

March 2016



Newsletter of the County of Orange Radio Amateur Civil Emergency Service

**Inside this issue:**

Captain's Corner	1
Robert Stoffel	2
OCRACES Meeting	3
Lifetime Licenses	3
KG6MIH Silent Key	3
Basic Battery Box	4
Cooperative T-Hunt	5
Palm Springs Fest	5
Extra Question Pool	5
RACES/MOU News	6
Events Calendar	7

## Captain's Corner

*by RACES Captain Ken Bourne, W6HK, Chief Radio Officer*

### Massive Power Outage

A scenario for the next City/County RACES & MOU Drill (May 7, 2016) that has been suggested is a massive power outage. Whether or not we adopt this scenario, we should consider the potential impact of such a situation, and how, as RACES members, we should be prepared to deal with it.

We are talking about a nationwide power outage, caused by a massive solar flare or EMP (electromagnetic pulse) attack, or a regional outage possibly caused by coordinated terrorist detonations at critical points along the power grid, or by a failure of the power company's grid-controlling computers (which might be terrorist-hacked), or by a large earthquake or fire along the power grid.

A power outage lasting several weeks or months would be devastating to all individuals, businesses, and agencies, including farms, factories, gas stations, hospitals, banks, stores, etc. Fuel pumps won't work, neither will devices that process credit or debit cards. Fuel, which can't be pumped, will eventually run out at sites that use generators, such as hospitals, cell sites, and public-safety communications towers.

How will you eat? Grocery stores will be empty within three days with no gasoline pumps to fuel delivery trucks. Even if you have enough food stored at home for a week or two, what will you do after that?

What if you have an accident at home, or become ill? Ambulances won't be running for the same reason that grocery trucks are out of gas.

After people run out of food and can't buy any more, can't get their prescriptions from pharmacies that can't verify without telephones or the Internet, can't get cash from ATMs, and can't get a response from police and fire departments, they will get desperate and looting and violence might begin.

To be prepared for this situation, you should store food (including for your pets), water (without power, utility water will not be available), batteries, flashlights, personal hygiene items, first-aid kits, and prescription medicines. Cooking food will be a challenge, since even natural gas for gas stoves will not be delivered without power. Therefore, you should consider storing a propane camp stove and bottles of propane. Have some hefty fire extinguishers available also. As soon as the power goes out, fill your bathtub and washing machine for flushing and washing. A two-week supply of water for a family of four would require 56-112 gallons, plus more for pets.

As RACES members, be ready to communicate. If some cell sites are still operational, your cell-phone batteries need to be charged. So do your 2-meter/440-MHz HT batteries. But how do you charge batteries without power? One possible solution was presented at a recent OCRACES meeting by Kevin Zanjani, KI6DHQ, from Bioenno Power. They offer portable/renewable energy storage systems, power packs, foldable solar panels, and solar charge controllers for their lithium iron phosphate batteries. You can also charge your cell phone from some of the available hand-crank AM/FM radios, which also include an LED flashlight.

**The Next  
OCRACES  
Meeting Is**

**March 7, 2016  
1930 Hours**

**840 N. Eckhoff Street,  
Suite 104, Orange**

Radio Inspection  
David Corsiglia, WA6TWF



Orange County Sheriff's Department  
Communications & Technology Division

*Continued on page 2*

## Captain's Corner *Continued from page 1*

Your rechargeable cell phones, tablets, and laptops can be used for storing important OCRACES, OCSD, and FEMA documents, as well some family documents and contact information. For example, on my iPhone I have stored the complete U.S. Department of Homeland Security *Auxiliary Communications Field Operations Guide (AUXFOG)*, the DHS *National Interoperability Field Operations Guide*, the *California Interoperability Field Operations Guide*, the *Orange County Fire Watch Volunteer Manual*, the *OCRACES Severe Fire Weather Patrol Guide*, and manuals for my portable and mobile transceivers. I also have programming software for my

radios on my laptop, and I store programming cables in my laptop bag.

If the power outage is not extremely severe and we are able to obtain fuel for our vehicles, RACES members might be deployed to be “eyes and ears” throughout Orange County. As the severity decreases, power would be restored in only some sectors at a time. Mobile RACES units could report important observations to the EOC, as they observe lights coming on in their areas. We could also report dangerous situations caused by the outage, such as civil unrest.

## Robert Stoffel to Retire at End of March

OCSD Communications & Technology Division Director Robert Stoffel, KD6DAQ, plans to retire at the end of March 2016. Robert has been a great supporter of RACES, and has always shown appreciation for our service to the Division and to the Department. He has attended many of our events, such as Ham Jam and Field Day, and has worked closely with us during drills and activations. At our annual OCRACES Holiday Dinners, Robert has taken great pleasure in congratulating the OCRACES members on their achievements and service throughout the year.

In addition to being directly involved in enhancing the RACES program, Robert has been a key component in the implementation of many radio systems in Orange County, including the 800 MHz Countywide Coordinated Communications System (CCCS), the Emergency Alert System, the Operational Area Radio System, the addition of 800 MHz radios into paramedic base hospitals, receiving-center ERs, and private ambulance companies, and various VHF, UHF, 700 MHz, and 800 MHz interoperable radio systems.

Robert started working for the County in 1985 as Communications Coordinator II Extra Help, Communications Division. In November 1989, he became the Chief of Operations, Communications Division. He directed the operation of the County's Coordinated Communications Center (Control One/OCC) and oversaw the transition of the facility on The City Drive in Orange to the current Loma Ridge facility. In July 1995, Robert became the Emergency Communications Coordinator, Communications Division, and took charge of managing the RACES program as well as the Communications Training Officer. He was responsible for training all users of the 800 MHz CCCS and coordinating interoperable communications systems, hospital emergency communications systems, the Emergency Alert System, RACES, and various state and federal communications systems.

In February 2005, Robert became the Assistant Director of the Communications Division, and, in March 2007, became the director of the Communications & Technology Division.

RACES members are invited to celebrate Robert's retirement on Tuesday, March 29, 2016, at 11:30 AM, at the Prime Cut Café, 1547 W. Katella Avenue, in Orange. The cost is \$20 per person, which includes lunch and non-alcoholic beverage. Please RSVP to Lidia Verduzco at 714-704-7910 or lidia.verduzco@comm.ocgov.com. by Friday, March 18, 2016..

Thanks to Robert for his 26+ years of service to the County, and for his support and friendship to all members of County of Orange RACES. We wish him the very best in his retirement.



**Robert Stoffel, KD6DAQ, at OCRACES Holiday Dinner on December 7, 2015.**



**Robert Stoffel, KD6DAQ, at OCRACES Field Day on June 26, 2015.**

## Next OCRACES Meeting: March 7th

The next County of Orange RACES meeting will be on Monday, March 7, 2016, at OCSD Communications & Technology Division, 840 N. Eckhoff Street, Suite 104, in Orange. Come early (5:30 PM) to have your mobile radio checked in the Eckhoff service bays. As part of our regular meeting, OCSD Senior Communications Technician David Corsiglia, WA6TWF, will check your hand-held radios as well on the communications service monitor in the shop. Equipment inspection will include transmit frequency accuracy, power output, deviation, and spurious emissions. He will also test receiver sensitivity. Antennas will be checked for reflected power. David will also check your antenna and microphone cables for intermittency.

Important upcoming events will be discussed at this meeting, such as the next City/County RACES & MOU Drill on Saturday, May 7, 2016 (0900 to 1100 hours), and Field Day on Saturday and Sunday, June 25-26, 2016, at Craig Regional Park in Fullerton. We plan to deploy the OCRACES van to Fullerton Airport during the May 7th drill, especially with new members who need training on setting up the van. May 7th is Fullerton Airport Day, and this will be an opportunity to show our capabilities to the public attending this event. The OCSD Aero Squadron Reserve Unit will also be exhibiting. Two different drill scenarios were suggested at the last City/County RACES & MOU Meeting—a large plane crash and a major power outage, possibly caused by terrorists disrupting the power grid for several weeks. We need to select the drill scenario and Field Day leaders at this meeting or in the near future.

## FCC Seeks Comments on Lifetime Licenses

The FCC is seeking comments on a Petition for Rule Making (RM 11760) that asks the FCC to grant lifetime Amateur Radio licenses. Mark F. Krotz, N7MK, of Mesa, Arizona, filed his request with the FCC last November. He wants the FCC to revise § 97.25 of its rules to indicate that amateur radio licenses are granted for the holder's lifetime, instead of for the current 10-year term. Krotz noted that the General Radiotelephone Operator License (GROL) already is issued on a lifetime basis, and he maintained that not having to renew licenses would lighten the FCC's workload.

"It would be mutually beneficial for the FCC and amateur radio operators to update Part 97 to grant operator licenses for lifetime, Krotz said in his filing. "The FCC would benefit by reducing administrative costs."

In 2014 the FCC granted lifetime credit for examination elements 3 and 4, but applicants seeking relicensing under that provision still must pass examination element 2.

Individuals may submit comments via the FCC's Electronic Comment Filing System (ECFS).

## Kevin Guice, KG6MIH, Silent Key

We are very sad to report that Kevin Guice, KG6MIH, became a silent key on Monday, February 8, 2016. Kevin, along with his parents Cliff, KG6MIG, and Bobbie, KG6MIF, was a member of City of Orange Amateur Radio (COAR, the City's RACES unit), American Red Cross, and SART (Santa Ana's former RACES unit). He was also a



weather spotter for the National Weather Service and had his own weather station that uploaded to Weather Underground, NWS. He also volunteered at CHOC (Children's Hospital of Orange County) as a member of their Youth Advisory Counsel. Kevin was 27 years old and became an amateur radio operator on July 17, 2002. He became an Extra Class ham in March 2005. He became an Eagle Scout in 2006. Kevin was honored by the Orange County Regional Center as the winner of their Spotlight Award in 2008. As a ham, he worked stations worldwide on HF and enjoyed talking with friends on local repeaters in Orange County. Kevin adored his golden retriever service dog Gabby, who was a precious companion in Kevin's battle with cerebral palsy, scoliosis, dozens of surgeries, and insurmountable pain. Kevin had a great "no excuses" attitude, and was an inspiration to others with his enthusiasm, intelligence, curiosity, and humor.



# EmComm Basic Battery Box

by Tony Gawel, W6TNY

This project is intended to provide CERT, EmComm teams, and amateur radio clubs with a basic low-cost emergency battery-box project that is simple to build and requires minimal tools. The article is designed to inspire a few ideas on what is possible by providing a club/group activity that all members can participate in. The building process provides builders with both camaraderie and pride of ownership in building their own emergency equipment (the fundamentals of amateur radio).

The battery box is a quick, fun, and inexpensive project for individuals and groups. If you have the components, the build can be completed in just a few hours or an afternoon. You start with the basic box and add your accessories and ideas as you go. The ultimate project you decide to build is determined by the skills of the group and your own imagination.

This project is not the high-end mega EmComm box that many amateur radio operators often build. It is not designed to replace critical pieces of equipment either, but to supplement them. This project is designed for most people who want to be better prepared, and may not have the resources to build one of these so called mega EmComm boxes.

Some of the advantages of the battery-box project are;

1. The box is easily transported in the back of your car
2. It can be installed in your home/office
3. It can easily be taken in the field for EmComm or QRP operations.

A single box can provide limited emergency power during critical times, but if the boxes are connected together the user can effectively add more battery capacity and air time when needed.

The unit is capable of supplying emergency 12 volt DC power in the field to charge most phones, HT radios, small HT repeaters, mobile radios operating on low power (QRP), and assorted LED lighting. A well-constructed EmComm box can provide temporary power for those running Broadband-Hamnet Wi-Fi mesh nodes, etc.

What type of box you decide to build is based on your resources, skills, and creative imagination. This article primarily focuses on building on the cheap, building more basic boxes, and for those that can afford to build the “Cadillac” box! The foundational design becomes the building block for other designs. It only differs in the type of accessories that you decide to incorporate. Key advantages of this battery-box design are that it can be customized, expanded, and added on to as you need, which makes it affordable and easy on your resources. The recommended procedures for building the different types of boxes are the same, but the addition of optional accessories can increase the unit’s functionality and overall cost of the project. An important consideration is that this design also lends itself to incorporating different battery sizes and types based on budget and availability. The build also attempts to incorporate a simple design to allow for quick battery replacement and for future upgrades potentially to the new lithium-iron-phosphate, light, high-capacity batteries (as in “Cadillac” EmComm boxes).



Figure 1. Cadillac box.



Figure 2. Basic box.

## The Build

I wanted to build a quick, fun, and inexpensive project that can be shared with others, and that was one of the primary reasons why I designed the box. It provides emergency 12 volt DC power in a small, lightweight, waterproof case. Various types of batteries are plentiful and often recycled batteries can be found for free or for just a few bucks. The building process has been simplified for non-technical people.

The build begins with readily available 7-Ah AGM UPS batteries, which are inexpensive and available in most electronics surplus stores or from an older UPS unit. Another source of batteries may come from larger UPS systems. Depending on the type of UPS system, if and when a battery pack fails there are often still a few usable batteries remaining. The 7-Ah battery that is typical in these UPS packs is a deep-cycle battery, which lends itself extremely well to these smaller types of projects.



Figure 3. Basic box with USB charge adapter and phone cable.

## KD7QOX Hides in Huntington Beach

OCRACES Applicant Julian McDonald, KD7QOX, was the fox on Monday, February 15, 2016, on the monthly cooperative T-hunt. He turned on the fox box immediately following the 2-meter OCRACES ACS net in a parking lot at Springdale Street and Bolsa Avenue in Huntington Beach.

The hunt began with helpful bearing information from Gordon West, WB6NOA, from his home in Costa Mesa. The MESAC Team, consisting of Patrick Williams, KJ6PFW, and Eric Bowen, W6RTR, was the first to find the fox. Next was Richard Saunders, K6RBS, from Mission Viejo. Then Ken Bourne, W6HK, and his son Don, KB6TVK, arrived.

The next cooperative T-hunt will be held on February 15th (the third Monday in February), immediately following the OCRACES 2-meter net (approximately 7:20 PM). The fox will transmit on the input (146.295 MHz) of the 146.895 MHz repeater. Hunters will compare bearings via the 449.100 MHz repeater, and are encouraged to beacon their positions via APRS throughout the hunt. The fox will be hiding in a sector of Orange County (to be announced a few days prior to the hunt) on paved, publicly accessible property. No fees will be required to drive directly to the fox.

To resolve scheduling conflicts with RACES meetings, events, and County holidays in 2016, we have moved all cooperative T-hunts to the third Monday, except for the second Monday in October.

The cooperative T-hunts provide excellent practice in working together to find sources of interference. The hunts are not official RACES events, so DSW (Disaster Service Worker) coverage does not apply. Please drive carefully!

Fox-hunt loops and beams are available from Arrow Antenna and HRO, including the Arrow Model FHL-VHF fox-hunt loop (covers 1 MHz to 600 MHz) and the Arrow Model 146-3 three-element portable hand-held yagi. The Arrow OFHA 4-MHz offset attenuator can be useful when close to the fox, to prevent receiver overload. An all-mode transceiver is quite useful, allowing hunters to switch to the SSB or CW mode for detecting extremely weak signals, or to switch in a built-in attenuator, reduce RF gain, or tune slightly off frequency when dealing with extremely strong signals.



At the fox's den are (left to right) Don Bourne, KB6TVK, Eric Bowen, W6RTR, Julian McDonald, KD7QOX (the fox), Patrick Williams, KJ6PFW, and Richard Saunders, K6RBS.

## Extra Question Pool Emphasizes Digital, SDRs

The new Amateur Extra class license examination question pool, effective from July 1, 2016, through June 30, 2020, now is available at the National Conference of Volunteer Coordinators (NCVEC) Web site. The latest revision contains a few minor corrections that had been released in a February 5 errata of the initial January 8 release. NCVEC Question Pool Committee Chair Rol Anders, K3RA, said the new pool represents a fairly significant change relative to the current question pool, which expires on June 30.

“The primary change is modernization of the pool to place more emphasis on digital communications, digital test equipment, software defined radios, and propagation/space weather,” he said. “Also, a number of other topics were added, including questions on some additional antenna types commonly used by radio amateurs.” Anders said that room to cover the new topics was made in the question pool by dropping some questions that had been in the expiring pool.

“Many of the questions removed were on topics which were felt to be of less importance to the current amateur population,” he said. “However, there was also some ‘evening out’ of difficulty in the removal of a number of questions felt to be inappropriately easy or difficult relative to the rest of the pool.” As a result, he said, the net number of questions grew from 700 to 712 questions.

All questions in the expiring pool were re-evaluated for possible clarification or improvement, and approximately 60 questions were slightly modified.

“All in all, the Question Pool Committee has worked to keep the Amateur Extra class exam up to date, to provide a high-quality examination, and to ensure that the incoming Extra class amateurs are well-qualified to be leaders in the hobby,” Anders said.

# RACES/MOU News from Around the County

**"RACES/MOU News" provides an opportunity to share information from all City & County RACES/ACS units and MOU organizations in Orange County.**

**Please send your news to NetControl Editor Ken Bourne, W6HK, at:**

**w6hk@ocraces.org**

## Anaheim RACES

Anaheim RACES Coordinator Jeff Duvall, Administrative Analyst, Anaheim Fire & Rescue, submitted the following information:

The effects of severe weather are felt every year by many Americans. To obtain critical weather information, NOAA's National Weather Service (NWS), part of the U.S. Department of Commerce, established SKYWARN® with partner organizations. SKYWARN® is a volunteer program with nearly 290,000 trained severe weather spotters. These volunteers help keep their local communities safe by providing timely and accurate reports of severe weather to the National Weather Service.

Although SKYWARN® spotters provide essential information for all types of weather hazards, the main responsibility of a SKYWARN® spotter is to identify and describe severe local storms. In the average year, 10,000 severe thunderstorms, 5,000 floods, and more than 1,000 tornadoes occur across the United States. These events threatened lives and property.

Anaheim Fire & Rescue's Emergency Management & Preparedness Section along with Anaheim Radio Amateur Civil Emergency Service (RACES) will be hosting a SKYWARN® training session.

Training is free and typically lasts about 2 hours. You'll learn:

- Basics of thunderstorm development
- Fundamentals of storm structure
- Identifying potential severe weather features
- Information to report
- How to report information
- Severe weather safety

### **Who is eligible?**

NWS encourages anyone with an interest in public service and access to communications, such as ham radio, to join the SKYWARN® program. Volunteers include police and fire personnel, dispatchers, EMS workers, public utility workers, and other concerned private citizens. Individuals affiliated with hospitals, schools, churches, or nursing homes or who have a responsibility for protecting others are also encouraged to become a spotter.

To register for this training session, please

visit: <https://www.eventbrite.com/e/skywarn-training-anaheim-california-tickets-21437605455>.

**When:** Friday, March 4, 2016, from 5:30 PM to 7:30 PM.

**Where:** North Net Fire Training Center, 2400 E Orangewood Ave., Anaheim, CA 92806 (W. Orangewood Ave & 57 Freeway, across from Angel Stadium of Anaheim).

**Parking:** In the front parking lot, or along the street on Rampart Street.

Do you need more information? E-mail [RACES@Anaheim.net](mailto:RACES@Anaheim.net) or call Jeff DuVall at 714-765-4051.

## Fullerton RACES

Fullerton RACES Radio Officer Gene Thorpe, KB6CMO, reported that amateur radio operators are needed for the Donate LIFE Run/Walk & Family Festival at Cal State Fullerton on Saturday, April 30, 2016. They need 30 hams all around the course. Time is 0700 to 1130 hours or so. Contact Gene at [kb6cmo@juno.com](mailto:kb6cmo@juno.com) with your name, call sign, e-mail address, and telephone number.

## La Palma RACES

La Palma Police Sgt. Art Wright, KJ6JJH, is now the City's RACES Coordinator.

## Laguna Niguel ACS

Dale McNulty, N6IOK, is now the Laguna Niguel ACS Chief Radio Officer.

## Laguna Woods RACES

Chris Macon, Laguna Woods City Manager, is now the City's RACES Coordinator.

## Placentia RACES

Placentia RACES, in coordination with the LDS ERC group, had a four-day Technician Class license class in January 2016. Of the 24 people who attended, 21 passed the test and two were not able to take the test at the designated date. They will take the test later. The class was presented by Bill Burbridge, W6VKO, assisted by Don Rex, WR6R, and Mark Garrett, KG6CAV. They also held a Radio 101 class on February 25, 2016, for new hams to help them with using their radios.

# March 2016

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5 Weekly 40 m ACS Net
6	7 OCRACES Meeting & Weekly 2 m ACS Net	8	9	10	11	12 Weekly 40 m ACS Net
13	14 Weekly 2 m ACS Net	15	16	17 Happy Saint Patrick's Day	18	19 Weekly 40 m ACS Net
20	21 Weekly 2 m ACS Net & Cooperative T-Hunt	22	23	24	25 Good Friday	26 Weekly 40 m ACS Net
27	28 Happy Easter Five-Band ACS Nets & SWACS Radio Test	29	30	31		

**Upcoming Events:**

- March 7: OCRACES Meeting, 840 N. Eckhoff Street, Suite 104, Orange, 1930-2130 hours
- March 21: Cooperative T-Hunt on input of 2-meter repeater, 1920 hours
- March 28: Five-band ACS nets and Southwest ACS Frequency/Radio Test
- May 7: City/County RACES & MOU Drill
- June 25-25: Field Day



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



## Mission Statement

County of Orange RACES has made a commitment to provide all Public Safety departments in Orange County with the most efficient response possible to supplement emergency/disaster and routine Public Safety communications events and activities. We will provide the highest level of service using Amateur and Public Safety radio resources coupled with technology, teamwork, safety, and excellence. We will do so in an efficient, professional, and courteous manner, accepting accountability for all actions. We dedicate ourselves to working in partnership with the Public Safety community to professionally excel in the ability to provide emergency communications resources and services.

### County of Orange RACES Frequencies

40 m: 7250 kHz SSB (City/County/MOU Net—Saturdays, 1000 hours)  
 10 m: 29.640 MHz output, 29.540 MHz input, 107.2 Hz PL  
 6 m: 52.620 MHz output, 52.120 MHz input, 103.5 Hz PL  
 2 m: 146.895 MHz output, 146.295 MHz input, 136.5 Hz PL\*  
 2 m: 147.480 MHz simplex  
 1.25 m: 223.760 MHz output, 222.160 MHz input, 110.9 Hz PL  
 70 cm: 446.000 MHz simplex  
 70 cm: 449.100 MHz output, 444.100 MHz input, 110.9 Hz PL (private)  
 70 cm: 449.180 MHz output, 444.180 MHz input, 107.2 Hz PL (private)  
 23 cm: 1287.650 MHz, 1287.675 MHz, 1287.700 MHz, 1287.725 MHz, 1287.750 MHz, and 1287.775 MHz outputs, -12 MHz inputs, 88.5 Hz PL  
 \*Primary Net—Mondays, 1900 hours

RACES Program Coordinator (Emergency Comm's Manager)  
 Lee Kaser, KK6VIV  
 714-704-8080

Chief Radio Officer (Captain)  
 Ken Bourne, W6HK  
 714-997-0073

Radio Officers (Lieutenants)  
 Scott Byington, KC6MMF  
 Harvey Packard, KM6BV

Assistant Radio Officers (Sergeants)  
 Jack Barth, AB6VC  
 Ernest Fierheller, KG6LXT  
 Bob McFadden, KK6CUS  
 Tom Tracey, KC6FIC

### County of Orange RACES

OCSD/Communications & Technology  
 840 N. Eckhoff St., Suite 104, Orange, CA 92868-1021  
 Telephone: 714-704-8080 • Fax: 714-704-7902  
 E-mail: [ocraces@comm.ocgov.com](mailto:ocraces@comm.ocgov.com)

# County of Orange RACES

OCSD/Communications & Technology  
840 N. Eckhoff St., Suite 104,  
Orange, CA 92868-1021

Telephone – 714-704-7979  
Fax – 714-704-7902  
E-mail – ocraces@comm.ocgov.com

**Visit Our Web Site**  
<http://www.ocraces.org>  
**It's Where It's @!**

Questions or Comments?  
Contact *NetControl* Editor Ken Bourne, W6HK  
[w6hk@ocraces.org](mailto:w6hk@ocraces.org)



**“W6ACS ...**  
Serving  
**Orange County”**

## Meet Your County of Orange RACES Members!



Ken Bourne  
W6HK



Scott Byington  
KC6MMF



Harvey Packard  
KM6BV



Jack Barth  
AB6VC



Ernest Fierheller  
KG6LXT



Bob McFadden  
KK6CUS



Tom Tracey  
KC6FIC



Randy Benicky  
N6PRL



Roger Berchtold  
WB6HMW



David Corsiglia  
WA6TWF



Jim Dorris  
KC6RFC



Nancee Graff  
N6ZRB



Ray Grimes  
N8RG



Walter Kroy  
KC6HAM



Martin La Rocque  
N6NTH



Fran Needham  
KJ6UJS



Kenan Reilly  
KR6J



Tom Riley  
K6TPR



Brad Russo  
KB6GPM



Joe Selikov  
KB6EID



Ken Tucker  
WF6F



Tom Wright  
KJ6SPE



Robert Stoffel  
KD6DAQ



Lee Kaser  
KK6VIV