

March 2018



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Next OCRACES Meeting:

**Monday,
March 5, 2018,
at 1930 Hours**

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

**Discuss Net and
Activation Procedures**



Orange County Sheriff's Department
Communications & Technology Division



Newsletter of the County of Orange Radio Amateur Civil Emergency Service

Captain's Corner

by RACES Captain Ken Bourne, W6HK, Chief Radio Officer

Beware of Remote Computer Access

Scammers are everywhere, and are trying to get remote access to your computers. Sometimes, during computer problems, software failures, difficulties in loading drivers, configuring codeplugs, or trying to make your computer programming software (CPS) communicate with your new Chinese DMR transceiver (for example), you might, out of desperation, permit someone to have remote access to your computer to resolve your problems. Doing so is dangerous, especially if you need to log into their Web site to give them access. Perhaps a safer method would be to install remote access and support software on your computer, such as TeamViewer, which generates a new password for access every time it is activated. You simply provide that password to the other party, which also needs to be running TeamViewer. That password expires at the end of the access session. During the session, watch carefully to make sure that the other party does not install malware, access private files, etc.

By the way, TeamViewer can allow you to access your home computer from a field computer (such as your laptop or smartphone), if you need a stored file during a RACES activation, for example. Simply activate TeamViewer on your home computer before you leave home, write down the ID number and session password, and fill in that information when you activate TeamViewer from your field location.

Some sellers of newly introduced amateur radio equipment are offering to remotely fix your computer's capabilities to communicate with your newly bought transceiver.



Expert Electronics SunSDR MB1 transceiver covers 160 through 10 meters, 6 meters, and 2 meters. It is designed in Russia, assembled in Taiwan, and sold by NSI Communications in Kirkland, Washington, which offers technical support by remote access to your PC.

er. That's probably ok if their access is through something like TeamViewer or NoMachine, and if they are accessing only the radio's built-in computer, such as a Flex 6700 or an Expert Electronics SunSDR MB1 transceiver.

Expert Electronics is a Russian company, and that initially threw up a red flag about their MB1, considering that many viruses and malware originate in Russia, and the seller, NSI Communications, offers technical support remotely to your computer. However, the computer that runs the MB1 is built into the radio, and remote access might not be so bad if an external computer is not connected at the time. Just watch out for what's happening through your router to other devices.

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Captain's Corner *Continued from page 1*

The MB1 is such an interesting transceiver that I will divert my article to describing it, and then will get back on the subject of the dangers of allowing remote access to your computer.

The MB1 covers 160 through 10 meters, 6 meters, and 2 meters. It incorporates advanced SDR technologies, including independent receive path with direct digital conversion (DDC) and separate independent transmit path with digital up conversion (DUC). Featured are two software-independent receiver channels with bandwidth up to 312 kHz and two sub-receivers in each channel. There is an antenna switch for two HF antennas. An automatic tuner unit is available as an option. Four programmable PTT outputs provide independent external power amplifier control. A COM port is provided for connecting external devices (power amplifiers, rotators, external computers, etc.). A bandpass filter may be added in the HF front end via RX IN and RX OUT connectors. Sub-octave bandpass filters are embedded. Other VHF and UHF bands may be added with transverters. Frequency synchronization is achieved with an external 10-MHz reference oscillator.

The MB1's computer capabilities include installation of digital-modes software, installation of ham and contest logs, use of two CW skimmers on different bands, connection to a LAN and the Internet, use of Internet applications (such as e-mail, Skype, ICQ, TV, etc.), playing of video and audio files, watching TV via USB receivers, and ability to connect two external monitors, keyboard, and mouse.

The MB1's CPU is an Intel i5 at 2.8 GHz. RAM is 8 GB. It uses a 120 GB solid-state "disk" drive. There are four USB 3.0 ports on the rear panel and two USB 2.0 ports on the front panel. External monitors connect through an HDMI and D-PORT. It also has a 1-GB LAN port. An Ultimate MB1 Prime is available with an Intel i7-6700T CPU, 16 GB of RAM, and a 525 GB SSD.

Connecting this Russian transceiver to the Internet for technical support is probably reasonably safe, but be careful if your external computer is connected. Russia is one of several countries with spammers and hackers who try to remotely connect to your computer for accessing critical files, stealing your ID or passwords to financial accounts, planting malware and viruses, etc.

Beware even of antivirus software, which is designed to comprehensively scan a computer and accesses virtually everything on your computer as it searches for malware, and then sends regular reports back to a company server. Installing Russian antivirus software is particularly risky. One such software is Kaspersky, which is considered highly effective in detecting and eliminating computer viruses. However, in 2015, it was reported that the home computer of a National Security Agency (NSA) contrac-

tor was hacked by Russian agents using Kaspersky antivirus software. In October 2017, it was reported that NSA investigated after Israeli government hackers informed U.S. officials that Kaspersky software was being used to comb computers worldwide for classified material. Last September, the Department of Homeland Security issued a binding operational directive (BOD) to federal agencies to remove Kaspersky software from government computers within 90 days. The order stated, "Kaspersky antivirus products and solutions provide broad access to files and elevated privileges on the computers on which the software is installed, which can be exploited by malicious cyber actors to compromise those information systems." The order cited concerns "about the ties between certain Kaspersky officials and Russian intelligence."

I am not aware of any evidence that data has been stolen from ordinary consumers who had Kaspersky antivirus software on their computers. However, many home computers may have been searched for information of possible interest to Russian spy agencies. If you are concerned about privacy or have sensitive information on your computer (such as OCSD-related information if you are a Reserve), I recommend that you not run Kaspersky.

If you purchased your computer with preinstalled Kaspersky antivirus software, you can uninstall it. (Windows Defender Antivirus cannot be uninstalled, but it can be disabled.) The retailer that sold you the computer might do it for you, and then install some other brand of antivirus software. Best Buy stopped selling Kaspersky products last September. Office Max and Office Depot also stopped selling Kaspersky.

I have received several telephone calls from people (always with an Indian or Pakistani accent) claiming to represent Microsoft, and claiming that my computer is infecting the Internet. They offer to access my computer remotely to "fix" the problem, if I were to log into their Web site. Once they have access to your computer, they can do the following, according to Microsoft:

- Trick you into installing malicious software that could capture sensitive data, such as online-banking user names and passwords. They might also then charge you to remove the software.
- Convince you to visit legitimate Web sites to download software that will allow them to take control of your computer remotely and adjust settings to leave your computer vulnerable.
- Request credit-card information so they can bill you for phony services.
- Direct you to fraudulent Web sites and ask you to enter credit-card and other personal or financial information there.

Next OCRACES Meeting: March 5th

The next OCRACES meeting will be on Monday, March 5, 2018, at 7:30 PM, at OCSD Communications & Technology Division, 840 N. Eckhoff Street, Suite 104, in Orange. At this meeting we will discuss net and activation procedures and the types of equipment each member is expected to own and keep operational. We will also form teams in order to become more active and more effective. One team will focus on publicizing and recruiting. Another team will be responsible for scheduling guest speakers for our meetings. A technology team will explore various modes of communications to expand our capabilities and will find solutions to equipment problems that occur in the EOC RACES Room and in any future OCRACES communications vehicle. Every member will be assigned to a team, so be ready to state your preference and bring your team ideas to this meeting.

ARRL Requests Expanded HF Tech Privileges

ARRL has asked the FCC to expand HF privileges for Technician licensees to include limited phone privileges on 75, 40, and 15 meters, plus RTTY and digital mode privileges on 80, 40, 15, and 10 meters. The FCC has not yet invited public comment on the proposals, which stem from recommendations put forth by the ARRL Board of Directors' Entry-Level License Committee, which explored various initiatives and gauged member opinions in 2016 and 2017.

"This action will enhance the available license operating privileges in what has become the principal entry-level license class in the Amateur Service," ARRL said in its Petition. "It will attract more newcomers to amateur radio, it will result in increased retention of licensees who hold Technician Class licenses, and it will provide an improved incentive for entry-level licensees to increase technical self-training and pursue higher license class achievement and development of communications skills."

Specifically, ARRL proposes to provide Technician licensees, present and future, with phone privileges at 3.900 to 4.000 MHz, 7.225 to 7.300 MHz, and 21.350 to 21.450 MHz, plus RTTY and digital privileges in current Technician allocations on 80, 40, 15, and 10 meters. The ARRL petition points out the explosion in popularity of various digital modes over the past two decades. Under the ARRL plan, the maximum HF power level for Technician operators would remain at 200 W PEP. The few remaining Novice licensees would gain no new privileges under the League's proposal.

ARRL's petition points to the need for compelling incentives not only to become a radio amateur in the first place, but then to upgrade and further develop skills. Demographic and technological changes call for a "periodic rebalancing" between those two objectives, the League maintains.

"There has not been such a rebalancing in many years," ARRL said in its petition. "It is time to do that now." The FCC has not assessed entry-level operating privileges since 2005.

The Entry-Level License Committee offered very specific, data- and survey-supported findings about growth in amateur radio and its place in the advanced technological demographic that includes individuals younger than 30. It received significant input from ARRL members via more than 8,000 survey responses.

"The Committee's analysis noted that, today, amateur radio exists among many more modes of communication than it did half a century ago, or even 20 years ago," ARRL said in its petition.

Now numbering some 378,000, Technician licensees comprise more than half of the US Amateur Radio population. ARRL said that after 17 years of experience with the current Technician license as the gateway to amateur radio, it's urgent to make it more attractive to newcomers, in part to improve upon science, technology, engineering, and mathematics (STEM) education "that inescapably accompanies a healthy, growing Amateur Radio Service," ARRL asserted.

ARRL said its proposal is critical to developing improved operating skills, increasing emergency communications participation, improving technical self-training, and boosting overall growth in the Amateur Service, which has remained nearly inert at about 1% per year.

The Entry-Level License Committee determined that the current Technician Class question pool already covers far more material than necessary for an entry-level exam to validate expanded privileges. ARRL told the FCC that it would continue to refine examination preparation and training materials aimed at STEM topics, increase outreach and recruitment, work with amateur radio clubs, and encourage educational institutions to utilize amateur radio in STEM and other experiential learning programs.

"ARRL requests that the Commission become a partner in this effort to promote amateur radio as a public benefit by making the very nominal changes proposed herein in the Technician class license operating privileges," the petition concluded.

ACS/EmComm Radio Rodeo: May 5, 2018

Instead of the usual City/County RACES & MOU ACS Exercise on the first Saturday in May, the event will be expanded to cover all operational areas (counties) in the Southern Region (Mutual Aid Regions I and VI) of Cal OES. Counties in Mutual Aid Region I include Los Angeles, Orange, San Luis Obispo, Santa Barbara, and Ventura. Counties in Mutual Aid Region VI include Imperial, Inyo, Mono, Riverside, San Bernardino, and San Diego.

The exercise objective will be to establish contact between all counties on HF (40 meters) as well as on 2-meter, 1¼-meter, and 70-centimeter high-altitude repeaters and linked systems (such as Cactus). In Orange County, we will test local communications on our repeaters on those bands, plus simplex on 2 meters and 70 centimeters, plus our 6-meter repeater. Each county will establish a location for gathering RACES and other amateur radio EmComm vehicles. One hour of the exercise will be spent communicating between the local vehicles and perhaps with EOCs throughout the county. The other hour will be devoted to intercounty communications. Net control for intercounty communications will be assigned prior to the exercise.

Formal message traffic is not planned for this exercise. At the conclusion of the exercise, participants will have an opportunity to inspect the communications vehicles.

Plans have been drafted, and include an ICS 205 Incident Radio Communications Plan and an Incident Action Plan (IAP), in accordance with FEMA National Incident Management System (NIMS) and Incident Command System (ICS) procedures.

We are hoping to hold the Orange County portion of this event at the Great Park in Irvine. We expect this location to be confirmed soon.

Here is the planned event timeline:

- 0800-0830: Participant check-in and setup
- 0830: Mandatory participant briefing
- 0900-1000: Roll call and testing between local RACES/ACS/EmComm units
- 1000-1100: Roll call and testing between Operational Areas
- 1100-1115: Mandatory participant debriefing
- 1115-1200: Vehicle and equipment exhibition and inspection
- 1200: Demobilization

ARES Transitioning to New Online Reporting

The Amateur Radio Emergency Service (ARES) will phase out the traditional ARES report forms later this year in favor of an online system called ARES Connect, a volunteer management, communications, and reporting system. The new system will allow information to be logged by ARES members and managed through the Field Organization. The advent of ARES Connect was among other highlights in “The Amateur Radio Emergency Service (ARES) 2017 Annual Report,” released in February 2018.

“ARES Connect is a volunteer management system that covers event signup, reporting, and roster management,” ARRL Emergency Preparedness Manager Mike Corey, K1IU, said. “It does not change how ARES operates when serving a partner entity; it is simply a system that will make managing volunteers and events easier.” Beta testing of ARES Connect will begin in March. ARES made changes to its report forms last year to make it easier to process information at ARRL Headquarters and to standardize the format for all forms. ARES Monthly Reports have been posted to the ARRL Web site, providing regular information on amateur radio public service communications activity, the report noted.

According to the 2017 report, ARES membership stands at 31,332, up by nearly 13% from 2016. The number of emergency operations events reported was up by 665 from the previous year, with 1,913 reported in 2017. The top three states in terms of ARES membership in 2017 were California (2,265), Texas (1,930), and Ohio (1,858).

Reported ARES events amounted to 51,673 in 2017 — a 4% increase — accounting for 718,930 volunteer hours at a calculated value of more than \$17.3 million.

“There was a noticeable increase in reported activity during August through November,” the ARES 2017 Annual Report said. “During this period there was amateur radio response activity for hurricanes Harvey, Irma, and Maria; wild-fires in the western states, and the total solar eclipse that occurred on August 21.”

According to the report, 26 states gained ARES members, while 13 lost members.

KC6TWS Hides in Aliso Viejo

It was a cold and windy night on Monday, February 19, 2018. Peter Gonzalez, KC6TWS, was the fox on the monthly cooperative T-hunt. He turned on the fox box immediately following the 2-meter OCRACES ACS net, hiding in Woodfield Park in Aliso Viejo, north of Pacific Park Drive, between Aliso Creek Road and Alicia Parkway.

The first to find the fox was Dennis Brunning, KC6NVX, who started fairly close to the fox. Next was Ron Allerdice, WA6CYY. Third place was taken by Richard Saunders, K6RBS. After making several wrong turns, Ken Bourne, W6HK, and Roger Kepner, W6SQQ, came in fourth.

The next hunt will be on Monday, March 19, 2018, immediately following the OCRACES 2-meter net (approximately 7:20 PM). The fox will hide on paved, publicly accessible property in a city or sector of Orange County to be announced a few days before the hunt. No fees will be required to drive directly to the fox. He will transmit on the input (146.295 MHz) of the 146.895 MHz repeater. Hunters will compare bearings via the 448.320 MHz repeater and are encouraged to beacon their positions via APRS throughout the hunt. We are looking for a volunteer to be the fox.

The cooperative T-hunts are usually held on the third Monday of each month. The hunts provide excellent practice in working together to find sources of interference quickly. 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. For on-foot hunting, the BC-146.565 three-element, hand-held, foldup, yagi antenna is available from Bob Miller Enterprises (<http://www.rdfantennas.com>), along with the VK3YNG MK4 sniffer. 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. Some hunters use the DF2020T radio direction finder kit, which is a Doppler system available from Global TSCM Group, Inc. (<http://www.kn2c.us>). A very similar system is the MFJ-5005 Doppler direction finder. Useful apps are available for iPhones and Android phones. For some excellent information on T-hunting, see <http://www.homingin.com>.



At the fox's den are (left to right) Ron Allerdice, WA6CYY, Dennis Brunning, KC6NVX, Peter Gonzalez, KC6TWS (the fox, holding the fox box), Richard Saunders, K6RBS, and Roger Kepner, W6SQQ.

Westminster RACES Supports Tet Parade

by Chi Nguyen, KE6MVS, Westminster RACES Chief Radio Officer

Many thanks to the Westminster RACES/CERT Members. Westminster RACES/CERT Volunteers supported the annual Tet Parade in Westminster on February 17, 2018. Chief Radio Officer Chi Nguyen, KE6MVS, led the field team, and Assistant Chief Radio Officer Adam Valek, N6HVC, served as Net Control. Operations went smoothly and the weather was great, which made for a perfect day. Approximately 60 hours were dedicated to the TET Parade.

With the command post at the Tet parade are (left to right) Andrew Nguyen, KI6SYJ, Thu Chu, KE6SFF, Chi Nguyen, KE6MVS, Jason Orban, KK6FRG, Ellen Lopez, KF6PWV, Adam Valek, N6HVC, Antonio Zelaya, AF6II, Barbara Flack (CERT), Chu Nguyen, KE6YSS, Huy Nguyen, KG6CVC, and Dong Ha, KJ6MBC.



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 and supportive amateur radio clubs in Orange County.

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

w6hk@
ocraces.org**

Fullerton RACES

Fullerton RACES Radio Officer Gene Thorpe, KB6CMO, asks everyone to save Saturday, April 28, 2018, for this year's Donate Life Run/Walk/Family Festival, from 0630 to 1130 hours. Let Gene know if you can help with this event at California State University Fullerton. Send an e-mail with your name, call sign, and cell-phone number to KB6CMO@arrl.net.

Irvine RACES (IDEC)

Sgt. Tim Schilling is now the Police Advisor for IDEC.

Mission Viejo RACES

An excellent article ("This Ham Radio Operator Could Save Your Life") by Columnist David Whiting in the Sunday, February 25, 2018, edition of the *Orange County Register* publicized amateur radio and RACES, and featured Mission Viejo RACES Member Knute Josifek, K6HIV. Whiting said, "When the Big One hits, you might as well kiss your cellphone goodbye. It's more than likely emergency officials will shut down all use except for first responders....A big quake will topple cell towers and that means zero cell calls. That is when you might find yourself thanking Josifek, 75, and the other volunteers....These men and women—as well as an increasing number of teens—call themselves amateur radio enthusiasts. Trained and licensed, they are the volunteers for our country's Radio Amateur Civil Emergency Service."

Whiting points out that Josifek is "an electronics instructor at Saddleback College in South Orange County, an electrical engineer for Fortron Source Corp., a volunteer with the Mission Viejo Office of Emergency Management, a deacon at United Church of God in Los Angeles."

Whiting continues that Josifek "allows that if a big quake occurs, his mission is to contact first responders outside of the disaster zone so they know what's what."

The article covers Josifek's early days in amateur radio, signal propagation off the ionosphere, SOARA repeaters, and amateur radio in general. Congratulations to Knute Josifek, K6HIV, on a great interview to publicize the capabilities of amateur radio and RACES to serve during a disaster.

Hospital Disaster Support Communications System (HDSCS)

Orange County EMS has asked HDSCS leadership to provide a three-hour course in March on "Using Amateur Radio Resource." This course is primarily for staff from the non-receiving medical facilities that are now having to meet the new regulations from the Center for Medicare and Medicaid Services. The course will provide an understanding of how amateur radio can help; putting amateur radio in the disaster plan; activation protocols; and sending messages via the amateur radio networks.

HDSCS volunteer examiners are hosting a licensing exam session and informal open house on Saturday, March 3, 2018, at Care Ambulance in the city of Orange, starting at 9:00 AM. Those wanting to take a test at any level are asked to register with Ken Simpson, W6KOS. Information is on the HDSCS public Web site at <http://www.hdscs.org>.

HDSCS leadership is planning for its 2018 Orientation and Review Workshop on March 24th. This all-day workshop reviews technical aspects of the group such as HDSCS communicator equipment preparation; nuances of repeaters available to HDSCS; recognizing and dealing with various kinds of interference, along with hospital-related topics such as hospital incident command system; dealing with messages involving patient information; triaging; and internal communications. This year the special topic will be about the support of non-emergency receiving centers.

HDSCS leadership visited one of Orange County HPP medical facilities that has asked for backup communications. They met with the administrator, who is also the disaster coordinator for the facility in Garden Grove. This setting furnishes skilled nursing and subacute services. HDSCS gave the hospital a letter acknowledging the request, and agreed to provide communications to the best of their capabilities.

HDSCS leadership attended the monthly Orange County Multi-Agency Disaster group meeting. A recommendations and reminders sheet was provided to hospitals involved in the November 2017 Statewide Medical and Health Exercise. Planning is now underway for the Spring drill, and the next two OCMAD meetings will be focusing on that.

March 2018

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3 Weekly 40 m ACS Net
4	5 Weekly 2 m ACS Net & OCRACES Meeting	6	7	8	9	10 Weekly 40 m ACS Net
11	12 Weekly 2 m ACS Net	13	14	15	16	17 Weekly 40 m ACS Net
18	19 Weekly 2 m ACS Net & Cooperative T-Hunt	20	21	22	23 Orange County Amateur Radio Club Meeting	24 Weekly 40 m ACS Net
25	26 ACS Nets on Five Bands & Cal OES Nets	27	28	29	30	31 Weekly 40 m ACS Net

Upcoming Events:

- **March 5:** OCRACES Meeting, 840 N. Eckhoff Street, Suite 104, Orange, 1930-2130 hours
- **March 17-18:** Baker to Vegas Challenge Cup Relay
- **March 19:** Cooperative T-Hunt on input of 2-meter repeater, 1920 hours
- **March 23:** Orange County Amateur Radio Club Meeting, American Red Cross (George M Chitty Building), 600 Parkcenter Drive, Santa Ana, 1900 hours
- **May 5:** ACS Radio Rodeo, 0800-1200 hours



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: 146.595 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: 448.320 MHz output, 443.320 MHz input, 141.3 Hz PL (private)
 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)
 70 cm: 449.680 MHz output, 444.680 MHz input, 131.8 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

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**"W6ACS ...
Serving
Orange County"**

Meet Your County of Orange RACES Members!



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Scott Byington
KC6MMF



Jack Barth
AB6VC



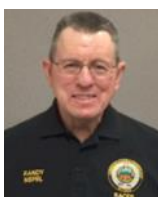
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David Corsiglia
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Ray Grimes
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N6NTH



Matt Luczko
KM6CAO



Fran Needham
KJ6UJS



Harvey Packard
KM6BV



Tom Riley
K6TPR



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