The September 11th club meeting was held on the air by club President Denney N6HV who used the Sulphur Mountain Repeater, on 145.200 MHz with a minus offset and a PL of 127.3 Hz. After check-ins and covering old and new business, everyone was invited to join us in a Zoom meeting, which was held at 19:30, and the topic was “Emergency Communications” by Stu Sheldon AG6AG. Many thanks to Stu for a “two in a row” set of presentations (FT talk in August and EmCom in September).

The October 9th club meeting is scheduled to be held on the air by club President Denney N6HV who will use the Sulphur Mountain Repeater, on 145.200 MHz with a minus offset and a PL of 127.3 Hz. After check-ins and discussing old and new club business we will go over to the Zoom meeting for a presentation on Building and Understanding Simple Antennas by Denney, our club President. The presentation will start around 19:30.

Club Officers	And Keyer	Contributors
President	Denney Pistole	N6HV
Vice-President	Clem Alberts	KM6OKZ
Secretary	Phil Cohen	WA6BUZ
Treasurer	John Gartman	W6JPG
Board Member	Stewart Stone	KG6BOV
Board Member	Robert Shank	KM6RSS
Board Member	Richard Abbey	WB6AEW
Photographer	Denney Pistole	N6HV
Facilities	Richard Abbey	WB6AEW
Keyer Editor	Robert Shank	KM6RSS
Webmaster	Robert Shank	KM6RSS
Domain	Phil Cohen	WA6BUZ
Membership	Bob Brodie	KJ6AAE
License Trustee	Stewart Stone	KG6BOV
QSL Manager	Ben Holmes	K6QV
Safety Officer	Bob Brodie	KJ6AAE
Local Area Net	Wayne Woodhams	N6WIX
ACS/ARES	Rob Hanson	W6RH
SB Section	John Kitchens	NS6X

The Inside Story

The ***KEYER*** is published monthly by K6MEP, the Ventura County Amateur Radio Club, Inc. as a means of providing club members the minutes from K6MEP's monthly general membership meetings, the monthly board of directors' meetings, a calendar of events and articles of interest on amateur radio. Layout and logos are the property of The Ventura County Amateur Radio Club, K6MEP. The stories printed in this journal remain the property of the writers, without whom we would not have a publication. Permission to reprint articles should be obtained from the authors. Articles and photos from the ARRL are reproduced with permission. Material submitted for inclusion is encouraged. Submit material by email to KM6RSS@gmail.com. Our club mailing address is **K6MEP, PO Box 2103 Oxnard, CA 93034-2103**

K6MEP holds general membership meetings at 7:30 PM on the 2nd Friday of each month (except December). Dues are $20 per year.

Message from the President

The Prez Sez,

It's official, after 32 days of no sunspots they have declared that we are in Sunspot cycle 25. Videos are already popping up on YouTube that we could have another Carrington like event. What was the Carrington event? In 1895 there was major solar activity and it peaked with a large numbers of Sunspots and Flares that combined with a major Coronal Mass Ejection (CME). A CME is the sun shooting out a multibillion ton blob of plasma. The phenomenon that ejected the CME was seen by astronomers as a white light flare, meaning it was big, bright, and white not black like a regular sunspot when you look through a telescope or at images on the web. The CME hit the earth and caused a geomagnetic storm that caused Auroras as far down as the Caribbean. Auroras usually only go down to the US Canadian border or just below.

The CME also disrupted telegraph operations. Some telegraph operators reported sending and receiving messages with their batteries disconnected. They used 130 volts of batteries. Just think of 130 volts going into your TV or refrigerator. One report from the event said that the paper tape in the telegraph inker, a device that recorded the telegraph message on paper tape, caught fire. There were reports that sparks were seen coming off telegraph poles and even setting the poles on fire. In 2012 there was a similar event, but the CME missed the earth. In 1989, a much smaller event knocked out power in Quebec.

One YouTubers suggest putting your radio in a small metal trash can when not in use. The trash can are cheap and available. I suggest that you think about unplugging your radio and switching the antenna to a dummy load when not in use. That's a good idea during a lightning storm.

NOAA does have a satellite watching the sun. In a worst-case condition the satellite would give us 30 minutes warning of the event or massive CME hitting the earth.

The good news is there was a solar event on the 26th of September that caused a Radio Blackout over the Pacific. A blackout is good? Well no, we want better conditions and we get a blackout, but such events mean that better conditions are coming. (Cont. on page 3)

Message from the President **(Cont. fom page 2)**

Sunspots or no sunspots FT-8 is hopping. Get on and see what you can do. The higher HF bands might not be open but I got a report from our vice president Clem that 20 meters was open to Japan and China the other day. Sounds like it could have been open for CW and voice too.

Don't forget we have a Zoom get together after the Monday night 2 meter net. Get on and say hello to the other club members and let others know what you are doing ham radio wise. As always I encourage photos of changes to your station or other things you are doing radio wise.

Stu Sheldon AG6AG pointed out in his presentation to the club (the presentation will be posted on the club web site k6mep.org) that it is a good idea to have an away kit in case we have an earthquake bigger than the 4.5 one that hit LA last week. In this away kit you should have half a tank of gasoline in your car plus you should think of having some gasoline in a stored in a metal container, not stored in the house or garage, but stored away from anything burnable. The kit should have clothes and other gear in a bag. Plus you should be able to get to important paper work and must take stuff (if it's important to you make it easy to get to and take out of the house in a hurry, you will not have time to think about it when the place is burning down). It's not just fires and earthquakes that we should be worried about. I have been through one hurricane and I was living in the desert at the time, so it can happen here. The east and gulf coast of the US have been having one hurricane after another so we should be prepared. We also have had heavy rains and floods in Ventura County. Even something like a tree falling on your house can cause you to leave in a hurry.

I am looking for speakers for the November club meeting. I need suggestions on what you want to hear and who you would like to have present. Get you desires into me. Help out by asking someone you know to give a talk at the upcoming meetings. The Zoom presentations are posted on the k6mep.org web site.

I would also like to welcome the new members to the club. This is your club. Let me know what you want. The club can help you get your license or upgrade. Email me at k6mep@qsl.net.

Denney N6HV your Humble President.

K6MEP Monday Night Net Contest Status

As of Monday, September 28, 2020 there have been 663 total check-ins with an average of 17.45 check-ins per session. Dave AI6VX and Robert KM6RSS are leading with 38 check-ins, each. Scott N6ZAI has 37 check-ins followed by Rod KA6GSU, Stewart KG6BOV and Clem KM6OKZ, all with 35 check-ins. During the net, Scott announced he has recently earned his amateur extra using an internet-based GLAARG testing process. Pedro KE6MIL has been patiently waiting the delivery of a new GAP Titan dx antenna that seems to have gone MIA from its Florida point of origin to his home in Oxnard. Ben K6QV is building another transceiver from a kit. Everyone mentioned getting out and preparing their HF equipment. Denney N6HV is continuing working on his EME antenna complex. After the net many of us join our Zoom meeting where we can socialize without wearing masks. Several members show their latest gadget and see who also has the same one. Some tall tales are also shared about boat anchor rigs that are too heavy to lift up to the video camera. Everyone (members and guests) is welcome to join the Zoom meeting and Denney posts the URL on our K6MEP.groups.io.

Selected October Contests & Special Events

The following contests and special events caught your editor's eye. This is by no means a complete listing. Please see QST or the ARRL website (www.arrl.org) for any details and QSL information.

Maty Weinberg, KB1EIB, events@arrl.org; www.arrl.org/special-event-stations

Special Event Stations

Working special event stations is an enjoyable way to help commemorate history. Many provide a special QSL card or certificate!

Because of the COVID-19 pandemic, many organizations are canceling or rescheduling events. This is the information we had at the time we went to press. We suggest you contact the event organizer to confirm. — *Ed.*

Sep. 4 – Oct. 1, 1800Z – 2000Z, GB200FN, Romsey, United Kingdom. RSGB. **Florence Nightingale Bicentenary 2020**. 14.200 3.665. QSL. John Wakefield, Oakhurst, Lower Common Rd., Romsey SO51 6BT, United Kingdom. **www.qrz.com/db/gb200fn**

Sep. 10 – Sep. 14, 0000Z – 0300Z, WA2NYC, Staten Island, NY. Wireless Association of New York City. **19th Anniversary of the Attack on the World Trade Center**. 28.450 14.390 7.238 D-STAR XRF 020B. QSL. Wireless Association of New York City, 233 Wolverine St., Staten Island, NY 10406. *We remember the more than 2,900 lives lost that day.* **www.qrz.com/db/wa2nyc**

Sep. 18 – Sep. 20, 0101Z – 0101Z, NV7V, Las Vegas, NV. Clark County NV ARES. **Silver State Classic Challenge**. 446.60 147.18 145.24 145.22. Certificate. Tim Duerson, 3719 Robin Knot Ct., North Las Vegas, NV 89084. **www.sscc.us** *or* **www.ccnvares.org**

Sep. 19 – Sep 20, 0800Z – 0800Z, KF5DFD, Henrietta, TX. Clay County Amateur Radio Club. **Clay County Pioneer Day**. 14.255 7.255. Certificate. Michael B. Boydston, 103 N. Crockett, Henrietta, TX 76365. **mbrentusa@gmail.com**

Sep. 26 – Sep. 27, 1500Z – 2100Z, NØN, Johnson, NE. Southeast Nebraska Amateur Radio Club. **84th Anniversary, SENARC Emergency Communication Exercise**. 14.230 7.180. Certificate & QSL. Charles Bennett, P.O. Box 67181, Lincoln, NE 68506. *From Coryell Park.* **senebrradioclub@gmail.com** *or* **www.facebook.com/SENRC**

Oct. 2 – Oct. 3, 1500Z – 2300Z, WØD, Macon, MO. Macon County Amateur Radio Club. **Lester Dent — Doc Savage Mystery Special Event**. 14.270 7.200 3.950. Certificate. Macon County ARC, P.O. Box 13, Macon, MO 63552. **dbagley@cvalley.net** *or* **www.maconcountymissouriarc.org**

Oct. 2 – Oct. 12, 0000Z – 2359Z, N6D, Healdsburg, CA. Will Pattullo, AE6YB. **Anniversary of the Dedication of Mission Dolores, San Francisco, 1776**. 14.265 7.265. QSL. Will Pattullo, 161 Presidential Cir., Healdsburg, CA 95448. **www.qrz.com/db/ae6yb**

Oct. 3, 1300Z – 2000Z, N1EPJ, East Greenwich, RI. Massie Wireless Club. **New England Wireless & Steam Museum Yankee Steam-Up**. 3.558 14.058 7.25 14.258. QSL. Massie Wireless Club, N1EPJ, P.O. Box 883, East Greenwich, RI 02818. **www.newsm.org** *or* **www.qrz.com/db/n1epj**

Oct. 8 – Oct. 16, 0400Z – 2359Z, W3T, Harleysville, PA. WV2M. **Anniversary of Towamencin Encampment**. 14.074 14.030 7.074 7.030; SSB, CW and FT8. Primary mode will be FT8. QSL. Frank Gallo, 106 Tweed Way, Harleysville, PA 19438. **www.w3t.info**

Oct. 10, 1600Z – 2300Z, NI6IW, San Diego, CA. USS *Midway* (CV-41) Museum Ship. **Celebrating the Birthday of the US Navy, October 1775**. 14.320 7.250 14.070 (PSK31) D-STAR on various reflectors. QSL. USS *Midway* Museum Ship (COMEDTRA), 910 N. Harbor Dr., San Diego, CA 92101.

Oct. 10 – Oct. 11, 1500Z – 0500Z, W7A, Tucson, AZ. Radio Society of Tucson. **Arizona QSO Party**. 14.248 14.048 7.189 3.848. Certificate. Bill, Clark, 222 N. Suntan Dr., Vail, AZ 85641. **www.azqsoparty.org**

Oct. 10 – Oct. 18, 0000Z – 2359Z, W5I/W5K/W5E, Sherman, TX. Grayson County Amateur Radio Club. **Eisenhower Birthday Special Event**. 14.250 14.040 7.250 7.040. QSL. Grayson County ARC, P.O. Box 642, Sherman, TX 75091. **qrz.com/db/w5i** *or* **https://graysoncountyarc.org**

Oct. 10 – Oct. 18, 0000Z – 2359Z, various call signs, various cities. World Wide Flora and Fauna. **Third Annual Get Your Parks ON! Earth Science Week 2020**. 14.244 14.044 10.124 7.044. Certificate. N9MM, 4245 Holstein Dr., Cleveland, TX 77328. *Operators from around the world are encouraged to participate in this year's international event. See website for details.* **www.wwff.us**

Oct. 11 – Oct. 12, 1800Z – 0300Z, N3APS, Orinda, CA. Expatriate Marylanders Radio Club. **140th Anniversary of the Current Maryland Flag**. 14.320 7.275 28.425 146.550. QSL. M.G. Vurek, P.O. Box 617, Orinda, CA 94563. **www.qrz.com/db/n3aps**

Oct. 17, 1300Z – 1900Z, W1M, Russell, MA. Western Mass. Council — BSA. **Woronoco Heights Outdoor Adventure/ SCOTA/JOTA/JOTI**. 14.290 14.060 10.115 7.190. QSL. Tom Barker, 329 Faraway Rd., Whitefield, NH 03598. *W1M will also operate on BrandMeister TG 907 and its affiliated TAC talk groups. All logging is done on paper. QSL card available on eQSL or for a 4 × 6 SASE.*

Oct. 17, 1400Z – 2000Z, K4RC, Yorktown, VA. Williamsburg Area Amateur Radio Club. **Yorktown Surrender Day Event**. 14.265 7.265. QSL. QSL Manager, K4RC, P.O. Box 1470, Williamsburg, VA 23187. **www.k4rc.net**

Oct. 31, 1500Z – 2300Z, WW1USA, Kansas City, MO. National World War I Museum and Memorial. **102nd Anniversary of the Armistice**. 14.225 14.060 7.250 7.060. Certificate. WW1USA Amateur Radio Station, World War I Museum and Memorial, 2 Memorial Dr., Kansas City, MO 64108. **ww1isa@theworldwar.org** *or* **www.qrz.com/db/ww1isa**

Certificates and QSL cards: To obtain a certificate from any of the special event stations offering them, send your QSO information along with a 9 × 12 inch self-addressed, stamped envelope (three units of postage) to the address listed in the announcement. To receive a special event QSL card (when offered), be sure to include a self-addressed, stamped business envelope along with your QSL card and QSO information.

Special Events Announcements: For items to be listed in this column, use the ARRL Special Events Listing Form at **www.arrl.org/special-events-application**.

Submissions must be received by ARRL HQ no later than the 1st of the second month preceding the publication date; a special event listing for **January** *QST* would have to be received by **November 1**. In addition to being listed in *QST*, your event will be listed on the ARRL Web Special Events page.

You can view all received Special Events at **www.arrl.org/special-event-stations**.

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Bruce Draper, AA5B, aa5b.corral@gmail.com

Contest Corral — October 2020

Check for updates and a downloadable PDF version online at **www.arrl.org/contest-calendar**.
Refer to the contest websites for full rules, scoring information, operating periods or time limits, and log submission information.

Start - Finish Date-Time		Finish Date-Time		Bands	Contest Name	Mode	Exchange	Sponsor's Website
1	1700	1	2000	3.5	SARL 80-Meter QSO Party	Ph	RS, serial, grid or QTH	www.sarl.org.za
1	1700	1	2100	28	NRAU 10-Meter Activity Contest	CW Ph Dig	RS(T), 6-char grid square	nrau.net/activity-contests
1	1900	1	2100	1.8-50	SKCC Sprint Europe	CW	RST, SPC, name, mbr or power	www.skccgroup.com
3	0600	4	0600	1.8-28	Oceania DX Contest, Phone	Ph	RS, serial	oceaniadxcontest.com
3	0600	4	1800	3.5-28	TRC DX Contest	CW Ph	RST, serial, "TRC" (if member)	trcdx.org/rules-trc-dx
3	0700	3	1000	3.5, 7	German Telegraphy Contest	CW	RST, LDK (if DL)	agcw.org/index.php/en
3	1200	4	1159	3.5-28	RTTYOps WW RTTY	Dig	RST, 4-digit year first licensed	rttyops.wordpress.com
3	1200	4	1159	1.8-28	Russian WW Digital Contest	Dig	RST(Q), 2-char oblast code (if UA)	rdrclub.ru/ustav-rtsrk
3	1400	4	0200	All	YLRL DX/NA YL Anniversary Contest	CW Ph Dig	Serial, RS(T), SPC	ylrl.org/wp/dx-na-yl-contest
3	1600	4	1100	3.5, 7	International HELL-Contest	Dig	RST, serial	www.darc.de
3	1600	4	2200	1.8-28	California QSO Party	CW Ph	Serial, county or SPC	www.cqp.org/Rules.html
3	1700	3	2100	3.5-28	FISTS Fall Slow Speed Sprint	CW	RST, SPC, name, mbr or power	fistsna.org
3	1800	4	1800	All	SKCC QSO Party	CW	RST, SPC, name, 4-char grid	www.skccgroup.com
4	0500	4	2300	3.5-28	RSGB DX Contest	CW Ph	RS(T), serial	www.rsgbcc.org/hf
4	0600	4	0900	3.5	UBA ON Contest, SSB	Ph	RS, serial, ON section (if ON)	www.uba.be/en
4	2200	4	2359	7,14,21	Peanut Power QRP Sprint	CW Ph	RS(T), SPC, peanut nr or power	www.nogaqrp.org
5	1900	5	2030	3.5	RSGB 80-Meter Autumn Series, CW	CW	RST, serial	www.rsgbcc.org/hf
6	0100	6	0300	3.5-28	ARS Spartan Sprint	CW	RST, SPC, power	arsqrp.blogspot.com
7	1700	7	2000	144	VHF-UHF FT8 Activity Contest	Dig	4-char grid square	ft8activity.eu/index.php/en
7	1900	7	2300	432	432 MHz Fall Sprint	CW Ph Dig	4-char grid square	svhfs.org
7	2000	7	2100	3.5	UKEICC 80-Meter Contest	Ph	6-char grid square	www.ukeicc.com
10	0000	10	2359	1.8-28	QRP ARCI Fall QSO Party	CW	RST, SPC, mbr or power	qrparci.org/contests
10	0000	11	1559	3.5-28	Makrothen RTTY Contest	Dig	4-char grid square	pi259.org/makrothen
10	0000	11	2359	50-1296	ARRL EME Contest	CW Ph Dig	Signal report	arrl.org/eme-contest
10	0001	10	2359	28	10-10 International 10-10 Day Sprint	CW Ph Dig	Name, mbr or "0," SPC	www.ten-ten.org
10	0300	11	2100	1.8-UHF	Nevada QSO Party	CW Ph	RS(T), county or SPC	nvqso.com/contest-rules
10	0600	11	0600	1.8-28	Oceania DX Contest, CW	CW	RST, serial	oceaniadxcontest.com
10	0800	10	1400	902 and up	Microwave Fall Sprint	CW Ph Dig	6-char grid square	svhfs.org
10	1200	11	1200	3.5-28	Scandinavian Activity Contest, SSB	Ph	RST, serial	www.sactest.net
10	1200	11	2359	1.8-50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
10	1500	11	0459	1.8-144	Arizona QSO Party	CW Ph Dig	RS(T), county or SPC	www.azqsoparty.org
10	1600	11	2200	1.8-UHF	Pennsylvania QSO Party	CW Ph	Serial, county or SPC	paqso.org
10	1700	10	2100	3.5-28	FISTS Fall Unlimited Sprint	CW	RST, SPC, name, mbr or power	www.fistsna.org
10	1800	11	1800	1.8-144	South Dakota QSO Party	CW Ph Dig	RS(T), county or SPC	www.sdqsoparty.com
10	2000	11	2000	1.8	PODXS 070 Club Great Pumpkin Sprint	Dig	RST, SPC	www.podxs070.com
11	0530	11	0800	3.5	UBA ON Contest, CW	CW	RST, serial, ON section (if ON)	www.uba.be/en
11	0800	11	1000	50	UBA ON Contest, 6 Meters	CW Ph	RS(T), serial, ON section (if ON)	www.uba.be/en
12	0000	12	0200	1.8-28	4 States QRP Second Sunday Sprint	CW Ph	RS(T), SPC, mbr or power	www.4sqrp.com
14	0030	14	0230	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqcc.info
14	1700	14	2000	432	VHF-UHF FT8 Activity Contest	Dig	4-char grid square	www.ft8activity.eu
14	1900	14	2030	3.5	AGCW Semi-Automatic Key Evening	CW	RST, serial, year first used a bug	agcw.org/index.php/en
14	1900	14	2030	3.5	RSGB 80-Meter Autumn Series, Data	Dig	RST, serial	www.rsgbcc.org/hf
17	0000	18	1600	50, 144	Araucaria World Wide VHF Contest	CW Ph	RS(T), 6-char grid square	avhfc.com/rules/en.pdf
17	0000	18	2359	3.5-28	JARTS WW RTTY Contest	Dig	RST, age of operator	jarts.jp/rules2020.html
17	0001	18	2359	28	10-10 International Fall Contest, CW	CW	Name, mbr or "0," SPC	www.ten-ten.org
17	1400	18	0200	All	New York QSO Party	CW Ph Dig	RS(T), county or SPC	www.nyqp.org
17	1500	18	1459	3.5-28	Worked All Germany Contest	CW Ph	RS(T), DOK code or "NM" or serial	www.darc.de
17	1500	18	1500	1.8	Stew Perry Topband Challenge	CW	4-char grid square	www.kkn.net/stew
17	2000	17	2359	1.8-7, 21-50	Feld Hell Sprint	Dig	RST, mbr, SPC, grid	sites.google.com/site/feldhellclub
17	2130	17	2230	7	Argentina National 7 MHz Contest	Ph	RS, year first licensed	lu4aa.org/wp/concurso-nacional-40m
18	0000	18	0200	14-21	Asia-Pacific Fall Sprint, CW	CW	RST, serial	jsfc.org/apsprint/aprule.txt
18	1400	21	0800	1.8-144	Classic Exchange, Phone	Ph	Name, RS, SPC, rig	classicexchange.org
18	1700	19	0100	1.8-144	Illinois QSO Party	CW Ph Dig	RS(T), county or SPC	http://www.w9awe.org/ILQP%202020%20Rules.pdf
18	1900	18	2030	3.5	RSGB RoLo CW	CW	RST, 6-char grid of previous QSO	www.rsgbcc.org/hf
18	2300	19	0100	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	qrpcontest.com/pigrun
19	1300	23	2359	All	ARRL School Club Roundup	CW Ph	RS(T), class (I/C/S), SPC	arrl.org/school-club-roundup
19	1800	20	0300	1.8-UHF	Telephone Pioneers QSO Party	CW Ph Dig	RS(T), chapter (if member), name	www.tpqso.com
19	1900	19	2030	3.5	RSGB FT4 Contest Series	Dig	4-char grid square	www.rsgbcc.org/hf
24	0000	25	2359	1.8-28	CQ Worldwide DX Contest, SSB	Ph	RS, CQ zone	www.cqww.com/rules.htm
28	0000	28	0200	1.8-28	SKCC Sprint	CW	RST, SPC, name, mbr or power	www.skccgroup.com
28	2000	28	2100	3.5	UKEICC 80-Meter Contest	CW	6-char grid square	www.ukeicc.com
29	2000	29	2130	3.5	RSGB 80-Meter Autumn Series, SSB	Ph	RS, serial	www.rsgbcc.org/hf
30	1600	30	2359	3.5-14	Zombie Shuffle	CW	RST, SPC, Zombie nr/area code, name	www.zianet.com/qrp
31	1200	1	1159	1.8-28	Russian WW MultiMode Contest	CW Ph Dig	RST(Q), oblast or serial	rdrclub.ru/ustav-rtsrk
31	1200	1	1200	3.5-28	UK/EI DX Contest, SSB	Ph	RS, serial, district (if UK/EI)	www.ukeicc.com

There are a number of weekly contests not included in the table above. For more info, visit: **www.qrpfoxhunt.org**, **www.ncccsprint.com**, and **www.cwops.org**.
All dates refer to UTC and may be different from calendar dates in North America. Contests are not conducted on the 60-, 30-, 17-, or 12-meter bands. Mbr = Membership number. Serial = Sequential number of the contact. SPC = State, Province, DXCC Entity. XE = Mexican state. Listings in blue indicate contests sponsored by ARRL or *NCJ*. The latest time to make a valid contest QSO is the minute listed in the "Finish Time" column. *Data for Contest Corral is maintained on the WA7BNM Contest Calendar at* **www.contestcalendar.com** *and is extracted for publication in* QST *2 months prior to the month of the contest. ARRL gratefully acknowledges the support of Bruce Horn, WA7BNM, in providing this service.*

Available Gear

Denney N6HV: One roll, 250 feet 14/2 clear speaker wire $30.00, [new, still in wrapper, old stock]. Various rolls of wire, big rolls; 8 gauge, shielded single pair and other gauges, good prices. Three-quarter-inch wide, flat, heavy, copper-braid, $1.00/ft; great for grounding.
Items Given to the Club for Donations: Multimeter, Micronta brand $5.00. HP 1706A oscilloscope, as is, $50. Various lengths of Ethernet cables, $0.25 each. Radio Shack Power Supply, 13.8 volt at 3 amps, $3.00. Swing arm desk lamp includes light bulb and other various items; $5.00 to $25.00. Vacuum tubes donated by Scott Vilander with delivery by Dave AI6VX. Kenwood TL-922A Linear Amplifier AS IS: Contact Denney for price.

Equipment Tech and Operator Manuals

I have a large collection of radio tech manuals and operator manuals from Alinco / Icom / Kenwood / Yeasu and others. All are PDF format.

Stewart
KG6BOV@arrl.net

Vintage Vacuum Tube Inventory

22-Jun-20
Scott Vilander
5336 Traci Drive, Santa Barbara Ca. 93111
Mobile: 805 453 4533
Email: scottvilander@gmail.com

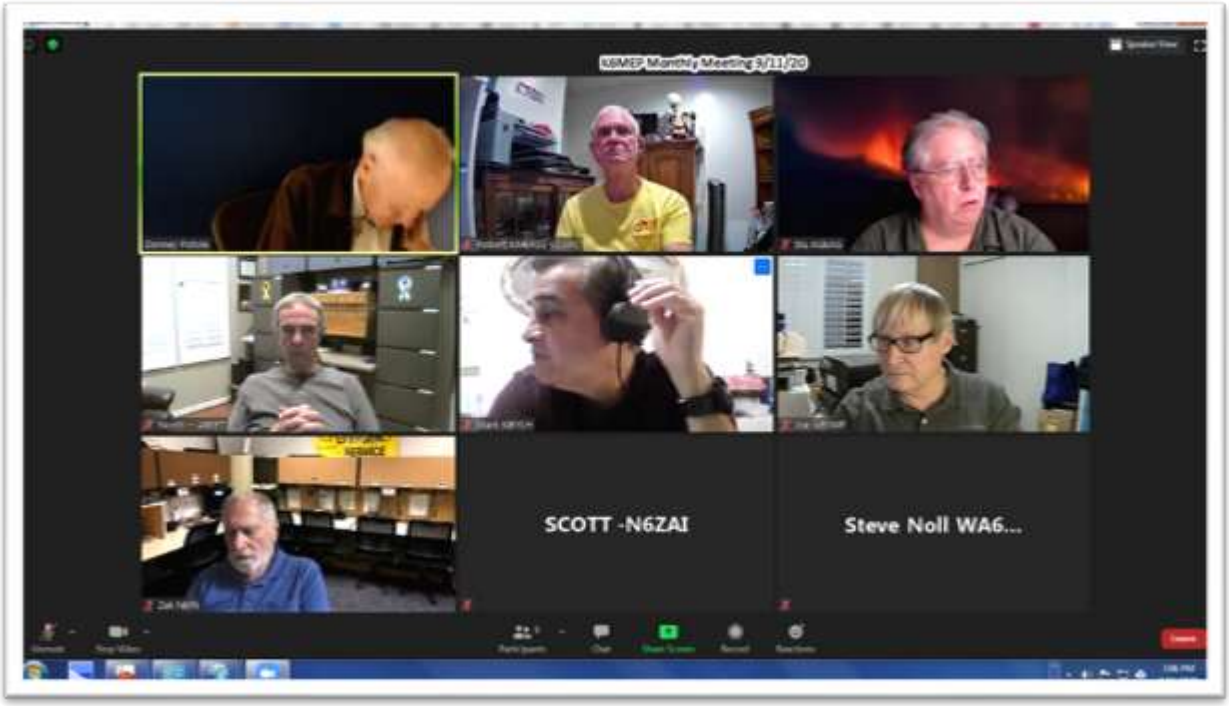
23 Tubes

Item	Date (Month/Year)	Manufacturer	Country	Service Branch	Type	Serial No. or Contract No.	Description	Package
1	3/1/1954	RCA Manufacturing Co., INC	USA	US NAVY	U.S.N CRC 811A	N1265-51354-P	Vacuum Tube	Original Box? ✓ 34
2	Not Marked	Electronic Enterprises, Inc	USA	Not Marked	866-866A	254 0424 00	Tube, Mercury Vapor Rectifier	Original Box? ✓ 30
3	5/1/1943	RCA Manufacturing Co., INC	USA	US NAVY	CRP-836	NXS. 6967	Vacuum Tube	Original Box? ✓
4	6/1/1943	RCA Manufacturing Co., INC	USA	US NAVY	CRP-836	NXS. 6967	Vacuum Tube	Original Box? ✓ 10
5	8/1/1944	Westingouse Electric & Mfg C	USA	US NAVY	Jan-832A	NXSA-31225	Vacuum Tube	Original Box? ✓ 20
6	5/1/1944	Westingouse Electric & Mfg C	USA	US NAVY	Jan-832A	NXSA-31225	Vacuum Tube	Original Box? ✓ 20
7	11/1/1944	RCA Manufacturing Co., INC	USA	JS NAVY, US Arm	Jan-832A	NXSA-55620	Vacuum Tube	Original Box?
8	5/1/1945	General Electric Co.	USA	JS NAVY, US Arm	Jan-CKR-829B	NXSR-86356	Tube (Box Marked "Used")	Original Box?
9	Not Marked	Not Marked	USA	Not Marked	1625	V105,V106,V107	e, Transmitting Beam Power Af	Original Box? ✓ 13
10	12/1/1942	RCA Manufacturing Co., INC	USA	US NAVY	CRC 6L6	94712	Vacuum Tube	Original Box? ✓ 22
11	7/1/1944	National Union	USA	JS NAVY, US Arm	JAN CNU 1625	VT136, NXSA 32848	Vacuum Tube	Original Box? ✓ 50
12	6/1/1944	National Union	USA	JS NAVY, US Arm	JAN CNU 1625	VT136, NXSA 20124	Vacuum Tube	Original Box? ✓ 50
13	6/1/1944	National Union	USA	JS NAVY, US Arm	JAN CNU 1625	VT136, NXSA 20124	Vacuum Tube	Original Box? ✓ 50
14	9/1/1944	Electronic Enterprises, Inc	USA	JS NAVY, US Arm	JAN CDZ-866A	VT46A	Vacuum Tube	Original Box? ✓ 35
15	2/1/1949	RCA Victor Div of RCA	USA	JS NAVY, US Arm	JAN CRC-829B	Not Marked	cuum Tube (Box Marked "Wea	Original Box? ✓ 30
16	Not Marked	Sylvania	USA	Not Marked	JAN CHS 6L6GA	6L6G	Vacuum Tube	Original Box? ✓ 25
17	Not Marked	RCA Victor Div of RCA	USA	Not Marked	JAN CRC813	VT144	Vacuum Tube	Original Paper? ✓ 50
18	Not Marked	TBD. Unopened Package	USA	Not Marked	68380	838	Vacuum Tube	Original Paper ✓
19	Not Marked	TBD. Unopened Package	USA	Not Marked	68380	838	Vacuum Tube	Original Paper ✓
20	Not Marked	TBD. Unopened Package	USA	Not Marked	68380	838	Vacuum Tube	Original Paper
21	Not Marked	General Electric Co.	USA	Not Marked	GL807	6146	Vacuum Tube	Incorrect RCA Box ✓ 12
22	Not Marked	Sylvania	USA	Not Marked	JAN CHS 6V6GT/G	VT107A	Vacuum Tube	ncorrect Olson Box ✓ 26
23	Not Marked	National Co	USA	Not Marked	AN/URR-13	NDBAR-52304	Radio Receiver Transformer	Original Box? ✓
24	Not Marked	Olson Radio?	USA	Not Marked	TUNG-SOL	3221-03	Vacuum Tube	Original Box?
25	Not Marked	Chatham Electronics	USA	Not Marked	AN CHAG-5R4WG	252	Vacuum Tube	No Package
26	3/1/1943	RCA Radiotron	USA	Not Marked	IB3GT		Vacuum Tube	No Package ✓ 3
27	Not Marked	RCA Radiotron	USA	Not Marked	CFH5		Vacuum Tube	No Package
28	Not Marked	KEN-RAD	USA	Not Marked	JAN CKR-6L6	SC43/ 748-188-5	Vacuum Tube	No Package ✓ 25
29	Not Marked	KEN-RAD	USA	Not Marked	6AC7	043/ 188-5	Vacuum Tube	No Package ✓ 4
30	Not Marked	GE Electronics	USA	Not Marked	IB3GTE	56-09/188-21	Vacuum Tube	No Package

September 11th Meeting Minutes (submitted by President Denney N6HV)

Sixteen operators checked into the on-the-air meeting including one visitor. No old business was presented from the members in attendance. The president brought up his concerns about the election of club officers. The bylaws state that if a quorum is not present at the November meeting the elections will be held at the next general club meeting, where a quorum is present. The president has contacted the elected club officials and all but one responded that they were willing and able to continue their duties at this time. He invited any club member that has questions about the election to contact him or any club board member.
After club business was taken care of we moved over to a Zoom conference where Stu Sheldon AG6AG gave a presentation on Emergency Preparedness and the organization of the emergency services in Ventura County. The presentation covered many tips, some of them from his experiences in the Northridge earthquake. Stu then went into the county's emergency organizations and how to join, the training you should take and how to participate. The presentation will be posted on the k6mep.org web site and on YouTube.

Denney N6HV



Denney N6HV

Upcoming FCC Exam Session Preparation (All those "local" within 25 mi. scheduled this year)

Thousand Oaks CA 91360

09/19/2020
Start/End Dates: 09/19/2020 - 10/17/2020
Times: 8:00am - Noon
# of Sessions: 5
Class level: General
Morse code offered: No
Pre register required: Yes
Fee: 0
Pre Study required: No
Class Type: Weekend/One Day
Exam offered: No
Sponsoring Club/Organization: Conejo Valley Amateur Radio Club
Instructor: KF6JQO
Contact: Kathryn Hunley K6VQN
Phone: (805) 218-3277
Email: k6vqn@arrl.net
Location Zoom meeting

Calabasas CA 91301

LICENSING CLASS

10/18/2020
Start/End Dates: 10/18/2020 - 10/18/2020
Times: 9am to 3pm
# of Sessions: 1
Class level: Technician
Morse code offered: Yes
Pre register required: Yes
Fee: $100
Pre Study required: Yes
Class Type: Weekend/One Day
Exam offered: Yes
Sponsoring Club/Organization: Goodkin Radio Classes
Instructor: K6YXH
Contact: Norm Goodkin K6YXH
Phone: (818) 613-2257
Email: norm@goodkin.net
Location: On-line
Additional Information: Register at http://hamclass.goodkin.net. Please obtain an FCC Registration Number (FRN) and use it to fill out a license application Form 605, downloaded from http://glaarg.org/glaarg-forms. Fill it out on your computer, print and sign it.
If you are looking to just take an exam, on-line exams are being offered all over the USA – it doesn't matter where they are or where you are – you take the exam on your computer. You can register for one of WB6OHW's on-line exam sessions here: http://hamstudy.org/sessions/wb6ohw

Thousand Oaks CA 91360

LICENSING CLASS IS CANCELLED

Sponsoring Club/Organization: was Conejo Valley Amateur Radio Club.

ON EXAM DAY BRING THE FOLLOWING ITEMS (When COVID restrictions are lifted):

1. A legal photo ID (driver's license, passport).
2. When no photo ID is available, two forms of identification must be presented: a. non-photo ID/driver's license (some states still have them) b. birth certificate (must have the appropriate seal) c. social security card d. library card e. utility bill, bank statement or other business correspondence that specifically names the person; or a postmarked envelope addressed to the person at his or her current mailing address as it appears on the Form 605.
3. Students may bring any of the above items and/or a school ID, minor's work permit, report card, or a legal guardian may present a photo ID.
4. Bring your Social Security Number (SSN) or your FCC issued Federal Registration Number (FRN). VEC's are required by FCC to submit either your SSN or your FRN number with your license application form. If you prefer not to give your SSN, then you may use
5. Your FCC issued FRN, if you have one. For instructions on how to register your SSN with the FCC and receive a FRN, visit the FCC's FAQ page and the FCC's registration instructions page.
6. If applicable, bring the original and a photocopy of your current Amateur Radio license and any Certificates of Successful Completion of Examination (CSCE) you may hold from previous exam sessions. The photocopy(s) will not be returned.
7. Two number two pencils with erasers and a pen.
8. 7. A calculator with the memory erased and formulas cleared is allowed. You may not bring any written notes or calculations into the exam session. Slide rules and logarithmic tables are acceptable, as long as they're free of notes and formulas. Cell phone must be silenced or turned off during the exam session. The phones' calculator function may not be used.
9. Bring a check, a money order or cash to cover the exam session fee(s). Check the ARRL VEC's current exam fee. The fee is normally $15.00 for ARRL-sponsored tests.

October CVARC Ham Exam Cancelled

CVARC has cancelled the October 11 ham exam session. Due to COVID-19 they don't have access to the Community Room at the Sheriff's station. From the comments they are getting from the Sheriff, it appears the December 13th session is in doubt, but they'll wait until closer to the date before they'll cancel. They've been getting calls from people interested in a session and have been referring them to the online testing instructions on the CVARC website.
73, Andy Ludlum-K6AGL 818-370-3402

Upcoming FCC Exam Test Sites **(none scheduled within 25 miles of Ventura in October;** Due to the Coronavirus outbreak, please verify with your VE team that the exam session is being held.**)**

GLAARG is offering remote testing; see https://glaarg.org/remote-sessions/ **for details)**

Trivia for October 2020

Did you know???

1. The Empire State building in New York City is struck by lightning on an average of 23 times a year.
2. There are about 800 types of soda pop in the world.
3. The pentagon building construction began, strangely, on September 11, 1941.

DE Dana KG6WXE

Calendar October 2020

5: K6MEP Monday Night Net
6: ACS/ARES Tuesday Night Net
9: Club Meeting (held on the Sulphur Mountain repeater, on 145.200 MHz with a minus offset and a PL of 127.3 Hz. Please join us at 19:00 (7:00 pm) and say hello to your fellow club members and tell us about what you have been doing on amateur radio. There will be a Zoom video meeting at 19:30
12: K6MEP Monday Night Net
13: ACS/ARES Tuesday Night Net
17 The Great Shakeout (DYFI)
19: K6MEP Monday Night Net
20: ACS/ARES Tuesday Night Net
26: K6MEP Monday Night Net
27: ACS/ARES Tuesday Night Net
31: Halloween

(Repeated from the CVARC website). The wildly successful "Auxiliary Bored Meetings" will continue on a new schedule beginning Monday, June 29, 2020. The informal nets have been running four times daily on the Bozo repeater. Over 7,500 calls from 275 unique hams have been logged on the nets. Under the new schedule, the net will be called to order at 9 A.M. Monday through Saturday. The Saturday morning net will run 9 A.M. to noon with a swap and the repeater will linked with Paul Strauss' (WD6EBY) repeater network for full Ventura County coverage. Starting July 11, 2020, there will be a second Saturday net at 9 P.M.

The Bozo Repeater operates with the following settings:

Frequency: 147.885 MHz
Offset: –
PL: 127.3

Stu AG6AG

http://www.cvarc.org/event/auxiliary-bored-meetings-on-bozo-2/all/

K6MEP Monday Night Net Script

QST- QST- QST. This is _____(Name)_____(Call Sign), with the Ventura County Amateur Radio Club Net. If there is any station with EMERGENCY or PRIORITY Traffic that needs the immediate use of this frequency, please come now.

Hearing none, the following is a QST. This is _____(Name) _____ (Call Sign), tonight's net control station for the Ventura County Amateur Radio Club Net. If, at any time, during tonight's net, anyone needs this frequency for emergency or priority traffic, please call net control, and we will respond appropriately.

This is a directed net, open to all amateur radio operators and is sponsored by K6MEP, the call sign for VCARC. This net begins each Monday evening at 20:00 local time on the WD6EBY linked repeater system.

The primary frequency of this net is 145.200 MHz with a minus offset and a PL of 127.3 Hz. If the repeater should fail for any reason, we can use South Mtn. repeater on 146.385 MHz with a positive offset and a PL of 127.3 Hz as backup.
All amateurs are welcome to check in after the following announcements.
A roundtable will follow the check-ins. A rag chew session may follow the formal net.

K6MEP, the Ventura County Amateur Radio Club, meets at 19:30 hours on the second Friday of each month at The Dudley House, 197 N Ashwood Ave, Ventura, CA. The next meeting date is Friday _____ (insert date). We urge any non-members interested in the VCARC to contact the club Secretary, Phil Cohen WA6BUZ or send an email to him at K6MEP@qsl.net. Non-members interested in amateur radio are welcome to attend our meetings.
When you check-in, please give your call sign, name and if you are a VCARC member. If you are not a member of the club, please include your QTH or location.

(Check-ins completed): Hearing no other check-ins, we will now begin with our Roundtable
****

Any last comments? ******** Any late, missed, or visitor check-ins?
Please check-in now.

Hearing no new check-ins does anyone have anything else they would like to add to tonight's net?
Hearing none;
(Closing): This concludes the VCARC weekly net at _____hours. Thank you for your interest and participation. Also thanks to Paul Strauss, WD6EBY, for the use of the repeater for our K6MEP net.
73, this is _____ call sign), tonight's VCARC net control, signing off.

Eric Casey, KC2ERC, ecasey@arrl.org; www.arrl.org/hamfests-and-conventions-calendar

Convention and Hamfest Calendar

A = AUCTION
D = DEALERS / VENDORS
F = FLEA MARKET
H = HANDICAP ACCESS
Q = FIELD CHECKING OF QSL CARDS
R = REFRESHMENTS
S = SEMINARS / PRESENTATIONS
T = TAILGATING
V = VE SESSIONS

Abbreviations
Spr = Sponsor
Tl = Talk-in frequency
Adm = Admission

Because of the COVID-19 pandemic, many organizations are canceling or rescheduling events. This is the information we had at the time we went to press. We suggest you contact the event organizer to confirm. — *Ed.*

Arizona (Congress) — Nov. 7 D Q R T V
8 AM. *Spr:* Hassayampa ARK. Escapees North Ranch, 30625 AZ Hwy. 89. *Tl:* 146.58. *Adm:* Free. **www.harkaz.org**

Arizona (Sierra Vista) — Nov. 7 D F R T V
7 AM – 2 PM. *Spr:* Cochise ARA. Cara Green Acres, 2756 Moson Rd. *Tl:* 146.76 (162.2 Hz). *Adm:* Free. **www.k7rdg.org**

285 TECH CONNECT TECH FEST
November 7, Lakewood, CO
R
9 AM – 3 PM. *Spr:* 285 Tech Connect RC. Bridge Church at Bear Creek, 3101 S. Kipling St. Tl: 145.145 (107.2 Hz). *Adm:* Door $10 (cash only). **www.na0tc.org**

FLORIDA STATE CONVENTION
October 9 – 10, Melbourne, FL
D F H Q R S T V
Friday 1 PM – 7 PM, Saturday 9 AM – 3 PM. *Spr:* Platinum Coast ARS. Melbourne Auditorium, 625 E. Hibiscus Blvd. *Tl:* 146.85 -600. *Adm:* $10. **www.pcars.org**

Georgia (Savannah) — Oct. 24 F R T
8 AM – 1:30 PM. *Spr:* Coastal ARS. Savannah Hilton Head Regional Airport Recreation Building, 250 Crossroads Pkwy. *Tl:* 447.2. *Adm:* Free. **www.coastalamateurradiosociety.net/wpW4LHSblog/?page_id=871**

Indiana (Mitchell) — Nov. 7 D F H R S T V
8 AM – 1 PM. *Spr:* Hoosier Hills Ham Club, W9QYQ. Lawrence County 4H Fairgrounds, 11265 US Hwy 50 W. *Tl:* 146.73 (107.2 Hz). *Adm:* $5. **www.w9qyq.org**

Iowa (Davenport) — Nov. 1 D F H R S
6 AM – 2 PM. *Spr:* WØBXR. Iowa National Guard Armory, 5300 W. Kimberly Rd. *Tl:* 146.25/88 (77 Hz). *Adm:* Advance $7, door $8.

Kentucky (Hazard) — Oct. 24 D F H R T V
8 – 11 AM. *Spr:* Kentucky Mountains ARC. Avawam Volunteer Fire Dept., 3680 W. Kentucky Hwy. 80. *Tl:* 146.67 (103.5 Hz). *Adm:* $5. **www.facebook.com/kymarc**

Michigan (Madison Heights) — Oct. 25 D F H Q R V
8 AM – 1 PM. *Spr:* Utica-Shelby Emergency Communication Assn. United Food and Commercial Workers Local 876 Hall, 876 Horace Brown Dr. *Tl:* 147.18 (100 Hz). *Adm:* $5. **www.usecaarc.com**

NEBRASKA STATE CONVENTION
October 31, Lincoln, NE
D F H R S V
8 AM – 3 PM. *Spr:* Lincoln ARC. Lancaster Event Center, 4100 N. 84th St. *Tl:* 146.76. *Adm:* 16 years or older $8, LARC Members $5. **www.lincolnhamfest.org**

New Jersey (Wayne) — Oct. 17 D F H
8 AM – 1 PM. *Spr:* WRAET ARC. United Methodist Church, 99 Parish Dr. *Tl:* 145.21 -0.6 (79.7 Hz). *Adm:* $5. **dfreeswick@optonline.net**

New York (Hicksville) — Oct. 25 D F H Q R S V
9 AM – 1:30 PM. *Spr:* Long Island Mobile ARC. Levittown Hall, 201 Levittown Pkwy. *Tl:* 146.85 (136.5 Hz). *Adm:* $6. **www.limarc.org**

Ohio (Westminster) — Oct. 10 F H R T
8 AM – 1 PM. *Spr:* Northwest Ohio ARC. Westminster UMC (Warm Building), 6650 Faulkner Rd. *Tl:* 16.67. *Adm:* $5. **www.nwoarc.com**

South Carolina (Conway) — Oct. 24 D F H Q R S T V
8 AM – 2 PM. *Spr:* Grand Strand ARC. Academy of Hope School, 3521 Juniper Bay Rd. *Tl:* 145.11 (85.4 Hz). *Adm:* Advance $6, door $7. **www.w4gs.org**

South Carolina (Gaffney) — Oct. 24 F H R S T
8 AM. *Spr:* Carolina ARES. Southside Baptist Church, 204 W. Oneal St. *Tl:* 145.15. *Adm:* $5.

Tennessee (East Ridge) — Oct. 16 – 17 D F H Q R S T V
Friday 1 – 7 PM, Saturday 8 AM – 3 PM. *Spr:* Chattanooga ARC. Camp Jordan Arena, 323 Camp Jordan Pkwy. *Tl:* 146.79. *Adm:* $10. **www.hamfestchattanooga.net**

Texas (Sinton) — Oct. 17 D F H R S T V
8 AM – 3 PM. *Spr:* South Texas Hamfest Assn. San Patricio County Fairgrounds Event Center, 219 W. 5th St. *Tl:* 147.08 (107.2 Hz). *Adm:* Advance $5, door $7. **www.southtexashamfest.org**

WISCONSIN STATE CONVENTION
October 24, Wisconsin Rapids, WI
H S
9 AM – 4:30 PM. *Spr:* WeComm, LTD. McMillan Memorial Library, 490 E. Grand Ave. *Tl:* 146.79 (114.8 Hz). *Adm:* Free. **www.wi-aresraces.org**

To All Event Sponsors

Before making a final decision on a date for your event, you are encouraged to check the Hamfest and Convention Database (**www.arrl.org/hamfests-and-conventions-calendar**) for events that may already be scheduled in your area on that date. You are also encouraged to register your event with HQ as far in advance as your planning permits. See **www.arrl.org/hamfest-convention-application** for an online registration form. Dates may be recorded up to 2 years in advance.

The deadline for receipt of items for this column is the **1st of the second month preceding publication date**. For example, your information must arrive at HQ by **October 1** to be listed in the **December** issue. Information in this column is accurate as of our deadline; contact the sponsor or check the sponsor's website for possible late changes, driving directions, and other event details. Please note that postal regulations prohibit mention in *QST* of games of chance, such as raffles or bingo.

Emergency and Volunteer Training

Some excellent emergency and volunteer training is available through the American Red Cross of Ventura County, FEMA and the American Radio Relay League.

Red Cross Courses

The following is a list of locally available Red Cross courses and a current schedule of classes over the next two months. Enroll by calling the Red Cross Chapter House at 805-987-1514 Ext 320 leaving your name, course code and telephone number. If you are interested in a class not currently scheduled call to be placed on a waiting list for the next scheduled date.

Note: The classes **Fulfilling Our Mission** and **Introduction to Disaster Services** are required for all Red Cross classes if you are not currently registered as a Red Cross Volunteer.

For training class registration, call: 805-987-1514 Ext 320.

Course schedule and descriptions:

http://www.arcventura.org/DSCourseDescriptions.html

http://www.arcventura.org/contact_us.html

COLLABORATING TO ENSURE EFFECTIVE SERVICE DELIVERY(ARC3089-4)
COMMUNITY SERVICES OVERVIEW (ARC 3068-1)
DISASTER ASSESSMENT (ARC 3067-1)
DISASTER HEALTH SERVICES: OVERVIEW (3076-1F)
DISASTER HEALTH SERVICES SIMULATION (ARC 3076-2F)
DISASTER MENTAL HEALTH SERVICES (ARC 3077-1F)
DISASTER MENTAL HEALTH: AN OVERVIEW (ARC 3077-2)
DISASTER WELFARE INQ.:CONNECTING YOUR COMMUNITY(ARC 3085-1)
DISASTER WELFARE INQUIRY SIMULATION (ARC 3085-2)
EMERGENCY OPS CENTER/INCIDENT COMMAND LIAISON (ARC 3089-5)
ERVs: READY, SET, ROLL (ARC 3068-4)
FAMILY SERVICES: PROVIDING EMERGENCY ASSISTANCE (ARC 3072-1)
FINANCIAL STATISTICAL INFORMATION MANAGEMENT (ARC 3078-2)
HUMAN RESOURCES IN DISASTER (ARC 3087-3F)
LOGISTICS: AN OVERVIEW (ARC 3087-1)
LOGISTICS SIMULATION (ARC 3071-2)
MANAGING TOTAL DIVERSITY
MASS CASUALTY DISASTER (ARC 3079 1F)
PUBLIC AFFAIRS IN DISASTER 1 (ARC 3080 1F)
SAFE FOOD HANDLING WORKSHOP
SHELTER OPERATIONS (ARC 3068-11)
SHELTER SIMULATIONS (ARC 3068-12)
WORKING WITH TOTAL DIVERSITY

Scheduled Red Cross Classes

For training class registration, call: 805-987-1514
Please try to register for classes a week before the class is being offered

The following free **FEMA Independent Study Courses** are recommended. There are several other FEMA courses available; see the other courses at http://training.fema.gov/is

IS-5.a An Introduction to Hazardous Materials - (10/31/2013)
IS-10.a Animals in Disasters: Awareness and Preparedness - (10/2/2015)
IS-11.a Animals in Disasters: Community Planning - (10/2/2015)
IS-15.b Special Events Contingency Planning for Public Safety Agencies - (10/31/2013)
IS-20.19 Diversity Awareness Course 2019 - (1/30/2019)
IS-21.17 Civil Rights and FEMA Disaster Assistance - (1/25/2017))
IS-26 Guide to Points of Distribution - (8/11/2010)
IS-27 Orientation to FEMA Logistics - (10/31/2013)
IS-29 Public Information Officer Awareness - (10/31/2013)
IS-33.19 FEMA Initial Ethics Orientation 2019 - (1/30/2019)
IS-35.19 FEMA Safety Orientation 2019 - (1/30/2019)IS-36 Multi-hazard Planning for Childcare - (10/31/2013)
IS-42 Social Media in Emergency Management - (10/31/2013)
IS-75 Military Resources in Emergency Management - (2/25/2011)
IS-100.b Introduction to Incident Command System, ICS-100 - (10/31/2013)
IS-111.a Livestock in Disasters - (10/31/2013)
IS-144 Telecommunicators Emergency Response Taskforce (TERT) Basic Course - (10/31/2013)
IS-162 Hazard Mitigation Floodplain Management in Disaster Operations - (11/16/2016)
IS-200.b ICS for Single Resources and Initial Action Incidents - (10/31/2013)
IS-230.d Fundamentals of Emergency Management - (12/16/2013)
IS-235.c Emergency Planning - (12/15/2015)
IS-240.b Leadership and Influence - (6/16/2014)
IS-241.b Decision Making and Problem Solving - (3/31/2014)
IS-242.b Effective Communication - (3/31/2014)
IS-244.b Developing and Managing Volunteers - (3/29/2013)
IS-250.a Emergency Support Function 15 (ESF15) External Affairs: A New Approach to Emergency Communication and Information Distribution - (5/7/2012)
IS-271.a Anticipating Hazardous Weather & Community Risk, 2nd Edition - (10/31/2013)
IS-288.a The Role of Voluntary Organizations in Emergency Management - (2/12/2015)
IS-315 CERT Supplemental Training: The Incident Command System - (8/13/2013)
IS-317 Introduction to Community Emergency Response Teams - (6/26/2014)
IS-320 Wildfire Mitigation Basics for Mitigation Staff - (10/31/2013)
IS-322 Flood Mitigation Basics for Mitigation Staff - (10/31/2013)
IS-323 Earthquake Mitigation Basics for Mitigation Staff - (10/31/2013)
IS-325 Earthquake Basics: Science, Risk, and Mitigation - (10/31/2013)
IS-326 Community Tsunami Preparedness - (10/31/2013)
IS-366.a Planning for the Needs of Children in Disasters - (12/9/2015)
IS-368 Including People With Disabilities & Others With Access & Functional Needs in Disaster Operations - (2/20/2014)
IS-393.a Introduction to Hazard Mitigation - (10/31/2013)
IS-405 Overview of Mass Care/Emergency Assistance - (12/10/2013)
IS-454 Fundamentals of Risk Management - (10/31/2013)
IS-546.a Continuity of Operations Awareness Course - (10/31/2013)
IS-547.a Introduction to Continuity of Operations - (10/31/2013)
IS-559 Local Damage Assessment - (10/31/2013)
IS-700.b An Introduction to the National Incident Management System - (6/25/2018)
IS-775 EOC Management and Operations - (8/6/2008)
IS-800.b National Response Framework, An Introduction - (1/20/2017)
IS-815 ABCs of Temporary Emergency Power - (12/27/2016)
IS-906 Workplace Security Awareness - (10/31/2013)
IS-907 Active Shooter: What You Can Do - (12/28/2015)
IS-909 Community Preparedness: Implementing Simple Activities for Everyone - (10/31/2013)
IS-910.a Emergency Management Preparedness Fundamentals - (10/19/2012)
IS-915 Protecting Critical Infrastructure Against Insider Threats - (7/10/2013)
IS-916 Critical Infrastructure Security: Theft and Diversion – What You Can Do - (10/31/2013)
IS-922 Applications of GIS for Emergency Management - (10/31/2013)
IS-951 DHS Radio Interoperability - (9/22/2016)
IS-2200: Basic Emergency Operations Center Functions - (5/17/2019)
IS-2500 National Prevention Framework, an Introduction - (3/27/2018)
IS-2600 National Protection Framework, An Introduction - (3/27/2018)
IS-2700 National Mitigation Framework, an Introduction - (3/27/2018)
IS-2900.a National Disaster Recovery Framework (NDRF) Overview - (7/11/2018)

The **ARRL** offers several on-line courses. The courses listed here are recommended for those involved in disaster and emergency service. See these and other courses at the ARRL web site.

Introduction to Emergency Communication EC-001
HF Digital Communications EC-005
PR-101: ARRL Public Relations (EC-015)
Public Service and Emergency Communications Management for Radio Amateurs- EC-016

There are some costs with the ARRL courses but discounts and occasional scholarships are available to ARRL members. See ***www.ARRL.org*** for details and enrollment.

442.480(+) PL 156.7Hz

ARES-ACS Frequency Updates

The Tuesday night Ventura County ARES/ACS Net is held on the WD6EBY Sulphur Mt. Repeater. Local nets are 7:00 to 7:30 PM; County Net starts at 7:30 on WD6EBY Sulphur Mt. Repeater 145.200 (-) PL 127.3 / 445.560 Mhz(-) PL 141.3

Good Frequencies to have pre-programmed into your radios...

Area 1 Simi Valley – K6ERN 146.805 Mhz (-) PL 100.0
Area 2 Conejo Valley, T. Oaks, Newbury Park – N6JMI 147.885 Mhz (-) PL127.3 BOZO
Area 3 Camarillo, Somis,– K6ERN 147.915 Mhz (-) PL 127.3
Area 4 Oxnard, Port Hueneme, NBVC – WB6YQN 146.970 Mhz (-) PL 127.3
Area 5 Ojai Valley – N6FL 145.400 Mhz (-) PL 114.8
Area 6 Ventura City – WA6ZSN 146.385 Mhz (+) PL 127.3
Area 7 Santa Paula, Fillmore, Piru – WA6ZSN 146.385 Mhz (+) PL 127.3
Area 8 Moorpark, Santa Rosa Valley – K6ERN 145.460 Mhz (-) PL 127.3
County-Wide – WD6EBY 145.200 (-) PL 127.3
ACS Portable – VCACS/p 144.930/147.585 Mhz PL 127.3
WD6EBY SP 145.420 Mhz (-) PL 127.3
WD6EBY 447.480 (-) PL 156.7 Hz South Mtn.
K4NGL 145.360 Mnz (-) PL 156.7 Kimberly Peak

Other Good Area Frequencies ...

AA6DP 147.090 Mhz (+) No PL Catalina
K0AKS 147.150 Mhz(-) PL127.3 TOaks
K6CPT DCS 145.300 Mhz (-) PL100.0 LA DCS
K6CPT DCS 147.270 Mhz (-) PL100.0 LA DCS
K6DCS DCS22 147.225 Mhz (+) PL 94.8 LA DCS
K6ERN 146.880 Mhz (-) PL 127.3 SMRA Red Mt.
K6ERN 147.765 Mhz (-) PL 127.3 Olivas Park / SMRA
K6TZ 146.790 Mhz (-)PL131.8 SBARC
KB6C 147.735 Mhz (-) PL 100.0 Oat Mt / MMRA
N6EVC 146.850 Mhz (-) PL 94.8 Rasnow
N6FDR 145.260 Mhz (-) PL 100.0 Malibu
W6AAX 147.180 Mhz (+) PL 186.2 Verdugo Peak
W6GRG 146.940 Mhz (-) PL 127.3 Simi DSW Repeater
W6YJO 145.180 Mhz (-) PL 131.8 Sta Ynez
WA6FGK 146.640 Mhz (-) PL 127.3 Simi Valley
WA6PPS 147.300 Mhz (-) PL 110.9 L.A.City ACS
WB6OBB 147.000 Mhz (+) PL 131.8 Sta Barbara
WD6EBY 145.240 MHz (-) PL 127.3 Chatsworth Pk

Due to assignment and coordination of several D-Star Repeaters, TASMA, the southern California Two meter amateur frequency coordination body, has had to re-align several frequencies. Among these changes are the channelization (15 KHz spacing) of the 145.5 - 145.6 simplex allocation and reassignment of several frequencies from simplex to other uses.

None of the local Ventura County repeaters are directly affected; however several previous simplex frequencies are now in use either as repeater inputs or outputs. **New County ARES Packet frequency is 145.050 Mhz**;

Ventura County ARES-ACS simplex frequencies have been re-assigned as follows:

Area 1 Simi Valley – 145.510 Mhz (S)
Area 2 Conejo Valley, T.O., Newbury Pk – 146.445 Mhz (S)
Area 3 Camarillo, Somis – 146.550Mhz (S)
Area 4 Oxnard, Port Hueneme, NBVC – 146.595Mhz (S)
Area 5 Ojai Valley – 145.555Mhz (S)
Area 6 Ventura City – 147.510Mhz (S)
Area 7 Santa Paula, Fillmore, Piru – 145.540 Mhz (S)
Area 8 Moorpark – 146.535Mhz (S)
County ARES Simplex – 145.615 Mhz (S)
National Simplex – 146.520Mhz(S)

Ventura County ARES / ACS Emergency Coordinators

ACS RO/ARES DEC: Rob Hanson, W6RH, Email: w6rh@arrl.net
Assist ACS RO/Deputy DEC: Rick Tate, KQ6NO Email: kq6no@arrl.net

Area 1 Simi Valley EC: Steve King, KE6WEZ Email: ke6wez@gmail.com
Area 2 TO, Conejo Valley EC: Zack Cohen, N6PK , Email: n6pk@arrl.net
Area 3 Camarillo, Somis EC: Avi Carmi, K6AVI Email: avi@carmi.us
Area 4 Oxnard, Hueneme, Mugu EC:Hovan Salbian, K6BQL Email: ki6bql@arrl.net
Area 5 Ojai EC: Wayne Francis, W6OEU Email: w6oeu@arrl.net
Area 6 City of Ventura EC (acting): Grant Mohr, KG6SFW, E-mail gmohr12@hotmail.com
Area 7 Santa Paula, Fillmore, Piru EC: Grant Mohr, KG6SFW, E-mail gmohr12@hotmail.com
Area 8 Moorpark, Santa Rosa Valley EC: Marc Hanley KM6B, Email: km6b@arrl.net

ACS/ARES Training and News

Rob Hanson Ventura County ACS Radio Officer, Ventura County ARES District Emergency Coordinator
From: main@vc-acs.groups.io [mailto:main@vc-acs.groups.io] On Behalf Of Hanson, Robert - W6RH
Sent: Sunday, September 20, 2020 5:29 PM
Subject: [vc-acs] Winlink

Here is a series of talks hosted by Dan Marler, K7REX, that reflect a variety of approaches on best practices:

WK1 – Winlink Basics: Initial Setup and Basic Operation
Viewing: https://vimeo.com/441219236
Downloading: https://vimeo.com/user107547861/download/441219236/920160e538
Documents:
https://www.dropbox.com/sh/fwaejzwx0zkcid0/AAAx9GnWhPs9XMBHFPttEG0ya?dl=0

*WK2 - Winlink Basics: Peer-2-Peer Operations; VARA FM and UZ7H0 on VHF *
Viewing: https://vimeo.com/443288476
Downloading: https://vimeo.com/user107547861/download/443288476/1281494e61
Documents:
https://www.dropbox.com/sh/x9uaq9zvdxi5jmu/AABhLhp-7JvqfzJZh1ciGRbxa?dl=0

*WK3 - Winlink Advanced: Gateways; VHF and HF Operations *
Viewing: https://vimeo.com/445460664
Downloading: https://vimeo.com/user107547861/download/445460664/7dcc8ac971
Documents:
https://www.dropbox.com/sh/pm44njgw9nq753b/AADZQ21U8Pki1fDjUaFceqgXa?dl=0

*WK4 - Winlink Radio Soundcard Interface: DRA Radio Interface products *
Viewing: https://vimeo.com/447856794
Documents: https://vimeo.com/user107547861/download/447856794/e9841991dd

WK5 - Winlink Workshop: VARA HF-VHF
Viewing: https://vimeo.com/449979332
Download: https://vimeo.com/user107547861/download/449979332/bead43b67b
Documents:
https://www.dropbox.com/sh/ubr2e10le6g6qkn/AACnJC-jJ7V53eDqoZt-zPO4a?dl=0

* WK6 - Winlink Workshop: Winlink Advance Questions/Answers *
Viewing: https://vimeo.com/454616833
Download: https://vimeo.com/user107547861/download/454616833/1eb678bef2
(Cont. on page 17)

ACS/ARES Training and News(Cont. from page 16)

*WK7 - Winlink Workshop: Antenna Workshop NVIS *
Viewing: https://vimeo.com/456800013 <https://vimeo.com/456800013>
Download: https://vimeo.com/user107547861/download/456800013/b79529b145
Documents:
https://www.dropbox.com/sh/0wtev8zleu8a6ei/AABdN7ec5SKYp_Rr_GynocPta?dl=0

*WK8 - Winlink Workshop: EMCOMM Best Practices - Discussion *
Viewing: https://vimeo.com/459237256
Download: https://vimeo.com/user107547861/download/459237256/eba407611c

From: main@vc-acs.groups.io [mailto:main@vc-acs.groups.io] **On Behalf Of** Hanson, Robert - W6RH
Sent: Sunday, September 20, 2020 5:14 PM
To: Main ACS
Subject: [vc-acs] Earthquake Preparedness

County of Ventura Public Information •

Earthquake Preparedness. Last week's 4.5 magnitude earthquake is a good reminder to be prepared.

If an earthquake happens, protect yourself right away.

If you are in a car, pull over and stop. Set your parking brake.

If you are in bed, turn face down and cover your head and neck with a pillow. (Cont. on page 18)

ACS/ARES Training and News(Cont. from page 17)

If you are outdoors, stay outdoors away from buildings.

Do not get in a doorway.

Do not run outside.

Stay Safe During an Earthquake: Drop, Cover, and Hold On

https://www.ready.gov/earthquakes

From: ARRL Web site [mailto:memberlist@www.arrl.org]
Sent: Thursday, September 17, 2020 9:16 PM
To: km6rss@gmail.com
Subject: ARLB024 FCC Grants ARRL Rules Waiver Request for Fire Emergencies, Hurricanes

SB QST @ ARL $ARLB024
ARLB024 FCC Grants ARRL Rules Waiver Request for Fire Emergencies,
Hurricanes

ZCZC AG24
QST de W1AW
ARRL Bulletin 24 ARLB024
From ARRL Headquarters
Newington CT September 18, 2020
To all radio amateurs

SB QST ARL ARLB024
ARLB024 FCC Grants ARRL Rules Waiver Request for Fire Emergencies,
Hurricanes

The FCC has granted ARRL's request for a temporary waiver to permit amateur data transmissions at a higher symbol rate than currently permitted by section 97.307(f) of the FCC Amateur Service rules. The FCC acted to facilitate hurricane and wildfire relief communications within the US and its territories.

Section 97.307(f) limits the symbol rate - the rate at which the carrier waveform amplitude, frequency, and/or phase is varied to transmit information - for HF amateur radioteletype (RTTY)/data transmissions to 300 bauds for frequencies below 28 MHz (except for 60 meters), and 1,200 bauds in the 10-meter (28 - 29.7 MHz) band. (Cont. on page 19)

ACS/ARES Training and News (Cont. from page 18)

The digital signal must use one of the codes specified in section 97.309(a) of the rules, but an amateur station transmitting a RTTY or data emission using one of the specified digital codes may use any technique whose technical characteristics have been publicly documented.

In 2016, in response to an ARRL petition for rulemaking, the Commission proposed to remove the symbol rate limitations, which it tentatively concluded had become unnecessary due to advances in modulation techniques and no longer served a useful purpose. However, the FCC did not include the ARRL proposal to limit signal bandwidth to that which the Commission had said it intended when it originally adopted the 300-baud limit. The proceeding is currently pending.

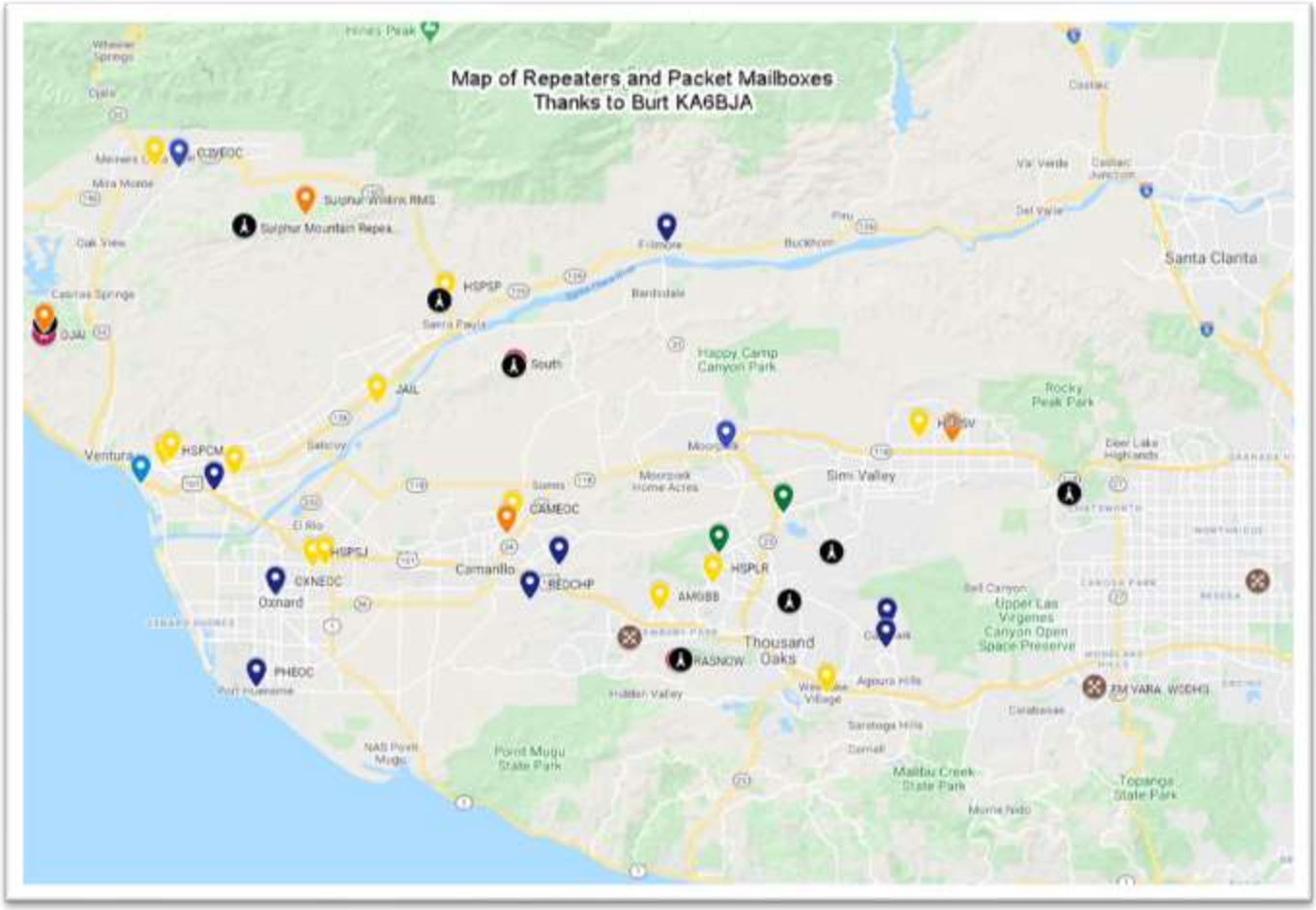
ARRL sought the waiver for amateur radio licensees directly involved with hurricane and wildfire relief via HF using PACTOR 4 modems for communication within the US and its territories, relative to several impending hurricane situations and wildfires in the western US. ARRL's petition noted that Section 97.307(f) of the amateur rules prevents the use of PACTOR 4, a data protocol that permits relatively high-speed data transmission. ARRL noted that past FCC temporary waivers have allowed this protocol during similar events. ARRL also stated that trained amateur radio operators with communications equipment are actively preparing to assist radio amateurs involved with the Amateur Radio Emergency Service (ARES) working with federal, state, and local emergency management officials to assist with disaster relief communications.

"We conclude that ARRL's request should be granted," the FCC said. "ARRL stands ready to assist the area potentially impacted by the impending hurricanes and ongoing wildfires to conduct disaster relief communications. ARRL asserts that the higher data rates offered by PACTOR 3 and PACTOR 4 emissions are critical to sending relief communications. We conclude that granting the requested waiver is in the public interest." The waiver is limited to 60 days and applies only to stations in the continental US and Puerto Rico using PACTOR 3 and PACTOR 4 emissions and who are directly involved with HF hurricane and wildfire relief communications. (Cont. on page 20)

ACS/ARES Training and News (Cont. from page 19)

From: main@vc-acs.groups.io On Behalf Of Auerbach, Burt - KA6BJA ARES
Sent: Tuesday, September 22, 2020 10:00 PM
To: main@vc-acs.groups.io
Subject: [vc-acs] Interactive map of Ventura County VHF stations

I've taken the locations of the county EOC's, packet nodes, packet Winlink RMS sites, FM VARA stations, and repeaters and put them on an interactive Google map. I've attached a PDF file with a map to provide an idea of what this looks like. If it comes through, it should be able to be downloaded and printed. The interactive map works better as it can be enlarged and contains additional information. You need a Google account w/ a Gmail address to access it. Send me an email and I'll send you the link. On the map, Blue = 144 packet, Green = 220 packet, Yellow = 144 + 220 packet, Red = packet nodes, Orange = Winlink RMS, Brown = FM VARA stations, Black = repeaters. If you click on a pin information about that location will appear in the sidebar on the left. Check or uncheck the boxes in the sidebar to control the amount of information displayed. Please let me know if any of the information is incorrect or if additional locations need to be added.



ARRL offers online training for hams who want to participate in the Amateur Radio Emergency Service.

The time for training is before a disaster...not during one.

The former Amateur Radio Emergency Communications (AREC) series of three training courses has been reconfigured into two courses: An introductory course and a course for leaders and managers.

Introduction to Emergency Communication (#EC-001)

Revised in 2018, this is an update of the former Level 1 course. It is designed to provide basic knowledge and tools for hams who want to serve as a Public Service volunteer. It provides an opportunity for non-hams who rely on communications in emergency situations to learn about Amateur Radio and its unique role in emergencies.

For start dates, registration deadlines and more visit www.arrl.org/online-course-catalog

Public Service and Emergency Communications Management for Radio Amateurs (#EC-016)

Launched in 2010, this course is designed for Amateur Radio operators who will be in leadership and managerial roles, organizing other volunteers to support public service activities and communications emergencies. Participants will learn how radio amateurs prepare to support local community events and, when working in coordination with governmental and emergency response organizations, how to deploy their services. This is a self-study course. For more information and to register visit www.arrl.org/online-course-catalog.

PR-101: ARRL Public Relations (EC-015)

This is a basic training course for PIOs and anyone interacting with the media and promoting Amateur Radio.

This course is designed to give hams a quick overview in public relations activities. It uses the skills of experts in various aspects of public relations to provide volunteer Public Information Officers with the basic skills and expectations that a PIO needs to know to be effective in their home region.

PR-101 covers everything from the basic news release to Web sites and video work.

This course is available--free! – on-line, or can be purchased in CD format from the ARRL store.

Stepping on toes regarding NETS by Wayne Woodhams N6WIX

In this month's comments I am going to step on some toes, on purpose, not to offend anyone, but to hopefully cause us to think about some things, that need our attention.

To begin the discussion I need to "set the stage". Anyone who has taken a "general communications" class in their educational journey has heard the "Communications Model" presented and explained. Aristotle came up with the idea 2300 years ago. It is really simple. It involves 1) a signal or message being made or presented, 2) that signal or message being transmitted by some method, and 3) that signal or message being received. In short, created, transmitted, and received. That's the way Amateur Radio works, and we are all familiar with the concept.

That 3-step process is the way the concept started, and many generations left it that simple. My father's generation, for the most part, saw it that way. Here's a personal example that illustrates that. My father was a Church Minister, and he used the "communications model". He preached, the audience heard his presentation, and hopefully accepted his thoughts. There was only one problem with that experience. Half of the audience could be falling asleep, and my father wouldn't even notice. He just kept on with the presentation!

Due to that widespread experience in communications, things changed in the 1970's. That 3-part model suddenly became a 5-part model, adding two very import steps. The fourth step was the issue of feedback, and the fifth step involved adjustment. Feedback meant to evaluate how the model was working, and due to that evaluation, critical changes were made. These two steps made a huge difference in results. But, sadly enough, those two additional steps didn't have very much involvement or impact within Amateur Radio, and specifically NETS. We mostly continue with the old model.

Now here is the "stepping on toes" part. Within Ventura County, we have numerous nets that operate week after week, doing the exact same thing, without any changes or improvements. THIS IS NOT A GOOD THING! We can make an exception when we start something new, to allow some repetition to help us get accustomed to the new experience. But, when learned, the two additional steps need to come alive. The questions to ask are 1) Is a particular net or experience fulfilling its' intended purpose? Is the net or experience growing, or is it static? Are any changes being made for improvement? Sadly, there are quite a number of nets each week in this County that truly need to take a look at results (feedback), and what could be done to improve. Static is not good, but evidence of growth and the pursuit of excellence ARE. (Cont. on page 23)

Stepping on toes regarding NETS (Cont. from page 22)

Your assignment this month? Listen to nets, and identify if growth and excellence are present. Then you just might have some ideas or contribution to help make the changes that are needed. Perhaps, in doing my part I should call each of you, and see if you have done your assignment. Just kidding! See you next month.

73, Wayne N6WIX

Local Area Radio Weekly Nets by Wayne Woodhams, N6WIX

Monday

Cuckoo Net 146.790 MHz (-) 131.8 Hz PL and 145.180 MHz (-) 131.8 Hz PL MTWThF from 08:00 Hrs

Auxiliary Bored Meeting: MTWThF at 09:00 and on Saturday at 21:00 Hrs : Bozo Repeater Frequency: 147.885 MHz Offset: -PL: 127.3

California Rescue ARES Net 7.25 MHz MTWThF 08:30 Hrs

Santa Barbara South County ARES net 19:30 Hrs on 146.79 MHz (-) PL 131.8.

Southwest ACS Nets Every Monday at 18:30 Hrs, on a local station on the Cactus Intertye Network. Check-in by roll call. 4th Monday "grid test" 20:30 Hrs.

LA DCS-22 Net – 19:30 Hrs - K6DCS - 147.225 MHz (+) then on 7.2353 MHz LSB

K6MEP Net -20:00 Hrs 145.200 MHz (-) 127.3 PL

CESN (California Emergency Services Net) at 20:00 Hrs Primary frequency - 3992 kHz, Backup frequency - 3960 kHz. All free to listen, check-in by membership only.

LA Section ARES Net - HF Every Monday following the VHF/UHF net (21:30 Hrs) 1st. 3rd and 4th Monday - 75 meters 3.995 MHz (± 45 kHz) / 2nd Monday -10 meters 28.495 MHz

Tuesday

Cuckoo Net 146.790 MHz (-) 131.8 Hz PL and 145.180 MHz (-) 131.8 Hz PL MTWThF from 08:00 Hrs

California Rescue ARES Net 7.250 MHz MTWThF 08:30 Hrs

Ventura County ARES-ACS 6 Meter Net - between 18:45 Hrs to 19:00 Hrs K6SMR 52.980 MHz (-) PL 82.5 SMRA Red Mt

Ventura County ARES-ACS Simplex Net - 18:30 Hrs on 147.510 MHz Simplex ORT schedule only!

Ventura County ARES-ACS HF Net - between 18:30 Hrs to 19:00 Hrs 40M on 7.235 MHz LSB +/-

Ventura County ARES/ACS Nets between 19:00 and 20:00 Hrs. The County-wide net starts at 19:30 Hrs and normally finishes by 20:00 Hrs on WD6EBY 145.200 MHz (-) /127.3 PL

SBARC Swap Net 146.790 MHz (-) / 131.8 Hz PL and 145.180 MHz (-) / 131.8 Hz PL 19:30-20:00 Hrs

West SB ARES HF Net (1" Tuesday, Monthly) 3822 kHz LSB 20:30 Hrs

6-Meter Roundtable - 50.125 MHz USB First Tuesday of each month 20:00 Hrs

ATV Net 20:30 Hrs 148.790 MHz (-) / 131.8 Hz PL RITZ repeater

SBARC Digital Communications Net 146.790 MHz (-) / 131.8 Hz PL and 145.180 MHz (-) / 131.8 Hz PI 8:00 - 10:00 PM

Wednesday

Cuckoo Net 146.790 MHz (-) 131.8 Hz PL and 145.180 MHz (-) 131.8 Hz PL MTWThF from 08:00 Hrs

California Rescue ARES Net 7.25 MHz MTWThF 08:30 Hrs

CESN (California Emergency Services Net 10:00 Hours, Primary frequency 7192 kHz, Backup frequency - 7230 kHz All free to listen, check-in by membership only.

SMRA Tech Net 146.880 MHz (-) / 127.3 PL (SMRA Red Mt) 20:00 Hrs

SBARC Swap Net 146.790 MHz (-) / 131.8 Hz PL K872 20:00 Hrs

Teamtalk Voice Net.20:00 Hrs k6pvr-svr.local.mesh server http://www.pvarc.club/mesh/mesh-applications/

Thursday

Cuckoo Net 146.790 MHz (-) 131.8 Hz PL and 145.180 MHz (-) 131.8 Hz PL MTWThF from 08:00 Hrs

California Rescue ARES Net 7.25 MHz MTWThF 08:30 Hrs

So Cal 6 meter net. 51.940 MHz - pl 82.5. 19:00-20:00 Hrs

Southern Calif 6M SSB Technical Roundtable Net 20:00 Hrs on 50.2 MHz USB SSB

SBARC / K6TZ Technical Mentoring Net 20:00-21:00 Hrs 146.790 MHz (-) / 131.8 Hz PL and 224.08 MHz (-) 131.8 PL (linked)

Friday

Cuckoo Net 146.790 MHz (-) 131.8 Hz PL and 145.180 MHz (-) 131.8 Hz PL MTWThF from 08:00 Hrs

California Rescue ARES Net 7.250 MHz MTWThF 08:30 Hrs

Saturday

Military Radio Collector Net 18:00 Hrs 3985 kHz AM vavw.mrcuwestord/mrca-radio-nets/

Sunday

ARRL Southwestern Division Net 08:00 Hrs 3965 MHz. ARRL Officers check in first. All visitors welcome at end of that net

Newbie Net 19:00-19:30 Hrs Bozo Repeater 147.885 MHz (-) PL127.3

Rabbit Net 19:00 Hrs Linked Rabbit repeater.

NEWS FROM PVARC

New Repeater on the Air

On Saturday the 19th the team installed a new repeater on South Mountain with a frequency of 447.480 MHz with a encode and decode pl of 156.7 Hz. (Please note this pl may change change). The installation team members were Rich Williamson W7KI, Rob Hanson W6RH, Eric Satterlee KG6WXC, Eric Oberg KE6MLF, Orv Beach W6BI and me, Paul Strauss WD6EBY. I want to recognize everyone on the team for their backbreaking work, and their skills and dedication towards Amateur Radio. If you see any of the team or talk to them on the radio please give them your best and let them know you appreciate all that they do. Thank you all.

As I said the day was long and hard. Before we could do anything we had to remove about 1,500 pounds of old equipment from the building so we could install our equipment. This was back-breaking work! Once the old equipment was removed from the building the team had to load it into two pickup trucks. There was a lot of grunting, lifting, pushing and sweating to get the equipment into the trucks.

Late Note: Today I heard an occasional burst that is degrading the repeater's receive performance. On the next visit I will bring a service monitor to hopefully identify the signal.

Planned system

The repeater is a standalone test system and will eventually be replaced with a fully linked repeater system. With the manufacturer again producing repeater controllers, the production system is now under construction in my garage. The system will encompass a UHF repeater, VHF repeater, and several 420 MHz links. To support the MESH network community we will be installing three nodes, each with a 120 degree sector antenna which will provide full 360 degree coverage.

System Antennas

Due to Saturdays time constraints we connected the repeater to an existing tower-mounted antenna. When analyzed, the antenna appeared that it should work, but that wasn't the case. Checking the VSWR, we discovered about 30% of the power being reflected. We had no time for further testing and left the repeater connected and operational on this donor antenna. Since Saturday, several suitable replacement antennas have been identified and will be scheduled to be installed. I was happily surprised that I could talk through the repeater from inside my house sitting in my easy chair on my HT. When the antenna is replaced we should see improved system performance.

Generator

The area in and around the generator was cleaned up, de-greased and power washed. This cleaner environment will make servicing the system a lot easier. I plan to install a small battery bank to handle the transition to generator power. (Cont. on page 26)

NEWS FROM PVARC (Cont. from page 25)

My Driveway
More back breaking work as the 1,500 lbs. of junk the team removed from the hilltop had to be unloaded somewhere. My driveway is now the happy recipient of this junk, oops...wonderful equipment. Several neighbors have scrounged some items and one scrap merchant drove by and said he would send a truck to take it all. What's junk to some is money to others. Good for them.

Recovery
I have been sore for several days and starting to feel better. Orv's back is still hurting and Eric S. bumped his head and scraped his legs and arms. This type of mountain top work used to be so much easier!

Network Improvements
There is a major network backbone change coming by the years end. Through an agreement with a commercial network provider, the backbone between several hilltops will be transitioned to the commercial networks uWave system. This changeover will improve our traffic throughput, latency will be reduced, and backbone reliability will is expected to at 99% or better. Another benefit is the ability to link the repeaters through a ROIP (Radio Over Internet Protocol) unit such as the JPS-NXU. Converting a link path from a 420 MHz transmitter to a ROIP interface will reduce power consumption, reduce the heat load and lessen the draw on the site battery backup systems. For clarification, this is a private point-to-point uWave connection with no dependency on the internet for connectivity.

Planned Site Decommissioning
As this new South Mountain site becomes established, the PVARC ham radio network installation at the South Mtn. West site will be de-installed. This will be a good days work in removing tower mounted Backbone Dishes, Sector Antennas, PTZ camera and all of the ironwork that we installed. The plan is to have all equipment removed from South Mountain West by Thanksgiving.

I want to thank you all for your continued support and look forward to a physical meeting as soon as it is practical.
If you have any questions or concerns please do not hesitate to contact me.

Paul Strauss WD6EBY
www.pvarc.club
pgstrauss@verizon.net
(Cont. on page 27)

NEWS FROM PVARC (Cont. from page 26)

« 2019 ‹ SEP **OCTOBER 2020** NOV › 2021 »

PVARC Calendar

Month

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3 Newsline / ARRL A
4 lewsline / ARRL N lewbie Net 7:00 PI	5 K6MEP Net 8:00 PI	6 ACS Net – HF 6:30 ACS Net – VHF UI	7 LVARC Net 2:00 PI CVARC HF Net 7:0 Teamtalk Mesh Ne	8	9	10 Newsline / ARRL A
11 lewsline / ARRL N lewbie Net 7:00 PI	12 K6MEP Net 8:00 PI	13 NBEMS monthly n ACS Net – HF 6:30 ACS Net – VHF UI	14 CVARC HF Net 7:0 Teamtalk Mesh Ne	15	16	17 Newsline / ARRL A
18 lewsline / ARRL N lewbie Net 7:00 PI	19 K6MEP Net 8:00 PI	20 ACS Net – HF 6:30 ACS Net – VHF UI	21 CVARC HF Net 7:0 Teamtalk Mesh Ne	22	23	24 Newsline / ARRL A
25 lewsline / ARRL N lewbie Net 7:00 PI	26 K6MEP Net 8:00 PI	27 ACS Net – HF 6:30 ACS Net – VHF UI	28 CVARC HF Net 7:0 Teamtalk Mesh Ne	29	30	31 Newsline / ARRL A

Disassembling the antenna

ARRL Santa Barbara Section Mgr. John Kitchens NS6X

From: John Kitchens [mailto:ns6x.john@gmail.com]
Sent: Tuesday, September 22, 2020 6:56 PM
To: arrlsb@mailman.qth.net
Subject: [ARRLSB] Fwd: [smlist:7869] Please be aware of a scam e-mail that circulating

Please be aware of the phishing/scam email that looks as though it comes from the ARRL and/or me, the Section Manager. I will never ask anyone to buy gift cards, or anything, for that matter.

Happy fall. Winter will be here soon, and standard time on November 1st.

72/73 John, NS6X
---------- Forwarded message ---------
From: Ewald, Steve, WV1X <wv1x@arrl.org>
Date: Tue, Sep 22, 2020 at 10:24 AM
Subject: [smlist:7869] Please be aware of a scam e-mail that circulating
To: smlist <SMlist@reflector.arrl.org>

Hello, Section Managers.
Here is an alert to please be aware of. Since yesterday (Monday), I have learned from three Section Managers (so far) that someone or some people are sending scam/phishing-like e-mails to other ARRL Section Leaders and/or others.
The fake message tries to appear that it is from the Section Manager (or the "President" of the ARRL Section), and asks the recipient of the message to quickly purchase gift cards on the Section Manager's behalf so that the cards may be donated to a Veterans' cause. The e-mail then asks the recipient to e-mail the Section Manager for information on where to send the gift cards.
The contact information (names, Section names and potential recipients) might be taken from ARRL Section Web pages.
I have alerted the ARRL IT department, too, to let them know what is happening. I don't know any more than what has been reported so far. Thank you.
73,
Steve Ewald, WV1X
Supervisor, Field Organization Team
ARRL, the national association for Amateur Radio®
860-594-0265
sewald@arrl.org
ARRL Santa Barbara Section Manager
(Cont. on page 29)

ARRL SB Section Mgr. John Kitchens NS6X (Cont. from page 28)

From: ARRL Members Only Web site [mailto:memberlist@www.arrl.org]
Sent: Thursday, September 24, 2020 3:47 PM
To: ARRL SB Section
Subject: Santa Barbara Section Volunteers

Right now, we have 2 Section email systems. That is partly why we need volunteers to help rectify (electrical term) this issue. To make sure that everyone is getting the information, I will be sending emails through both systems. This email is for hams registered at the ARRL website as being in the Santa Barbara Section.

So, what do you get for being a volunteer? A special name/callsign badge and a certificate. And the satisfaction of helping ham radio in many aspects. I am still looking for volunteers to fill Section Leadership positions. The jobs are:

Section Emergency Coordinator (To help the 3 counties with their operations, to be a liaison and contact person to coordinate the 3 counties and maybe hold periodic communal training exercises. This is not a position where a person will be allowed, or expected to, tell the individual county operations how to fulfill their county roles and jobs. The 3 counties operate differently, and operate well. This is a coordinator position, not a controlling position. It is important, but needs a person who can be tactful and positive.)
Assistant Section Manager (essentially a club liaison - one from each club, preferably)
Local Government Liaison (a person to be the contact for the local government, could be a city or county - to understand the local issues. Not to be a political operative or community organizer, but to be a positive contact for the local government, answer the government leader's questions, be aware of whom the players are)
Traffic manager - (the traffic system in the Section runs well, but needs a bit of coordination throughout the Section, and most importantly, finding new bodies to join the traffic system. Maybe the various Morse groups could provide people to be trained as traffic messengers).
Public Information Coordinators - (We have an excellent PIO, but each club should have someone who handles public information contacts, such as social media, print media, video (television, cable, YouTube etc.) media and more.)
Section Youth Coordinator (Doesn't need to be a teenager, but it could be. Someone who will focus ham radio toward the youth - schools, makers etc. Someone to help clubs do so, if they are so inclined.)
Club Coordinator (help get clubs active, motivated and working in the general support for ham radio. Some other type of groups will bring in a speaker to talk at all clubs for a reduced cost. We would like to have a Santa Barbara Section conference again. Need someone to help make it happen - just a small conference/Hamfest - look at the Yuma Arizona Hamfest.
Technical Specialist (working with the Technical Coordinator, maybe have experts "Elmers" for various aspects and specialties. How to get on FT8 (why won't my computer key my KX3. I can
(Cont. on page 30)

ARRL SB Section Mgr. John Kitchens NS6X (Cont. from page 29)

decode signals, just not key the radio), contesting, setting up a station, RFI solutions, use of chokes and why, homebrewing, how to solder - or crimping - how to install a coax connector, what is DMR/etc. and how to make my radio work - what is a hotspot, and more. We could use a dozen or more people.

Webmaster (I am not a web guy. Who is, or what groups of people are, who could help us? We need a Section website)

Special Event coordinator (We have a small Section budget that can cover some costs such as website hosting. The following clubs are ARRL affiliated:

Conejo Valley ARC
Ventura County ARC (K6MEP)
Ventura County ARS
Simi Settlers ARC
Santa Barbara ARC
UC Santa Barbara ARC
Paso Robles ARC
Cal Poly SLO ARC
Satellite ARC
And hopefully Pleasant Valley ARC soon.

There are more groups and clubs, which should not be ignored, but these are the "affiliated" clubs. The Section includes the counties of San Luis Obispo, Santa Barbara and Ventura. More schools, middle, high, community college and college/university should have a radio club.

Let me know if you would like to help, or get more information. Get one of those pretty, special color ARRL badges. No membership is required.

John Kitchens, NS6X
PO Box 178
Somis, CA 93066
805.216.2569
NS6X@ARRL.org
NS6X@ARRL.net

Meeting Location Maps (meetings may be on-the-air, please check K6MEP.org)

K6MEP Membership Application. Dues due this month. Please mail the completed form (see below) or the one on K6MEP.org.

To join the Ventura County Amateur Radio Club, Inc. (also known as VCARC or K6MEP), complete and send form, along with $20 annual dues, to VCARC P.O. Box 2103 Oxnard CA 93034-2103

Checks can be written to either Ventura County Amateur Radio Club, Inc. or VCARC

Pro-rate dues as follows based on our calendar year ending October 31 (Oct-Dec = $20, Jan-Mar = $15, Apr-Jun=$10, Jul-Sep=$5). Existing members should renew every October =$20.

Name (Last, First)_____ Call sign_____ License Type_____

Address Street_____ City, State Zip_____

Email_____ Telephone_____ Date of Application_____

Y/N for the following: New Member _____ Renewing _____ Member of ARRL?_____

I'd Like To See/Do....

TOPIC	YOUR INTEREST LEVEL			COMMENTS
	Meh	Ok	Yayy!	
All about coax cables				
Amateur Radio Satellites				
Antenna construction project				
Antenna ordinances				
ARES, ACS, CERT, RACES, MARS, SkyWarn				
Assembling a Go-Box				
Assembling a test lab				
Best bands to get on & what to expect				
Construction projects, like_____				
Ferrites, and demonstrations of.				
Field Day – Strategies, Tactics and Techniques				
FRS & GMRS - what are those?				
Ham Radio projects for Arduinos & Raspberry Pi				
VHF Digital Modes: D-Star, Packet, APRS				
HF Digital Modes: RTTY,JT65,WSPR,PSK31,PACTOR,FT8				
How to use an oscilloscope				
Local Repeaters You Can Hit				
MESH				
Moonbounce				
More social events, picnics, etc.				
NVIS for regional HF communications				
QSLs, QSL cards, ARRL LOTW, eQSL				
SDR - Software Defined Radios				
Compact HF antennas				
Soldering				
Sulphur Mountain Repeater Association				
SWR, Meaning and Measurement.				
Troubleshooting				
Vacuum Tubes				
VHF and Above Contesting				
What's DTMF, CTCSS, and PL?				
Power amplifiers and receiver preamplifiers				
Assembling Emergency Supplies				
The Love of Morse Code. Keys, Paddles & Bugs.				
The HF Reverse Beacon Network				
ARRL American Radio Relay League topics				

I can give a presentation on:	

ARRL News (all photos and icons from ARRL.org or other specified sources)

FCC Proposes to Reinstate Amateur Radio Service Fees

[UPDATED 2020-09-01 @1845 UTC] Amateur radio licensees would pay a $50 fee for each amateur radio license application if the FCC adopts rules it proposed this week. Included in the FCC's fee proposal are applications for new licenses, renewal and upgrades to existing licenses, and vanity call sign requests. Excluded are applications for administrative updates, such as changes of address, and annual regulatory fees.

The FCC proposal is contained in a *Notice of Proposed Rulemaking* (***NPRM***) in MD Docket 20-270, which was adopted to implement portions of the "Repack Airwaves Yielding Better Access for Users of Modern Services Act" of 2018 — the so-called "**Ray Baum's Act**."

The Act requires that the FCC switch from a Congressionally-mandated fee structure to a cost-based system of assessment. In its *NPRM*, the FCC proposed application fees for a broad range of services that use the FCC's Universal Licensing System (ULS), including the Amateur Radio Service that had been excluded by an earlier statute. The 2018 statute excludes the Amateur Service from annual regulatory fees, but not from application fees.

"[A]pplications for personal licenses are mostly automated and do not have individualized staff costs for data input or review," the FCC said in its *NPRM*. "For these automated processes — new/major modifications, renewal, and minor modifications — we propose a nominal application fee of $50 due to automating the processes, routine ULS maintenance, and limited instances where staff input is required."

The same $50 fee would apply to all Amateur Service applications, including those for vanity call signs. "Although there is currently no fee for vanity call signs in the Amateur Radio Service, we find that such applications impose similar costs in aggregate on Commission resources as new applications and therefore propose a $50 fee," the FCC said.

The FCC is not proposing to charge for administrative updates, such as mailing address changes for amateur applications, and amateur radio will remain exempt from annual regulatory fees. "For administrative updates [and] modifications, which also are highly automated, we find that it is in the public interest to encourage licensees to update their [own] information without a charge," the FCC said.

The FCC also proposes to assess a $50 fee for individuals who want a printed copy of their license. "The Commission has proposed to eliminate these services — but to the extent the Commission does not do so, we propose a fee of $50 to cover the costs of these services," the FCC said.

The Ray Baum's Act does not exempt filing fees in the Amateur Radio Service. The FCC dropped assessment of fees for vanity call signs several years ago.

ARRL is reviewing the matter and intends to file comments in opposition.

Deadlines for comments and reply comments will be determined once the *NPRM* appears in the *Federal Register*. Interested parties may file comments by using the FCC's Electronic Comment Filing System (**ECFS**), posting to MD Docket No. 20-270. This docket is already open to accept comments, even though deadlines have not yet been set.

ARLB026 ARRL Seeks Changes in FCC Proposal to Delete 3.4 GHz Amateur Band

QST de W1AW
ARRL Bulletin 26 ARLB026
From ARRL Headquarters
Newington CT September 28, 2020

To all radio amateurs

ARRL met via telephone with FCC staff members this week to emphasize its opposition to the FCC Notice of Proposed Rulemaking (NPRM) in Docket 19-348 to delete amateur radio from the 3.3 - 3.5 GHz band.

The FCC will take final action in the proceeding when it meets on September 30.

The NPRM can be found online in PDF format at,
https://ecfsapi.fcc.gov/file/121661888341/FCC-19-130A1.pdf .

In comments filed earlier this year, ARRL urged that the secondary status for amateur radio in the band be continued. In a series of meetings with Commissioner legal advisors and staff members, ARRL explained how continued secondary use by radio amateurs will not impair or devalue use of this spectrum by future primary licensees, including those intending to provide 5G or other services. ARRL also stressed the various public-benefit uses of the spectrum by amateurs, including ongoing use of television and mesh networks on the west coast of the US as part of efforts to contain wildfires.

With regard to interference potential, ARRL stated that amateur radio operators using these bands are technically proficient and (Cont. on page 35) have a long history of sharing with primary users in this and other bands without causing interference.

FCC staff expressed concern that because amateur operations in the band are less clearly defined than those of other services also operating on a non-interference in the band, they would be difficult to locate should interference occur. ARRL Washington Counsel David Siddall, K3ZJ, noted that Section 97.303(g), an existing amateur rule, could be amended or used to craft a notification requirement, if the FCC concluded that relying on other methods would be insufficient.

The FCC participants indicated that such a requirement, in place of deleting the secondary allocation, would be given serious consideration. (Section 97.303(g) contains specific frequency-sharing requirements for the 2200- and 630-meter amateur bands.) (Cont. on page 35)

ARLB026 ARRL Seeks Changes in FCC Proposal to Delete 3.4 GHz Amateur Band (Cont. from page 34)

Siddall also pointed out that the Amateur Television Network (ATN) filed an email with the Commission that included a letter from the California Governor's Office of Emergency Services (Cal OES) describing amateur radio's contributions, specifically calling out the need for 3.4 GHz access and explaining why other bands are not sufficient.

ARRL also argued that, in any event, continued operation in the band should be permitted until and unless an actual potential for interference exists in a specific geographic area. ARRL said the FCC should not intentionally leave spectrum capacity unused during a build-out period that the Commission's own proposal indicates will last for at least 12 years in some areas.

The record in the proceeding is now closed. Please be reminded that there can be no calls, emails, or filings to the FCC with regard to the issues under consideration until a final FCC Report and Order and Further Notice of Proposed Rulemaking is released.

Release is currently expected to be within a few days after the Commission's September 30 meeting. At that time, ARRL will evaluate the impact on amateur radio of the Commission's decisions and consider what further action, if any, may be merited.

US Mail is the Only Way to Vote in ARRL Division Elections

The candidates for the 2020 ARRL Division elections are now official. Unfortunately, incorrect information regarding electronic balloting in ARRL Division elections was disseminated in the Midwest Division. ARRL does not use electronic voting. The only way to cast a vote is by US Postal Service mail.

We urge you to participate by casting and mailing your ballot. Ballots, accompanied by a photograph and a 300-word statement (if provided) from each candidate, will be mailed out to members by October 1.

If you do not receive your ballot by October 16, contact Carla Pereira, KC1HSX, at **cpereira@arrl.org**. Completed ballots are due back at ARRL Headquarters no later than noon Eastern Time on Friday, November 20, 2020. — *The Ethics & Elections Committee of the Board of Directors*

5-MHz Interoperability Channels Designated for Wildfires and

Hurricane Sally Response

The Federal Emergency Management Agency (FEMA) has announced that two 60-meter channels have been made available, as necessary, for interoperability between US Government stations and US amateur radio stations involved in emergency communications related to the wildland firefighting response in California, Oregon, and Washington, and to Hurricane Sally. These interoperability channels will remain active until the need for these channels no longer exists:

- Channel 1 — primary voice traffic 5332 kHz channel center, 5330.5 kHz USB voice
- Channel 2 — digital traffic 5348 kHz channel center, 5346.5 kHz USB with 1.5-kHz offset to center of digital waveform.

Frequencies may be modified or added to by FEMA Region 10 for their area or operations due to existing 5-MHz/60-meter interoperability plans for their region.

Amateur radio is secondary on the 5-MHz band and should yield to operational traffic related to wildland firefighting and hurricane response. Although the intended use for these channels is interoperability between federal government stations and licensed US amateur radio stations, federal government stations are primary users and amateurs are secondary users.
The Military Auxiliary Radio System (MARS) is following FEMA's lead on the interoperability channel designations for the wildfire and hurricane response. **Army MARS** Program Manager Paul English, WD8DBY, says he has alerted all MARS members of the FEMA channel designations and MARS members are prepared to support response efforts as needed.

MARS Communications Exercise to Involve Amateur Radio Community

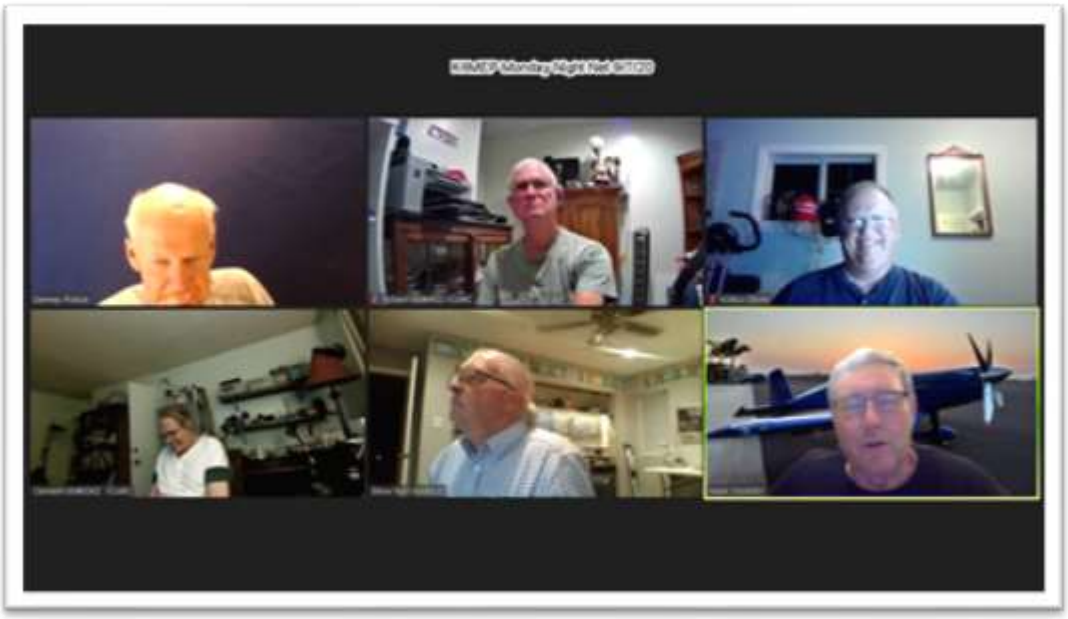
Military Auxiliary Radio System (MARS) volunteers will take part in the Department of Defense (DOD) Communications Exercise 20-4, starting on October 3 and concluding on October 26. The MARS focus is interoperability with ARRL and the amateur radio community.

"Throughout the month of October, MARS members will interoperate with various amateur radio organizations that will be conducting their annual simulated emergency tests with state, county, and local emergency management personnel," said MARS Chief Paul English, WD8DBY. "MARS members will send a DOD-approved message to the amateur radio organizations recognizing this cooperative interoperability effort."

MARS members will also train with the ARRL National Traffic System (NTS) and Radio Relay International (RRI) to send ICS 213 general messages to numerous amateur radio leaders across the US. (Cont. on page 37)

MARS Communications Exercise to Involve Amateur Radio Community (Cont. from page 36)

"This exercise will culminate with MARS Auxiliarists sending a number of summary messages in support of a larger DOD communications exercise taking place October 20 - 26," English added. Throughout the month of October, MARS stations will operate on 60 meters, and WWV/WWVH will broadcast messages to the amateur radio community. English assures no disruption to communications throughout the month-long series of training events.



NATIONAL WEATHER SERVICE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Hello Solar Cycle 25

Analysis determines we are in Solar Cycle 25

September 15, 2020 - The solar minimum between Solar Cycle 24 and 25 - the period when the sun is least active - happened in December 2019, when the 13-month smoothed sunspot number fell to 1.8, according to the Solar Cycle 25 Prediction Panel, co-chaired by NOAA and NASA. We are now in Solar Cycle 25 with peak sunspot activity expected in 2025, the panel said.

Solar Cycle 24 was average in length, at 11 years, and had the 4th-smallest intensity since regular record keeping began with Solar Cycle 1 in 1755. It was also the weakest cycle in 100 years. Solar maximum occurred in April 2014 with sunspots peaking at 114 for the solar cycle, well below average, which is 179.

Solar Cycle 24's progression was unusual. The Sun's Northern Hemisphere led the sunspot cycle, peaking over two years ahead of the Southern Hemisphere sunspot peak. This resulted in solar maximum having fewer sunspots than if the two hemispheres were in phase.

Solar Cycle 25

For the past eight months, activity on the sun has steadily increased, indicating we transitioned to Solar Cycle 25. Solar Cycle 25 is forecast to be a fairly weak cycle, the same strength as cycle 24. Solar maximum is expected in July 2025, with a peak of 115 sunspots.

"How quickly solar activity rises is an indicator on how strong the solar cycle will be," said Doug Biesecker, Ph.D., panel co-chair and a solar physicist at NOAA's Space Weather Prediction Center. "Although we've seen a steady increase in sunspot activity this year, it is slow."

The panel has high confidence that Solar Cycle 25 will break the trend of weakening solar activity seen over the past four cycles. "We predict the decline in solar cycle amplitude, seen from cycles 21 through 24, has come to an end," said Lisa Upton, Ph.D., panel co-chair and solar physicist with Space Systems Research Corp. "There is no indication we are approaching a Maunder-type minimum in solar activity."

"While we are not predicting a particularly active Solar Cycle 25, violent eruptions from the Sun can occur at any time," Biesecker added.

Solar cycle prediction gives a rough idea of the frequency of space weather storms of all types, from radio blackouts to geomagnetic storms and solar radiation storms. It is used by many industries to gauge the potential impact of space weather in the coming years.

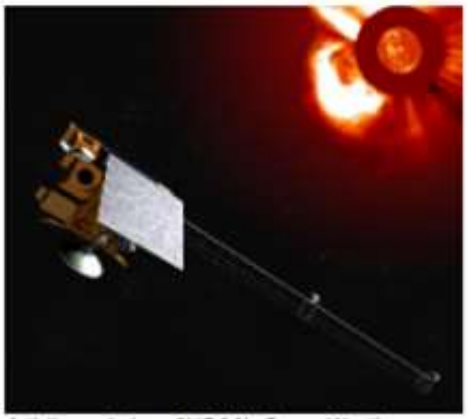
New satellites will provide enhanced observations of the Sun

In 2024, before the peak of sunspot activity in Solar Cycle 25, NOAA is slated to launch a new spacecraft dedicated to operational space weather forecasting. NOAA's Space Weather Follow-On L-1 observatory will be equipped with instruments that sample the solar wind, provide imagery of coronal mass ejections, and monitor other extreme activity from the Sun in finer detail than before. NOAA's next Geostationary Operational Environmental Satellite (GOES-U) is also scheduled to launch in 2024. GOES-U will carry three solar monitoring instruments, including the first compact coronagraph, which will help detect coronal mass ejections. Enhanced observations of the Sun from these satellites will help improve space weather forecasting.

The Solar Cycle Prediction Panel forecasts the number of sunspots expected for solar maximum, along with the timing of the peak and minimum solar activity levels for the cycle. It is comprised of scientists representing NOAA, NASA, the International Space Environment Services, and other U.S. and international scientists.

For the latest space weather forecast, visit NOAA's Space Weather Prediction Center, the nation's authority for space weather alerts, watches, warnings, and advisories at https://www.spaceweather.gov/.

Solar minimum - the period when the sun is least active - as seen by the Solar Ultraviolet Imager aboard GOES-East on Dec. 15, 2019. We are now in Solar Cycle 25. Credit: NOAA.



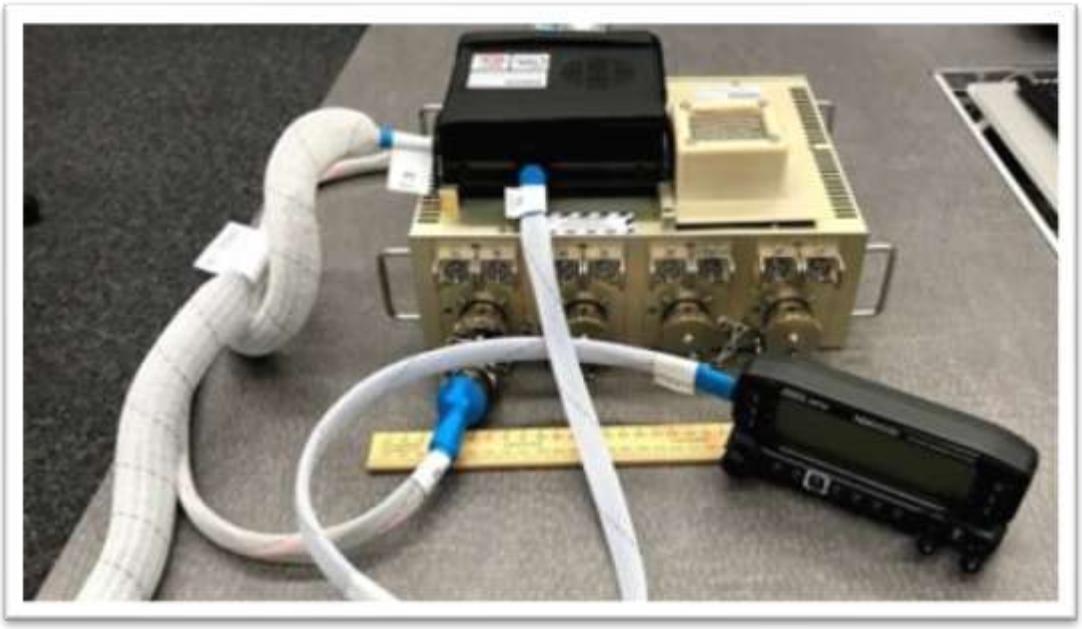
Artist's rendering of NOAA's Space Weather Follow-On L-1 observatory. Credit: NOAA

KB6NU's Ham Radio Blog (Suggested by Mark KD6ASL)

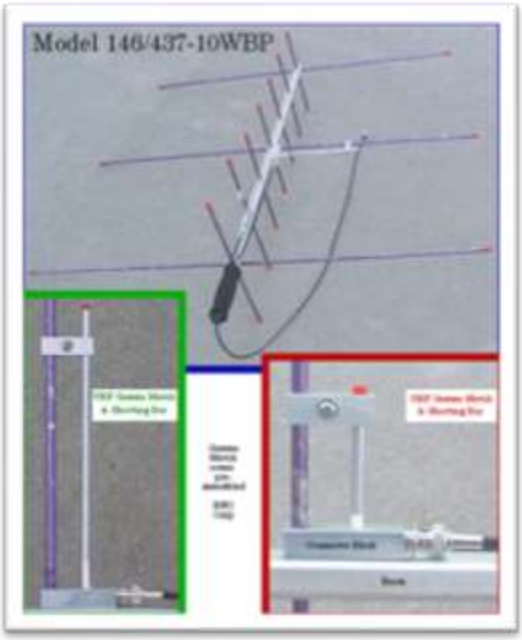
New ham gear on the ISS generating some excitement

The ham gear that was recently installed on the International Space Station is generating a lot of excitement in the amateur radio world. This first element, called the InterOperable Radio System (IORS), was installed in early September in the ISS' Columbus module. The IORS replaces the Ericsson radio system and packet module that were originally certified for spaceflight on July 26, 2000.

Part of the new radio system includes an FM cross band repeater system that has an uplink frequency of 145.99 MHz with an access tone of 67 Hz and a downlink frequency of 437.800 MHz. Hams are already making use of the repeater.



Phase 1 of the InterOperable Radio System (IORS), was installed onboard the Columbus module in early September. According to ARISS, [The equipment] consists of a special, space-modified JVC Kenwood D710GA transceiver, an ARISS developed multi-voltage power supply and interconnecting cables. The design, development, fabrication, testing, and launch of the first IORS was an incredible five-year engineering achievement accomplished by the ARISS hardware volunteer team. It will enable new, exciting capabilities for ham radio operators, students, and the general public. Capabilities include a higher power radio, voice repeater, digital packet radio (APRS) capabilities and a Kenwood VC-H1 slow scan (Cont. on page 40)



New Ham Gear on the ISS Generating Some Excitement (Cont. from page 39)

television (SSTV) system.

A second IORS undergoes flight certification and will be launched later for installation in the Russian Service module. This second system enables dual, simultaneous operations, (e.g. voice repeater and APRS packet), providing diverse opportunities for radio amateurs. It also provides on-orbit redundancy to ensure continuous operations in the event of an IORS component failure.

Next-gen development efforts continue. For the IORS, parts are being procured and a total of ten systems are being fabricated to support flight, additional flight spares, ground testing and astronaut training. Follow-on next generation radio system elements include an L-band repeater uplink capability, currently in development, and a flight Raspberry-Pi, dubbed "ARISS-Pi," that is just beginning the design phase. The ARISS-Pi promises operations autonomy and enhanced SSTV operations.

I've gotten the bug myself. I rejoined AMSAT and ordered a satellite antenna. Not the best timing, as it's starting to get cooler here in Michigan, but it is what it is.

After looking at a number of designs for homebrew antennas, and considering the Elk 2M/440L5 Dual-Band Antenna, I decided to buy an Arrow II 146/437-10WBP Handheld Yagi w/ Duplexer after consulting with the guys on Twitter. Nearly everyone recommended the Arrow antenna over the Elk, but what really clinched the deal was that Jeff, KE9V, noted that if I purchased the Arrow antenna via the AMSAT website, AMSAT would get a cut of the sale.

So, now, I'm eagerly awaiting delivery of the antenna, and hope to work the ISS and other satellites soon. See you on the satellites, I hope.

On Tuesday, October 27, 2020, at 7:00pm Eastern time, the Cherryland Amateur Radio Club will host a special presentation, "How to work satellites using you hand-held," by Clint Bradford, K6LCS, who will present live from his home in California via ZOOM. Clint will be joined on-line with guests from AMSAT as well. Click here to register to attend.

The post New ham gear on the ISS generating some excitement appeared first on KB6NU's Ham Radio Blog.

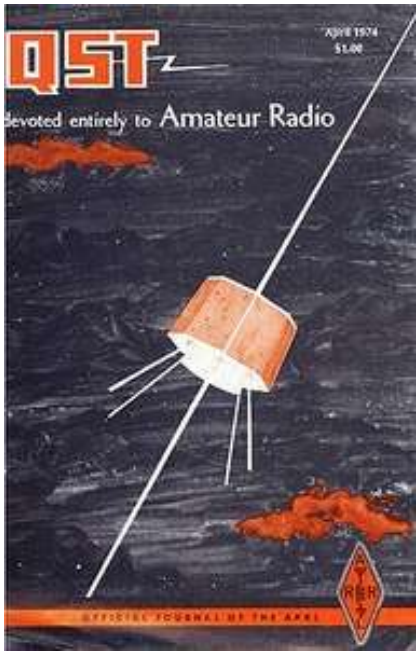
Venerable AO-7 Satellite Approaching a Return to Full Solar Illumination

AMSAT-OSCAR 7 (AO-7), the oldest amateur radio satellite still in operation, is nearing a return to full illumination by the sun, which should take place around September 25 and continue until around December 26. AMSAT's vice president of operations Drew Glasbrenner, KO4MA, says that during this period, AO-7 likely will switch between modes A (2 meters up/10 meters down) and B (70 centimeters up/2 meters down) every 24 hours. He reminded users to use only the minimum necessary power and to avoid "ditting" to find their signals in the passband, which can bounce the entire passband up and down and sometimes even cause the transponder to reset to mode A.

"Try to find yourself with very low power, or on SSB, or best, with full Doppler control," Glasbrenner said. "If you have to use high power to find yourself, your receive antenna and system probably needs improvement."

Last May, the nearly 46-year-old AO-7 made possible a contact between Argentina and South Africa -- a distance of more than 4,300 miles. Both stations were aiming just 2° or 3° above the horizon. AO-7 only works when it's receiving direct sunlight and shuts down when in eclipse.

Launched in 1974, AO-7 surprised the amateur satellite community by suddenly coming back to life in 2002 after being dormant for nearly 30 years and periodically re-emerging. AMSAT considers AO-7 "semi-operational." Theory is that AO-7 initially went dark after several years of operation when a battery shorted, and it returned to operation when the short circuit opened. With no working batteries, AO-7 now only functions when it's receiving direct sunlight, and it shuts down when in eclipse.



Built by a multinational team under AMSAT's direction, AO-7 carries a non-inverting Mode A transponder (145.850 - 950 MHz up/29.400 - 500 MHz down) and an inverting Mode B (432.180 - 120 MHz up/145.920 - 980 MHz down) linear transponder. AO-7 has beacons on 29.502 and 145.975 MHz, used in conjunction with Mode A and Mode B/C (low-power mode B), respectively. A 435.100 MHz beacon has an intermittent problem, sometimes switching between 400 mW and 10 mW.

FCC Grants Waiver Permitting Garmin to Market a Combination Part 95/Part 25 Device

The FCC has granted the request of Garmin International for a waiver of Section 95.2761 of the FCC's rules, permitting it to obtain equipment certification for a handheld unit that combines a low-power, terrestrial Part 95 Multi-Use Radio Service (MURS) transmitter and a Part 25 emergency satellite communication module in the same device. The FCC responded to Garmin's request in an *Order* released on September 21. Section 95.2761(c) precludes combining MURS transmitting capabilities in equipment that is also capable of transmitting in another service, with the exception of Part 15 unlicensed services.

The FCC said it determined that it would be in the public interest to waive Section 95.2761(c), so that Garmin may obtain authorization to produce its proposed handheld device.

"We find here that Garmin's proposed device contains an important public safety feature, which would not be brought to market if we were to strictly enforce the rules in this case. As Garmin noted in its request, the certified Part 25 module in the MURS unit would allow emergency communication to the outside world at the push of a button."

Garmin's proposed product would include two transmitters: a low-power MURS transmitter for short-range terrestrial communication, and a previously certified Part 25 module that would allow emergency communication via the Iridium satellite system under a blanket license held by Iridium. End users would have to subscribe to the Iridium service.

Garmin argued in its petition that the purpose of the original equipment authorization restriction was "to prevent consumer confusion with other terrestrial services that either had different licensing regimes or were for different types of communications" and that it is inappropriate in this case.

"We agree with Garmin that its device's intended use does not flout the purpose of Section 95.2761(c)," the FCC said in its *Order*. "Garmin maintains that the Part 95 MURS transmitter and the Part 25 module operate on different frequencies and will not operate simultaneously. Provided the device is constructed in this manner, we are persuaded that its dual purposes will be well segregated."

IARU Region 1 President Sounds Alarm on Wireless Power Transfer for Vehicles

International Amateur Radio Union (IARU) Region 1 President Don Beattie, G3BJ, wants to raise greater awareness regarding the interference potential of Wireless Power Transfer for Electric Vehicles (WPT-EV). He is urging IARU member-societies to contact national regulators to make them aware of the technology's potential for "RF pollution." Beattie notes that WPT-EV chargers can run as much as 20 kW.

WPT-EV was on the agenda for World Radiocommunication Conference 2019 (WRC-19). The International Telecommunication

Union (ITU) Radiocommunication Sector (ITU-R) conducted studies to assess the impact of WPT-EV on radiocommunications and suitable harmonized frequency ranges. Those ITU-R studies identified the 19 - 25 kHz band, as well as bands in the 50 kHz and 60 kHz range, for high-power WPT-EV, and the 79 - 90 kHz band for medium-power WPT-EV. The consensus of WRC-19 delegates was to make no changes in the ITU *Radio Regulations* with respect to WPT-EV.

The Netherlands' IARU member-society VERON has posted the text (translated into Dutch) of Beattie's remarks on the subject.

"The discussions about WPT-EV have reached a point where they are moving from the technical to the political arena," Beattie said. "Discussions with a national regulator indicate that we must now take action at the national level. The amateur service, but also other telecommunication services, will experience the consequences of WPT-EV."

Beattie urged member-societies in Region 1 to contact national regulators, preferably in person, to explain why radio amateurs are so concerned. He pointed out that long charging times in populated areas could generate harmonics that make radio communication very difficult. "Models show that this also applies to the wider environment of a WPT-EV installation," Beattie said. "Broadcasters, stationary, and mobile services share these concerns" and provided input to CEPT Electronic Communications Committee Report 289.

Beattie noted that the WPT-EV discussion has been going on for a long time. The technology is similar to that used for wireless charging of cell phones. (Cont. on page 44)

IARU Region 1 President Sounds Alarm on Wireless Power Transfer for Vehicles (Cont. from page 43)

"The wireless charging of electric cars is done with large coils," he explained. "One of them is on the ground under the vehicle; the second is in the car. Typically, about 22 kW is transferred wirelessly through those coils. This is done using frequencies between 79 and 90 kHz. Technical and operational standards for WPT-EV are under development."

WPT-EV developers are seeking noise level limits that are some 30 - 45 dB above current noise levels, Beattie said. "Limits that have a serious negative effect on the radio spectrum," he asserted.

"In the interests of the future of amateur radio, we need to get the attention of national regulators," Beattie concluded. "This is about the future of amateur radio!"

Hams Help Find Kids by Monitoring FRS Channel

Late on the afternoon of September 16, the police department in Post Falls, Idaho, received a 911 call that two juveniles -- ages 9 and 11 -- were missing from a Post Falls residence for about an hour. According to the report, the pair had left home intending to play in the neighborhood with some Family Radio Service (FRS) radios. Several patrol cars were dispatched to the area to conduct a visual search, and detective Neil Uhrig, K7NJU, responded as officer in charge due to his

training and experience with missing persons investigations. The initial search focused on a 2-mile radius from the missing kids' residence.

One officer received information from witnesses that the pair was probably using FRS Channel 1 (462.5625 MHz). An officer returned to police headquarters to retrieve some FRS radios for distribution to the patrol officers, in the event they might be able to hear the youngsters talking.

Uhrig, meanwhile, pulled out his VHF/UHF handheld with the thought of setting up FRS Channel 1 as an auxiliary frequency, but without the manual at hand, he wasn't able to execute the channel setup. But Uhrig did hear the Northwest Traffic Net (NWTN) that had begun at 6:30 PM on the local 2-meter repeater.

Checking into the net at about 6:45 PM, Uhrig explained the missing persons situation to net control station Shannon Riley, KJ7MUA, and asked if net participants in the Post Falls area with FRS capability could listen for the youngsters talking. (Cont. on page 45)

Hams Help Find Kids by Monitoring FRS Channel (Cont. from page 44)

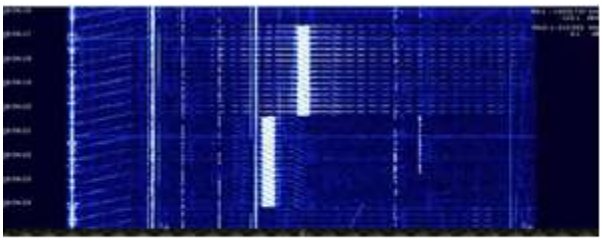
A number of stations promptly checked in to say they had FRS radios and were monitoring FRS Channel 1. It was assumed that only stations located near the missing youngsters would hear them, given the limited range of FRS radios.

Not long after 7 PM, Jim Hager, KJ7OTD, reported hearing children talking on FRS Channel 1. Uhrig went to Hager's home to confirm his observation, and the patrol units were redirected to the new search vicinity. A short time later, the missing pair was found safe and returned home.

Uhrig said the most remarkable thing about the incident was that the missing youngsters turned out to be some distance from the original search area, and in the opposite direction from where they were thought to have been headed.

Net Manager Gabbee Perry, KE7ADN, said, "I'm so proud of what a superior job NWTN NCS Shannon [KJ7MUA] and all the operators did last Wednesday. It was a very unusual situation, but everyone had excellent focus and used their resourcefulness to help quickly find the missing kids." -- *Thanks to ARRL Assistant Idaho Section Manager Ed Stuckey, AI7H*

"Foghorn" is Back on the Bands, IARU Monitoring Service Reports



Chinese "Foghorn" signal waveform. [Wolf Hadel, DK2OM]

The Chinese "Foghorn" over-the-horizon radar (OTH-R) is once again showing up in the logs of the International Amateur Radio Union Monitoring Service (IARUMS) in IARU Region 1 (Europe, the Middle East, and Africa). While the reports reflect what's being heard by stations primarily in Europe, the same interference can and does affect other parts of the world, often depending upon the time of day. Named by former IARUMS Region 1 Coordinator Wolf Hadel, DK2OM, because of its sound, the Foghorn was first reported in 2017 operating in amateur bands. The signal is frequency modulation on pulse (FMOP) with 66.66 sweeps-per-second bursts.

"In August, we found significantly more OTH radars from the Far East, especially the system known as 'Foghorn,'" said IARUMS Region 1 Coordinator Peter Jost, HB9CET, noting that the Foghorn facilities generate a signal with a bandwidth of 10 kHz. "But also, the notorious Russian 'Contayner' radar still contaminated our bands, especially 20 meters, daily."

The Foghorn was being heard on 40 meters, in the vicinity of 7113 - 7123 kHz and 7165 - 7175 kHz. Other OTH-R signals tracked to, or believed to be in, China are showing up elsewhere on the band with equally broad signals. Some international broadcasters have also set up shop on amateur bands, including Voice of Broad Masses 1 on 7140 kHz, and Voice of Broad Masses 2 on 7180 kHz, both with 9 kHz-wide AM signals. China Radio International has been transmitting at the very bottom edge of 20 meters, its signal slopping over into the amateur band. Chinese OTH-R signals were also monitored at various places on 20 meters. (Cont. on page 46)

"Foghorn" is Back on the Bands, IARU Monitoring Service Reports (Cont. from page 45)

Russian "Contayner" OTH-R signals were spotted on several 20-meter frequencies in August. An idling signal on 14,221 kHz is believed to be coming from Kazakhstan, showing up every evening. A Foghorn OTH-R has been appearing in the 14,338 - 14,348 kHz range.

A radio war between Russia and Ukraine has generated signals on 40 meters (Russia on 7055 and Ukraine on 7060 kHz), airing what the monitor called "very loud" and persistent signals every day, with "plenty of abuse," propaganda, profanities, and agitation being passed back and forth.

AM radars with "huge signals" were reported to be taking up segments on 40 and 20 meters. A "monster" F1B signal has been heard on 14,301 kHz.

The role of IARUMS -- monitoring the amateur bands to search and identify transmissions sent by intruders -- is important, because the amount and variety of intruders is rapidly growing, IARU said. "A number of national monitoring coordinators and volunteers have been watching our bands for many years. But more needs to be done to raise awareness of societies and countries where no national monitoring team exists. Also, existing groups can still help by sharing detailed information worldwide with others. 'Monitoring is Teamwork!'"

IARU said it's also very important that as many member-societies as possible file interference complaints with national regulators when intruders are heard.