



The Ventura Amateur Radio Club, K6MEP, will hold its next regular meeting at 7:30 PM on Friday, July 12th 2019 at the historic Dudley House, 197 N. Ashwood, Ventura CA 93003, at the corner of Loma Vista and Ashwood; 34d 16m 13.67s N 119d 14m 43.24s W; Grid Square DM04jg; (see map pg 20). The Board Meeting precedes the General Meeting.

July's Guest Speaker



July's guest speaker is Orv Beach W6BI. Orv was first licensed as WN6WEY in 1967. He's been into digital ham radio all his life, starting with CW. He worked his way up through RTTY, PACTOR, packet radio, PSK31, and started messing around with ham radio networking in 2014. He's given many presentations about ham radio networking over the last five years and helped deploy the network's digital radios in

Ventura County and the San Fernando Valley. He's also active in coordinating the build-out and maintenance of the wider ham radio network, which now spans from Goleta south to the Mexican border and east to Las Vegas, comprising over 400 nodes, both hilltop and home QTH.

As a result he was recently named one of the first three AREDN Ambassadors, those who promote ham radio networking through presentations about the software developed by the Amateur Radio Emergency Data Network team.

In his presentation to VCARC he'll show what areas the hamnet covers, what expansions of the network are planned, how to get on it, and what's available on the network to use. He may also bring a few goodies for show & tell.

Ventura County Amateur Radio Club 2019 Officers and Chairs

President	Robert Shank	KM6RSS
Vice-President	Richard Abbey	WB6AEW
Secretary	Phil Cohen	WA6BUZ
Treasurer	John Gartman	W6JPG
Board Member	Stewart Stone	KG6BOV
Board Member	Rod Austin	KA6GSU
Board Member	Steve Noll	WA6EJO
Photographer	Stewart Stone	KG6BOV
Facilities Mgr.	Richard Abbey	WB6AEW
Editor/ Pub.	Stewart Stone	KG6BOV
PR chairman	Dana Wentling	KG6WXE
Programs Chair	Steve Noll	WA6EJO
Webmaster	Robert Shank	KM6RSS
Domain Mgr.	Phil Cohen	WA6BUZ
New Members	Bob Brodie	KJ6AAE
License Trustee	Stewart Stone	KG6BOV
QSL Manager	Ben Holmes	K6QV
Safety Officer	Bob Brodie	KJ6AAE

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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 from the ARRL are reproduced with permission. Material submitted for inclusion is encouraged. Submit material by e-mail 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. Dues are \$20 per year.

Message from the President

The Prez Sez,

July is the month in which we celebrate Independence Day. On July 2, 1776, the legal separation of the Thirteen Colonies from Great Britain occurred, when the Second Continental Congress voted to approve a resolution of independence that had been proposed by Richard Henry Lee of Virginia. Two days later its delegates adopted the Declaration of Independence, a historic document drafted by Thomas Jefferson, John Adams, and Benjamin Franklin. Many people display the American flag outside their homes or buildings. Additionally, Independence Day (falling on Thursday this year) fireworks are often accompanied by patriotic songs such as the national anthem and, in capable military bases, a salute of one gun for each state in the United States, called a "salute to the union", is fired on Independence Day 2019 at noon. (cont. on pg 7)

Secretary's Column and Meeting Minutes

Ventura County Amateur Radio Club Inc.
Club Meeting
Meeting Date: 6/14/19

GENERAL MEMBERSHIP MEETING MINUTES

MEETING ADDRESS: Dudley Historical House, Ventura

ATTENDANCE: Listed on Roll Check-In Sheet

CALL TO ORDER 19:30

ANNOUNCEMENTS

MEETING MINUTES

Richard Abbey acting president for the meeting

Open meeting with Pledge of Allegiance

Introductions

OLD BUSINESS

The June 10th K6MEP Monday night net had 15 check-ins; Clem KM6OKZ is tied with Rod KA6GSU for the lead.

Ben showed the delivered QSL cards.

(cont. on pg. 7)

Selected July 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.

- **07/01/2019 | Eagle Has Landed**
Jul 1-Jul 28, **0900Z-2359Z, GB5EHL**, Leicester, ENGLAND. Leicester Radio Society. 14.250; 160 to 10, 4, 6, and 2 meters; 70 cm, on all popular modes. QSL. Mr. M. Harriman, 70 Station Rd., Thurnby, Leicester LE79PU, ENGLAND. <https://www.g3lrs.org.uk>
- **07/03/2019 | WHISKEY REBELLION FESTIVAL**
Jul 3-Jul 12, **0101Z-2357Z, W3R**, Prosperity, PA. Washington Amateur Communications WACOM. 3.865 7.275 18.160 14.270. Certificate. William Steffey, 401 Bells Lake Rd , Radio Hill, Prosperity, PA 15329. Certificate and QSL information at www.qrz.com/db/w3r or www.wacomarc.org
- **07/05/2019 | 80th Anniversary Celebration of the West Palm Beach Amateur Radio Group**
Jul 5-Jul 19, **0000Z-2359Z, W4P**, West Palm Beach, FL. West Palm Beach Amateur Radio Group, Inc.. 14.260 7.195. QSL. WPBARG, P.O. Box 7623, West Palm Beach, FL 33405-7623. <https://wpbarg.com>
- **07/08/2019 | 50th Anniversary of First Moon Landing**
Jul 8-Jul 24, **0000Z-2259Z, N8A**, West Chester, OH. Midwest VHF/UHF Society. 10368.100. Certificate. Tom Holmes, N8ZM, 1055 Wilderness Bluff, Tipp City, OH 45371-9221. Plan to work 10 GHz EME when moon at best position for good DX. Contact for schedules and exact frequency. n8zm@mvus.org
- **07/13/2019 | 75th Anniversary Dr. W. B. Konkle Memorial Library**
Jul 13, **1500Z-1800Z, K3L**, Montoursville, PA. Bald Eagle Repeater Association. 14.270. Certificate & QSL. Bob Brown - KB3IPZ, 1201 Cherry St, Montoursville, PA 17754. QSL via KB3IPZ. QSL card with SASE. Certificate available via email only Rbrown5415@gmail.com
- **07/13/2019 | Mountaineer Amateur Radio Association - 100th anniversary of West Virginia's oldest club.**
Jul 13, **1400Z-2200Z, W8SP**, Marion County, WV. Mountaineer Amateur Radio Association. 18.150 14.040 7.200 7.040; general portion of 40 and 20 meters. QSL. W8SP c/o Chuck McClain, 5679 Beverly Pike, Grafton, WV 26354. www.qrz.com/db/w8sp
- **07/14/2019 | 50 Years - First Man on the Moon**
Jul 14-Jul 28, **1700Z-2000Z, N1A**, Milford, OH. Milford Amateur Radio Club. SSB: 28.350 14.260 7.240 3.840; CW: 14.045, 7.045, 3.545; FT8 standard frequencies. QSL. Milford Amateur Radio Club, P.O. Box 100, Milford, OH 45150-0100. Email qsl@w8mrc.com for QSL requests. www.w8mrc.com
- **07/14/2019 | 50th Anniversary of the First Manned Lunar Landing**
Jul 14-Jul 20, **1200Z-2359Z, WB4ICJ**, Geneseo, IL. 50th Anniversary First Manned Lunar Landing Group. SSB/FT8 - 80/40/20 Meters. Certificate. 50th Anniversary First Manned Lunar Landing Group, 9600 Wolf Rd., Geneseo, IL 61254. www.wb4icj.com
- **07/16/2019 | Apollo 11 , The 50th Anniversary**
Jul 16-Jul 24, **1332Z-1650Z, K2CAM**, Garden City, NY. Long Island Mobile Amateur Radio Club. 15.340 14.240 7.240 3.840. Certificate & QSL. LIMARC, P.O. Box 392, Levittown, NY 11756. K2CAM is the callsign of the Cradle of Aviation Museum on Long Island, NY. Long Island is considered the birth place of aviation in America. Grumman Aerospace was the primary contractor for the LEM, Lunar Excursion Module. QSL card please end SASE. Certificate, please enclose \$3.00 for mailing. Info available for K2CAM on QRZ.com www.limarc.org
- **07/16/2019 | Apollo 11 50th anniversary**
Jul 16-Jul 25, **1400Z-0000Z, N4A**, Huntsville, AL. NASA Marshall Space Flight Center ARC. 14.273. QSL. MSFC Amateur Radio Club, NASA/MSFC c/o Don Hediger, ES35, Huntsville, AL 35812. Various bands and modes will be used. Check spotting cluster or @NASARadioClubs for details. Numerous other NASA radio clubs will be on the air during this period. SASE is required for QSL card. nn4sa.wordpress.com
- **07/16/2019 | K2M, Honoring the Men and Women that built the LEM on Long Island 50 years ago**
Jul 16-Jul 24, **0900Z-2359Z, K2M**, Babylon, NY. Great South Bay Amateur Radio Club. 14.321. Certificate. GSBARC - K2M, PO BOX 1356, West Babylon, NY 11704-0356. www.gsbarc.org
- **07/18/2019 | Apollo 11 Moon Landing 50th Anniversary**
Jul 18-Jul 21, **2300Z-2300Z, N5A**, Springdale, AR. Razorback Contest Club. 14.250 14.040 7.200 7.040. QSL. Razorback Contest Club, 3407 Diana St., Springdale, AR 72764. www.qrz.com/db/ke5xx
- **07/18/2019 | Tall Ships Celebration - Bay City-Michigan**
Jul 18-Jul 21, **1200Z-1700Z, W8EDS**, Bay City, MI. Bay Area Amateur Radio Club. 147.360 PL131.8

145.310 PL131.8 444.500 PL123. Certificate. Jon Dee Coulter, 1454 Wesley Ct, Bay City, MI 48708. For updates, contact kc8usu@yahoo.com

- **07/18/2019 | W3A Apollo 11-50th Anniversary-Live TV from the Moon**

Jul 18-Jul 23, 1300Z-2200Z, W3A, Baltimore, MD. The Amateur Radio Club of the National Electronics Museum (K3NEM). 14.250 14.050 7.250 7.050. Certificate & QSL. W3A-Apollo, PO Box 1693, MS 4015, Baltimore, MD 21203. Amateur Radio Club of the National Electronics Museum (ARCNEM) will operate W3A to commemorate the live television transmission of the first moonwalk using a camera designed and built by Westinghouse. While the flight camera remained on the moon, a duplicate unit manufactured at the same time is on display at the National Electronics Museum where W3A operations will take place. Primary operation will be July 19-July 21 with additional operation possible during the July 18-23 period as operator availability permits. Operation on 80M (3.550, 3.850) and digital modes possible during event. Frequencies +/- according to QRM. QSL and Certificate available via SASE; details at www.W3A.space

- **07/19/2019 | Apollo Moon Landing 50th Anniversary at Space & Rocket Center**

Jul 19-Jul 21, 2000Z-2000Z, W4A, Huntsville, AL. Huntsville Amateur Radio Club HARC. 14.290 7.225 7.044 3.945; SSB CW FT8. QSL. M.D. Smith, WA4DXP, 307 Clinton Ave. W., Suite 100, Huntsville, AL 35801. No overnight. Celebrating Man's first steps on the moon 50 years ago. SASE for QSL. www.qrz.com/db/W4A

- **07/19/2019 | South Carolina Peach Festival, 42nd Anniversary**

Jul 19-Jul 20, 0001Z-2359Z, W4W, Gaffney, SC. Cherokee County Coroner's Office. 147.240 146.610 145.250 145.190. Certificate & QSL. Dennis Fowler, P.O. Box 1210, Gaffney, SC 29342. dfowler@cherokeecountycoroner.com

- **07/19/2019 | Wisconsin Rapids Special Event Celebrating the Wisconsin State Water Ski Show Championships**

Jul 19-Jul 21, 1300Z-2000Z, W9DQA, Wisconsin Rapids, WI. Heart of Wisconsin Amateur Radio Group. 14.280 14.242 7.284 146.790 pl 114.8. Certificate & QSL. Paul Giannoni, 976 Falk Court, Nekoosa, WI 54457. www.howarg.org

- **07/20/2019 | 50th Anniversary of the 1st Manned Moon Landing**

Jul 20-Jul 28, 1300Z-2359Z, K1M, Ansonia, CT. Stratford Amateur Radio Club, Inc.. 14.275 7.225 3.825. QSL. K1M, 32 Benz Street, Ansonia, CT 06401.

- **07/20/2019 | Honoring the 50th Anniversary of the Apollo 11 Moon Landing**

Jul 20, 1400Z-2000Z, K8QYL, Wapakoneta, OH. Reservoir Amateur Radio Association. 14.250 7.250. QSL. Rich Spencer, W8GZ, 05925 Vogel Rd., Saint Marys, OH 45885. From the Neil Armstrong Air and Space Museum

- **07/20/2019 | Man on the Moon First Communication to Earth – 50 Years**

Jul 20-Jul 21, 1300Z-1700Z, K9MOT, Schaumburg, IL. Motorola Amateur Radio Club. SSB within 10KHz: 3.83, 7.23, 14.245, 21.435, 28.465; CW 3.543, 7.043, 14.0. Certificate. MOTOROLA AMATEUR RADIO CLUB, PO Box 59701, Schaumburg, IL 60159. To commemorate Motorola's contribution to the Apollo program and lunar communication. www.qsl.net/k9mot

- **07/20/2019 | Michigan ROBO-CON**

Jul 20, 1300Z-2100Z, W8A, Lapeer, MI. Lapeer County Amateur Radio Association. 14.250 14.045 7.225 7.045; SSB, CW, FT8, and D-STAR REF089C. QSL. LCARA QSL Manager, P.O. Box 12, Hadley, MI 48440. Commemorative QSL cards to be mailed. www.w8lap.com

- **07/20/2019 | Oscar Zero Minuteman Missile Launch Control Facility 10th Anniversary**

Jul 20-Jul 21, 1200Z-1600Z, N0GF, Grand Forks, ND. FORX Amateur Radio Club. 18.160 14.260 14.185 7.250. QSL. Mark Koponen, KF4ME, 1312 Noble Cove, Grand Forks, ND 58201. The Ronald Reagan Minuteman Missile Launch Control Facility in Cooperstown, ND, served as a nuclear deterrent during the cold war. The facility has been preserved by the North Dakota State Historical Society as it was during the height of the cold war. This weekend is the 10th Anniversary of the historic site as operated by the ND State Historical Society. kf4irm@arrrl.net or www.wa0jxt.org

- **07/20/2019 | RV Service Net/Wally Byam Airstream Club 62nd International Rally**

Jul 20-Jul 28, 1200Z-1200Z, W4B, Doswell, VA. Amateur Radio Club of the Wally Byam Airstream Club. 7.191 7.184. QSL. Jeff Dalrymple, 44815 CR 641, Jay, OK 74346. Station will be on the air when possible as possible. Keep trying. First 250 contacts will receive limited edition QSL card. rvsvcnet.wbcci.net

- **07/20/2019 | SEMARC celebrates the 50th anniversary of the US manned Moon Landing**

Jul 20-Jul 22, 1300Z-2300Z, N0M, Saint Paul, MN. South East Metro Amateur Radio Club. 18.075 14.040 7.260 7.040. QSL. B. F. McInerney, 2523 Cochrane Drive, Saint Paul, MN 55125. Special QSL with SASE www.semarc.org

- **07/21/2019 | Kingsport, TN Mini Maker Faire**

Jul 21, 1300Z-1600Z, W4TRC, Kingsport, TN. Kingsport Amateur Radio Club. 14.250 7.250. Certificate. Carl S Hacker, Send e-mail to tnars@gmail.com for , certificate. www.w4trc.org

- **07/22/2019 | 24th World Scout Jamboree**
Jul 22-Aug 2, 0000Z-0000Z, NA1WJ, Glen Jean, WV. NA1WSJ Radio Association / K2BSA ARA. 14.290. QSL. Donald Sonnefeld, KD2FIL, 169 Chestnut Hill Ln S, Buffalo, NY 14221. The World Scout Jamboree will be active from 22 July to 2 August 2019 from the Summit Bechtel Reserve in Fayette County, West Virginia, with testing starting as early as 15 July. While this is the fourth World Jamboree to be held in North America, it's the first Jamboree ever jointly run by the North American Scouting organizations — Scouts Canada, Asociación de Scouts de México, and the Boy Scouts of America. The demonstration station is expected to be on 80m and up, satellites, D-Star, Echolink, and more! Check the website for QSL information and Ops Plan <https://k2bsa.net/world-jamboree-na1wj>
- **07/22/2019 | EAA AirVenture 2019**
Jul 22-Jul 28, 1400Z-2300Z, W9W, Oshkosh, WI. EAA Warbirds of America. 28.425 21.235 14.250 7.225. QSL. Ed Finnegan, K9ECF, 69 Mohawk Street, Cary, IL 60013. 1400Z - 2300Z daily. Operations from the Warbird area next to aircraft such as the T-6, T-28, T-34, Aero Vodochody L-39, MiG 17, Spitfire, Grumman F6F Hellcat, and P-51 Mustang. www.warbirds-aea.org
- **07/22/2019 | Seneca County Fair**
Jul 22-Jul 29, 1600Z-0200Z, W8ID, Tiffin, OH. Seneca Radio Club. 7.225 3.895. QSL. Seneca Radio Club W8ID, P.O. Box 67, Tiffin, OH 44883. W8ID will be celebrating 177 years of the Seneca County Fair! Join us for the cotton candy! Join us for all the fun! We can't wait! www.w8id.org
- **07/22/2019 | W9ZL EAA Airventure 2019**
Jul 22-Jul 28, 1300Z-2030Z, W9ZL, Appleton, WI. Fox Cities Amateur Radio Club. 50.150 14.270 7.250. Certificate. W9ZL Airventure 2019, PO Box 2346, Appleton, WI 54912. EAA Airventure 2018. Worlds largest airshow & fly-in, Oshkosh WI. Fox Cities Amateur Radio Club Inc Will operate from the EAA grounds on 14.250, 7.250, 50.150 SSB. Certificate available: Send QSL and large SASE to:FCARC AirVenture 2019, PO Box 2346, Appleton WI 54912 www.fcarc.club
- **07/23/2019 | Randolph County 4-H Fair**
Jul 23-Jul 24, 1700Z-2200Z, WD9EXZ, Winchester, IN. Randolph County Amateur Radio Club. 147.300 PL 110.9. QSL. Mike Daniels, 10315 W River Rd, Ridgeville, IN 47380. Operating from 5 PM to 10 PM.
- **07/26/2019 | 125th Year of Snake Alley, Ripley's Crookedest Street in the World**
Jul 26-Jul 28, 1400Z-2330Z, W0FUN, Denmark, IA. Iowa Radiosport Society. 14.240 14.059 10.115 7.220

7.059. QSL. Iowa Radiosport Society, P.O. Box 73, Denmark, IA 52624-0073.

- **07/27/2019 | 10th Annual Detroit Maker Faire**
Jul 27-Jul 29, 1500Z-0100Z, N8M, Dearborn, MI. Ford Amateur Radio League. 10 - 28.400 Ssb. 28.170 cw 20 - 14.250 Ssb 14.130 cw 40 - 7.270 Ssb 7.100 cw 80 - 3.900 Ssb 3.55 cw. QSL. FARL, P.O. Box 2711, Dearborn, MI 48123. Operating in the Pennsylvania Courtyard of The Henry Ford. QSL Cards will go out as postcards. No SASEs required. Will attempt LoTW and/or eQSL www.k8utt.org
- **07/27/2019 | Appalachian Trail on the air with HRAC, Part 2**
Jul 27, 1600Z-2200Z, W3UU, Halifax, PA. Harrisburg Radio Amateurs Club. 146.55 14.265 7.265. Certificate & QSL. Terry Snyder, PO Box 355, Halifax, PA 17032-0355. Today we are on the Appalachian Trail on Peters Mountain, Halifax Township USA. This high location on the trail is along State Route 225. QSL with SASE, Certificate with appropriate sized SASE and \$3.00 to cover expense. 7.265, 14.265, 146.55. QSL to Terry Snyder, PO Box 355, Halifax, PA 17032. terry@djterry.com or w3uu.org
- **07/27/2019 | USCGAUX/Sea Scout Safety at Sea Day**
Jul 27, 1300Z-2000Z, N9E, Lorain, OH. USCGAUX/BSA Sea Scouts. 14.270 14.290 7.180 7.290. QSL. USCGAUX Radio Officer, Coast Guard Station Lorain, 110 Alabama Ave, Lorain, OH 44052.



Field Day 2019 at Oxnard College

Available Gear

Looking for Antenna Instructions and manuals

Looking for antenna instruction and manuals for pre-1995 VHF and UHF antennas. Hy-gain, Cushcraft, KLM are the big manufacturers, but there were dozen of little ones (K1FO, K2RIW, Tronna). Would like to start a repository of antenna manuals. Manuals will be copied and originals will be returned. The copies will be posted on the web for use by everyone. Have needed the manuals for two 2 meter antennas recently and cannot find them.

Denney N6HV /
denney@denneypistole.com

Equipment Tech and Operator Manuals

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

Stewart
KG6BOV@arrl.net



Field Day 2019 at Oxnard College

Yaesu FT-8 and accessories for sale

Please contact Ron KI6YAX
vccert1@gmail.com



From the WT6JS Donation

Yaesu VX-3R, HT Dual Band 2m/440 whip antenna
w/2 chargers, manual
3 HT Dual Band 'Rubber Duck' antennas
4" external speaker w/mag mount
Mag mount system for large mobile HF antenna
Arrow Handheld Yagi Dual Band Antenna

Please contact Stewart KG6BOV
Kg6bov@arrl.net



The Prez Sez, (cont. from pg. 7)

especially the hot and cold coffee. There were 14 folks who signed the operator's sheet and approximately 50 visitors (some missed signing the visitor's log).

Among the notables were Karsten Guthrie, Battalion Chief, Oxnard Fire Department, Daniel Maguire, Ventura County Red Cross Disaster Program Manager, Scott Brewer KD6NEA, City of Oxnard's Emergency Services Director and Jeff Reinhardt AA6JR, ARRL PIC, Santa Barbara Section. We all enjoyed seeing, visiting, and talking about radio (and other topics) with each other and learned a few tips along the way. Our log files, photos and supporting documents will be submitted to the ARRL web by Hovan KI6BQL. Thanks to all who participated this year; your efforts are noted and greatly appreciated!

Looking Forward:

July 12th's speaker will be Orv Beach W6BI, who will discuss the Mesh system.

Safety Share:

The National Safety Council (www.nsc.org/)



reminds everyone that July is usually the month where many driving accidents occur. Avoid speeding, using cell phones and driving under the influence. In 2011, 3,417 people were killed in car crashes in July. Crashes involving speeding and alcohol are highest in the summer, and cell phone use increases crash risk fourfold, even when using a hands-free device. Place children in age-appropriate car seats. If you are flying, buy a ticket for children ages 2 and younger and place them in an FAA-approved child seat. Do not hold young children on your lap during a flight. Learn about your vehicle's safety systems and how to use them. MyCarDoesWhat can help drivers understand features such as adaptive cruise control, blind (cont. on page 9)

Secretary's Column and Meeting Minutes

(cont. from pg. 7)

QSL cards have arrived; Ben K6QV showed the club the new cards.

New K6MEP website continues to be under construction by Phil.

Discussion on dues payment and prorated fee schedule.

Member in arrears more than 90 days may be dropped from membership rolls.

Discussion on what a voting member is. Steve WA6EJO went through member list to determine license status.

Full members must be licensed.

Modification of the club membership form.

Approved by board. To be voted on by membership.

Approval for funds for food for field day. \$200 advance to Mark Ortega KI6YLH

Club positions: Talk about filling vacancies or deleting the position. Positions need to be defined.

Will talk off line

BOARD ADJOURNED 19:17



Field Day 2019 at Oxnard College

The Prez Sez, (cont. from pg. 8

spot warning systems and backup cameras.

Do not operate a boat while drinking or without a boater's license. Make sure children use floatation devices and everyone in your group knows how to swim. In 2011, 759 individuals drowned in July.

Stay hydrated and avoid being outside for long periods of time in the extreme heat. In 2011, 270 people were killed in July because of extreme temperatures.

In 2013, 44 kids died from heatstroke because they were left in hot cars. Never leave a child unattended in a vehicle.

See you all at the Friday the 12th of July club meeting at the Dudley House with your ideas, energy, and Ham Radio experiences!

73,

Robert Shank KM6RSS, President VCARC

Upcoming FCC Exam Session Preparations

ON EXAM DAY BRING THE FOLLOWING ITEMS:

1. A legal photo ID (driver's license, passport). 2
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 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.
5. 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.
6. Two number two pencils with erasers and a pen.
7. 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.
8. Bring a check, a money order or cash to cover the exam session fee(s). Check the ARRL VEC's current exam fee. They are normally \$15.00.

License Preparation and Sample Test Sites

07/13/2019 | Eagle Rock CA 90041

Start/End Dates: 07/13/2019 - 07/14/2019

Times: 9am to 5pm

of Sessions: 1

Class level: General

07/20/2019 | Thousand Oaks CA 91360

Start/End Dates: 07/20/2019 - 08/10/2019

Times: 8:00AM - Noon

of Sessions: 4

Class level: Technician

07/20/2019 | Thousand Oaks CA 91360

Start/End Dates: 07/20/2019 - 08/10/2019

Times: 1:00PM - 5:00PM

of Sessions: 4

Class level: General

07/21/2019 | Agoura Hills CA 91301

Start/End Dates: 07/21/2019 - 07/21/2019

Times: 0900-1600

of Sessions: 1

Class level: Technician

10/12/2019 | Eagle Rock CA 90041

Start/End Dates: 10/12/2019 - 10/13/2019

Times: 9am to 5pm

of Sessions: 1

Class level: Technician

10/20/2019 | Agoura Hills CA 91301

Start/End Dates: 10/20/2019 - 10/20/2019

Times: 0900-1600

of Sessions: 1

Class level: Technician



Field Day 2019 at Oxnard College

Upcoming FCC Exam Sessions

07/13/2019 | [Goleta CA 93117-3271](#)

Sponsor: Santa Barbara ARC
Location: Impulse Communications
Time: 9:00 AM (Walk-ins allowed)

07/13/2019 | [Santa Monica CA 90405-6130](#)

Sponsor: The PAPA system
Location: Spitfire Grill Restaurant
Time: 7:00 AM (No Walk-ins / Call ahead)

07/21/2019 | [Agoura Hills CA 91301-5332](#)

Sponsor: Goodkin Ham Radio Classes
Location: Agoura Hills/Calabasas Community Center
Time: 2:30 PM (No Walk-ins / Call ahead)

08/03/2019 | [Van Nuys CA 91405-4542](#)

Sponsor: ARES LAX
Location: Valley Presbyterian Hospital (Health Education Center)
Time: 11:00 AM (Walk-ins allowed)

08/11/2019 | [Thousand Oaks CA 91360-6861](#)

Sponsor: Conejo Valley ARC
Location: Ventura Cty Sheriff's E County Station
Time: 8:30 AM (Walk-ins allowed)

08/17/2019 | [Frazier Park CA 93225](#)

Sponsor: Pine Mountain ARC
Location: Frazier Park Library
Time: 12:00 PM (Walk-ins allowed)

09/07/2019 | [Van Nuys CA 91405-4542](#)

Sponsor: ARES LAX
Location: Valley Presbyterian Hospital (Health Education Center)
Time: 11:00 AM (Walk-ins allowed)

09/14/2019 | [Santa Monica CA 90405-6130](#)

Sponsor: The PAPA system
Location: Spitfire Grill Restaurant
Time: 7:00 AM (No Walk-ins / Call ahead)

10/05/2019 | [Van Nuys CA 91405-4542](#)

Sponsor: ARES LAX
Location: Valley Presbyterian Hospital (Health Education Center)
Time: 11:00 AM (Walk-ins allowed)

10/13/2019 | [Thousand Oaks CA 91360-6861](#)

Sponsor: Conejo Valley ARC
Location: Ventura Cty Sheriff's E County Station
Time: 8:30 AM (Walk-ins allowed)

10/19/2019 | [Frazier Park CA 93225](#)

Sponsor: Pine Mountain ARC
Location: Frazier Park Library
Time: 12:00 PM (Walk-ins allowed)

10/20/2019 | [Agoura Hills CA 91301-5332](#)

Sponsor: Goodkin Ham Radio Classes
Location: Agoura Hills/Calabasas Community Center
Time: 2:30 PM (No Walk-ins / Call ahead)

Trivia for July 2019

1. Only 11 communicators were made for the TV Show "Star Trek"?
2. James Montgomery Doohan, Star Trek's Scotty, was wounded 6 different times at the "D" day invasion?
3. Google sources more than 3.8 million a minute.

The next full moon will be on July 16.
DE Dana KG6WXE



Field Day 2019 at Oxnard College

Upcoming Hamfests and Conventions

Radio Society of Tucson Autumn Hamfest

Start Date: 09/28/2019 **End Date:** 09/28/2019 **Location:** Target Store North Parking Lot 9615 East Old Spanish Trail Tucson, AZ 85701 **Website:** <http://www.k7rst.org> **Sponsor:** Radio Society of Tucson **Type:** ARRL Hamfest **Talk-In:** 146.800 (PL 156.7) **Public Contact:** Joe Statkevics , K3TYE 11538 East Golf Links Road Tucson, AZ 85730 Phone: 520-365-3570 **Email:** joestat4@msn.com

San Diego Hamfest and Preparedness

Start Date: 10/05/2019 **End Date:** 10/05/2019 **Location:** Lakeside Rodeo Grounds 12584 Maplevue Street Lakeside, CA 92040 **Website:** <http://www.lakesidearc.org/sdhamfest/sdhamfest.php> **Sponsor:** Lakeside Amateur Radio Club **Type:** ARRL Hamfest **Talk-In:** 146.55 **Public Contact:** Paul Rios , KC6QLS 12207 Valhalla Drive Lakeside, CA 92040 Phone: 619-593-9445 **Email:** KC6QLS@cox.net

TARA Swapfest

Start Date: 10/05/2019 **End Date:** 10/05/2019 **Location:** Rumsey Park Ramada #4 400 North McLane Road Payson, AZ 85541 **Website:** <http://tontoradio.org> **Sponsor:** Tonto Amateur Radio Association **Type:** ARRL Hamfest **Talk-In:** 147.39 (PL 100) **Public Contact:** Bruce Johnson , N7DDT 318 N Rim Trail Road Payson, AZ 85541 Phone: 928-474-4154 **Email:** stretch8@q.com

PACIFICON 2019

Start Date: 10/18/2019 **End Date:** 10/20/2019 **Location:** San Ramon Marriott 2600 Bishop Drive San Ramon, CA 94583 **Website:** <http://www.Pacificon.org> **Sponsor:** Mount Diablo Amateur Radio Club **Type:** ARRL Convention **Talk-In:** 147.060 (PL 100) **Public Contact:** Debbie Deeble , SWL P.O. Box 31372 Walnut Creek, CA 94598 Phone: 925-288-1730 **Email:** info@pacificon.org

CopaFest 2019

Start Date: 10/26/2019 **End Date:** 10/26/2019 **Location:** Ultrastar at Ak-Chin Circle 16000 North Maricopa Road Maricopa, AZ 85238 **Website:** <http://www.copafest.org> **Sponsor:** Maricopa Amateur Radio Association, inc. **Type:** ARRL Hamfest **Talk-In:** 449.125 (PL 136.5), 145.210 (PL 162.2) **Public Contact:** Bob Howard , W8RH 35881 West Catalan Street Maricopa, AZ 85138 Phone: 520-709-6176 **Email:** w8rh@live.com

Oro Valley Amateur Radio Club Hamfest

Start Date: 11/09/2019 **End Date:** 11/09/2019 **Location:** Marana Middle School 11285 West Grier Road Marana, AZ 85653 **Website:** <http://tucsonhamradio.org> **Sponsor:** Oro Valley Amateur Radio Club **Type:** ARRL Hamfest **Talk-In:** 146.62, 444.1, 147.32, 447.525 (PL 156.7) **Public Contact:** Steven Wood , W1SR 6219 N. Via de la Tortola Tucson, AZ 85718 Phone: 520-906-1204 **Email:** W1SR@ARRL.NET

SuperFest

Start Date: 12/07/2019 **End Date:** 12/07/2019 **Location:** Mesa Community College 1833 W. Southern Avenue Mesa, AZ 85201 **Website:** <https://superstitionsuperfest.org> **Sponsor:** Superstition Amateur Radio Club **Type:** ARRL Hamfest **Talk-In:** 147.120+ (PL 162.2), 446.900- (PL 100) **Public Contact:** John Wolven , KG7NAP 2263 W. Olla Avenue Mesa, AZ 85202 Phone: 480-980-0502 **Email:** info@superstitionsuperfest.org



Field Day 2019 at Oxnard College

K6MEP Net Script

QST- QST- QST. This is <Name> <Callsign>, with the Ventura County Amateur Radio Club Net.

If there is there 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> <Callsign>, 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, open net for all amateur radio operators, 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. 146.385 plus offset and a PL of 127.3 as backup. All amateurs are welcome to check in after these announcements. A roundtable will follow the open check-in. 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 93003. The next meeting date is <say next meeting date from calendar>. We urge any non-members interested in VCARC to contact our Secretary, Phil Cohen, WA6BUZ email at K6MEP@qsl.net.

As we continue with the check-in process, please give your call sign, name and if you are a VCARC member. If you are not a member of the VCARC, please include your QTH or location.

(Check-ins completed): We will now begin with our Roundtable ***** Any last comments? ***** Any late, missed, or visitor check-ins? Please check-in now.

(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 <Name> <Callsign>, tonight's VCARC net control, signing off.

K6MEP Calendar

July 2019

1: K6MEP Monday Night Net

3: Moorpark 3rd of July Fireworks – ARES Support. Contact Marc KM6B km6b@arrl.net

4: Independence Day – Celebrate Our Freedom

8: K6MEP Monday Night Net

12: Regular Monthly Club Meeting at 7:30pm. K6MEP Board meeting precedes the club meeting at 7:00pm

15: K6MEP Monday Night Net

22: K6MEP Monday Night Net

29: K6MEP Monday Night Net

August 2019

5: K6MEP Monday Night Net

9: Regular Monthly Club Meeting at 7:30pm. K6MEP Board meeting precedes the club meeting at 7:00pm

12: K6MEP Monday Night Net

19: K6MEP Monday Night Net

26: K6MEP Monday Night Net

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



Field Day 2019 at Oxnard College

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)|S-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 6 Ventura City – WA6ZSN 146.385 Mhz (+) PL 127.3
Area 2 Conejo Valley, T. Oaks, Newbury Park – N6JMI 147.885 Mhz (-) PL 127.3 BOZO	Area 7 Santa Paula, Fillmore, Piru – WA6ZSN 146.385 Mhz (+) PL 127.3
Area 3 Camarillo, Somis – K6ERN 147.915 Mhz (-) PL 127.3	Area 8 Moorpark, Santa Rosa Valley – K6ERN 145.460 Mhz (-) PL 127.3
Area 4 Oxnard, Port Hueneme, NBVC – WB6YQN 146.970 Mhz (-) PL 127.3	County-Wide – WD6EBY 145.200 (-) PL 127.3
Area 5 Ojai Valley – N6FL 145.400 Mhz (-) PL 114.8	ACS Portable – VCACS/p 144.930/147.585 Mhz PL 127.3

Other Good Area Frequencies ...

AA6DP 147.090 Mhz (+) No PL Catalina	N6EVC 146.850 Mhz (-) PL 94.8 Rasnow
K0AKS 147.150 Mhz(-) PL 127.3 TOaks	N6FDR 145.260 Mhz (-) PL 100.0 Malibu
K6CPT DCS 145.300 Mhz (-) PL 100.0 LA DCS	W6AAX 147.180 Mhz (+) PL 186.2 Verdugo Peak
K6CPT DCS 147.270 Mhz (-) PL 100.0 LA DCS	W6GRG 146.940 Mhz (-) PL 127.3 Simi DSW Repeater
K6DCS DCS22 147.225 Mhz (+) PL 94.8 LA DCS	W6YJO 145.180 Mhz (-) PL 131.8 Sta Ynez
K6ERN 146.880 Mhz (-) PL 127.3 SMRA Red Mt.	WA6FGK 146.640 Mhz (-) PL 127.3 Simi Valley
K6ERN 147.765 Mhz (-) PL 127.3 Olivas Park / SMRA	WA6PPS 147.300 Mhz (-) PL 110.9 L.A. City ACS
K6TZ 146.790 Mhz (-) PL 131.8 SBARC	WB6OBB 147.000 Mhz (+) PL 131.8 Sta Barbara
KB6C 147.735 Mhz (-) PL 100.0 Oat Mt / MMRA	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 6 Ventura City – 147.510Mhz (S)
Area 2 Conejo Valley, T.O., Newbury Pk – 146.445 Mhz (S)	Area 7 Santa Paula, Fillmore, Piru – 145.540 Mhz (S)
Area 3 Camarillo, Somis – 146.550Mhz (S)	Area 8 Moorpark – 146.535Mhz (S)
Area 4 Oxnard, Port Hueneme, NBVC – 146.595Mhz (S)	County ARES Simplex – 145.615 Mhz (S)
Area 5 Ojai Valley – 145.555Mhz (S)	National Simplex – 146.520Mhz(S)

Ventura County ARES / ACS Emergency Coordinators

ACS RO/ARES DEC: Rob Hansen, 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: Stewart Stone, KG6BOV Email: kg6bov@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



Field Day 2019 at Oxnard College

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.



Field Day 2019 at Oxnard College

Local Area Radio Nets Weekly Nets

Monday

Cuckoo Net 146.790 Mhz (-) / 131.8 Hz PL and 145.180 Mhz (-) / 131.8 Hz PL every weekday morning from 8:00 AM to about 8:20 AM

California Rescue ARES Net 7.25 Mhz MTWThF 8:30 AM

Santa Barbara South County ARES net 7:30 p.m. on 146.79 Mhz (-) PL 131.8.

LA DCS-22 Net – 1930 Hrs. - K6DCS - 147.225 MHz (+) then on 7.235± MHz LSB

K6MEP / VCARC Club Net – 145.200 Mhz (-) / 127.3 PL (WD6EBY linked system) 8:00 PM

Southern California ACS NET MONDAY AT 2000 HOURS LOCAL TIME ON 3992, 3960 KHz LSB

LA Section ARES Net - HF Every Monday following the VHF/UHF net (~2130 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 every weekday morning from 8:00 AM to about 8:20 AM

California Rescue ARES Net 7.250 Mhz MTWThF 8:30 AM

Ventura County ARES-ACS 6 Meter Net – between 6:45 PM to 7:00 PM K6SMR 52.980 Mhz (-) PL 82.5 SMRA Red Mt

Ventura County ARES-ACS Simplex Net – 6:30pm on 147.510 Simplex

Ventura County ARES-ACS HF Net – between 6:30 PM to 7:00 PM 40M on 7.235 Mhz LSB +/- ;

Ventura County ARES/ACS Nets between 7:00 and 8:00 PM, the Ventura County Amateur Radio Emergency Service / Auxiliary Communications Service holds their local and County-wide nets. Local Nets are by area and normally run from 7:00 to 7:30 PM. The County-wide Net starts at 7:30 PM and normally finishes by 8:00 PM on **WD6EBY 145.200 (-) / 127.3 PL**

SBARC Swap Net 146.790 Mhz (-) / 131.8 Hz PL and 145.180 Mhz (-) / 131.8 Hz PL 7:30-8:00 PM

West SB ARES HF Net (1st Tuesday, Monthly) 3822 Khz LSB 2030 / 8:30 PM

6-Meter Roundtable - 50.125 Mhz USB First Tuesday of each month 2000 / 8:00 PM

2030 **ATV Net** 146.790 Mhz (-) / 131.8 Hz PL K6TZ repeater

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

Wednesday –

Cuckoo Net 146.790 Mhz (-) / 131.8 Hz PL and 145.180 Mhz (-) / 131.8 Hz PL every weekday morning from 8:00 AM to about 8:20 AM

California Rescue ARES Net 7.25 Mhz MTWThF 8:30 AM

Southern California ACS NET 1000 Hours, 40 Meter Net 7230 KHz

SMRA Tech Net 146.880 Mhz (-) / 127.3 PL (SMRA Red Mt) 8:00 PM

SBARC Swap Net 146.790 Mhz (-) / 131.8 Hz PL K6TZ 2000

Thursday

Cuckoo Net 146.790 Mhz (-) / 131.8 Hz PL and 145.180 Mhz (-) / 131.8 Hz PL every weekday morning from 8:00 AM to about 8:20 AM

California Rescue ARES Net 7.25 Mhz MTWThF 8:30 AM

So Cal 6 meter net, 51.940 Mhz – pl 82.5. 1900-2000 local Thursdays.

Southern Calif 6M SSB Technical Roundtable Net Thursday night at 8:00 PM on 50.2 Mhz USB SSB

SBARC / K6TZ Technical Mentoring Net -- Thursday nights 8:00-9:00 PM 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 every weekday morning from 8:00 AM to about 8:20 AM

California Rescue ARES Net 7.250 Mhz MTWThF 8:30 AM

Saturday

Military Radio Collector Net 1800 / 6:00PM 3985 Kc +/- AM www.mrcgwest.org/mrcg-radio-nets/

Sunday

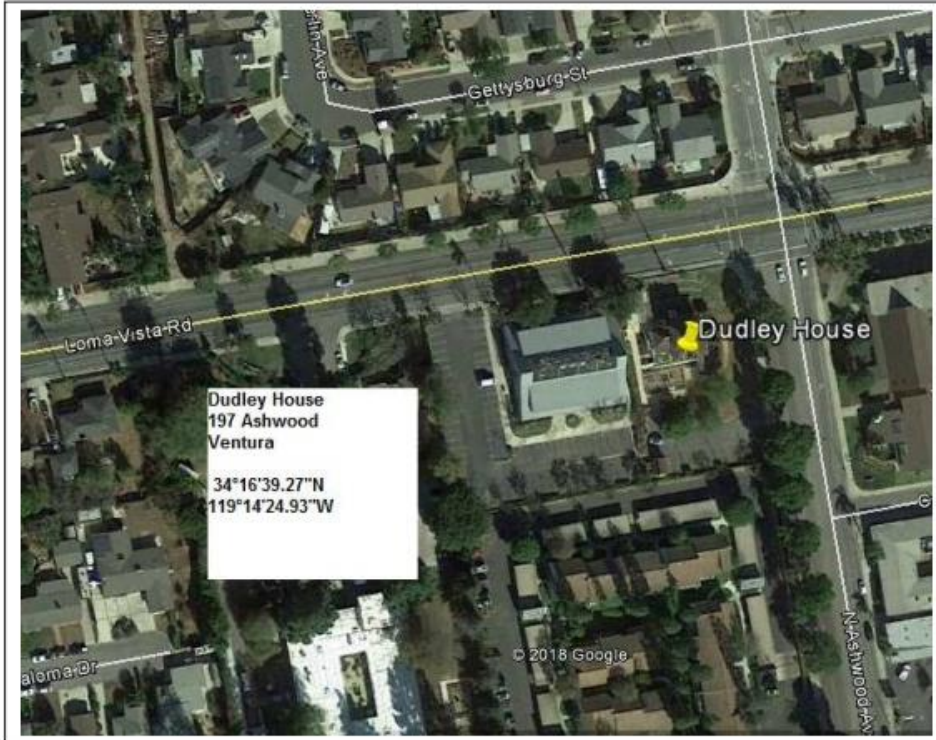
ARRL Southwestern Division Net 0800 / 8:00 AM 3965 Mhz.

Newbie Net 7:00-7:30 pm Sundays; Bozo Repeater 147.885 Mhz (-) / PL127.3

Rabbit Net 7:00- ??? pm Sundays Linked Rabbit repeaters



Field Day 2019 at Oxnard College



ARRL Announces "Happy 150!" Hiram Percy Maxim Birthday Celebration

This year marks the 150th anniversary of the birth of ARRL's first president and cofounder Hiram Percy Maxim (HPM), W1AW, born on September 2, 1869. ARRL will hold an operating event to celebrate HPM's legacy, getting under way at 0000 UTC on August 31, and continuing until 2359 UTC on September 8. The event is open to all radio amateurs.

The goal is straightforward: Contact as many participating stations as possible. W1AW and *all* ARRL members will append "/150" to their call signs during this event (DX operators who are ARRL members may identify as *<call sign>/150*, if permitted by their country of license.) Participating stations will exchange signal report and [ARRL/RAC Section](#). DX stations will send signal report and "DX." Those taking part may use all Amateur Radio bands, *excluding* 60, 30, 17, and 12 meters.

Permitted modes: CW, phone (any voice modes), and digital. Submit Cabrillo log or ADI files. ARRL will calculate all final scores based on participants' uploads to the ARRL event web app (link not yet active).



The 84 available multipliers only count once. These include the 83 ARRL/RAC Sections (RAC Sections include the Canadian Northern Territories, encompassing VE8, VY1, and VY0) and DX. The W1AW operating schedule during this period may be adjusted as necessary to accommodate on-air celebration operating activities. Contacts with W1AW/150 will earn 3 points each. Contacts with any ARRL member will earn 2 points each. These stations will also identify as *<call sign>/150*. Contacts with nonmembers will earn 1 point each.

Participants can earn 150 bonus points by:

- Contacting W1AW/150 on each band and mode.
- Uploading entries (ARRL members only).
- Using social media to publicize this event and/or participation before, during, and/or after the event.
- Operating with 5 W PEP output or less throughout the event.
- Making at least 20 contacts while operating portable.
- Completing at least 150 contacts.

Online certificates will be awarded, and are available [via download](#) only. Updates and results will be [publicized](#).

There are no power or operator categories. Participating ARRL members who use Logbook of The World (LoTW) are encouraged to [create a separate LoTW certificate](#) for uploading <call sign>/150 contacts. Members then should upload logs for this event using their /150 certificates. Submissions must be via the online web app. No email or paper submissions will be accepted.

Window Closes on July 15 for Volunteer Monitor Program Applications

Monday, July 15, will be the last day that applications for the new [Volunteer Monitor Program](#) will be accepted. Some 250 applications have been submitted to fill approximately 150 Volunteer Monitor (VM) positions in the program, which is succeeding the Official Observer (OO) program. Retired FCC special counsel and former Atlantic Division Vice Director Riley Hollingsworth, K4ZDH, is overseeing ARRL's role in the development and implementation of the program, and he has been interviewing all applicants. Those not selected as VMs will be placed in a reserve pool. Current OOs have been invited to apply for appointments.



Approved by the ARRL Board of Directors at its July 2018 meeting, the new Volunteer Monitor Program represents a formal agreement between the FCC and ARRL in which volunteers trained and vetted by ARRL will monitor the airwaves and collect evidence that can be used to correct misconduct, as well as to recognize exemplary on-air operation. ARRL will refer incidents of flagrant violations to the FCC for action, in accordance with FCC guidelines, and the FCC will give priority to

enforcement cases developed by the Volunteer Monitor Program. The FCC proposed the program following the closures of several FCC regional offices and a reduction in field staff.

ARRL and the FCC have signed a *Memorandum of Understanding (MOU)* that establishes the Volunteer Monitor Program as a replacement for the Official Observers.

The first Volunteer Monitors could be in place and ready to begin their duties by this fall.

FAA Reauthorization Act of 2018 Changes Recreational Drone Flying Requirements

The [FAA Reauthorization Act of 2018](#) includes changes to [recreational drone flying](#) in the US. Radio amateurs have used drones to inspect antenna systems and terrain and to carry support lines aloft, as well as for other purposes. The FAA considers those who fly their drones for fun as recreational users. The FAA Reauthorization Act of 2018 describes how, when, and where

owners may fly drones for recreational purposes. These broad guidelines should apply to most Amateur Radio users of drones.

- [Register](#) as a "modeler." A registrant must be at least 13 years old and a US citizen or legal permanent resident.
- [Label](#) your model aircraft with your registration number.
- Fly only for recreational purposes.
- Follow the safety guidelines of a community-based organization (see below).
- Fly your drone at or below 400 feet when in uncontrolled or Class G airspace, and do not fly it in airspace where flight is prohibited.
- Keep your drone within your line of sight or within the line-of-sight of a visual observer who is co-located and in direct communication with the operator.
- Never fly near other aircraft, especially near airports.
- Never fly over groups of people, public events, or stadiums full of people.
- Never fly near emergencies such as any type of accident response, law enforcement activities, firefighting, or hurricane recovery efforts.
- Never fly under the influence of drugs or alcohol.



Recreational flyers who intentionally violate any of these safety requirements and/or operate in a careless and reckless manner could be liable for criminal and/or civil penalties. [Read](#) the Authorization for limited recreational operations as described in Section 44809 (PDF). All limited recreational operations should be conducted in accordance with this authorization.

For more information, read [Advisory Circular 91-57B](#).

The FAA is upgrading the online system, known as LAANC (the Low Altitude Authorization and Notification Capability), so that recreational operations can get automated airspace authorizations to fly in controlled airspace.

The new law also will require that drone operators pass an online aeronautical knowledge and safety test and carry proof of test passage. The FAA is developing the test in consultation with stakeholders. Recreational flyers would have to pass the test, which could be administered electronically. The FAA will provide additional guidance and will notify when the test is available. The FAA also will issue guidance for how it will recognize community-based organizations.



[More detailed information](#) about the FAA's plan to fully implement the requirements of Section 349 of the FAA Reauthorization Act of 2018 is available in the *Federal Register*.

So Now What? Podcast

"Fan Questions" will be the focus of the new (July 11) episode of the [So Now What?](#) podcast for Amateur Radio newcomers.



If you're a newly licensed Amateur Radio operator, chances are you have lots of questions. This biweekly podcast has answers! *So Now What?* offers insights from those who've been just where you are now. New

episodes will be posted every other Thursday, alternating new-episode weeks with the [ARRL The Doctor is In](#) podcast.

So Now What? is sponsored by [LDG Electronics](#), a family owned and operated business with laboratories in southern Maryland that offers a wide array of antenna tuners and other Amateur Radio products.

ARRL Communications Content Producer Michelle Patnode, W3MVP, and ARRL Station Manager Joe Carcia, NJ1Q, co-host the podcast. Presented as a lively conversation, with Patnode representing newer hams and Carcia the veteran operators, the podcast will explore questions that newer hams may have and the issues that keep participants from staying active in the hobby. Some episodes will feature guests to answer questions on specific topic areas.

Listeners can find *So Now What?* on [Apple iTunes](#), [Blubrry](#), [Stitcher](#) (free registration required, or browse the site as a guest) and through the free [Stitcher](#) app for iOS, Kindle, or Android devices. Episodes will be archived on the ARRL website.

IARU President Offers Assurances Regarding French 144 - 146 MHz Allocation Proposal

International Amateur Radio Union ([IARU](#)) President Tim Ellam, VE6SH/G4HUA, said his organization empathizes with the concerns of radio amateurs worldwide regarding a French proposal to allocate 144 - 146 MHz to the Aeronautical Service on a primary basis, essentially sharing it with Amateur Radio. The band is currently allocated to Amateur Radio on a primary basis around the world. Ellam this week offered assurances that the IARU is on top of the matter, which is still a regional issue, and is already working to keep the band in the hands of radio amateurs. While the issue could end up on the agenda of World Radiocommunication Conference 2023 (WRC-23), a lot would have to happen first.

"There is a lot of misinformation circulating as to what the proposal is seeking and how IARU is responding to it," Ellam told ARRL. "While the proposal is a concern, petitions and the like, while well intended, are going to have very limited value and, in fact, may harm the steps being taken in the regulatory environment."

The French proposal, submitted last month to a pre-WRC-19 European Conference of Telecommunications and Postal Administrations (CEPT) meeting, included 144 - 146 MHz within a range of frequencies to be studied for future airborne, non-safety applications in the Aeronautical Service. Germany opposed the move, and IARU "objected strongly," Ellam said. "Nonetheless, the proposal was carried forward to the next meeting of the CEPT Conference Preparatory Group in late August." IARU anticipates that other countries attending the August meeting will oppose the inclusion of 144 - 146 MHz as a frequency range to be considered for the WRC-23 agenda, Ellam said.



IARU President Tim Ellam, VE6SH/G4HUA

Since the June meeting, IARU Region 1 (Europe, Africa, and the Middle East) has asked its member-societies to contact their national administrations (i.e., governments) to explain the importance of the 144 - 146 MHz primary allocation, Ellam recounted. "IARU is also taking other actions to make its views known to those involved in the proposal," he said.

"If accepted as a WRC-23 Agenda Item, this proposal would require 4 years of studies by administrations," Ellam stressed. "Considering the challenges of sharing spectrum with aeronautical systems, it seems inevitable that the conclusion of such studies would be that sharing with a widely used part of the amateur spectrum presents too many problems to be viable."

Ellam encouraged individual radio amateurs who want to help to become members of their IARU member-society. "If anything," Ellam concluded, "this recent news should serve as a timely reminder that defense of the amateur spectrum does not just happen. Your member-societies and the IARU constantly work at defending the amateur allocations." Read [more](#).

W1AW, NU1AW to be Headquarters Multipliers for the IARU HF Championship

During the [IARU HF Championship](#) contest July 13 - 14, the ARRL HQ station will be W1AW/7, on the air from Nevada with Tom Taormina, K5RC, as control operator. IARU Secretariat Club station NU1AW will be on the air from KC1XX in New Hampshire and K1TTT in Massachusetts and counts as the IARU HQ station.

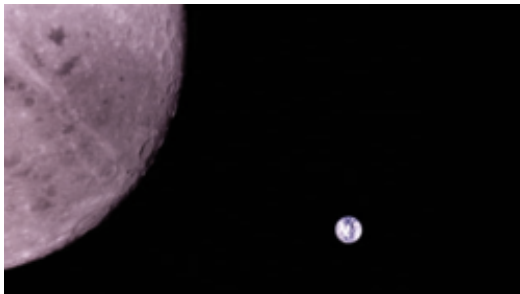
Both single and multioperator stations may operate the entire 24-hour period, and stations may operate on phone, on CW, or on both modes. IARU member-society HQ stations send signal report and official IARU member-society abbreviation (e.g., ARRL).

Members of the IARU Administrative Council and the three IARU regional Executive Committees send "AC," "R1," "R2," and "R3," as appropriate. All other stations send signal report and [ITU zone](#).



Historic Amateur Radio Contact via Moon-Orbiting Satellite Reported

A contact between radio amateurs in Germany and China took place on July 1 via the moon-orbiting LO-94 satellite, DSLWP-B, launched in May 2018. The two-way exchange between Reinhard Kuehn, DK5LA, in Sorup, Germany, and Harbin Institute of Technology club station BY2HIT (operated by Wei Mingchuan, BG2BHC), in Harbin, China, occurred between 0551 and 0728 UTC, according to reports. The GMSK-to-JT4G repeater onboard DSLWP-B was used to make the contact, the first ever via a lunar-orbiting repeater.



"Using the GMSK-to-JT4G repeater is not easy, in terms of the signal power needed for the uplink," [commented](#) radio amateur and engineer Daniel Estévez, EA4GPZ, whose blog includes images of the lunar surface downloaded via DSLWP-B. "There were plans to make a QSO between BY2HIT and Reinhard

since many months ago, but previous attempts didn't work out. My congratulations to the people at both sides of the QSO, who have achieved it a month before [DSLWP-B crashes against the lunar surface.](#)"

As Estévez explained it, the GMSK-to-JT4G repeater works by sending commands to the satellite that embed a 13-character message, using the same frequency and a similar protocol to the one that commands the camera and other satellite functions. He said sending a message in this fashion takes a little longer than 1 minute.

An open telecommand protocol allows radio amateurs to take and download images, and DSLWP-B transmitted images of the moon and Earth during this week's solar eclipse. DSLWP-B was launched as a secondary payload with the *Queqiao* relay satellite as part of the Chang'e 4 mission to the far side of the moon.

DSLWP stands for "Discovering the Sky at Longest Wavelengths Pathfinder," and was designed to test low-frequency radio astronomy and space-based interferometry. The repeater uplink is on 2 meters and the downlink is on 70 centimeters.

ARISS-International Delegates Meet in Montreal

Representatives of nine nations were on hand as Amateur Radio on the International Space Station ([ARISS](#)) held its 2019 "face-to-face" meeting of international delegates at the Canadian Space Agency in Montreal, June 26 - 28. ARISS-Canada was the host for the gathering. A high point of the conference came when JVC Kenwood Software Manager Shin Aota, JL1IBD, presented two Kenwood TM-D710GA transceivers to ARISS-Russia delegate Sergey Samburov, RV3DR. One of the TM-D710GA radios will replace aging Amateur Radio equipment currently in use on the International Space Station, while the other will remain on Earth as a spare for training cosmonauts. For more than a year, these radios have undergone rigorous NASA qualification testing followed by final software configuration and verification.



"With today's transfer of the radios to ARISS-Russia, we are one step closer to an enhanced Amateur Radio system on board the ISS, supporting various operations such as SSTV, voice communication, APRS, and a variety of experiments," ARISS-International said in announcing the presentation. The ARISS Hardware Team met on June 25.



JVC Kenwood's Shin Aota, JL1IBD (left), hands a new Kenwood TM-D710GA transceiver to ARISS-Russia's Sergey Samburov, RV3DR. [Greg Sarratt, W4OZK, photo]

Other topics included ARISS' future participation in NASA's Deep Space Gateway ([DSG](#)) program. ARISS is the only noncommercial entity whose ideas are under study by the program. The ARISS plan focuses on Amateur Radio communication, including optical communication channels, as well as equipment development, team cooperation, education, and public outreach.

Those attending the conference included Radio Amateurs of Canada (RAC) President and ARISS-Canada Delegate for RAC Glenn MacDonell, VE3XRA; AMSAT-NA President Joe Spier, K6WAO, and AMSAT-Italia President Emanuele D'Andria, I0ELE. ARRL Southeastern Division Director Greg Sarratt, W4OZK, attended in his role as chair of the ARRL Board's new ARISS Committee. Rosalie White, K1STO, represented ARRL as an ARISS-US delegate

and handled the duties of ARISS-International Secretary. The other ARISS-US delegate was Dave Taylor, W8AAS. Read [more](#). -- Thanks to Dave Jordan, AA4KN, ARISS Public Relations, and Rosalie White, K1STO

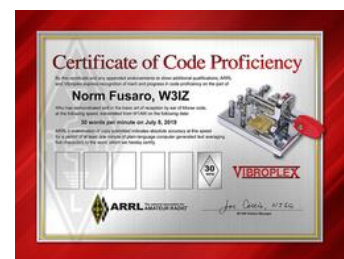
In Brief...



Applications for the 2020 ARRL Foundation Scholarship Program will be accepted between *September 1 and December 31, 2019*. All applicants must be FCC-licensed radio amateurs, and many scholarships have other specific requirements, such as

intended area of study, residence within a particular ARRL Division, Section or state, and license class. Applicants should review the scholarships and check off the ones for which they are eligible. If you complete an online application, you must also [email](#) a PDF of academic transcripts from your most-recently completed school year by **January 13, 2020**. Applications not accompanied by transcripts will not be considered. The ARRL Foundation Scholarship Committee will review all applicants for eligibility and award decisions. Scholarship recipients will be notified in May 2020 via USPS mail and email. For more information, visit the [ARRL Foundation Scholarship Program](#) page.

Starting with the August issue, QST will list the recipients of W1AW [Code Proficiency](#) certificates. Key manufacturer [Vibroplex](#) is now sponsoring the certificates, which have been redesigned. The Code Proficiency program has been an ARRL staple for decades. Participants who copy a [W1AW qualifying run](#) and submit 1 minute of legible solid copy and the \$10 certificate fee can qualify. Send submissions to W1AW Qualifying Run, 225 Main St., Newington, CT



USA 06111. These are checked directly against the official W1AW text, and those demonstrating solid copy will receive an initial Code Proficiency certificate. Endorsement stickers, which cost \$7.50, are issued for speeds up to 40 WPM. The W1AW Code Proficiency Program is open to hams and non-hams alike. Those seeking to attain a Code Proficiency certificate can listen to W1AW daily code practice sessions, in which the text is taken directly from *QST*, as announced before each practice run.

A final call has been issued to solicit technical papers for presentation at the ARRL/TAPR Digital Communications Conference (DCC). The event is set for September 20 - 22 at the Marriott Detroit Metro Airport Hotel. Papers will also be published in the *Conference Proceedings*. Authors do not need to attend the conference to have their papers included in the *Proceedings*. The submission deadline is August 5. [Submit](#) papers via email or mail to Maty Weinberg, KB1EIB, ARRL, 225 Main St., Newington, CT 06111. Papers will be published exactly as submitted, and authors will retain all rights.

Cathryn Mitchell, M0IBG, the academic director of the University of Bath Doctoral College in the UK, has received the 2019 Edward Appleton Medal and Prize. She was recognized for her pioneering research in tomography and data assimilation that revealed a completely new perspective on the ionosphere in response to extreme space weather. "Mitchell innovated a completely new Earth observation technique by adapting medical tomography to image the Earth's ionosphere, thus revealing the dynamics of the near-Earth space environment," an [announcement](#) on the Institute of Physics (IOP) website explained. "Her use of Global Positioning System satellite signals as a source for space weather tomography, through a new time-dependent mathematical inversion algorithm, has given us the first global-scale view of the ionosphere in response to space weather storms." The award's namesake, Edward Appleton, won the 1947 Nobel Prize in Physics for his 1924 work that proved the existence of the ionosphere. Radio amateurs participated in listening tests during the early 1920s that provided data regarding how radio signals propagate. Scientist Cathryn Mitchell, M0IBG, Honored for Ionospheric Imaging Research



07/03/2019

Cathryn Mitchell, M0IBG, the academic director of the University of Bath Doctoral College in the UK, has received the 2019 Edward Appleton Medal and Prize for her pioneering research in tomography and data assimilation that revealed a completely new perspective on the ionosphere in response to extreme space weather.

"Mitchell innovated a completely new Earth observation technique by adapting medical tomography to image the Earth's ionosphere, thus revealing the dynamics of the near-Earth space environment," an **announcement** on the Institute of Physics (IOP) website explained. "Her use of Global Positioning System satellite signals as a source for space weather tomography, through a new time-dependent mathematical inversion algorithm, has given us the first global-scale view of the ionosphere in response to space weather storms."

The award's namesake, Edward Appleton, won the 1947 Nobel Prize in Physics for his 1924 work that proved the existence of the ionosphere. Radio amateurs participated in listening tests during the early 1920s that provided data regarding how radio signals propagate.

According to the award announcement, Mitchell's research "fundamentally changed" the understanding of the ionosphere. Her deep-field experimental work to collect tomographic radio signals has taken her to both poles and altered the understanding of the relationship between plasma density irregularities and optical aurora, leading to the discovery of disruptive radio propagation effects on satellite signals used for navigation and timing. The research could help to improve the accuracy and reliability of satellite navigation systems.

Mitchell holds a Natural Environment Research Council (NERC) Knowledge Exchange Fellowship and recently acted in advisory roles for UK and US governmental bodies and for the European Space Agency. She is the author of more than 100 journal papers, and her tomography algorithms are licensed to other research organizations in the UK and around the world.

"She continues to pioneer new observation techniques, this year producing the first ever single-frequency Geostationary GPS ionospheric measurements," the IOP announcement said.

"Mitchell's innovations in tomographic imaging have crossed traditional discipline boundaries and are now applied in other fields including medical imaging, nuclear imaging, and cosmic-ray muon tomography."



Field Day 2019 at Oxnard College

To Join the Ventura Amateur Radio Club, Inc. (also known as VCARC or K6MEP)

Send form, along with \$20 annual dues, to VCARC P.O. Box 2103 Oxnard CA 93034-2103

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

Pro-rate dues as follows based on quarter paid (Oct-Dec = \$20, Jan-Mar = \$15, Apr-Jun=\$10, Jul-Sep=\$5)

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 __ 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				
DXpeditions				
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 a DMM (Digital Multimeter)				
How to use an oscilloscope				
License Upgrade Class				
Local Repeaters You Can Hit				
MESH				
Moonbounce				
More social events, picnics, etc.				
NVIS for regional HF communications				
QSLs, QSL cards, ARRL LOTW, eQSL				
Resistors & Capacitors - explained & demonstrated				
SDR - Software Defined Radios				
Compact HF antennas				
Soldering				
Sulphur Mountain Repeater Association				
SWR, Meaning and Measurement.				
T-Hunting				
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				
Nothing, I just want to get out of the house.				
ARRL American Radio Relay League topics				

I can give a presentation on:	
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