The October 9th club meeting was held on the air by club President Denney N6HV used 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 went over to the Zoom meeting for a presentation on Building and Understanding Simple Antennas by Denney, our club President. The presentation started around 19:30. A total of fifteen members and guests checked-in on the Sulphur Mountain Repeater and we discussed current regulations against our meeting as a club. Some suggested that the more vulnerable members should attend the club meeting using Zoom while the other, younger members without comorbidities could attend in person, following whatever restrictions were currently in place. Denney plans on contacting Richard Abbey WB6AEW, our facilities manager of the Dudley House, to determine when we can use it again. Mark KI6YLH suggested that the back of the building that faces the street can be used for an outdoor meeting since it offers seating and covering from the elements. There is also a BBQ pit. A board meeting was held on October 17 to discuss the K6MEP.org website replacement.

The November 13th 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 “Propagation” by President Denney. The presentation will start around 19:30. Everyone is welcome to attend!

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

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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,

The long warm days of Indian summer are coming to an end. Autumn and cooler weather is coming. Along with it is better propagation.

Fall and winter does not only make the air on the surface of the earth cooler, the cold extends to the ionosphere and the layers that refract radio waves. These layers, labeled D, E, and F, refract or bend radio waves, not reflect them. Refraction can bend the wave enough to return them to earth. The drop in autumn and winter temperatures makes the air denser, even at ionosphere elevations. Denser air increases the chance that ionizing solar radiation will strike and ionize atmospheric particles. The more ionization in the F and E layers of the ionosphere, the more radio waves are returned to earth (ship). More ionization in the D layer is not good; I will get to that in a second.

The fall and spring are great times to try trans-equatorial (where your signal crosses the equator) paths where you work across the equator into South America, Australia, South Africa, and other southern stations.

All radio blackouts are not created the same. On Oct 16th AR2775 was at the limb of the sun when it emitted a flare. The charged particles (plasma) from the flare missed the earth.

Quick note: the plasma from a flare and or a sunspot is different from the plasma emitted by a Coronal Hole. Coronal hole plasma travel slower and is less energetic than plasma from a flare or sunspot. AR2775 is an Active Region or bright spot. Sun spots form inside Active Regions and are seen as black spots. Active regions can have flares and CMEs without having a sunspot.

The AR2775 flare also emitted Ultra Violet light and x-rays. UV light and x-rays reached the earth in 8 1/2 minutes. The plasma, released at the same time, takes 24 to 48 hours to reach the earth and could have taken longer. The UV light and x-rays hit the earth's atmosphere and increased the density of D layer of the ionosphere. (Cont. on page 3)

Message from the President (Cont. from page 2)

The D layer is the lowest of the ionosphere radio refractive layers. An enhanced D layer absorbs lower frequency radio waves, but this event did not affect the D layer the same over the entire sunlit portion of the world, but impacted South America the most. Had AR2775 not been so close to the sun's limb it could have blacked radio signals all over the world.

A D layer blackout impacts signal at 10 MHz and below the most. The signal degradation gets worst the lower in frequency you go. The good news is a radio blackout like on the 16th tend to last only an hour. They can last longer, but not as long as the problems caused by the plasma from a flare or sunspot that can disrupt propagation for a day to a week.

How can you tell if a UV light or x-ray event is taking place? The atmosphere absorbs UV light and x-rays. Before there were man-made satellites used as solar observatories, ground-based astronomers used a proxy: 2.8 cm radio signals. These radio signals from the sun have a close but not linear correlation with solar UV and x-ray emissions and the 2.8 cm emissions reach the surface of the earth. You can find the level of 2.8 cm emissions as solar flux or SFI on the K6MEP web site (qsl.net/k6mep), solarham.net, or VOACAP. A good site to check on the condition of the D layer is https://www.swpc.noaa.gov/communities/radio-communications. Also look at the Planetary K index. A value of 2 or lower is good for propagation.

If the K sub P (the planetary K index) jumps from green to yellow or red means that a UV-or-x-ray-blast or CME has hit the earths geomagnetic field. The plasma or UV and x-rays could cause a blackout, enhance propagation, or no change at all. Most likely they will cause a blackout followed by enhanced propagation. Email me at k6mep@qsl.net.

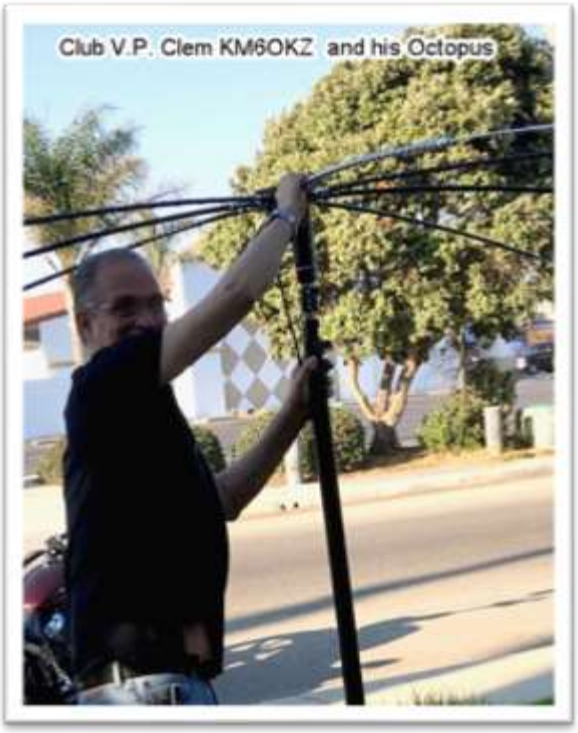
Denney N6HV, your Humble President.

K6MEP Monday Night Net Contest Status by Clem KM6OKZ

Our “Monday Night Tech Net” continues to be graced by the usual unusual cast of venerable characters… plus a smattering of unexpected but very warmly welcomed visitors. And each week I frantically try to keep up with everyone that checks in… and week by week all the call signs and the voices to whom they belong gradually become all the more comfortably familiar to these addled ears. As most if not all of us know, consistent attendance is attended by the promise of a reward at year’s end, but only for those few faithful souls who will have diligently checked in over the entire course of this most bizarre year. As always, our meetings present us with unique opportunities to come together in a common purpose and friendship in a time wherein social distancing is now, and regrettably for the foreseeable future, an unfortunate imperative. Moreover, the Internet Zoom meetings following the formal roundtable Net have become a source of camaraderie as well as a forum in which to ask questions, exchange knowledge, explore new ideas… and to indulge in the mutual pleasure of simply rag-chewing. All in all…. I think Monday evenings are a pretty good thing to look forward to. So… for you that haven’t already, I would encourage you to come join us! As of Monday, October 26, 2020 there has been 741 total check-ins with an average of 18.07 check-ins per session. Dave AI6VX and Robert KM6RSS are leading with 42 check-ins, each. Scott N6ZAI has 41 check-ins followed by Burt KA6BJA with 40 check-ins. Denney N6HV is continuing to work on his EME antenna complex. After the net, many of us join our Zoom meeting where we socialize without wearing masks. (Cont. on page 4)

K6MEP Monday Night Net Contest Status by Clem KM6OKZ (Cont. from page 3)

Several members showed and/or talked about their latest gadget (see Clem's, below) and checked to see who also has the same one. Everyone (members and guests) is welcome to join the Zoom meeting and Denney posts the URL on our K6MEP.groups.io. 73, Clem KM6OKZ Club V.P.



Selected November 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.

ARRL November Sweepstakes

Contest Objective: To support amateur self-training in radiocommunications, including improving amateur operating skills, conducting technical investigations, and intercommunicating with other amateurs. Stations in the United States and Canada (including territories and possessions) exchange information with as many other US and Canadian stations as possible on the 160, 80, 40, 20, 15 and 10 meter bands.
Dates:
CW: First full weekend in November (November 7-9, 2020).
Phone: Third full weekend in November (November 21-23, 2020).
Contest Period: Begins 2100 UTC Saturday and runs through 0259 UTC Monday.
Click here for updates on the Affiliated Club Competition program
2020 Update:
There are now a total of 84 ARRL/RAC sections, as RAC has separated Prince Edward Island (PE) from the Maritime (MAR) Section. Make sure your contest logging software and "country" (CTY) files have been updated so that those abbreviations are recognized and credited properly. Visit **contests.arrl.org/contestmultipliers.php** for a complete list of contest multipliers and their abbreviations.

EME Contest

Contest Details

1. Object: Two-way communications via the earth-moon-earth path on any authorized amateur frequency above 50 MHz.
2. Date and Contest Period: Three full weekend 48-hour periods (0000 UTC on Saturday through 2359 UTC Sunday). 2020 dates and designated bands:
September 12-13, 2020: 2.3+ GHz
October 10-11, 2020: 50-1296 MHz
November 28-29, 2020: 50-1296 MHz
3. Entry Categories:
3.1. Single Operator All Mode: Any combination of CW, phone, or digital modes. Available for all bands.
3.2. Single Operator CW Only: 144, 432, and 1296 MHz bands and Multi band logs.
3.3. Multioperator All Mode: Any combination of CW, phone, or digital modes. Available for all bands.
3.4. Multioperator CW Only: 144, 432, and 1296 MHz bands and Multi band logs.
4. Exchange: Each station must send and receive both call signs and a signal report in any mutually understood format, plus an acknowledgment of the calls and report. Partial or incomplete contacts should be indicated on your log, but not counted for contest credit.
5. Scoring:
5.1. QSO points: Count 100 points for each complete EME contact.
5.2. Multiplier: Each US State and Canadian Province, plus each DXCC entity (excluding the US/Canada) worked via EME on each band.
5.3. Final Score: Multiply QSO point total by the sum of multipliers worked from each band.

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

Contest Corral — November 2020

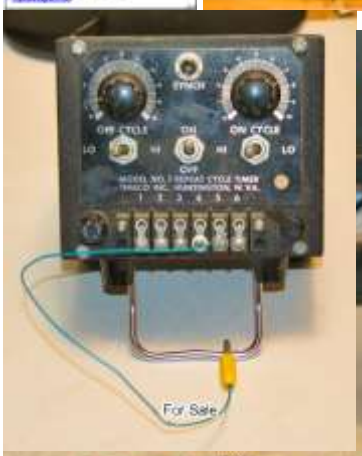
Check for updates and a downloadable PDF version online at **www.arrl.org/contest-calendar**.
Refer to the contest websites for full rules, scoring information, operating periods or time limits, and log submission information.

Start - Finish Date	Time	Finish Date	Time	Bands	Contest Name	Mode	Exchange	Sponsor's Website
1	0000	1	0400	3.5-14	North American SSB Sprint Contest	Ph	Other's call, your call, serial, name, SPC	ssbsprint.com/rules
1	0600	1	0859	3.5, 7	Silent Key Memorial Contest	CW	RST, ITU zone or SK call you wish to recognize	www.skmc.hu/en
1	1400	4	0800	1.8-144	Classic Exchange, CW	CW	Name, RST, SPC, rig	www.classicexchange.org
1	1500	1	1800	3.5-28	High Speed Club CW Contest	CW	RST, mbr or "NM"	www.highspeedclub.org
2	0000	2	0100	3.5-14	K1USN Slow Speed Test	CW	Max 20 WPM; name, SPC	www.k1usn.com
2	2000	2	2130	3.5	RSGB 80-Meter Autumn Series, Data	Dig	RST, serial	www.rsgbcc.org/hf
3	0100	3	0159	1.8-50	Worldwide Sideband Activity Contest	Ph	RS, age group (OM, YL, or youth)	wwsac.com/rules.html
3	0200	3	0400	3.5-28	ARS Spartan Sprint	CW	RST, SPC, power	arsqrp.blogspot.com
4	1700	4	2000	144	VHF-UHF FT8 Activity Contest	Dig	4-char grid square	ft8activity.eu/index.php/en
4	2000	4	2100	3.5	UKEICC 80-Meter Contest	Ph	6-char grid square	ukeicc.com/80m-rules.php
5	1800	5	2200	28	NRAU 10-Meter Activity Contest	CW Ph Dig	RS(T), 6-char grid	www.nrau.net
5	2000	5	2200	1.8-50	SKCC Sprint Europe	CW	RST, SPC, name, mbr or power	www.skccgroup.com
7	0500	7	1200	3.5-28	IPARC Contest, CW	CW	RST, serial, "IPA" if member	www.iparc.de
7	1200	8	1200	1.8-28	Ukrainian DX Contest	CW Ph	RS(T), 2-letter oblast if Ukraine	urdxc.org/rules.php?english
7	1200	8	2359	1.8-50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
7	2100	9	0300	1.8-28	ARRL November Sweepstakes, CW	CW	Serial, precedence (Q/A/B/U/M/S), your call, check (year licensed), ARRL/RAC section	www.arrl.org/sweepstakes
7	2300	15	2300	1.8-14	AWA Bruce Kelley 1929 QSO Party	CW	RST, name, QTH, equipment year, rig type, power	antiquewireless.org
8	0500	8	1200	3.5-28	IPARC Contest, SSB	Ph	RST, serial, "IPA" if member	www.iparc.de
8	0800	8	1200	All	EANET Sprint	CW Ph Dig	RS(T)	fediea.org/news/?news=20201108
9	0000	9	0100	3.5-14	K1USN Slow Speed Test	CW	Max 20 WPM; name, SPC	www.k1usn.com
9	0100	9	0300	1.8-28	4 States QRP Group Second Sunday Sprint	CW Ph	RS(T), SPC, mbr or power	www.4sqrp.com
10	0100	10	0159	1.8-50	Worldwide Sideband Activity Contest	Ph	RS, age group (OM, YL, or youth)	wwsac.com/rules.html
11	1700	11	2000	432	VHF-UHF FT8 Activity Contest	Dig	4-char grid square	ft8activity.eu/index.php/en
11	2000	11	2130	3.5	RSGB 80-Meter Autumn Series, SSB	Ph	RS, serial	www.rsgbcc.org/hf
14	0000	15	2359	3.5-28	WAE DX Contest, RTTY	Dig	RS, serial	www.darc.de/der-club/referate/referat-conteste/worked-all-europe-dx-contest/en
14	0000	16	2359	1.8-7	PODXS 070 Club Triple Play Low Band Sprint	Dig	RST, SPC	www.podxs070.com
14	0001	15	2359	28	10-10 International Fall Contest, Digital	Dig	Name, mbr or "0," SPC	www.ten-ten.org
14	0700	15	1300	3.5-28	JIDX Phone Contest	Ph	RST, JA prefecture or CQ zone	www.jidx.org/jidxrule-e.html
14	1200	15	1000	50-1296	SARL VHF/UHF Analogue Contest	CW Ph	RS(T), 6-char grid	www.sarl.org.za
14	1200	15	1200	1.8-28	OK/OM DX Contest, CW	CW	RST, 3-letter OK/OM district code or serial	okomdx.crk.cz
14	1900	16	0500	1.8-432	CQ-WE Contest	CW Ph Dig	Name, location code, years of service	cqwe.cboh.org/rules.html
15	1300	15	1700	3.5, 7	Homebrew and Oldtime Equipment Party	CW	RST, serial, class	www.qrpcc.de/contestrules
15	2300	16	0100	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	qrpcontest.com/pigrun
16	0000	16	0100	3.5-14	K1USN Slow Speed Test	CW	Max 20 WPM; name, SPC	www.k1usn.com
16	2000	16	2130	3.5	RSGB FT4 Contest Series	Dig	4-char grid	www.rsgbcc.org/hf
17	0100	17	0159	1.8-50	Worldwide Sideband Activity Contest	Ph	RS, age group (OM, YL, or youth)	wwsac.com/rules.html
19	0130	19	0330	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqcc.info
20	1600	20	2200	3.5	YO International PSK31 Contest	Dig	RST, serial, YO county or country	www.yo5crq.ro/Rules.htm
21	1200	22	1200	3.5-28	LZ DX Contest	CW Ph	RS(T), 2-letter LZ district or ITU zone	lzdx.bfra.org/rulesen.html
21	1600	21	2359	1.8	All Austrian 160-Meter Contest	CW	RST, serial, OE district or serial	www.oevsv.at
21	1700	22	0100	1.8	REF 160-Meter Contest	CW	RST, serial, department code	concours.r-e-f.org/contest
21	1900	21	2059	1.8-50	Feld Hell Sprint	Dig	RST, mbr, SPC, grid	sites.google.com/site/feldhellclub
21	1900	21	2300	1.8	RSGB 1.8-MHz Contest	CW	RST, serial, district code (if UK)	www.rsgbcc.org/hf
21	2100	23	0300	1.8-28	ARRL November Sweepstakes, Phone	Ph	Serial, precedence (Q/A/B/U/M/S), your call, check (year licensed), ARRL/RAC section	www.arrl.org/sweepstakes
23	0000	23	0100	3.5-14	K1USN Slow Speed Test	CW	Max 20 WPM; name, SPC	www.k1usn.com
24	0100	24	0159	1.8-50	Worldwide Sideband Activity Contest	Ph	RS, age group (OM, YL, or youth)	wwsac.com/rules.html
25	0000	25	0200	1.8-28	SKCC Sprint	CW	RST, SPC, name, mbr or power	www.skccgroup.com
25	2000	25	2100	3.5	UKEICC 80-Meter Contest	CW	6-char grid square	ukeicc.com/80m-rules.php
26	2000	26	2130	3.5	RSGB 80-Meter Autumn Series, CW	CW	RST, serial	www.rsgbcc.org/hf
28	0000	29	2359	50-1296	ARRL EME Contest	CW Ph Dig	Signal report	www.arrl.org/eme-contest
28	0000	29	2359	1.8-28	CQ Worldwide DX Contest, CW	CW	RST, CQ zone	www.cqww.com
30	0000	30	0100	3.5-14	K1USN Slow Speed Test	CW	Max 20 WPM; name, SPC	www.k1usn.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: All items as shown below: Contact Denney for price.



October 9th Meeting Minutes (submitted by President Denney N6HV)

There were 15 hams in attended the On-the-Air portion of the meeting, started at 19:00.
No old or new business was presented.
Mark KD6ASL suggested that a Welcome Back party be considered. The president took action to investigate the action and bring before the board.
Mark KI6YHL suggested that we should consider an outside Saturday meeting. That was combined with the above action.
There was some discussion about the Buddy Pole antenna.
The meeting switched over to Zoom where there was a presentation about building a dipole antenna in an hour or less by Denney. Getting the antenna up in the air will be the subject of another presentation. Denney N6HV

October 17th Board Meeting Minutes (submitted by President Denney N6HV)

Minutes of October 17th board meeting
The meeting was called to order at 8:11 PM.
Attendees:
Denney Pistole N6HV President
Clement Alberts KM6OKZ Vice President
John Gartman W6JPG Treasurer
Robert Shank KM6RSS At-large Board Member
As per club bylaws, 4 out of 7 is a Quorum (Section V: Four (4) members of the Board of Directors shall constitute a Quorum.)
First item of business was a discussion of the VCARC web site and its update.
A club member, Bruce Schubert KM6ZJK, has volunteered to revamp the club's web site. After some discussion there was a motion to contact Mr. Schubert and ask him to start a revamp of the web site. The motion was voted on and passed.
There was some discussion about moving the web site to another host. It is presently hosted on QSL.net. There are restrictions using that host although we have not had any problems. It was suggested that we discuss terms and conditions with Phil WA6BUZ for hosting the club's web site. A motion was raised and seconded. The vote was in favor of the motion.
There was some discussion about having back-up for the web site. A motion for two club members to have the back up for the club's web site was made, with at least one backup to be held by a club board member. The motion was seconded and approved.
There was discussion of offering Bruce the role of club webmaster if he agrees.
A tentative plan is to have the new website phased in with the old one running, while the new one is built. After both have been in operation we will have the club decide if they approve to use the new one and discontinue the old website (https://www.qsl.net/k6mep/). We will keep the domain name K6MEP.org with Phil as the domain chairman.
The club president will write an email or letter to Mr. Schubert to ask him start work on revamping the web site.
Meeting adjourned at 9:20. Submitted by Denney Pistole N6HV President of the VCARC

Upcoming FCC Exam Session Preparation (Physical Location) Sites **(None scheduled within 50 mi of 93001 in November)**

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.

Upcoming FCC Exam Test 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)

Calabasas CA 91301-5332

EXAM SESSION

11/01/2020
Sponsor: Goodkin Ham Radio Classes
Date: Nov 01 2020
Time: 8:00 AM (No Walk-ins / Call ahead)
Contact: Norm Goodkin
(818) 613-2257
Email: hamclass@goodkin.net
VEC: Greater LA VEC
Location: Agoura Hills/Calabasas Community Center
27040 Malibu Hills Rd
Calabasas CA 91301-5332

Van Nuys CA 91405-4542

EXAM SESSION

11/07/2020
Sponsor: ARES LAX
Date: Nov 07 2020
Time: 11:00 AM (Walk-ins allowed)
Contact: James W. Laage
(818) 368-8710
Email: cllaage@verizon.net
VEC: ARRL/VEC
Location: Valley Presbeterian Hospital (Health Education Center)
15107 Vanowen Street
Van Nuys CA 91405-4542

Santa Monica CA 90405-6130

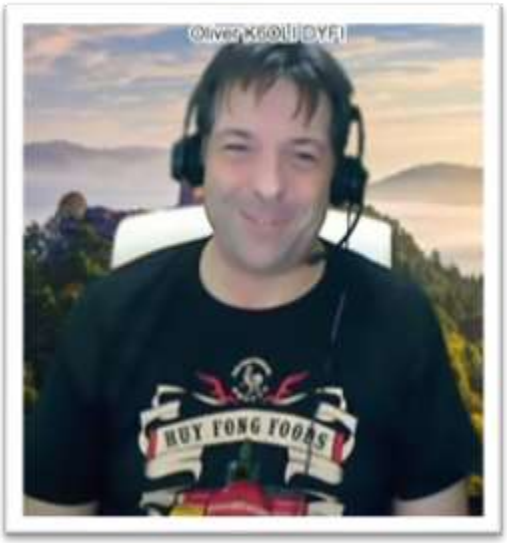
EXAM SESSION

11/14/2020
Sponsor: PAPA Repeater System
Date: Nov 14 2020
Time: 7:00 AM (No Walk-ins / Call ahead)
Contact: Norm Goodkin
(818) 222-7013
Email: hamclass@goodkin.net
VEC: Greater LA VEC
Location: Spitfire Grill
3300 Airport Ave
Meeting Room
Santa Monica CA 90405-6130

Valencia CA 91355-2008

EXAM SESSION

11/21/2020
Sponsor: Santa Clarita Amateur Radio Club
Date: Nov 21 2020
Time: 8:00 AM (No Walk-ins / Call ahead)
Contact:
(661) 259-0948
VEC: Greater LA VEC
Location: United Methodist Church of Valencia
25718 McBean Pkwy
Rm B
Valencia CA 91355-2008



Trivia for November 2020

Did you know???

1. Elvis Presley never performed outside of the United States?
2. Approximately 36 apples go into making one gallon of apple cider (apple juice)?
3. In the year of1899 the first auto pedestrian death took place in New York City?

DE
Dana
KG6WXE

Calendar November 2020

2: K6MEP Monday Night Net, ACS/ARES District Meeting
3: ACS/ARES Tuesday Night Net, U.S. GENERAL ELECTION
9: K6MEP Monday Night Net
10: ACS/ARES Tuesday Night Net
11: Veterans Day
13: 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
14: Nationwide Red Cross Emergency Communications Drill
16: K6MEP Monday Night Net
17: ACS/ARES Tuesday Night Net
23: K6MEP Monday Night Net
24: ACS/ARES Tuesday Night Net
26: Thanksgiving
27: Black Friday (but I doubt it)
30: K6MEP Monday Night Net

(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. However, due to government health restrictions, we meet "virtually" on 145.200 MHz with a minus offset and a PL of 127.3 Hz followed by a Zoom meeting afterwards. The next virtual meeting date is Friday _____ (insert date). We urge any non-members interested in the VCARC to contact us 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

ALABAMA STATE CONVENTION

November 21, Montgomery ARC
D F H Q R S T V
8:30 AM – 4 PM. *Spr:* Montgomery ARC. Alcazar Shrine Temple, 555 Eastern Blvd. *Tl:* 146.84. *Adm:* $8.
https://w4ap.org/marc/hamfest

Florida (Coral Gables) — Nov. 21 F T
7 AM – noon. *Spr:* Flamingo Net ARC. University of Miami Parking Lot 1 – 109, 1300 Campo Sano Ave. *Tl:* 147.15+.600 (94.8 Hz). *Adm:* Free, must pay university parking fee.
www.flamingonet.8m.net

Florida (Fort Walton Beach) — Nov. 13 – 14
D F H Q R S V
Friday 4 – 8 PM, Saturday 8 AM – 2 PM. *Spr:* Playground ARC. C.H. "Bull" Rigdon Fairgrounds, 1958 Lewis Turner Blvd. *Tl:* 146.79 (100 Hz). *Adm:* $7. **www.w4zbb.org**

Florida (Pinellas Park) — Nov. 14 F R T
8 AM – noon. *Spr:* St. Petersburg ARC. Freedom Lake Park, 9990 46th St. N. *Tl:* 146.07. *Adm:* Free. **www.sparc-club.org**

Florida (West Palm Beach) — Nov. 28 D F H R T V
8 AM – 1 PM. *Spr:* Palms West ARC. Lampert Family Service Center, 5841 Corporate Way. *Tl:* 147.045 (110.9 Hz). *Adm:* $5. **www.palmswestradio.org**

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**

CENTRAL DIVISION CONVENTION

November 14 – 15, Fort Wayne, IN
D F H Q R S V
Saturday 9 AM – 4 PM, Sunday 9 AM – 2 PM. *Spr:* Allen County AR Technical Society. Allen County War Memorial Coliseum, 4000 Parnell Ave. *Tl:* 146.88. *Adm:* $6 for both days, $3 for Sunday only. **www.fortwaynehamfest.com**

Michigan (Madison Heights) — Dec. 6 D F H R V
8 AM – noon. *Spr:* L'Anse Creuse ARC. Madison Place, 876 Horace Brown Dr. *Tl:* Receive 147.08, Transmit 147.68 (100 Hz). *Adm:* $5. **www.n8lc.org**

Mississippi (Ocean Springs) — Nov. 13 – 14 D F H Q R V
Friday 4:30 – 8 PM, Saturday 8 AM – 3 PM. *Spr:* Jackson County ARA. St. Martin Community Center, 15008 Lemoyne Blvd. *Tl:* 145.11 (123 Hz). *Adm:* $5. **www.jcmsara.com**

Nebraska (Norfolk) — Nov. 21 D F H R S V
8:30 AM – 2 PM. *Spr:* Elkhorn Valley ARC. Knights of Columbus Hall, 105 Elm Ave. *Tl:* 146.73 (131.8). *Adm:* $5.
www.qsl.net/evarc

New Jersey (Fair Lawn) — Nov. 27 H R
5:30 PM. *Spr:* Fair Lawn ARC. Fair Lawn Senior Center, 11-05 Gardiner Rd. *Tl:* 145.47 -600 (167.9 Hz). *Adm:* Free.
http://auction.fairlawnarc.org

Ohio (Delta) — Dec. 5 D F H R V
8 AM. *Spr:* Fulton County ARC. Village of Delta Memorial Hall, 401 Main St. *Tl:* 147.195 (103.5 Hz). *Adm:* $5.
www.k8bxq.org/hamfest

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.

Events that are sanctioned by ARRL receive special benefits, including an announcement in these listings and online. Sanctioned conventions are also listed in *The ARRL Letter*. In addition, events receive donated ARRL prize certificates and handouts. Once the form has been submitted, your ARRL Director will decide whether to approve the date and provide ARRL sanction.

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 **November 1** to be listed in the **January** 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.

Promoting your event is guaranteed to increase attendance. As an approved event sponsor, you are entitled to special discounted rates on *QST* display advertising and ARRL web banner advertising. Call ARRL's toll-free number at 1-800-243-7768, or email **ads@arrl.org**.

Burt KA6BJA

COVID-19 Convention and Hamfest Cancellations (and reschedules)

For more ARRL COVID-19 information see http://www.arrl.org/arrl-news-coronavirus-covid-19

ARRL National Convention and Orlando HamCation® Postponed to February 2022

ARRL and the Orlando Amateur Radio Club (OARC) have announced that the ARRL National Convention and Orlando HamCation® -- which was to host the convention -- have been postponed until February 10 - 13, 2022. The convention had been set for next February.

"The joint decision came after considering the national public health emergency including the health and safety of all participants, the uncertainty that continues to impact our organizations, and the reluctance to travel to, and attend, large events," said ARRL CEO David Minster, NA2AA. "We regret the disruption to the hard work already completed by so many volunteers preparing for the ARRL National Convention and HamCation."

"While postponing was a difficult decision, our top priority is delivering a safe and successful HamCation experience for everyone, including our attendees, dedicated volunteers, exhibitors, and service partners," said HamCation General Chairman Michael Cauley, W4MCA.

OARC President John Knott, N4JTK, noted that holding the convention in 2022 will mark the 75th anniversary of HamCation -- one of the largest annually held gatherings of radio amateurs in the US. The published gate figure for 2020 was 24,200 for all 3 days.

"We want our diamond anniversary show to be an exciting, five-star event," said Knott. "We look forward to seeing you in Orlando in 2022, and hope that you and your loved ones remain safe in the months to come."

A full day of National Convention programming and training sessions was previously scheduled to precede HamCation. That will be rescheduled for Thursday, February 10, 2022. HamCation will host the rest of the convention on Friday, Saturday, and Sunday, February 11 -13, 2022 at the Central Florida Fairgrounds & Expo Park in Orlando.

Cauley said HamCation may organize some online presentations and programs for what would have been HamCation 2021 next February. A QSO party is also under consideration. The HamCation website will soon post details, including information for anyone seeking refunds and other options for pre-purchased tickets and exhibit space. You can follow HamCation on Facebook, Twitter, and Instagram. Further details and any changes will be shared via the 2022 ARRL National Convention and Orlando HamCation websites. (Cont. on page 15)

COVID-19 Convention and Hamfest Cancellations (and reschedules)

(Cont. from page 14)

Yuma Hamfest Cancellation

It is with very mixed emotions, the Yuma Amateur Radio Hamfest Organization board announces the CANCELLATION OF THE 2021 YUMA HAMFEST. Due to the continued presence and recent resurgences of the Covid-19 virus in our nation and the world, we feel canceling is the responsible thing to do. The health and safety of you the attendee and our volunteers are much bigger than a hamfest. We understand that this news is disappointing. Please understand that we did not reach this decision lightly. We enjoy putting on the Yuma Hamfest as much as you enjoy attending it. Make your plans now. Let's make the February 18-19, 2022, Yuma Hamfest the biggest and best in its history.

CANCELED - Northeast HamXposition, ARRL New England Division Convention

HAMFEST/CONVENTION

11/06/2020
Start Date: 11/06/2020
End Date: 11/08/2020
Location: Best Western Royal Plaza Hotel
181 Boston Post Road West
Marlborough, MA 01752
Website: http://hamxposition.org
Sponsor: FEMARA, Inc.
Type: ARRL Convention
Talk-In: 147.27 (146.2); 449.925 (88.5)
Public Contact: Mike Raisbeck , K1TWF
85 High Street Chelmsford, MA 01824
Phone: 978-250-1235
Email: k1twf@hamxposition.org

CANCELED - Stone Mountain Hamfest, ARRL GA Section Convention

HAMFEST/CONVENTION

11/07/2020
Start Date: 11/07/2020
End Date: 11/08/2020
Location: Gwinnett County Fairgrounds
2405 Sugarloaf Pkwy
Lawrenceville, GA 30042
Website: http://www.stonemountainhamfest.com/ (Cont. on page 16)

CANCELED - Stone Mountain Hamfest, ARRL GA Section Convention

HAMFEST/CONVENTION (Cont. from page 15)

Sponsor: Alford Memorial Radio Club, Stone Mtn. Ga. & Gwinnett Amateur Radio Society
Type: ARRL Convention
Talk-In: 147.075+ (PL 82.5)
Public Contact: Mike Smith , KK4KHS
5191 La Paloma Drive SW Lilburn, GA 30047
Phone: 404-509-3104
Email: smithrm71@gmail.com

CANCELED - The 285 TechConnect Radio Club's annual TechFest

HAMFEST/CONVENTION

11/07/2020
Start Date: 11/07/2020
End Date: 11/07/2020
Location: Bridge Church at Bear Creek
3101 S Kipling Street
Lakewood, CO
Website: http://na0tc.org/
Sponsor: The 285 TechConnect Radio Club
Type: ARRL Convention
Talk-In: 145.145 (PL 107.2)
Public Contact: bob dotson , KD0BRA
835 Hi Meadow Drive Bailey, CO 80421
Phone: 303-330-0313
Email: bobdotson@outlook.com

CANCELED - Fort Wayne Hamfest & Computer Expo, ARRL Central Division Convention

HAMFEST/CONVENTION

11/14/2020
Start Date: 11/14/2020
End Date: 11/15/2020
Location: Allen County War Memorial Coliseum
4000 Parnell Avenue
Fort Wayne, IN 46801
Website: http://www.fortwaynehamfest.com
Sponsor: Allen County Amateur Radio Technical Society
Type: ARRL Convention
Talk-In: 146.880(-) no tone
Public Contact: ACARTS Fort Wayne , W9INX (Cont. on page 17)

CANCELED - Fort Wayne Hamfest & Computer Expo, ARRL Central Division Convention (Cont. from page 16)

P.O. Box 10342 Fort Wayne, IN 46851
Phone: 260-579-2196
Email: chairman@fortwaynehamfest.com

CANCELED - Oro Valley Amateur Radio Club Hamfest

HAMFEST/CONVENTION
11/14/2020
Start Date: 11/14/2020
End Date: 11/14/2020
Location: Marana Middle School
11279 West Grier Road
Marana, AZ 85653
Website: http://tucsonhamradio.org
Sponsor: Oro Valley Amateur Radio Club
Type: ARRL Hamfest
Talk-In: Oro Valley ARC Repeater System
Public Contact: Steven Wood , W1SR
6219 N. Via de la Tortola Tucson, AZ 85718
Phone: 520-906-1204
Email: W1SR@arrl.ne

CANCELED - Flamingo Net Flea at U. of Miami

HAMFEST/CONVENTION
11/21/2020
Start Date: 11/21/2020
End Date: 11/21/2020
Location: University of Miami Parking Lot 1-109
1300 Campo Sano Avenue
Coral Gables, FL 33114
Website: http://FlamingoNet.8m.net
Sponsor: Flamingo Net Amateur Radio Club
Type: ARRL Hamfest
Talk-In: 147.150 +.600 (PL 94.8)
Public Contact: William Moore , WA4TEJ
1451 N.E. 102 Street Miami Shores, FL 33138
Phone: 305-751-1874
Email: wa4tej@juno.com
(Cont. on page 18)

COVID-19 Convention and Hamfest Cancellations (and reschedules)

(Cont. from page 17)

CANCELED - Northeast Nebraska Hamfest

HAMFEST/CONVENTION

11/21/2020
Start Date: 11/21/2020
End Date: 11/21/2020
Location: CHC Hall (K of C Hall)
105 Elm Avenue
Norfolk, NE 68701
Website: http://www.qsl.net/evarc
Sponsor: Elkhorn Valley Amatuer Radio Club, Inc.
Type: ARRL Hamfest
Talk-In: 146.73(-) (PL 131.8)
Public Contact: Fred Wiebelhaus , K0FJW
P.O. Box 1033 Norfolk, NE 68701
Phone: 402-992-7653
Email: fwiebelhaus@cableone.net

CANCELED - WV4I Memorial Flea Market

HAMFEST/CONVENTION

11/28/2020
Start Date: 11/28/2020
End Date: 11/28/2020
Location: Lampert Family Service Center
5841 Corporate Way
West Palm Beach, FL 33401
Website: http://palmswestradio.org
Sponsor: Palms West Amateur Radio Club
Type: ARRL Hamfest
Talk-In: 147.045 (PL 110.9)
Public Contact: Joe Buch , N2JB
338 Lake Frances Drive West Palm Beach, FL 33411
Phone: 561-386-0087
Email: josephbuch@yahoo.com

Traveling under U.S. COVID-19 Restrictions for IOTA

On his way to Tatakoto Atoll (OC-298) VE3LYC, Cezar, made it to Washington DC yesterday and expects to continue on his way early today. (Cont. on page 19)

Traveling under U.S. COVID-19 Restrictions for IOTA (Cont. from page 18).

However this morning he reports: “Bad news... United Airlines (UA) wanted to see a covid-19 test result dated no later than Oct 24. Despite my explanation that I have only one ticket, from Ottawa to Papeete, despite email correspondence that I had with the Ministry of Health of French Polynesia which clearly showed that they are OK with my testing as done, the airline was firm in not allowing me to board.

The head of the respective UA team indicated that he is absolutely convinced, based on the information I provided that French Polynesia authorities will allow me into the country. However, UA have their rules, and they can be fined if they don't respect them! Even if he will allow me to board, it is highly possible that his counterpart in San Francisco won't, and if so he will be blamed for making the decision to board me in the first place.

I have searched the internet and there is only one farmacy, relatively close to the airport, which offers 'rapid covid testing', and it opens at 9 am. I will phone them in half an hour to see if I can get my results before 3-4 pm. If so, I will take the test, wait for the result, make sure that it is negative, and attempt to re-book my travel to Papeete with American Airlines (AA) if there are still seats available. AA have a flight to Los Angeles late afternoon, and from there to Papeete, but I cannot book and pay for them unless I have the test in hand.

If I cannot get the result sufficiently fast, so that I can be at the airport by no later than 4:15 pm local time (20:15 UTC), or if there is no seat availability to Los Angeles or from there to Papeete, I have no choice other than to return back home”.

Cezar was expecting to be QRV as TX0T between October 29 and November 5. QRX.

The following two updates are from VE3LYC, Cezar, who is still on his way to Tatakoto Atoll (OC-298):

Update 27 October 2020 - 21:00 UTC

“Back on track, for the time being! After an extensive search, I was able to find a pharmacy which promised to do the regular test in record time, for a fee. The regular RT-PCR test is mandatory for travel to French Polynesia, the 'rapid' test is not accepted. I was able to change my itinerary from Washington DC - SF to Washington DC - LA. This gives me a chance to pick up the 11:55 pm flight from LA to Papeete. Unfortunately, my ticket with United is now useless, because the flight is with Air Tahiti, and they have no agreement between them. I didn't purchase the new ticket, because Air Tahiti recommended me to do it at the check-in, just in case my flight to LA is delayed and I cannot make their flight. The new one-way ticket is $2k, which I don't want to waste.

If my flight arrives on time in LA, I would have about 1h 45min to recover my luggage, move from Terminal 7 to the International Terminal and get to the check-in. They close the check-in 1h before the flight, but I would like to be there at least 15-20min earlier. Air Tahiti knows of my situation. Also, United Airlines have been helpful to put me in a very front seat, so that I can get out of the plane right away upon arrival. It will be a rather physically demanding run with heavy luggage, but there is a chance to make it.” (Cont. on page 20)

Traveling under U.S. COVID-19 Restrictions for IOTA (Cont. from page 19).

Update 28 October 2020 - 05:30 UTC

“I arrived in time at the Air Tahiti check-in desk on the Los Angeles airport. Upon verification that I do have the correct and valid covid-19 type test, Air Tahiti issued me a new ticket from LA to Papeete. I am currently waiting for boarding, which will start momentarily. I haven't eaten much today, so I'm waiting for the 'dinner on the plane', hi. I don't know what other adventure awaits me in French Polynesia, but I hope that I left all mishap here in North America. I will arrive in Papeete at 05:05 am local time, after which I will go straight to the hotel. At 8 am I need to be at one of the local covid-19 test centers to take another test required for the travel to Tatakoto.”

VE3LYC, Cezar, updates everyone on his continuing trip to Tatakoto Atoll (OC-298), where he is expected to be QRV soon as TX0T. As of 1630Z yesterday he states: “I am now at the guesthouse in Papeete. The arrival in Tahiti was uneventful, except that the passengers found themselves under a torrential rain pouring in just as they put foot on the tarmack. I managed to sleep for four hours during the flight, which allowed me to get here a bit refreshed. The covid-19 test clinics open at 8 am, and I'll have to find the closest one to go to right away”.

FO – French Polynesia

VE3LYC, Cezar, made it safely to Tatakoto Atoll (OC-298) and began operating as TX0T just before 0300Z today. He has been reported active on CW on 20, 30 and 40 meters. Cezar is expected to be there until November 5th.

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.

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

Nationwide Red Cross Emergency Communications Drill Set for November 14

The nationwide American Red Cross Emergency Communications Fall Drill, a joint exercise with ARRL Amateur Radio Emergency Service (ARES®) groups, is set to take place on November 14. This exercise evolved from the highly successful spring drill that attracted hundreds of participants from some 40 states and Puerto Rico.

The fall drill will be a Winlink-specific event with these goals: (1) pass traditional American Red Cross (ARC) forms from as many states and as many radio amateurs as possible to one of six division clearinghouses, and (2), bring as many radio operators as possible up to a "basic" level of Winlink proficiency. A series of Winlink Workshops is held each Thursday at 0100 UTC on Zoom.

Winlink Proficiency Goals have been drafted, a Winlink technical support team has been formed, and Metrics for Drill Success have been developed. The proficiency goals are established as a training guideline and references online training resources. Many hams new to Winlink may find these resources helpful.

More than 300 radio amateurs have signed up for the event, and some 100 volunteers showed up for a pre-drill briefing call earlier this month. Another briefing call will be held in early November. This event is open to all radio amateurs.

For more information, contact Mike Walters, W8ZY, with ARES-related questions, or Wayne Robertson, K4WK, with Red Cross-related topics.

ARES® Briefs, Links

The Hurricane Watch Net, WX4NHC at the National Hurricane Center and SATERN activated for Hurricane Delta. From the final sitrep filed by Louisiana Section Emergency Coordinator James Coleman, AI5B, Hurricane Delta made landfall as a category 2 hurricane at approximately 6:00 PM local time on Friday, October 9, near Creole, Louisiana. By 7:30 AM, October 10, there were 878,974 power outages across Louisiana, Mississippi, and Texas. Louisiana ARES was placed on normal status with individual Parishes activated on an as-needed basis. The Louisiana ARES Emergency Net was on normal status. ARES developed an extensive set of Incident Radio Communication Plans (IC-205) for the Delta response, consistent with the Louisiana ARES Plan.

From October 3-26, Department of Defense (DOD) Military Auxiliary Radio System (MARS) operators are participating in DOD Communications Exercise 20-4. The MARS focus is to intercommunicate with the ARRL field organization and amateur radio organizations who are conducting their annual ARRL Simulated Emergency Test with state, county, and local emergency management personnel. MARS members will send a DOD-approved message to the amateur radio organizations recognizing this cooperative interoperability effort. (Cont. on page 25)

ARES® Briefs, Links (Cont. from page 24)

MARS members will also be training with the ARRL National Traffic System and the Radio Relay International (RRI) organization to send a number of ICS 213 general messages to numerous amateur radio community leaders across the US. This exercise will culminate with MARS members sending summary messages in support of a larger DOD communications exercise taking place from October 20-26.

Throughout the month, MARS operators will also be on 60 meters and sending WWV/WWVH broadcast messages to the amateur radio community. -- Paul English, WD8DBY, DA Civilian, U.S. Army NETCOM G3/5 Current Operations, HF/LMR Support Manager, Chief, Army MARS

The National Interoperability Field Operations Guide (NIFOG) is a national treasure of federal emergency communications reference information. Check it out. See also the DHS Auxiliary Communications Field Operations Guide (AUXFOG) and other federal government pubs. -- Thanks, Duane Mariotti, WB9RER, Kaiser Permanente Amateur Radio Network, Los Angeles, California

Scott Yonally, N8SY, Ohio Section Manager, reports that there is a new ARES Connect Frequently Asked Questions and "Ask Your Questions Here" area online specifically for ARES Connect. Need help getting operators entered into ARES Connect? Help is available, too.

The Orange County (California) Hospital Emergency Amateur Radio Team (OCHEART) is formalizing a Memorandum of Understanding (MOU) with KPARN, the Kaiser Permanente Amateur Radio Network of Los Angeles to provide mutual aid in time of need to support ultimately about 40 Orange County hospitals. Health Insurance Portability and Accountability Act (HIPAA) training is mandatory with the organizations seeking training free of charge. Readers having knowledge of courses are encouraged to contact OCHEART Operational Development, Training and Exercising EC Bob McCord, K6IWA

Early indications are that ARES support of ShakeOut 2020 has been a success. 175 Winlink-DYFI (Did You Feel It) reports were received by the United States Geological Survey (USGS). **In California, there were 25 Los Angeles Section ARES (ARESLAX- Northeast District) reports filed with stations using shakeout_2020 as an identifier for USGS use in creating and updating earthquake intensity maps. ARESLAX Northeast District stations also sent DYFI messages via Winlink to Ventura County ACS/ARES for its purposes - Thanks, Steve Waterman, K4CJX, Winlink Administrator, Winlink Development Team.**

November 14: Nationwide Red Cross Emergency Communications Drill, Joint Exercise with ARES

The Nationwide Red Cross Emergency Communications Fall Drill is a joint exercise with ARES set for November 14, an evolution of the highly successful Spring Drill that had hundreds of participants from some 40 states and Puerto Rico.

The Fall Drill will be a Winlink-specific event with the following goals: (1) pass traditional Red Cross (ARC) forms from as many states and as many radio amateurs as possible to one of six Divisional Clearinghouses, and (2) bring as many radio operators as possible up to a "basic" level of Winlink proficiency. [To prepare, there is a twelve-week series of Winlink Workshops held each Thursday at 0100Z on Zoom. Join the SEC-ARES group for announcements and discussions. Include your name and call sign when registering on SEC-ARES.] (Cont. on page 26)

ARES® Briefs, Links (Cont. from page 25)

Winlink Proficiency Goals have been written, a Winlink Technical Support Team has been formed, and Metrics for Drill Success have been developed. The proficiency goals are established as a training guideline and references online training resources. Many hams new to Winlink should find these resources helpful.

Over 300 radio amateurs have signed up for the event and more than a hundred were on a Briefing Call on October 5. There will be one other Briefing Call, in early November. This event is open to all radio amateurs; if interested in more information, contact Mike Walters, W8ZY, for ARES-related questions or Wayne Robertson, K4WK, for Red Cross-related topics.

SKYWARN Recognition Day 2020 - Making Adjustments for COVID-19

Since 1999, the annual SKYWARN™ Recognition Day celebrates the long relationship between the amateur community and the National Weather Service program. The purpose of the event is to recognize amateurs for the vital public service they perform during times of severe weather and to strengthen the bond between radio amateurs and their local National Weather Service office. The event is co-sponsored by the ARRL and the National Weather Service.

Normally each year, radio amateurs participate from home stations and from stations at National Weather Service (NWS) forecast offices with the goal of making contact with as many offices as possible. However, this year, due to COVID-19 restrictions, participation from NWS forecast offices will be minimal at best. The focus will shift to contacting as many SKYWARN trained spotters as possible during the event.

Radio amateurs who wish to participate may sign up for a SKYWARN Recognition Day number by completing the form found on the SRD 2020 website. During the event, operators are encouraged to exchange their name, QTH, SRD number, and current weather conditions with other participating stations. See the event website for the full operating guidelines.

SKYWARN Recognition Day 2020 will be held from 0000 UTC to 2400 UTC December 5.

K1CE for a Final: Use or Lose the SHF Bands; Increase Data Speed, Modes for Keeping Up with Needs of Served Partner Agencies

The FCC's decision to delete the amateur service from the 3.3 - 3.5 GHz allocation sent a chill down my spine. The message is clear: we must use our super high frequencies (SHF) or risk losing even more access. There is ever-increasing demand by our served partner agencies for higher speed data, digital voice and image transfer, the kinds of data rates that are made possible by the greater bandwidth afforded by our access to the SHF spectrum. There are many forward-thinking amateur groups around the country that are exemplary.

The 5 cm amateur band was recently used for filing a wildfire report - on September 8, 2020, two hams in the Puget Sound region of Washington State were watching the live camera feed from the Mt. Baldy HamWAN site and spotted and reported a wildfire in the surrounding forest. The Ham Wide Area Network is a system of commercial microwave radios tuned to the 5.65-5.925 GHz amateur radio band. Data speeds between the link sites vary depending on the path, but speeds four orders of magnitude faster than 9600 baud packet is common. Video cameras with PTZ control have been added to many of the link sites. (Cont. on page 27)

K1CE for a Final: Use or Lose the SHF Bands; Increase Data Speed, Modes for Keeping Up with Needs of Served Partner Agencies (Cont. from page 26)

The use of HamWAN as a backup emergency communications system throughout the Interstate-5 corridor in Washington is growing. The Washington Emergency Management Division EOC, the Washington State Department of Transportation Southwest Region EOC, two county and four city EOCs, three hospitals, and one Red Cross office already have permanent connections (so far).

The Northwest Ohio Amateur Radio Emergency Data Network (AREDN) Mesh Steering Committee (Lucas County ARES) conducted a drill focused on setting up individually-owned AREDN Mesh gear, troubleshooting and operating the ancillary gear (phones, cameras, laptops, self-contained power boxes) on an individual basis. Numerous law enforcement officers from Wood County as well as from Lucas and Monroe counties in Michigan were enthusiastic about the Mesh Networking capabilities.

In Colorado, the Boulder ATV club installed its new 5.9 GHz, FM-TV beacon transmitter on a government building for the purposes of encouraging microwave experimentation; to get hams to try ATV, especially with the really low cost FM-TV gear now available for drones; to be used as a known signal source for testing antennas and receivers; and to increase usage of our microwave bands, to help prevent their being taken away from us.

Use it or lose it. Add microwave apps to your ARES toolkits. There is a wealth of information from ARRL to get you started. A quick click on any search engine will lend more.

Earthquake Preparedness. The 4.5 magnitude earthquake a few months ago 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.

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

(Cont. on page 28)

Earthquake Preparedness(Cont. from page 27)

ACS/ARES Training and News

From: main@vc-acs.groups.io [mailto:main@vc-acs.groups.io] On Behalf Of Hanson, Robert - W6RH
Sent: Monday, October 19, 2020 4:21 PM
Subject: [vc-acs] VC Situation Update] FW: M7.5 EQ - Alaska

The California Tsunami Program just participated in a call with the National Tsunami Warning Center and coordinated with the California Geological Survey and received the following information:

At 1:54PM (Pacific), a magnitude 7.5 earthquake occurred southeast of Sand Point, AK, in the area of the Alaska-Aleutians subduction zone. Based on information from the NOAA Tsunami Warning Center and the USGS, the depth of the event is about 41km and the focal mechanism appears to be strike-slip (horizontal motion) in nature. This is located within the aftershock region of the July 2020 M7.8 earthquake in Alaska, which did not cause a tsunami in California.
This event is located in a part of the Alaska-Aleutian subduction zone which can cause significant tsunamis for California however the magnitude is relatively low and the horizontal motion of fault movement indicates that the earthquake will NOT cause a significant tsunami especially in California.
The National Tsunami Warning Center (NTWC) has issued three (3) Tsunami Information Statements for this event, placing a Tsunami Warning for portions of the Alaska Coast, but is still evaluating whether the potential wave heights (if a tsunami has been generated) for California. (Cont. on page 29)

ACS/ARES Training and News (Cont. from page 28)

In all likelihood, if all information about the earthquake stays the same, it is unlikely that California would be put into an alert level (Advisory or Warning) where response is needed. In order to further evaluate any potential risk for California, the NTWC needs to wait until the tsunami waves reach additional DART Buoys in the Pacific to generate additional information for the Forecasting process. As soon as this information is available, the NTWC will determine if additional areas need to be included in a Tsunami Warning, Advisory or Watch. This process could take up to one (1) hour from now.

We will continue to monitor the situation and wait for information from the NTWC that indicates the "all clear" for California. Again, there is no impact expected for California, but this cannot be confirmed until the forecasting process is complete.

Please let us know if you have questions or need additional information.

Thank you, Rob W6RH

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.

"How You Can Improve A Net for Both You and the Other Net Members" by Wayne Woodhams N6WIX

So you've chosen the nets you want to participate in. That's great! Now the question becomes "what can you do to make it more enjoyable for you, and also the others who participate?" That's my focus for this month.

Most of you who know me, know that I love music, and have had a passion and participation in it since I was very young. I love radio! But I eat, drink, sleep with, and outright have a passion for music beyond all other interests. If you came to my house, I would show you the "shack". But it is quite likely I would spend more time sharing the music room than the shack. That's my confession for this article. I have a very good listening arrangement in our living room. An even better setup exists in the radio room. Yes, in the radio room! However, even though those systems are impressive in sound, they simply don't even come close to the sound and equipment in the music room, which is a professionally equipped recording studio. The equipment is exotic and the sound, even more so. It truly takes your breath away!!!

I've also been involved in music personally all my life. One of my two majors in college was music. I've sung in countless groups, directed many others, and almost spent a lifetime in professional music, as a singer. I'm on YouTube, submitted by someone else, but we won't go there for this article. But I do want to share one item from when I lived in the Chicago area that pertains to my topic today. I was directing a 40-voice Church Choir, a 110-voice Men's Chorus, and a 30-member Baroque Brass Group, all at the same time. I would often join the three groups together for special songs and events that warranted that kind of participation. That size group can make a lot of music!!

Here's the point. I had a requirement for membership in each group. If you were in the group, and sort of felt obligated to be there, and sometimes didn't want to come to practice, then my solution was simple. GET OUT! GET AWAY FROM THIS AND FIND SOMETHING YOU REALLY WANT TO DO! If you don't want this activity, then it won't help the group properly.

That was a demanding requirement on my part. But it also placed an incredible demand on me. My job was to select the best choice in music, the performance, expression, and make the rehearsal times so enjoyable, that members couldn't wait until the next rehearsal. The requirement worked. Many members would wish for more time, or another session before the next scheduled time. I never had to call members and nag them to be there. And, the groups truly sounded fantastic! They gave it their best, because they wanted to.

I didn't always get a lot of sleep in those years, but what an experience. What a great time. And the sense of reward has lasted many years afterward. Those are fond and joyful memories.
If that is how music should be enjoyed, then **why not radio**? **Why not nets**? (Cont. on page 32)

"How You Can Improve A Net for Both You and the Other Net Members" by Wayne Woodhams N6WIX (Cont. from page 31)

What steps do you need to take, to make your net experience happen at that level? Here are some suggestions.

1) Listen to, and learn what **the net is totally about**. Learn about its history, successes and difficulties in the past and present, and who the key members were or are.
2) Learn **to know each member**. By name, by call signs, and even by the sound of their voice. Perhaps even by recognizing their personality, sense of humor, or style. It's really fun to identify a person when you may have only heard a word or two. As an example, one of the participants who checks into the Ventura County net is Frank, KI6OQ, from Simi Valley. I've known Frank and his call sign for 25 years. I've known his voice for 24.9 years. I know Frank. I respect Frank. He's a great guy, on or off the radio. What an opportunity and privilege (and honor) for both of us to know each other.
3) Take off-net time to prepare for, and think about what you could add to the net to make it more interesting for others. Does someone have a birthday that needs help to remember? A good accomplishment? Perhaps something you could share to make them feel better?
4) Brag about, and promote the net to others.
5) Try to spot problems or potential areas of growth for that net, without being harsh, judgmental, or obnoxious to the other members.
6) Ask yourself the question: If the net were left up to me, what could I contribute, or what should be done to cause the net to be more fun for everyone? What can I do to cause growth and enjoyment in this net? Can I find another person to work with, to make a positive difference?

We need more members in Amateur Radio, in nets, and in the hobby, who simply love what they are doing. If it has become routine, boring, or obligatory, we all need to stop, take a few steps back, and decide what needs to change. Pursuing passions and chasing excellence is an incredibly exciting road to travel. It's an easy road to be average, but the better road brings a lot more enjoyment and personal satisfaction.

PERSONAL NOTE: I accepted doing this article a few months ago based on request, but mostly because of the last couple of sentences of the previous paragraph. It's part of the passion and excellence that makes up my life. However, I need to suggest that this may not last a long way into the future, due to some recent changes. In the last year I have made incredible changes in my life, and have seen incredible results for those changes. I've lost about 130 lbs. and have become non-diabetic now, after being severely diabetic for almost 20 years. I feel much younger and very blessed and grateful for these results. While the current situation is amazing, getting my health back hasn't removed the damage of those 20 years of having 5 major issues to deal with. Hospitals know me, with over 40 admissions in 15 years. Ambulances became aware of where I lived, with about 10 emergency rides to the Emergency Room and ICU. So, the changes for(Cont. on page 33)

"How You Can Improve A Net for Both You and the Other Net Members" by Wayne Woodhams N6WIX (Cont. from page 32)

better mean a lot to me. The current issue now is my eyes. For purposes of "seeing", I can see enough to function around the house, and live life in a general way. I'm OK there. However, the eye cells around my retina have died enough to not be able to specifically focus on anything. When taking an eye test, I now cannot see the big "E" on the chart with either eye. In fact, I can't even see that there is a chart on the way. By definition, I am legally blind. I no longer can read a book, or see a computer screen, without using a high-powered magnifying glass, and doing so one letter at a time. I am writing this article, with a magnifying glass, and one letter at a time. It does make it difficult. I do use special drops daily, and get eye injections each month to help the retinal bleeding, and retain what eyesight I have left. My greatest hope is not to completely go blind. This is not a complaint from me, as I always look on the positive things. But is it a reality, nevertheless, and may impact what I can, or cannot do looking forward. So, I'll see how that impacts what I can contribute. I am not asking for pity, but simply an understanding of what I have to deal with. Thanks.

That's it for this month. Pursue radio, nets, and stay safe. And, throw in some music for fun!

73, Wayne N6WIX

Wayne's LA

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

PVARC Repeater News

More news next month, but work continues on migration of the PVARC South Mountain ham radio site to its new location.

PVARC Ham Radio Network News

A couple of weeks ago Paul WD6EBY replaced the problematic Ubiquiti network switch at Chatsworth Peak with a Netonix switch, which we've had good luck with. However upon replacing it, it was discovered that while all the port lights were flashing, the switch wasn't actually passing network traffic. This was the same symptom we found when Mike K6MJU tried to replace the Ubiquiti switch at Verdugo Peak (above Burbank) with a Netonix a month or so ago.

While Paul was on site I did some Googling and browsing of the Netonix forums. I found that some users (not a lot) had had the same issue. In their case it was associated with a specific firmware version, and was resolved by upgrading the switch firmware to the latest. While on site Paul downloaded that version, installed it, and presto, the switch was operational, passing traffic in all directions!

Besides being more reliable, the Netonix switch is DC-powered. That allowed Paul to connect the switch to the battery bank and decommission the AC inverter that had been powering the Ubiquiti switch. That's one less component as a source of failure!

Based on our success there, we scheduled a visit to Verdugo Peak on the 25th to try and revive the network there, which had been down for a couple of months. Armed with the latest Netonix firmware, Justin K6BFG successfully revived the Netonix switch and most of the links came back up. The link east to Mt. Wilson didn't come up, and Mike K6MJU will troubleshoot that on a visit scheduled for November 6th.

With those switches repaired, the number of nodes visible on the network is now hovering around 600.

While at the Verdugo Peak site, Eric KE6MLF and his brother Carl KE6SOW installed an ADS-B antenna on top of the container, ran its coax down into the container, and Justin connected the SDR and its companion Raspberry Pi. It's able to see aircraft for hundreds of miles around and will be available on the network soon.

Also done was a regular round of patching of the Raspberry Pis at the various sites. This patching is done over the ham radio network. That's possible because they have access to the Internet for the packages needed to update them via a proxy server. The RPI at Simi Valley Hospital has a bad micro SD card which will have to be replaced. (Cont. on page 36)

NEWS FROM PVARC (Cont. from page 35)

AREDN, the Amateur Radio Emergency Data Network, is the group of amateurs who develop and maintain the software that converts commercial wireless access points into amateur radio network nodes. It's what all of those 600+ nodes are running on the SoCal network.

On Saturday October 24th, the AREDN 2020 Conference was held via Zoom. There were over 120 attendees who viewed a half-dozen presentations on various topics associated with ham radio networking. Those presentations were recorded and are available for viewing in the AREDN channel on YouTube at

https://www.youtube.com/channel/UCDFGk_6DeeaDZwNcZtrVtaw

73

Orv W6BI

ARRL Santa Barbara Section Mgr. John Kitchens NS6X

Hello all,
I have been trying to fill Section volunteer positions for a while. I am giving another push. I am pleased to let you know that our Section Emergency Coordinator is Richard Tate, KQ6NO from Santa Paula. (Congratulations and thanks to Rick for taking on this position in addition to his ACS/ARES assignment as Assistant ACS Radio Officer/ARES Assistant DEC.
Richard will be contacting you to see how each county operates emergency communications, and to see how the ARES SEC role will be able to assist and coordinate between the 3 counties in the Section. I have been the SEC for about 3 years. I should not be both the Section Manager and SEC. We need to have more focus on each position.
I am looking forward to spending more time on being SM. One of the tasks that I have passed off to Rick, among others, is the EmComm and volunteer hours reporting to ARRL headquarters.

Additionally, Andy Ludlum, K6AGL, member of the Conejo Valley Amateur Radio Club, has been appointed as the first Assistant Section Manager in the Santa Barbara Section. The SM position will be a club liaison for me, the Section Manager, to have a person in the know hopefully at each club. I really have little to no secret ARRL information, but when I am aware of issues, successes, opportunities, we can work together to accomplish our goals.

There are many volunteer positions to fill in the Section. The one that I am focusing on right now is the Section Traffic Manager. The STM will manage the Section's involvement in the National Traffic System. We need to work on and develop the NTS in the Section. There is quite a bit of work to do, but there are several dedicated volunteers in the Section, working within the NTS, who will make the system work.

Let me know if you would like to volunteer for the STM position, or any volunteer position. I'll be talking about specific positions in the coming months.

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 the remaining Section Leadership positions. The jobs are: (Cont. on page 38)

ARRL SB Section Mgr. John Kitchens NS6X (Cont. from page 37)

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.
(Cont. on page 26)
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 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 (Andy Ludlum, K6AGL Assistant Section Manager)
Ventura County ARC (K6MEP)
Ventura County ARS
Simi Settlers ARC
Santa Barbara ARC
UC Santa Barbara ARC
Paso Robles ARC
Cal Poly San Luis Obispo ARC
Satellite ARC
And hopefully Pleasant Valley ARC soon.
(Cont. on page 39)

ARRL SB Section Mgr. John Kitchens NS6X (Cont. from page 38)

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 are due in October. 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) ARLB031

ARRL Urges Members to Join in Strongly Opposing FCC's Application Fees Proposal

ARRL will file comments in firm opposition to an FCC proposal to impose a $50 fee on amateur radio license and application fees. With the November 16 comment deadline fast approaching, ARRL urges members to add their voices to ARRL's by filing opposition comments of their own.

The FCC Notice of Proposed Rulemaking (NPRM) MD Docket
20-270 appeared in the October 15 edition of The Federal Register and sets deadlines of November 16 to comment and November 30 to post reply comments, which are comments on comments already filed.

The NPRM can be found online at, https://tinyurl.com/yyk8f2yp .

ARRL has prepared a Guide to Filing Comments with the FCC which includes tips for preparing comments and step-by-step filing instructions. File comments on MD Docket 20-270 using the FCC's Electronic Comment Filing System (ECFS). The instructions can be found online at, http://www.arrl.org/FCC-Fees-Proposal .

Under the proposal, amateur radio licensees would pay a $50 fee for each amateur radio application for new licenses, license renewals, upgrades to existing licenses, and vanity call sign requests. The FCC also has proposed a $50 fee to obtain a printed copy of a license. Excluded are applications for administrative updates, such as changes of address, and annual regulatory fees. Amateur Service licensees have been exempt from application fees for several years.

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. The 2018 statute excludes the Amateur Service from annual regulatory fees, but not from application fees. The FCC proposal affects all FCC services and does not single out amateur radio.

ARRL is encouraging members to file comments that stress amateur radio's contributions to the country and communities. ARRL's Guide to Filing Comments includes "talking points" that may be helpful in preparing comments. These stress amateur radio's role in volunteering communication support during disasters and emergencies, and inspiring students to pursue education and careers in engineering, radio technology, and communications.

As the FCC explained in its NPRM, Congress, through the Ray Baum's Act, is compelling regulatory agencies such as the FCC to recover from applicants the costs involved in filing and handling applications.

In its NPRM the FCC encouraged licensees to update their own information online without charge. Many, if not most, Amateur Service applications may be handled via the largely automated Universal License Service (ULS). The Ray Baum's Act does not exempt filing fees in

(Cont. on page 43)

ARRL Urges Members to Join in Strongly Opposing FCC's Application Fees Proposal (Cont. from page 42)

the Amateur Radio Service, and the FCC stopped assessing fees for vanity call signs several years ago.

See also "FCC Proposes to Reinstate Amateur Radio Service Fees,"
reported by ARRL in August, at,
http://www.arrl.org/news/fcc-proposes-to-reinstate-amateur-radio-service-fees
A summary page of the proceeding can also be found online at, http://www.arrl.org/FCC-Fees-Proposal .

FCC Orders Amateur Access to 3.5 GHz Band to "Sunset"

Despite vigorous and continuing opposition from ARRL and others, the FCC has ordered the "sunsetting" of the 3.3 – 3.5-GHz amateur radio secondary spectrum allocation, effective on November 9. The decision allows current amateur activity on the band to continue, "grandfathering" the amateur operations subject to a later decision. The FCC proposed two deadlines for amateur operations to cease on the band. The first would apply to the 3.4 – 3.5 GHz segment, the second to 3.3 – 3.4 GHz. The FCC will establish the dates once it reviews additional comments.

"We adopt our proposal from the *Notice of Proposed Rulemaking* to remove the amateur allocation from the 3.3 – 3.5 GHz band," the FCC said in its Report and Order (R&O) and Further Notice of Proposed Rulemaking in WT Docket No. 19-348, adopted on September 30 and published October 9 in The Federal Register, R&O. "[W]e adopt changes to our rules today that provide for the sunset of the secondary amateur allocation in the band, but allow continued use of the band for amateur operations, pending resolution of the issues raised in the Further Notice."

The September 30 R&O followed a 2019 FCC Notice of Proposed Rulemaking (NPRM) in which the FCC proposed re-allocating 3.45 – 3.55 GHz for "flexible-use service" and auctioning the desirable "mid-band" spectrum (generally defined as between 1 GHz and 6 GHz) to 5G providers. These and other recent spectrum-repurposing actions stem from the "MOBILE NOW Act", enacted in 2018, in which Congress directed the Commission to make additional spectrum available to auction for mobile and fixed wireless broadband. The FCC action is consistent with worldwide allocations adopted by the ITU for these frequencies.

In the run-up to the Commission's decision, ARRL met with the FCC's professional staff to explain its concerns and to answer questions. Subsequently, ARRL met with the wireless advisors to the FCC Chairman and two Commissioners. In those meetings, ARRL reiterated that continued secondary status for amateurs will not impair or devalue use of this spectrum by the primary licensees intending to provide 5G or other service. ARRL noted amateur radio's long history of successful coexistence with primary users of the 9-centimeter (Cont. on page 44)

FCC Orders Amateur Access to 3.5 GHz Band to "Sunset" (Cont. from page 43)

band, sharing this spectrum with the federal government users and secondary, non-federal occupants.

ARRL pointed out that vital links in amateur television and amateur radio high-speed mesh networks using the band have been especially valuable during such emergency situations as the wildfires currently raging on the west coast. Deleting the amateur secondary allocation will result in lost opportunities for experimentation and public service with no public interest benefit to make up for that.

ARRL argued that deleting the secondary allocation would waste the scarce spectrum resource, particularly in areas where commercial services often do not construct full facilities due to small populations.

The FCC action means that amateur radio will lose access to the 3.5-GHz secondary allocation even where commercial operations do not exist. ARRL told the Commission that it should not intentionally allow this spectrum to be vacant and unused, wasting the public resource, when amateurs can use some portion of it in many geographic areas with no detriment to any other licensee, just as it has in the past. ARRL argues that amateur operations should be permitted until and unless an actual potential for interference exists.

Deletion of the 3.3 – 3.5 GHz secondary amateur allocation will become effective on November 9, but amateur radio operation as of that date may continue while the FCC finalizes rules to license spectrum in the 3.45 – 3.55 GHz band and establishes deadlines for amateur operations to cease. The FCC proposed allowing amateur operation in the 3.3 – 3.4 GHz portion of the band to continue "pending further decisions about the future of this portion of the spectrum," the timing for which is unknown. The Commission proposed to mandate that operations cease in the 3.4 – 3.5 GHz portion when commercial licensing commences for the new 3.45 – 3.55 GHz "5G" band, which is predicted to begin in the first half of 2022.

"[W]e seek comment on whether it is in the public interest to sunset amateur use in the 3.3 – 3.55 GHz band in two separate phases, e.g., first above 3.4 GHz, which is the focus of [the *R&O*] and later in that portion of the band below 3.4 GHz," the FCC said.

ARRL expressed gratitude to the many members and organizations that joined ARRL in challenging the FCC throughout this nearly year-long proceeding. They included multiple radio clubs, weak signal enthusiasts, moonbounce participants, and the Amateur Radio Emergency Data Network (AREDN), the Amateur Television Network (ATN), AMSAT, and Open Research Institute (ORI).

ARRL will continue its efforts to preserve secondary amateur radio access to 3.3 – 3.5 GHz. Members are invited to share comments by visiting www.arrl.org/3-GHz-Band.

"We recognize that any loss of our privileges will most directly impact radio amateurs who use the frequencies to operate and innovate," said ARRL President Rick Roderick, K5UR. "Such instances only embolden ARRL's role to protect and advocate for the Amateur Radio Service and Amateur Satellite Service. There will be continued threats to our spectrum. So I urge all amateurs, now more than ever, to strengthen our hold by being ceaseless in our public service, experimenting, and discovery throughout the radio spectrum."

While FCC Plans to Delete 3.5 GHz Band, Canadian Privileges Will Remain

Although the FCC has announced plans to delete the secondary amateur radio 3.3 - 3.5 GHz allocation, that amateur allocation will remain in place right across the northern US border. Radio Amateurs of Canada (RAC) said this week that the FCC action has raised concerns among Canadian amateurs. "This FCC action does not directly affect Canadian amateurs, who continue to have a secondary allocation on this band," RAC stressed.

As RAC explained in a bulletin, Canadian regulator ISED published Gazette Notice SLPB-001-19: Decision on Revisions to the 3500 MHz Band to Accommodate Flexible Use and Preliminary Decisions on Changes to the 3800 MHz Band.

"In that document, ISED announced changes to the primary allocations to the Radiolocation, Fixed, and Mobile services at 3450 - 3500 MHz, removing Radiolocation, maintaining the Fixed services (used primarily for rural internet), and adding Mobile to 3450 - 3475 MHz, in line with its policy objective to 'foster innovation, investment, and the evolution of wireless networks by enabling the development and adoption of 5G technologies.'" RAC said this was the latest step in realigning allocations in the band that began with changes announced in December 2014. "At that time, as in the June 2019 announcement, the secondary allocation to amateur radio was not changed," RAC noted.

"As the 5G rollout advances, maintaining compliance with the 'no interference, no protection' requirement for secondary services is likely to impose increasingly severe restrictions on the ability of amateurs to use this band, even as the secondary allocation to the Amateur Service remains in place [in Canada]," RAC pointed out.

World Radiocommunication Conference 2023 (WRC-23) will include an agenda item to consider worldwide allocations to mobile internet services in several bands, among them 3.3 - 3.4 GHz and 10.0 - 10.5 GHz. The International Amateur Radio Union (IARU) has announced its intention to vigorously defend amateur interests in both bands at WRC-23, "and RAC representatives in Canadian working groups preparing the Canadian positions for WRC agenda items will be doing likewise," RAC said. -- Thanks to Radio Amateurs of Canada

Hurricane Delta Prompts Net Activations

The Hurricane Watch Net (HWN), WX4NHC at the National Hurricane Center (NHC), The Salvation Army's SATERN, and the Louisiana Amateur Radio Emergency Service (ARES) HF Net -- with support from the ARRL Delta Division and the Arkansas Section -- announced activations on October 7 for Hurricane Delta. The HWN has activated on 14.325 MHz. WX4NHC monitors the same frequency to gather "ground truth" reports from radio amateurs that may assist NHC forecasters.

"Hurricane Delta continues to advance on the Gulf Coasts of Texas, Louisiana, Mississippi, and Alabama," said ARRL Emergency Management Director Paul Gilbert, KE5ZW. "It is following mostly the same track that Hurricane Laura did."

The NHC forecast Delta to become a Category 3 storm before making landfall in the early evening of Friday, October 9, near Vermilion Bay, Louisiana.

The NHC predicted hurricane conditions and life-threatening storm surge to begin along portions of the northern Gulf Coast on Friday.

> FEMA has announced that Channels 1 and 2 of the 60-meter (5-MHz) band will be available, as necessary, starting on October 9, for interoperability between US Government stations and US amateur radio stations involved in Hurricane Delta emergency communication. The interoperability status will remain active until after the storm has passed, and the need for these channels no longer exists. These frequencies will be used: 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. Stations should yield to operational traffic related to Hurricane Delta. 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.

Gilbert pointed out that the region is still recovering from Hurricane Laura. "As a result, many of the regular Louisiana net control operators and stations are still not operational, or may be placed in mandatory evacuations," he said. Plans call for activating the Louisiana ARES HF Net at mid-day on Friday on 7.255 MHz ±10 kHz during daylight hours and on 3.878 MHz (±3 kHz) at night.

The HWN suspended operations at 1800 UTC on October 7, but plans to resume operations on Friday at 1200 UTC on 14.325 MHz. (Cont. on page 47)

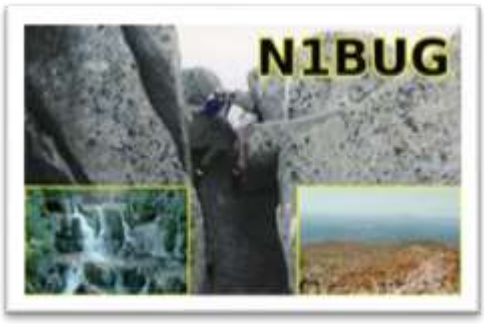
Hurricane Delta Prompts Net Activations (Cont. from page 46)

WX4NHC has been active on both HWN frequencies, as well as on the VoIP Hurricane Net, requesting surface reports from stations in the affected area "with or without weather data for use by NHC forecasters," Assistant WXNHC Coordinator Julio Ripoll, WD4R, said. WX4NHC also has an online Hurricane Report Form.

"NHC appreciates all the surface reports from the affected area during hurricanes as they fill in gaps of not just weather data, but also give a real-time, first-person perspective of what is actually happening on the ground," Ripoll said.

The International SATERN SSB Net (14.265 MHz, alternate 14.312 MHz) and the Southern Territory SATERN SSB Net (7.265 MHz) plan to activate Thursday through Saturday

Active LF Operator Offers Advice on New FST4 and FST4W Protocols



The recent beta release *WSJT-X* version 2.3.0-rc1 (release candidate 1) digital software suite includes two new protocols, FST4 and FST4W. FST4 is for two-way contacts, while FST4W is for "quasi-beacon" style transmissions. Both modes offer a range of options for T/R-sequence lengths and threshold decoding sensitivities extending well into the -40 dB range, developers said, as well as a wide variety of parameters that can be tweaked, such as transmission time, bandwidth, and so forth. On the *WSJT-X* development reflector, Paul Kelley, N1BUG, discussed whether the wide variety of options are really necessary or a stumbling block to two uncoordinated stations attempting a contact. Kelley said he understands the concern regarding the transmission times, but, as a "very active" 2200-meter operator, he advises that the new protocols were developed with the LF and MF bands in mind.

"LF and MF are not HF," Kelley said. "There is no one-size-fits-all for these bands. On HF, you may be able to work the whole world with one relatively fast speed. It is not so down here."

Kelley pointed out that MF operators are limited to 5 W EIRP on 630 meters and a mere 1 W EIRP on 2200 meters. Working "real DX" requires some specialized modes, plus determination and patience.

"One would probably not want to use anything slower than 120 seconds for QSOs with well-equipped stations at 1,000 kilometers (620 miles) distance," he said. "It would be very boring and waste a lot of time. But for some DX paths on 2200 meters, only 1,800- or 900-second periods would offer any hope for success. It's not so boring when you are about to set a new world record or make a personal best DX QSO. We need this flexibility." Cont. on page 48)

Active LF Operator Offers Advice on New FST4 and FST4W Protocols (Cont. from page 47)

Kelley predicts that some new conventions will emerge over time -- for example, 900- and 1,800-second periods might not see much use on 630 meters, while most of the faster choices probably will. (

"On 2200 meters, I think all four FST4W speeds will be quite useful," he said. "It may be that the fastest FST4 options won't see a lot of use on 2200 meters, but it may be too early to know for sure." -- *Thanks to the* ARRL Contest Update

FCC Headquarters Relocates

FCC Headquarters has moved. The new address is 45 L St. NE, Washington, DC 20554. The change is effective immediately. The FCC announced plans to move last spring, but the transition was delayed by the COVID-19 pandemic.

The FCC, like many federal agencies, has its own ZIP code, so there will be no disruption in mail delivery sent by USPS to the former address. The FCC still prohibits the delivery of hand-carried documents, and all COVID-19 restrictions or instructions regarding access to FCC facilities remain in place at the new location.

"The FCC continues to balance its efforts to be accessible to the public with the need for heightened security and health and safety measures and encourages the use of the Commission's Electronic Comment Filing System (ECFS) to facilitate the filing of applications and other documents when possible," the FCC said in an October 15 *Public Notice*.

Due to the pandemic, the move was accomplished by professional movers without the presence of any employees, all of whom had been working from home. An attempt was made during the summer to let employees back into headquarters for a day to pack up their offices and remove personal belongings, but that plan had to be scrapped after several employees tested positive for COVID-19.

Most FCC staff continues to work from home and is not expected to be physically present in their new offices before next June.

In anticipation of the planned move, the FCC last spring also announced the adoption of a new FCC seal. The redesign is the product of an agency-wide contest that solicited proposals from employees and contractors.

Florida ARES Group Publishes After-Action Book

A new paperback aimed at the Amateur Radio Emergency Service Community, *Power Out! After-Action Report and Improvement Plan* by Susan Halbert, KG4VWI; Leland Gallup, AA3YB, and Gordon Gibby, KX4Z, is available on Amazon. (Cont. on page 49)

Florida ARES Group Publishes After-Action Book (Cont. from page 48)

The $5.99 paperback chronicles the after-action report of a fun and whimsical deployment exercise conducted by the Alachua County (Florida) ARES® group.
“We have actually published over a dozen different books, some of them educational and some of them after-action reports,” Gibby said.

The narrative describes an interoperability effort with local fire and rescue personnel that led to a better understanding of these professionals. The exercise revealed many weaknesses in the volunteer group’s response, which were subsequently addressed, leading to an even stronger team. The report is presented in HSEEP format.
“Amazon handles all of the printing and distribution,” Gibby explained. “This is a fantastic way for clubs to produce educational material, and I’ve tried to teach several people how to do it. It’s a labor of love to provide more professional literature for amateur radio emergency communication efforts.”

WSJT-X Developer Expresses Puzzlement over FT8 Contest Use

WSJT-X co-developer Joe Taylor, K1JT, recently expressed puzzlement over the use of FT8 in contests -- rather than FT4, which was designed for contesting.

"I fail to understand why anyone who uses FT8 in a contest would fail to use FT4 for much of the time," Taylor said. "FT4 is about 3 dB less sensitive than FT8, but it's twice as fast."

Taylor offered the comment in the Mt. Airy VHF Society's October 2020 Cheese Bits, regarding the September ARRL VHF Contest. Taylor said a large fraction of stations that are worked with FT8 are much more than 3 dB above the FT4 decoding threshold.

"With FT4, you can still work anyone that can be worked with CW, and near the CW threshold, you'll do it faster using FT4," he said. "And with FT4, you can work stations that are far weaker (by ~20 dB) than what's necessary for SSB. When I did work other stations with FT4, I did it by transmitting the FT8 message 'K1JT FT4 318.'" Taylor said he'd then move to 50.318 MHz FT4, and several contesters followed him there. "Many more would have made it much more fruitful," he said.

"For speed, flexibility, and ease of running the bands, yes, you should use SSB and CW when there are stations to work," Taylor said in summary. "When you run out of those, use FT8 and especially FT4." Taylor also remarked, "In my 80th year, I can no longer call on my past stamina for contesting."

ARISS to Celebrate 20 Years of Ham Radio on the International Space Station

Amateur Radio on the International Space Station (ARISS) will soon celebrate 20 years of continuous ham radio operations on the International Space Station (ISS). NASA is commemorating the milestone with a newly produced infographic highlighting the educational contacts via amateur radio between astronaut crew members aboard the ISS and students. Over its 20 years, ARISS has supported nearly 1,400 scheduled ham radio contacts with schools, student groups, and other organizations.

Planning for ARISS began in 1996 as a cooperative venture among national amateur radio and amateur satellite societies, with support from their respective space agencies. The ARISS ham radio gear actually arrived on the station before the Expedition 1 crew, headed by Commander Bill Shepherd, KD5GSL. The FCC issued ham radio call sign NA1SS for ISS operations. After Expedition 1 arrived on station, some initial tests with ARISS ham radio ground stations and individual hams confirmed the ham gear was working properly. The first ARISS school contact was made with students at Luther Burbank Elementary School in Illinois on December 21, 2000, with Shepherd at the helm of NA1SS on the ISS, and ARISS operations team mentor Charlie Sufana, AJ9N, guiding the operation on the ground.

NASA produced a video of students talking with astronaut Chris Cassidy, KF5KDR, during an ARISS contact in May 2020.

Before and during scheduled ham radio contacts, students, educators, parents, and communities learn about space and related technologies, and radio communication using amateur radio. ARISS has inspired thousands of students, promoting exploration through educational experiences spanning science, technology, engineering, the arts, and mathematics.

ARISS relies on a large network of amateur radio operator volunteers, many associated with radio clubs in the communities where students and groups participating in the contact reside. ARISS volunteers support satellite ground stations, serve as technical mentors, and provide additional help in the areas of education, community outreach, and public relations.

While student-to-astronaut radio contacts are a primary objective for ARISS, the capability has also inspired further experimentation for amateur radio in space and evaluation of new technologies. In September, ARISS announced that the initial element of its next-generation ham radio system had been installed in the ISS *Columbus* module. The new radio system replaces equipment originally certified for spaceflight in mid-2000. The onboard ham station also provides a contingency communications system for the ISS crew. Several astronauts have also enjoyed using NA1SS to make casual contacts with — and delighting — earthbound members of the ham radio community. (Cont. on page 51)

ARISS to Celebrate 20 Years of Ham Radio on the International Space Station (Cont. from page 50)

In the US, ARISS sponsors include ARRL, AMSAT, and NASA, the ISS National Lab-Space Station Explorers, and NASA's Space Communications and Navigation program. Global organizing partners include International Amateur Radio Union (IARU) member-societies as well as AMSAT organizations, and space agencies in Canada, Europe, Russia, Japan, and elsewhere.
The next proposal window for US schools and educational organizations to host an amateur radio contact with a crew member on board the ISS opened on October 1 for contacts that would take place from July through December 2021.
Like many educators who have coordinated ARISS radio contacts for their students, teacher Rita Wright, KC9CDL, an ARRL member, described the first ARISS school contact as inspirational and having a lasting impact on their community. Five months after their contact, nearly 500 students greeted Bill Shepherd when he visited Luther Burbank School. Wright said it was "like tossing a pebble into a stream."

"The ripple effects are still occurring, and I suspect will continue to occur for a long time," she said. "We have a young staff, and witnessing these events has inspired some to look for other interdisciplinary projects. They are beginning their dream. Many of our students are looking forward to careers associated with the space industry."

ARLS009 ARRL Comments in Orbital Debris Mitigation Proceeding

In comments to the FCC, ARRL targeted two specific areas of concern regarding a Further Notice of Proposed Rulemaking (FNPRM) in IB Docket 18-313 - mitigation of orbital debris in the new space age.

In an earlier phase of the proceeding, ARRL filed comments and met with FCC staff to discuss the proposed rules. In comments filed on October 9, ARRL focused on the areas of indemnification and maneuverability/propulsion. Indemnification places the liability for any possible damage from a satellite on an individual or entity.
ARRL reiterated its assertion that, as a practical matter, an indemnification requirement "would seriously impair the ability of amateur and university experimenters to launch and operate satellites under US auspices" due to the potential liability and high insurance cost.

The FNPRM can be found online in PDF format at,
https://docs.fcc.gov/public/attachments/FCC-20-54A1.pdf .

ARRL's comments cited a letter from University Small Satellite Researchers, submitted on behalf of 24 named professors last April, contending that the requirement "would effectively preclude a large proportion of academic SmallSat missions because public universities typically cannot legally enter into indemnification arrangements." (Cont. on page 52)

ARLS009 ARRL Comments in Orbital Debris Mitigation Proceeding (Cont. from page 51)

ARRL argued that if the FCC does adopt an indemnification requirement, it should allow either the owner or the licensee of an amateur space station to provide indemnification. In the Amateur Satellite Service a licensee can only be an individual. An individual licensee is unlikely to accept liability for a satellite, but a satellite owner might. In its own comments, AMSAT similarly asked for language that would allow satellite owners as well as licensees to indemnify the US for the operation of an amateur radio satellite.

The FCC proposal also would require that all space stations deployed in low-Earth orbits higher than 400 kilometers (about 250 miles) be able to maneuver with the use of some sort of onboard propulsion system. ARRL urged adoption of an exception for "a limited number of amateur and similar experimental satellites" that are below a specified size and mass and either standalone spacecraft or in a constellation of no more than four or five individual satellites. ARRL suggested a size limit of 36 x 24 x 12 centimeters and 12 kilograms in mass.

"This would accommodate the types of small satellites most often used for experimental purposes by radio amateurs," ARRL told the FCC. "Such satellites are small in number [and] have limited to no capacity to implement maneuverability using current technology due to their small size," yet provide valuable platforms for experimentation and student experience.

Alternatively, ARRL asked the FCC to consider increasing the 400-kilometer low-Earth orbit limit, since satellites placed into orbit from the ISS and from ISS service vehicles "often are in higher orbits but share the same characteristics as those that orbit below 400 kilometers." Doing so would help to preserve the educational and experimental benefit of such satellites, ARRL said, provided "such vehicles are shown to pose no risk to the International Space Station and will return to Earth within the specified time limit."

In concluding its remarks, ARRL asked for "reasonable accommodation," given the public benefit of the Amateur Satellite Service, rather than lumping small experimenters and researchers with large corporate entities planning to launch thousands of satellites.

Multiple Balloons Carrying Ham Radio Payloads Launched

Eleven schools across the US launched helium-filled balloons carrying amateur radio payloads on October 9. The Smithsonian Air and Space Museum live-streamed the multiple launches. The balloons are trackable via ham radio on APRS (either 144.39 MHz FM or 144.34 MHz FM). The lighter-than-air vehicles were intended to head east around the globe, although there's no accounting for upper air currents. (Cont. on page 53)

Multiple Balloons Carrying Ham Radio Payloads Launched (Cont. from page 52)

Altitudes were expected to be in the 20,000 – 25,000 foot range, with the balloons taking a few days to cross the Atlantic Ocean.

Some of the balloons are already out over the Atlantic, and one, the KS1LAS-1 balloon, launched from Washington, was reported over the Mediterranean on October 14, moving at a speedy 69 MPH at an altitude of some 40,400 feet.

The K4NVA-1 balloon launched from Northern Virginia was reported on October 11 just east of St. Johns, Newfoundland, at just over 23,100 feet, moving at 62 MPH. Others are still over North America and/or not heading in the intended direction. The NW3DC-1 and NW3DC-2 balloons, sent up from Washington, DC, were last reported on launch day close together just off Maryland's Eastern Shore.

Japan's "Experience Stations" Enable Contacts Between Two Unlicensed Girls

What is believed to be the first ham radio contact in Japan between two unlicensed individuals took place on October 11 between "Experience Stations" 8J1YAB/1 and 8J3YAA/3. Both were licensed through the 7-CALL Amateur Radio Club.

"Today is my first amateur radio," one young girl said, as she wielded the mic. "Me too," the girl on the other end replied. The contact, on 40-meter SSB, was between Tokyo and Osaka. Licensed individuals were on both ends of the contact to serve as control operators. One operator reported, "There was applause at the Osaka venue."

"Congratulations on your first attempt and great success," Toshiaki Tsunashima, JA4DLF, tweeted. Satoshi Yamaguchi, 7M4VQJ, the President of 7-CALL Amateur Radio Club, called CQ and made initial contact with with Yasuyuki Suzuki, JJ0RHL, from the "sister station" 8J2YAB/1 in Tokyo. The licensed supervisor of 8J3YAA/3 in Osaka was Sam Yoshida, JS3CEQ.The Experience Stations are licensed under special permission, allowing unlicensed people to operate the station under the supervising of a licensed amateur. The idea is to promote experience with wireless communication technology. Before the noteworthy contact, the first contact by an unlicensed guest operator was made with 8J1JARL, a Japan Amateur Radio League special event station hosted by the Kanto Region Society of JARL, and operated by Yamaguchi Takahiko, JL1USZ.

(Cont. on page 54)

Japan's "Experience Stations" Enable Contacts Between Two Unlicensed Girls (Cont. from page 53)

Puntoshi, JN1VVR, remarked on Twitter, "Thank you for your hard work. It is necessary and important to prepare and experiment so that [unlicensed] people can feel the excitement of 'something amazing' while watching the operation. This [Experience Station] operation has just begun, and the know-how that will be accumulated for the future is important."

EXIARU Region 2 Releases 2020 Revision of its Band Plan

IARU Region 2 (IARU R2) -- the Americas -- has released the September 2020 revision of its Band Plan and made procedural changes to shorten the time to reflect future adjustments. The Band Plan includes a change approved at the October 2019 General Assembly to add an Amateur Satellite uplink subband, 21.125 to 21.450 MHz, on a non-exclusive basis. This matches similar changes in the Region 1 and Region 3 band plans.

A number of administrative changes have been made to the text, although the Band Plan itself has not been modified. These changes include:

- Modifications to the wording of the Band Plan to ensure that national regulators understand it is a voluntary document, and that countries may depart from the plan based on national requirements.
- Definition additions: Amateur Radio Direction Finding (ARDF), primary service, secondary service, and several acronyms.
- Inclusion of information detailing the primary and secondary users in each amateur radio allocation band.
- Correction of minor typographical errors.

At its May 2020 meeting, the IARU R2 Executive Committee added text to the Standard Operating Procedures that provides a process for the Band Plan to be updated in a more timely manner. Prior to this change, Band Plan modifications could only be approved at a General Assembly, held once every 3 years. Under the new provision, the Band Planning Committee may circulate proposed changes to member-societies with the approval of the Executive Committee. "Should no more than one objection be received within a 60-day period, the change shall be deemed accepted and reported as such at the next conference," the Band Planning Committee's terms of references state.

The IARU R2 Band Planning Committee has a member from each of the seven areas in Region 2, and one of those members also serves as the committee's chair. The current Committee Chair is Alphonse Penney, VO1NO/VA1AVR. -- *Thanks to IARU Region 2 Secretary George Gorsline, VE3YV*

IARU Administrative Council Addresses Wide-Ranging Agenda in Virtual Meeting

The International Amateur Radio Union Administrative Council (AC) met in a virtual session on October 8 – 10. Consisting of the three IARU international officers and two representatives from each of the three IARU regional organizations, the council is responsible for IARU policy and management. The meeting, which had been set to take place in Novi Sad, Serbia, was conducted via the internet because of coronavirus pandemic travel restrictions. The virtual format had the benefit of allowing participation by additional observers from regional organizations and a real-time presentation of reports from specialized IARU coordinators and advisors.

Recently appointed EMC Coordinator Martin Sach, G8KDF, reported on what is being done on behalf of the IARU in CISPR, the International Special Committee on Radio Interference. Sach and his predecessor, Tore Worren, LA9QL, continue to work together to address the need for reasonable standards to limit the proliferating threat of radio spectrum pollution from digital devices and wireless power transmission.

IARU Beacon Project Coordinator Peter Jennings, AB6WM/VE3SUN, reported on the status of the HF time-shared beacon network supported by the Northern California DX Foundation and the IARU. He explained recent and planned upgrades, as well as the networks many applications.

In his report, Satellite Advisor Hans Blondeel Timmerman, PB2T, described the work of the Satellite Frequency Coordination Panel. He reported that steps are being taken to address the growing number of non-amateur satellites that use amateur satellite spectrum.

Special Advisor for Emergency Communications Rod Stafford, W6ROD, explained his work representing the IARU in the ITU Development Sector (ITU-D), particularly with regard to disaster communications, and preparations for the World Telecommunication Development Conference scheduled for November 2021. He highlighted an opportunity to promote amateur radio in ITU-D as a training platform for youth.

Preparations are already under way for World Radiocommunication Conference 2023 (WRC-23) of the International Telecommunication Union (ITU), currently expected to be held in 2023. A team of some 20 IARU volunteers from all continents, headed by IARU Vice President Ole Garpestad, LA2RR, is engaged in the preparatory processes of the ITU and the regional telecommunications organizations (RTOs). The AC reviewed a draft of IARU's positions on WRC-23 agenda items of concern. The council also reviewed its Action Plan for the remainder of 2020 and 2021. The plan will be subject to ongoing adjustment in response to the impact of the pandemic on international travel. (Cont. on page 56)

IARU Administrative Council Addresses Wide-Ranging Agenda in Virtual Meeting (Cont. from page 55)

A committee was formed in 2019 to address the growing pressure on amateur spectrum, particularly secondary allocations, at 144 MHz and above. The committee reported on its work to date in defining present and future spectrum requirements. Additional information will be sought from the amateur community on how this spectrum is being utilized.

The AC received and discussed an in-depth report from its Working Group on the Future of IARU. It agreed to steps for evolving toward a more flexible organization and strengthened relationships within the global amateur radio community and telecommunications ecosystem.

The council received an IARU membership application from the Amateur Radio Union of the Kyrgyz Republic. It will be submitted to IARU member-societies for approval.

Taking note of the many ways that the global amateur radio community has responded positively to challenges posed by the pandemic, the AC agreed to develop a related theme for World Amateur Radio Day next April 18.

AC members attending the meeting were IARU President Tim Ellam, VE6SH/G4HUA; Vice President Ole Garpestad, LA2RR; Secretary David Sumner, K1ZZ; regional representatives Don Beattie, G3BJ; Hans Blondeel Timmerman, PB2T; Ramón Santoyo, XE1KK; George Gorsline, VE3YV; Wisnu Widjaja, YB0AZ, and Ken Yamamoto, JA1CJP. Participating as observers were regional executive committee members Sylvain Azarian, F4GKR; Mats Espling, SM6EAN; Jose Arturo Molina, YS1MS; Jay Bellows, K0QB, and Peter Young, VK3MV. IARU Assistant Secretary Joel Harrison, W5ZN, also participated.

While additional virtual meetings will be scheduled in the months ahead, the council expressed the hope that an in-person meeting can be held in October 2021.

British Columbia Radio Amateur Hears Mars Reconnaissance Orbiter

According to a Spaceweather.com report, Scott Tilley, VE7TIL, in British Columbia, Canada, received a signal from the NASA Mars Reconnaissance Orbiter (MRO), flying just 274 kilometers (about 170 miles) above the red planet's surface. The signal was an X-band carrier containing no data or telemetry.

"Its purpose is to allow for Doppler tracking," Tilley explained.
(Cont. on page 57)

British Columbia Radio Amateur Hears Mars Reconnaissance Orbiter

(Cont. from page 56)

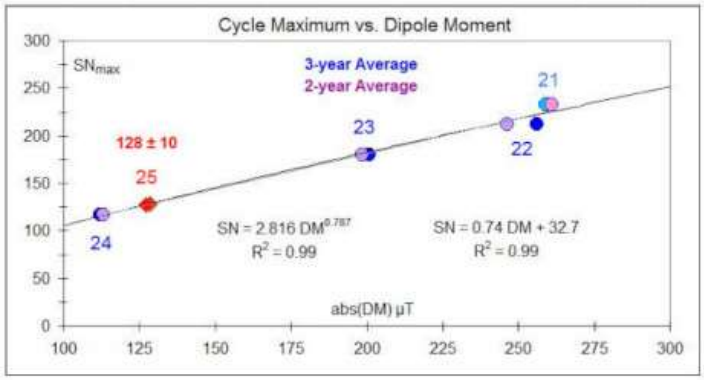
"The rapid change in pitch of the signal is caused by the relative motion of the satellite and the observer." He used a homemade satellite dish to hear the orbiter.

Scott Tilley, VE7TIL used this homebrew dish antenna to hear signals from NASA's Mars Reconnaissance Orbiter. [Scott Tilley, VE7TIL, photo]

Tilley enjoys tracking down signals from "dead" satellites, zombie satellites, and spy satellites, but the MRO was a first for him. "MRO's signal is weak, but it is one of the louder signals in Mars orbit," he said. "The spacecraft has a large dish antenna it uses as a relay for other Mars missions. With the proximity of Mars these days, it was the perfect time to try."

In 2018, Tilley saw the "signature" of the Imager for Magnetopause-to-Aurora Global Exploration (IMAGE), a NASA spacecraft believed to have died in 2005. That discovery delighted space scientists.

Solar Physicist Predicts a Slightly Better Solar Cycle 25



Solar physicist Leif Svalgaard of the W.W. Hansen Experimental Physics Laboratory at Stanford University has predicted a maximum sunspot number of 128 ±10, slightly better than Solar Cycle 24.

"The overall average is 132 ±47 (median 124)," he said. "None of these numbers are substantially different, so one could perhaps just go with the 'wisdom of the crowd.' All predictions that we consider have the underlying assumption that the sun has not changed its behavior (its 'spots,' so to speak) on a timescale of a few centuries (the Maunder Minimum may be a possible violation of that assumption), and that there will be no such changes in the near future, in spite of speculative suggestions." Those included one of his own in 2013.

Svalgaard characterized the science of solar cycle prediction to be still in its infancy, "borne out by the extreme range of predictions of Cycle 25." -- *Thanks to Frank Donovan, W3LPL*

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.

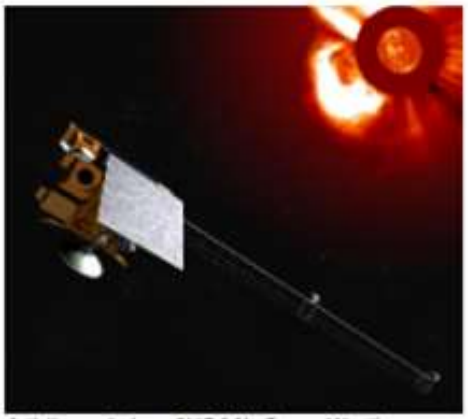
New satellites will provide enhanced observations of the Sun

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

W1AW Schedule

PAC	MTN	CENT	EAST	UTC	MON	TUE	WED	THU	FRI
6 AM	7 AM	8 AM	9 AM	1400		FAST CODE	SLOW CODE	FAST CODE	SLOW CODE
7 AM-1 PM	8 AM-2 PM	9 AM-3 PM	10 AM-4 PM	1500-1700 1800-2045	VISITING OPERATOR TIME (12 PM-1 PM CLOSED FOR LUNCH)				
1 PM	2 PM	3 PM	4 PM	2100	FAST CODE	SLOW CODE	FAST CODE	SLOW CODE	FAST CODE
2 PM	3 PM	4 PM	5 PM	2200	CODE BULLETIN				
3 PM	4 PM	5 PM	6 PM	2300	DIGITAL BULLETIN				
4 PM	5 PM	6 PM	7 PM	0000	SLOW CODE	FAST CODE	SLOW CODE	FAST CODE	SLOW CODE
5 PM	6 PM	7 PM	8 PM	0100	CODE BULLETIN				
6 PM	7 PM	8 PM	9 PM	0200	DIGITAL BULLETIN				
6:45 PM	7:45 PM	8:45 PM	9:45 PM	0245	VOICE BULLETIN				
7 PM	8 PM	9 PM	10 PM	0300	FAST CODE	SLOW CODE	FAST CODE	SLOW CODE	FAST CODE
8 PM	9 PM	10 PM	11 PM	0400	CODE BULLETIN				

W1AW's schedule is at the same local time throughout the year. From the second Sunday in March to the first Sunday in November, UTC = Eastern US time + 4 hours. For the rest of the year, UTC = Eastern US time + 5 hours.

♦ Morse code transmissions: Frequencies are 1.8025, 3.5815, 7.0475, 14.0475, 18.0975, 21.0675, 28.0675, 50.350, and 147.555 MHz.

Slow Code = practice sent at 5, 7½, 10, 13, and 15 WPM.

Fast Code = practice sent at 35, 30, 25, 20, 15, 13, and 10 WPM.

Code bulletins are sent at 18 WPM.

For more information, visit us at
www.arrl.org/w1aw

♦ W1AW Qualifying Runs are sent on the same frequencies as the Morse code transmissions. West Coast qualifying runs are transmitted by various West Coast stations on CW frequencies that are normally used by W1AW, in addition to 3590 kHz, at various times. Underline 1 minute of the highest speed you copied, certify that your copy was made without aid, and send it to ARRL for grading. Please include your name, call sign (if any), and complete mailing address. Fees: $10 for a certificate, $7.50 for endorsements.

♦ Digital transmissions: Frequencies are 3.5975, 7.095, 14.095, 18.1025, 21.095, 28.095, 50.350, and 147.555 MHz.

Bulletins are sent using 45.45-baud Baudot, PSK31 in BPSK mode, and MFSK16 on a daily revolving schedule.

Keplerian elements for many amateur satellites will be sent on the regular digital frequencies on Tuesdays and Fridays at 6:30 PM Eastern time using Baudot and PSK31.

♦ Voice transmissions: Frequencies are 1.855, 3.99, 7.29, 14.29, 18.16, 21.39, 28.59, 50.350, and 147.555 MHz. Voice transmissions on 7.290 MHz are in AM double sideband, full carrier.

♦ Notes: On Fridays, UTC, a DX bulletin replaces the regular bulletins. W1AW is open to visitors 10 AM to noon and 1 PM to 3:45 PM Monday through Friday. FCC-licensed amateurs may operate the station during that time. Be sure to bring your current FCC amateur license or a photocopy. In a communication emergency, monitor W1AW for special bulletins as follows: voice on the hour, teleprinter at 15 minutes past the hour, and CW on the half hour.

W1AW code practice and CW/digital/phone bulletin transmission audio is also available real-time via the *EchoLink Conference Server* W1AWBDCT. The conference server runs concurrently with the regularly scheduled station transmissions. The W1AW Qualifying Run texts can also be copied via the EchoLink Conference Server.

During 2020, Headquarters and W1AW are closed on New Year's Day, Presidents Day (February 17), Memorial Day (May 25), Independence Day (July 4), Labor Day (September 7), Veterans Day (November 11), Thanksgiving and the following day (November 26 and 27), and Christmas (December 25).