailto:blkirk@hotmail.com)  
Jerry Young [jerryyy@pacbell.net](mailto:jerryyy@pacbell.net)  
Pam Porter [psporter@ucdavis.edu](mailto:psporter@ucdavis.edu)  
Charlie Porter [coporter@ucdavis.edu](mailto:coporter@ucdavis.edu)  
Ken Wilson [gramps55@gmail.com](mailto:gramps55@gmail.com)  
Gary Matteson [gcmatteson@ucdavis.edu](mailto:gcmatteson@ucdavis.edu)  
Greg Kruckewitt [kg6sjt@gmail.com](mailto:kg6sjt@gmail.com)

## **Locations Outside of Yolo County**

UC Davis Med Center-Sacramento  
Mercy Hospital -Sacramento  
Sutter General -Sacramento  
Sutter Memorial -Sacramento  
Sac Medical Reserv Corps-Sacramento  
Sac Region Red Cross-Sacramento  
UC Davis Med Center-Sacramento  
Sacrament Blood Bank  
Saramento Medical Reserves Corps

James Gunn [james.gunn@ucdmc.ucdavis.edu](mailto:james.gunn@ucdmc.ucdavis.edu)  
WG6CFS Charles Story [charles.Story@chw.edu](mailto:charles.Story@chw.edu)  
KI6ZDI Dave Groza [GrozaD@sutterhealth.org](mailto:GrozaD@sutterhealth.org)  
KJ6MOU Jim Fitch [jazzyjm@mac.com](mailto:jazzyjm@mac.com)  
KI6OLC Linda Cardoza [bizebird@yahoo.com](mailto:bizebird@yahoo.com)  
K6PON Donna Dimmick [DimmickD@usa.redcross.org](mailto:DimmickD@usa.redcross.org)  
Heart N.C.S. James Gunn [james.gunn@ucdmc.ucdavis.edu](mailto:james.gunn@ucdmc.ucdavis.edu)  
KI6LOC Linda Cardoza [bizebird@yahoo.com](mailto:bizebird@yahoo.com)  
KI6LOC Linda Cardoza [bizebird@yahoo.com](mailto:bizebird@yahoo.com)



### **Hospital, EOCs and other Health Care Contacts**

Woodland Hospital		Sara McCarthy	<a href="mailto:Sarah.mccarthy@dignityhealth.org">Sarah.mccarthy@dignityhealth.org</a>
Sutter Davis Hospital		Vinnie Ryan	<a href="mailto:ryanv@sutter.org">ryanv@sutter.org</a>
Yolo County Public Health		Katie Kelsch	<a href="mailto:Katie.Kelsch@yolocounty.org">Katie.Kelsch@yolocounty.org</a>
Yolo County Public Health		Dana Carey	<a href="mailto:dana.carey@yolocounty.org">dana.carey@yolocounty.org</a>
Yolo County Office of Emergency Services		Dennis Plessas	<a href="mailto:plessasd@sacoes.org">plessasd@sacoes.org</a>
Yolo County Office of Emergency Services		Brenna Howell	<a href="mailto:brenna@brennahowell.com">brenna@brennahowell.com</a>
Yolo County Office of Emergency Services		Steve Cantelme	<a href="mailto:cantelmes@sacoes.org">cantelmes@sacoes.org</a>
California Emergency Management Agency	W6EMA	Ben Green	<a href="mailto:ben.green@oes.ca.gov">ben.green@oes.ca.gov</a>
Sutter Health Emergency Management Agency	WQ6F	Jonathan Taylor	<a href="mailto:taylorje@sutterhealth.org">taylorje@sutterhealth.org</a>
UC Davis		Nick Crossley	<a href="mailto:ncrossley@ucdavis.edu">ncrossley@ucdavis.edu</a>

### **Repeater Trustees**

W6AK		Tom Preston	<a href="mailto:kq6eo@arrl.net">kq6eo@arrl.net</a>
K6JRB		John Berg	<a href="mailto:jrberg@ucdavis.edu">jrberg@ucdavis.edu</a>
KE6YUV	K6WLS	Ken Wilson	<a href="mailto:gramps55@gmail.com">gramps55@gmail.com</a>

## California Sutter Davis Hospital Net Control Preamble

Attention all stations. Attention all stations. Attention all stations.

The following is a QST. The California Hospital Drill for Yolo and Sacramento Sutter Hospitals will start in 5 minutes at 1400 hours local time on the K6JRB Repeater System. This is Net Control K7DWO.

Attention all stations. Attention all stations. Attention all stations.

This is Bryce, K7DWO, Net Control for the 1400 hours net for the Yolo and Sacramento Sutter Hospitals in response to the California Hospital Drill. Net Control is located at the Sutter Davis Hospital.

This net is being conducted on the K6JRB Repeater – 145.450 MHz, Negative Offset, with a PL of 203.5.

This is a directed net. If you wish to make a contact or have anything for the net, please use Net Control. Break the Net at any time if you have any emergency or priority traffic. Is there any such traffic at this time?

Hearing no call for emergency or priority traffic I will begin check-in.

I will first call for hospitals and other health facilities in Yolo County and then I will call for hospitals and health facilities in Sacramento County.

Hospitals and medical facilities in Yolo County come now with your Name, Call Sign (spelled phonetically), Location, and/or Agency Name if representing an agency. Please speak slowly.

*Woodland Memorial Hospital, Jerry, KG6TEN*

I will check in Sutter Davis Hospital.

Are there any other Yolo County health facilities or visitors located within Yolo County wishing to check in?

I will now call for hospitals and other health facilities in Sacramento County wishing to check in.

Hospitals and medical facilities in Sacramento County come now with your Name, Call Sign (spelled phonetically), Location, and/or Agency Name if representing an agency. Please speak slowly.

*Sutter Hospital Emergency Management, Jonathan, WQ6F*

Are there any other Sacramento health facilities or visitors located within Sacramento County wishing to check in?

Are there any other participating stations, missed stations, or visitors wishing to check-in. Please come now.

There being no other traffic for this net, I will then close the net.

You are reminded that the California Hospital Net Drill Wrap-Up will occur this evening at 1700 hours local time on the K6JRB and the W6AK repeaters.

This is K7DWO, Net Control. I wish to thank the operators and users for the K6JRB repeater for standing by.

This Net is now closed.

November 15, 2012 Final

## **California Hospital Drill Wrap-Up Net Control Script:**

4:55 pm: The following is a QST. The California Hospital Drill Wrap-Up Net will start in five minutes on the K6JRB and W6AK repeater system.

The K6JRB is on 145.450, negative offset, and a tone of 203.5 and the W6AK, 146.910 negative offset, and a tone of 162.2.

Your K6JRB Net Control is Greg KG6SJT Yolo County ARES EC and W6AK Net Control will be Gary, WA6TQJ Assistant Yolo County ARES EC.

The California Hospital Drill Wrap-Up Net is a directed net in three parts:

Part One of the Hospital Drill is a check-in of stations representing agencies and organizations that participated in the today's Drill and other Amateur emergency radio operators.

Part Two is a reading of traffic from Yolo County Health. This message will be sent in the ICS 213 format.

Part Three is a call to all stations logged in for confirmation of receipt of message, Fills on message may be requested at this time. Each station will be asked to summarize its activity on the Hospital Drill.

Please standby; the Net will start at 5:00. This is (Name & Callsign) standing by for the Net.

5:00 PM: Good evening. This is the California Hospital Drill Wrap-Up Net

Your Net Control today is (Name/Callsign).

Is there any priority or emergency traffic? (pause)

*Net Control says: "break" and calls or receives call from WA6TQJ on K6RJB repeater to confirm no emergency traffic.*

*Each Net Control continues*

This is a directed net. All stations please refrain from transmitting unless called.

Stations with emergency traffic may break at any time.

This is a directed net. All stations please refrain from transmitting unless called.

Stations with emergency traffic may break at any time.

The purpose of the California Hospital Drill Wrap-up Net is: to test the ability of amateur radio operators to establish communication channels on amateur radio bands for the California Health Drill.

Stations with brief bulletins, reports or announcements for the net may present them when called.

Roll Call for Yolo County agencies will now follow (*on K6JRB repeater*):

Woodland Memorial Hospital, Jerry, KG6TEN (530) 662-0355

Sutter Davis Hospital, Bryce, K7WDO, (530) 406-0103

UC Davis Student Health, Pamela, N6OLO, (530) 574-1750

UC Davis Vet Hospital V.E.R.T. Team Charlie, N6JOA (530) 574-1750

American Red Cross in Woodland, Ken, W6WLS, 662-2747

Are there any other participating stations or visitors? Please provide Name, Call Sign and name of agency if representing an agency

*Record entries*

Roll Call for Sacramento County agencies will now follow (*on W6AK repeater*):

American Red Cross Region in Sacramento, Donna, K6PON, (916) 823-5156

Sacramento Blood Source, Linda, KI6LOC, (916) 972-0552

Sacramento Medical Reserve Corps. Linda, KI6LOC (916) 972-0552

UC Davis, Medical Center in Sacramento, Jim Gunn or Heart Net Control (916) 734-7091

Mercy Hospital, Charles, WG6CFS, (916) 574-2915

Sutter General, Jim, KJ6MOU, (916) 733-3029

Sutter Memorial, Dave, KI6ZDI, (916) 733-8338

Sutter Emergency Management, Jonathan, WQ6F, (916) 496-1116

Are there any other participating stations or visitors? Please provide Name, Call Sign and name of agency if representing an agency

All Stations Please prepare to receive traffic. *A Message from Yolo County Health will be read on the W6AK Repeater then read on K6JRB repeater.*

*If K6JRB NC doesn't have the message before hand.. He will announce that he is monitoring the W6AK repeater for the message.*

Roll Call is now repeated. Please confirm receipt of message. You may ask for fills if you need them. After confirming receipt of the message provide net control with a brief summary of your activity in today's California Hospital Drill.

*Roll call for (name repeater group), annotate confirm on check-in and insert "highlight" comments here making sure to identify participating station.*

Is there any further traffic for the California Hospital Drill Wrap-Up Net?

Hearing no stations, thanks go out to the Control Operators of *(give repeater call letters)* repeater and to those who maintain it.

This concludes the California Hospital Drill Wrap-Up Net

This is (name) closing the Net and returning (the repeater) system back to normal operation.

This is (Call sign) out and listening.

# **The California Hospital Drill Wrap up Net**

Net Log from the W6AK Repeater. KG6SJT, net control

California Hospital Drill wrap up Net on the W6AK repeater started November 15, 2012 at 5:00 PM. We had 14 check-ins.

## **The format of the net:**

The net consisted of three parts to the net:

Part One of the Hospital Drill was a check-in of stations representing agencies and organizations that participated in the Drill and other Amateur emergency radio operators.

Part Two was a reading of traffic from Yolo County Health. This message will be sent in the ICS 213 format.

Part Three is a call to all stations logged in for confirmation of receipt of message, Fills on message may be requested at this time. Each station was asked to summarize its activity on the Hospital Drill.

## **Part 1 of the California Hospital Drill Net**

The net was opened at 5:00PM and a role call of Sacramento County Agencies was conducted.

The following stations checked in:

American Red Cross Region in Sacramento, Donna, K6PON  
Mercy Hospital, Charles, WG6CFS  
Sutter General, Jim, KJ6MOU  
Sutter Emergency Management  
Yolo County Red Cross

Visiting Stations checking in:

KI6ZWW, John, Sacramento Fire/ CERT  
AG6EL, Craig, Amador ARES EC:  
N6XD, Ken, Volcano:  
KJ6WYY, Diana, Amador  
KC6MHT, Steve, Sacramento:  
KJ6HRO, Ron, Amador - mobile  
KI6DWP, John, Pioneer  
KI6DQB, Jeff, Sacramento



W6LFR, Lee, Sacramento: Secretary of the Sacramento Amateur Radio Club

## **Part 2 of the California Hospital Drill Net**

The following message was transmitted from Yolo County Public Health was transmitted in the ICS-213 format.

A recording of the net on the W6AK repeater is here:

<http://www.yoloares.org/news/2012/healthcaredrill/w6akrepeater.mp3>

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Number: 023 ROUTINE FROM: WA6TQJ ORIGIN: WOODLAND TIME: 16:53  
DATE: 11/15/12

TO: CALIFORNIA HOSPITAL DRILL PARTICIPANTS  
FROM YOLO COUNTY PUBLIC HEALTH  
SUBJECT: HOSPITAL DRILL

ALL MEDICAL AND HEALTH RESPONSE  
INFORMATION FROM YOLO FACILITIES SHOULD  
BE FORWARDED TO THE YOLO  
COUNTY MHOAC

<-- end of message -->

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## **Part 3 of the California Hospital Drill Net**

### ***Hospital Drill Participants checking in:***

- \* American Red Cross Region in Sacramento, Donna, K6PON:  
COPIED MESSAGE. We were not involved in exercise today.
- \* Mercy Hospital, Charles, WG6CFS:  
COPIED MESSAGE. There was good participation at Mercy for the exercise.
- \* Sutter General, Jim, KJ6MOU:  
COPIED MESSAGE
- \* Sutter Emergency Management, Jonathan, W6QF:  
COPIED MESSAGE
- \* Yolo County Red Cross, Ken, K6WLS,

***Visiting Stations checking in:***

- \* KI6ZWW, John, Sacramento Fire/ CERT
- \* AG6EL, Craig, Amador ARES EC:  
COPIED MESSAGE, Good net!
- \* N6XD, Ken, Volcano, Amador:  
COPIED MESSAGE
- \* KJ6WYY, Diana, Amador:  
COPIED MESSAGE
- \* KC6MHT, Steve, Sacramento:  
COPIED MESSAGE. This was a good exercise
- \* KJ6HRO, Ron, Amador - mobile  
(You have a good signal in Martell) COPIED MESSAGE
- \* KI6DWP, John, Pioneer,  
COPIED MESSAGE
- \* KI6DQB, Jeff, Sacramento: Sacramento Amateur Radio Club, Sacramento
- \* W6LFR, Lee, Sacramento: Secretary of the Sacramento Amateur Radio Club:  
COPIED MESSAGE. This was a good exercise

# ICS-213 (ARES VERSION)

NUMBER	PRECEDENCE (CIRCLE ONE)	FROM STATION	CHECK	PLACE OF ORIGIN	TIME FILED	DATE FILED <small>mm/dd/yy</small>
032	Routine <input checked="" type="radio"/>	WA6TQJ	17	WOODLAND	16 :53	11 /15 / 12

**INCIDENT NAME** (optional):

<b>TO:</b>	California Hospital Drill Participants	<b>POSITION:</b>	
<b>FROM:</b>	Yolo County Public Health	<b>POSITION:</b>	
<b>SUBJECT:</b>	Hospital Drill		

## MESSAGE BODY:

ALL	MEDICAL	AND	HEALTH	RESPONSE	5
INFORMATION	FROM	YOLO	FACILITIES	SHOULD	10
BE	FORWARDED	TO	THE	YOLO	15
COUNTY	MHOAC				20
					25
					30
					35
					40
					45

<b>RECEIVED FROM:</b> <small>Print name</small>		<b>INITIALS:</b>		<b>POSITION:</b>	
<b>RECEIVED BY:</b>	(Call sign)	<b>RECEIVED TIME:</b>	:	<b>RECEIVED DATE:</b> <small>mm/dd/yy</small>	/ /

## REPLY

REPLY TO MESSAGE NUMBER	FROM STATION	CHECK	PLACE OF ORIGIN	TIME FILED	DATE FILED <small>mm/dd/yy</small>
(Message number above)				:	/ /

					5
					10
					15
					20
					25
					30

<b>RECEIVED FROM:</b> <small>Print name</small>		<b>INITIALS:</b>		<b>POSITION:</b>	
<b>RECEIVED BY:</b>	(Call sign)	<b>RECEIVED TIME:</b>	:	<b>RECEIVED DATE:</b> <small>mm/dd/yy</small>	/ /