



This Month's News: New Opportunities

The October 8th 2021 meeting was held at The Dudley House at 19:00 and we had 20 in attendance with two visitors (George NJ2P and Geoffrey NC3FX, joined during the meeting). Jeremy KN6JMD reported that we had four on our Zoom broadcast (Stewart KG6BOV, Peter W6PJG, Keith W6KME and the mysterious "X"). Clem KM6OKZ spoke about nanoVNA and the physics behind it. Everyone enjoyed his knowledge and experience with this topic, as well as his skills in diagramming a Smith chart on the white board. Mark Vodon KI6PTE discussed the club's first aid and safety needs and Mark Swaney, KD6ASL introduced the proposed amended bylaws to be reviewed and put to vote at our November meeting.

The November 12th K6MEP club meeting is scheduled to be held at the Dudley House and our agenda is to hold nominations for our board as well as vote for the nominees. Additionally, we will vote for our recently presented amended bylaws. Denney N6HV will discuss "Sun and Ham Radio Propagation". We plan on discussing the location (La Dolce Vita has reserved the room for us) for our DecemberFest dinner. As always, visitors are welcome to attend!

The Inside Story

This Month's News: New Opportunities.....	1
Message from the President.....	3
Minutes of the October 3 rd 2021 Board Meeting	9
Minutes of the October 8th 2021 Membership Meeting.....	12
K6MEP Monday Night Net Update	14
Thoughts from the West - Reese West KQ6TT	17
Selected November Contests & Special Events	18
Contest Corral	19
Upcoming FCC Exam Session Preparation Sites.....	20
Upcoming FCC Exam Test.....	21
Trivia for November 2021	23
Calendar November 2021	23
K6MEP Monday Night Net Script	24
Convention and Hamfest Calendar	25
Emergency and Volunteer Training	26
ACS/ARES Frequency Updates	28
ACS/ARES Training and News Rob Hanson W6RH.....	29
ARES	32
Local Area Radio Weekly Nets	33
ARRL Santa Barbara Section John Kitchens NS6X.....	34
Meeting Location Maps	37
K6MEP Membership Application/Renewal	38
ARRL News	39
Local News	49
US Amateur Radio Bands	50
W1AW Schedule	51

Message from the President

The Prez Sez,

Why is our club affiliated with the ARRL and what does that mean to us as VCARC members?

I've answered the first question in last month's column and am addressing the remaining question (What does that mean to us as VCARC members and to our club) in this month's Keyer (taken from the ARRL website).

When our club was formed on May 5th 1938, the members voted to form the club and affiliate it with the ARRL. That affiliation provides our members (and the club) with many advantages.

Members receive:

LEARNING

Journals & Magazines - QST and On the Air

Depending on your membership level and interest, you may choose to receive mailed print copies of our monthly Membership Journal, QST, or our new bimonthly magazine On the Air, aimed at getting new licensees active and more involved with Amateur Radio. Plus, all members receive digital access to all four ARRL magazines, including QEX, technical articles and projects, and the National Contest Journal, with the latest from competitive radio.

(Continued on Next Page)

Club Officers	And Keyer	Contributors
President	Robert Shank	KM6RSS
Vice-President	Clem Alberts	KM6OKZ
Secretary	Pedro Morillas	K6MIL
Treasurer	John Gartman	W6JPG
Board Member	Richard Abbey	WB6AEW
Board Member	Dave Schmidt	AI6VX
Board Member	Mark Swaney	KD6ASL
Program Manager	Open	Please volunteer
Equipment Mgr.	Denney Pistole	N6HV
Refreshments	Linda Shank	
Facilities	Richard Abbey	WB6AEW
Keyer Editor	Robert Shank	KM6RSS
Webmaster	Robert Shank	KM6RSS
Domain	Phil Cohen	WA6BUZ
Membership	Open	Please volunteer
License Trustee	Dave Schmidt	AI6VX
QSL Manager	Ben Holmes	K6QV
Safety Officer	Mark Vodon	KI6PTE
PIO/Trivia	Dana Wentling	KG6WXE
Columnist	Reese West	KQ6TT
ACS/ARES	Rob Hanson	W6RH
SB Section	John Kitchens	NS6X

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 about 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 7:00 PM on the 2nd Friday of each month (except December). Dues are \$20 per year.

Message from the President (Continued)

The Learning Network - The webinar series feature presentations by members, for members, as part of ARRL's Lifelong Learning initiative. Topics cover primary interest areas among radio amateurs including electronics and technology, personal communications and operating, and emergency communications and public service.

Product Reviews - Before purchasing your next piece of equipment, see how it fared, in QST's Product Review. You have access to all QST Product Review columns from 1980 to the present.

E-Newsletters Stay up-to-date with what is going on in the Amateur Radio world – from weekly news and information emails to monthly contesting news and W1AW updates. Members can select from dozens of email communications to keep them up to date and informed.

SERVICES

Technical Information Service - Stuck on a project? Can't get your new radio on the air? As an ARRL member, get expert answers to your operating and technical questions via email or phone for free.

License Modifications - FCC License renewal and modifications are processed for free by the VEC Department.

Outgoing QSL Service - We ship QSL cards to QSL Bureaus throughout the world, providing you the convenience and savings of not having to address and mail each QSL card separately.

ARRL E-Mail Forwarding Service - As a member, you will receive an @arrl.net email address. All emails to this address can be forwarded to any other email account that you specify.

Awards - Get in on the fun with ARRL-sponsored contests and awards for members only!

COMMUNITY

Join ARRL's nearly 160,000 members and build your ham radio knowledge and network. You'll discover support, inspiration, and advice to elevate your Amateur Radio experience.

Join One of Our 2,500+ Clubs - Your membership will take you further when you reach out locally and join a club in your area. Build local connections, share solutions and ideas, and enjoy activities with hams near you.

(Continued on Next Page)

Message from the President (Continued)

Membership Directory - Build your connections! Access the online ARRL Membership Directory to find and network with other hams.

Affiliate Partners - We offer member pricing on many ARRL publications and select products, as well as equipment and club liability insurance.

ARRL Forums - This online conversation platform between ARRL members, allows discussions on a variety of topics including awards, contesting, technology, education, and Amateur Radio in the classroom.

LEADERSHIP

ARRL provides members with opportunities to develop skills and share their knowledge, from developing training webinars to volunteer examiners and leadership roles that serve the Amateur Radio community.

Volunteer Opportunities

Become part of a select group of ARRL Volunteers serving your fellow Radio Amateurs and the public.

Advocacy - Your membership supports the critical advocacy needed to preserve and protect the amateur frequencies.

The Club receives:

Mailing Lists- to reach out to area Hams interested in joining our club.

Club Commission Program-ARRL Affiliated Clubs receive a commission for every new ARRL membership and renewal they submit to ARRL Headquarters. Clubs retain a portion of the dues for each regular membership submitted to ARRL Headquarters: Clubs retain \$15 for each new membership or lapsed membership (of two years or more). A NEW MEMBER is defined as any individual who has never been a member of ARRL or any individual who has not retained a membership for two or more calendar years prior to the application submission. Clubs retain \$2 for each renewal. A RENEWING MEMBER can renew anytime, even before their current membership term expires.

(Continued on Next Page)

Message from the President (Continued)

Club Liability Insurance Plan. This comprehensive general liability policy provides coverage for lawsuits resulting from bodily injury and property damage at Club-sponsored activities. This includes concession stands, dances, banquets, parties, auctions, raffles, picnics and meetings, to name just a few. Coverage would also apply for official Club participation, for instance participating in a community-sponsored event. Plus, in addition to the policy limits described below, this plan also pays the court and legal costs of defense for covered claims. The plan reimburses expenses for first aid to others at the time of an accident. And, an owner of a premises used or rented by the Club can also be named as an additional insured. The basic Club Liability Insurance policy provides up to \$1,000,000 in coverage for each occurrence and up to \$2,000,000 in aggregate coverage each year.

Ham Radio Equipment Insurance Plan- No matter where you live, you could end up in the middle of a natural disaster. You may not be able to salvage what you had, but with the ARRL Ham Radio Equipment Insurance Plan you can get the help you need to get back on the air. Insurance is available to protect you from loss or damage to your amateur station, antennas and mobile equipment by lightning, theft, accident, fire, flood, tornado and other natural disasters. The ARRL Ham Radio Equipment Insurance Plan is available to all members of the American Radio Relay League who reside in the United States. Coverage is also available to ARRL affiliated clubs to protect the club's equipment - including club station and repeater equipment.

Library Book Set- This book set includes popular ARRL publications, intended for clubs or individuals that wish to make a gift to a local library or school. Only complete sets of these publications are available at the special price of \$200 per set. This is a great way to encourage youth to become amateur radio enthusiasts!

ARRL e-Mail Forwarding Service- Email forwarding service is now available for ARRL affiliated clubs: Effective immediately, clubs affiliated with the ARRL can sign up for the League's new E-Mail Forwarding Service. The forwarding--or alias--service is available at no additional charge for ARRL affiliated clubs. It will provide clubs with a uniform "call sign@arrl.net" e-mail address that remains the same even if the user changes e-mail service providers. Ours is K6MEP@arrl.net and forwards to Pedro K6MIL, our secretary.

Annual Report-Every ARRL club is eligible to receive a complimentary copy of the League's Annual Report, which contains the business reports of the staff and Directors.

Referrals of Prospective Radio Amateurs-League Headquarters, in addition to providing a basic package of information to a prospective ham, will refer prospects to our club for follow-up and recruitment. And our club will be listed in ARRL Web's club search database.

(Continued on Next Page)

Message from the President (Continued)

Club Gavel Competition- Only affiliated clubs are eligible for participation in the gavel competitions of the ARRL DX Contest, the ARRL November Sweepstakes, the ARRL VHF Sweepstakes and the 160- and 10-Meter Contests.

50% Discount on Club Ads in QST- We may purchase advertising in QST at half of the going rate.

Planning an ARRL Hamfest or Convention? - Most hamfests and conventions are club sponsored affairs.

Special Service Clubs (CVARC is one) - In addition to the above, Special Service Clubs also receive the following additional benefits: SSCs get special recognition in QST as they renew or become SSCs. SSCs are also eligible to appoint local Awards Managers.

Club Call Signs- ARRL provides club station license application and filing procedures.

New Amateur Reports for Clubs- This link is restricted to Club Presidents, Club Contact and Club Newsletter Editor. It allows our club to reach out to new hams and hams who have upgraded their licenses.

Tips for Preserving Your Club's History- Whether your club is fairly new to the Amateur Radio scene or if it has been around for decades, these tips will help you pass along your club record to future generations.

I hope that the benefits that ARRL provides will encourage you to maintain your membership and if you haven't joined yet, see Pedro or me for the application.



Message from the President (Continued)

My safety share (from <https://safestart.com/news/5-november-toolbox-topic-ideas/>) for the month of November is “Food”.

One of the first things you think about when you think about Thanksgiving is food—from turkey and all the fixings to pie; there usually isn't a shortage of delicious food when celebrating the Thanksgiving holiday. But when it comes to food safety, your mind should also go to the possibility of **food poisoning**. Talking about food safety with family members can help everyone stay safe this holiday season. The Centers for Disease Control and Prevention estimates that approximately **1 in 6 Americans** (48 million people) get food poisoning each year, and half of these incidents occur around the holidays. There are a number of factors that can contribute to holiday foodborne illness, from rushing to prepare a meal for a large group to fatigue, which is almost always a factor around the holidays. Not to mention that some cooks may simply not be aware of the **food preparation risk factors** that can contribute to people becoming sick. Please be safe this holiday and throughout the year!



73, Robert KM6RSS

Minutes of the October 3rd 2021 Board Meeting

MEETING LOCATION: Zoom

OFFICER ATTENDEES

OFFICE	LAST	FIRST	CALL SIGN	PRESENT
PRESIDENT	SHANK	ROBERT	KM6RSS	X
VP	ALBERTS	CLEMENT	KM6OKZ	X
SECRETARY	MORILLAS	PEDRO	K6MIL	X
TREASURER	JOHN	GARTMAN	W6JPG	X
BOARD	ABBEY	RICHARD	WB6AEW	
BOARD	SCHMIDT	DAVE	AI6VX	X
BOARD	SWANEY	MARK	KD6ASL	X

CALL TO ORDER 19:00

President Robert KM6RSS opened the meeting via Zoom at 7:00 PM. There were 6 out of a possible 7 board members present. Stewart Stone KG6BOV, Denney Pistole N6HV, and Burt Auerbach KA6BJA were present as guests. We urge all of our members to attend our board meetings as we want to be as inclusive as possible.

Minutes:

- We now have 52 paid-up members.
- Board and general membership minutes from September meeting were accepted as published in the October Keyer.
- Discussed the ARRL requirements to maintain affiliation status which requires the secretary to make an annual report that shows at least 51% of the voting membership holding an ARRL membership.
 - The secretary will contact each member to determine if they have an active membership in the ARRL and will update the membership roster with this information.

Officer's Report:

Treasurer: The club's savings, checking and petty cash account balances were presented to the board.

Committee Reports:

Member's Health and Safety

- President Robert asked the Board if anyone wanted to suggest any changes to the Health and Safety procedures for the October General Membership Meeting, being held at Dudley House, with Ventura County's mask mandates still being in (Continued on next page)

Minutes of the October 3rd 2021 Board Meeting (Continued)

- place. The board agreed that the same rules will apply and that refreshments will be available, similar to September's in-person meeting.

By Laws

- Mark KD6ASL, Clem KM6OKZ and Pedro K6MIL, members of the bylaws review and proposal committee, had sent the board members their proposed bylaws to be read before the meeting. After some discussion about how the membership will be able to understand the proposed bylaws, Mark KD6ASL agreed to write a summary of the differences between the proposed bylaws to the existing bylaws, prior to the October 8th membership meeting. The summary, along with the proposed bylaws, will be reviewed and voted on to determine if they should be moved forward to the entire general membership for presentation at the October meeting. A formal vote on accepting the proposed bylaws is planned to be part of the November 12th meeting agenda, along with the annual nomination and election of officers and board members.
- Burt KA6BJA, the previously named club election commissioner, had written the voting procedures for the summer election process. Based on the input from the board members, he has revised the procedures to fit both the annual elections as well as the bylaws revision. The Board will hold a Zoom meeting to review and approve his proposed election process prior to the October 8th meeting.
- Burt emailed the updated procedures to Board members for their review prior to the October 8th membership meeting.
- Secretary Pedro Morillas will email Zoom invitations to the Board prior to the October 8 meeting, to review the proposed bylaws and election procedures.

Special Orders:

- Inventory.
 - The Board voted to reimburse Denney N6HV, the club's equipment manager, for his receipted expenses.

Unfinished Business

Accounting Process Discussion

- Treasurer John W6JPG informed the Board that he reviewed the free offerings of a few software packages and determined that they do not have the capability to provide the Board with the budgeting information
- President Robert offered to explore this matter and work with John to download the categories that the bank provides and assign the club's transactions to the categories. Once this is done, John will report back to the board with the information.
- President Robert also agreed to assist the treasurer with establishing the administrator documentation with Amazon so that the club can receive the donations from Amazon Smile that has accrued from members (and others) by
(Continued on next page)

Minutes of the October 3rd 2021 Board Meeting (Continued)

- selecting the Ventura Amateur Radio Club as the charity (one member has generated \$116.70 in donations).

Social Functions

- The definition of sponsored versus non-sponsored club events were discussed as well as how they should be promoted and attended. The club has used the groups.io polls to determine how many members and their guests were planning on attending but found that not every member responded to the polls or attended functions that they said they would. More effort will be made to better promote club functions.

New Business:

Zoom at Dudley House

- Issues of reliable wireless communications were discussed. T-Mobile was used to establish an internet link to Zoom the August membership meeting as well as the September meeting. Jeremy KN6JMD will be asked to try to improve the internet link for the October meeting.
- The Board decided not to spend \$70.00 per month for a Verizon hotspot account.

Adjournment:

- President Robert asked for a motion to adjourn the meeting, the motion was made, seconded, a vote was taken and it was unanimously accepted. The meeting was adjourned at 9:17 PM.



Minutes of the October 8th 2021 Membership Meeting

MEETING LOCATION: Dudley House and Zoom

OFFICER ATTENDEES

OFFICE	LAST	FIRST	CALL SIGN	PRESENT
PRESIDENT	SHANK	ROBERT	KM6RSS	X
VP	ALBERTS	CLEMENT	KM6OKZ	X
SECRETARY	MORILLAS	PEDRO	K6MIL	X
TREASURER	JOHN	GARTMAN	W6JPG	X
BOARD	ABBEY	RICHARD	WB6AEW	X
BOARD	SCHMIDT	DAVE	AI6VX	
BOARD	SWANEY	MARK	KD6ASL	X

CALL TO ORDER 19:30

- President Robert KM6RSS opened the meeting at 7:30 PM. There were 6 out of a possible 7 board members present, 20 persons present, 18 members and 2 guests. 3 members were present via Zoom.

Minutes:

- We now have 52 paid-up members.
- Board and general membership minutes from September meeting were accepted as published in the October Keyer.
- The Secretary announced elections for Officers and Board Members will take place during the November 12 meeting.
- The Secretary announced voting for amendments to the by-laws will take place during the November 12 meeting.
- Members were encouraged to consider running for any position they wish to hold.
- Distributed copies of the proposed amendments to the Bylaws to the attendees.

Officer's Report:

Treasurer: John provided the balances of the club's accounts.

Committee Reports:

Elections

- Burt KA6BJA, the club election commissioner, the updated election procedures for the November 12th elections.

By Laws

- Mark KD6ASL reviewed the Board reviewed amendments to the 2010 Bylaws with the membership. Copies of the amended bylaws, as well as a summary of the proposed amendments, were distributed.

(Continued on next page)

K6MEP September 10th, 2021 General Meeting Minutes (Continued)

Inventory.

- Denney announced sales of \$255.00 were collected for donated equipment sold during the last TRW Swap meet.

First Aid Items

- Mark Vodon KI6PTE informed us of his research for a medical backpack. He will make a proposal to the Board, prior to purchasing any of items.
- Mark also informed the attendance of the various courses offered by The American Red Cross.

Youth Programs

- Tim Tenopir informed the members of his continued work with the Boy Scouts. More information will be provided as it becomes available.

Technical Presentation.

- Clem Alberts presented a succinct but thorough presentation on the theory of SWR, including the various instruments current available to amateur radio operators at reasonable prices.
- After the question period was over, Clem received applause and was thanked by Robert for all of his hard work and preparation. Robert asked Clem to send a copy of the presentation to be placed on the club's website.

Adjournment

- President Robert asked for a motion to adjourn the meeting, the motion was made, seconded, a vote was taken and it was unanimously accepted. The meeting was adjourned at 21:19 (9:19 PM).



K6MEP Monday Night Net Update

Our 2021 Contest started on January 11 and will end on December 6th. Make sure to set your calendar alarms to remind you to check-in and join the Zoom get-together that follows.

Our Net is held each Monday night at 20:00 hrs. local time (we won't hold the net on Christmas Eve/Day or New Year's Eve/Day if they fall on a Monday). We welcome all Ham operators so please check-in and join the roundtable discussion. The net is on Two Meters on the WD6EBY Repeater of Oxnard on 145.200 MHz with a negative offset and a PL of 127.3. Many thanks to PVARC and Paul WD6EBY for hosting our meeting on the repeater. We also have a Zoom meeting following the net at 20:30; see K6MEP.groups.io for details.

The rules are as follows: The person who checks-in to the K6MEP Monday Night Net Contest must hold a valid Amateur Radio License. If a non-member wins, they will be given a two-year membership in the club. The awards consist of \$100.00 for first place, \$50.00 for second place and \$25.00 for third place. In case of ties, the awards will be split equally among the members who qualify for the monetary award.

To give those who are interested in the experience of being part of our Monday Night Net Contest as Control Operators, we've created a sign-up sheet so that all those who would like to get in front of their microphones and lead our nets have a chance. Many thanks to all of our members who have volunteered and provided our net control operations. There are still openings for net control operators, as shown in the table below:

Please volunteer to be our net control operator!

Date	Net Control Operator
1-Nov	Mark Swaney KD6ASL
8-Nov	
15-Nov	
22-Nov	
29-Nov	Jeremy KN6JMD
	David AI6VX and the net contest will be
6-Dec	complete after this net is over.

If you would like to volunteer, please contact me with the date you would like and I'll update the list, which is saved to our K6MEP.groups.io website.
As the net control operator for the October 18th Monday Night K6MEP Club Net, Burt KA6BJA tried an experiment. (Continued on next page)

K6MEP Monday Night Net Update (Continued)

Just prior to closing the net, as a test of our operational readiness, he asked all participants to switch to our backup frequency of 146.385 MHz. This is the SMRA South Mountain repeater with a positive offset and a PL of 127.3. If the participants have the ARES 2 meter frequencies already programmed into their radios, this is the Area 7 repeater and should be Channel 7. Otherwise, the participants may wish to program their radios for this repeater prior to the Net. What he did was to run the list of check-ins and have each station respond so we got an idea of how effective and useful our backup frequency will be should we actually be required to use it. 6 of the 11 participants responded to Burt's request to respond on the back-up frequency.

As of October 25th, we've held 42 nets and had a total of 734 check-ins including 124 visitor check-ins and an average of 17.48 per Monday night. 3 members have checked in every Monday night for 42 Monday nights in a row. They are Dave AI6VX, Robert KM6RSS and Denney N6HV. Rod KA6GSU and Clem KM6OKZ have 41 check-ins. Jeremy KN6JMD has 40. On the next page is the Monday Night Net Contest Totals to Date. Our groups.io has all of the documents in the files folder. (Continued on next page)



K6MEP Monday Night Net Update (Continued)

Monday Night Net Contest Totals to Date			
Week #	Date	Total	Visitors
1	1/11/2021	22	4
2	1/18/2021	22	3
3	1/25/2021	22	6
4	2/1/2021	18	3
5	2/8/2021	17	2
6	2/15/2021	18	3
7	2/22/2021	20	4
8	3/1/2021	17	3
9	3/8/2021	26	8
10	3/15/2021	20	5
11	3/22/2021	22	7
12	3/29/2021	17	3
13	4/5/2021	20	7
14	4/12/2021	19	4
15	4/19/2021	18	3
16	4/26/2021	17	4
17	5/3/2021	20	4
18	5/10/2021	13	2
19	5/17/2021	15	1
20	5/24/2021	19	5
21	5/31/2021	16	2
22	6/7/2021	20	3
23	6/14/2021	14	2
24	6/21/2021	23	5
25	6/28/2021	14	1
26	7/5/2021	21	5
27	7/12/2021	19	2
28	7/19/2021	17	2
29	7/26/2021	16	1
30	8/2/2021	17	1
31	8/9/2021	16	1
32	8/16/2021	13	2
33	8/23/2021	16	1
34	8/30/2021	16	1
35	9/7/2021	16	1
36	9/13/2021	14	2
37	9/20/2021	15	2
38	9/27/2021	15	2
39	10/4/2021	16	1
40	10/11/2021	12	3
41	10/18/2021	11	1
42	10/25/2021	15	2
Total		734	124

Thoughts from the West - Reese West KQ6TT

INDUCTORS AND RESONANCE

Inductors are more complicated than capacitors. If you push a current into a capacitor, it develops a voltage, positive or negative as the case may be. You can push a current in the opposite direction and reduce the voltage and even charge it in the reverse direction. An inductor has a totally different performance. The voltage across it is a function of its inductive value and the rate of change of the current being forced through it. Ignoring losses, a steady current causes no voltage drop. Changing the amount of current causes a change in voltage across the inductor.

Let's take a look at an inductor with no current through it and apply a sine wave of current to it. The sign wave starts a zero, goes to a positive maximum, reverses direction back to zero and repeats in a negative direction. At time zero of the wave it has its maximum slope, or rate of change. This causes the highest voltage on the inductor. The slope of the sine decreases to zero at its maximum. At that point the voltage across the inductor is zero. The sine wave drops to zero where there is again a maximum negative slope. That creates maximum voltages in the opposite direction. The voltage on the coil changed direction. It reversed. In the first part of the sine wave, energy was put into the inductor. When its voltage reversed, it became a source of power, and returned stored energy to the circuit.

With a sine wave of current through the inductor, we get a sine wave of power into and back from the inductor with a useful change of direction of the voltage across the inductor changing from a energy sink to an energy source and back again. Now go back to the start of the current sine wave. It is going through ninety degrees to a maximum. The coil voltage is going from a maximum to zero. **The inductor voltage is ninety degrees ahead of the current.**

Now, consider a capacitor, and apply the same sine wave of current. The first 180 degrees of the current is all in one direction. The capacitor charges in one direction through the 180 degrees. It reaches its maximum

voltage when the current reaches zero again. It reaches a maximum voltage ninety degrees after the current reached its maximum. **Its voltage lags the current by ninety degrees.** There is no change in polarity if it is used as a power source.



Now let us connect the inductor and the capacitor in parallel and give them some power at their resonant frequency. Energy can circulate back and forth between the capacitor and the inductor, with inductor changing polarity back and forth through a cycle as it changes from sink to source twice each cycle.

As a power source, the inductor can create very high voltages if the magnitude of the current change is very high. Just opening the circuit with some kind of a switch opening can even create enough voltage to cause sparking or arcing. This method was used to create high voltages for spark plugs in gasoline engines.

Reese West KQ6TT
October 17 2021

Selected November Contests & Special Events

Please see QST or the ARRL website (www.arrl.org) for any details and QSL information.

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

Special Event Stations

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

Through – Nov. 30, 0000Z – 2300Z, I13VE, Venezia, Italy. ARI Venezia. **1,600 Years of the Foundation of Venice.** All bands. Certificate & QSL. Sezione ARI Venezia, S. Croce 1776/B, Venezia 30135, Italy. *Detailed rules on ARI Venezia website and on QRZ.com for I13VE. Both I13VE and club call IQ3VE are valid. QSL via eQSL or bureau. www.arivenezia.it*

Through Dec. 31, 0000Z – 2359Z, all calls, all areas. VE2GT and VE2NCG. **Quebec Parks on the Air (QCPOTA).** Certificate. *This is an operating event; see website for details. qcpota.ca*

Oct. 22 – Oct. 24, 1400Z – 2359Z, N4H, Tarpon Springs, FL. Upper Pinellas Amateur Radio Club. **100th Anniversary of the 1921 Hurricane.** 14.265 14.074 7.265 7.074. Certificate & QSL. UPARC QSL, P.O. Box 1684, Tarpon Springs, FL 34688. www.w8rd.net/hurricane

Oct. 22 – Oct. 25, 2000Z – 2000Z, K5D, Gautier, MS. The Jackson County Amateur Radio Association, Inc. **Deer Island MS 0115 Expedition, US Islands Awards Program.** 21.350 14.250 7.250. QSL. The Jackson County Amateur Radio Association, P.O. Box 234, Gautier, MS 39553.

Oct. 31 – Nov. 1, 0001Z – 0400Z, KC5BOO, Cleburne, TX. Club KC5NX. **Boo to You!** 14.310. QSL. Judy Cox, 3701 Park Rd., 21, Cleburne, TX 76033. kc5boo@yahoo.com

Oct. 31 – Nov. 1, 0300Z – 0400Z, WA4TRS, Bat Cave, NC. The Road Show Amateur Radio Club, Inc. **A Night on Bald Mountain.** 14.331 7.331. Certificate & QSL. The Road Show Amateur Radio Club, Inc., 57 Echo Lake Dr., Fairview, NC 28730. www.roadshowarc.org

Nov. 1 – Nov. 15, 0000Z – 0000Z, N5VET, Cleburne, TX. Club KC5NX. **Veterans Day 2021.** 14.255 14.045 7.240 7.235. QSL. Club KC5NX, 9200 Summit Ct. W., Cleburne, TX 76033. www.qrz.com/db/kc5nx, jay.n.violet@gmail.com or www.qrz.com/db/n5vet

Nov. 5 – Nov. 6, 2300Z – 2200Z, W9TAL, Ottawa, IL. The American Legion Post 33 Amateur Radio Club. **13th Annual Veteran Honor Guard Vigil at the Ottawa Illinois War Memorial.** 7.200 3.900. QSL. Joe Tokarz, TALARC Post 33, 901 La Salle St., Ottawa, IL 61350-4223. www.ottawaalp33.com

Nov. 6, 1400Z – 2200Z, K5U, McKinney, TX. McKinney Amateur Radio Club. **Veterans Day Salute to the USO.** 14.322. QSL. Dave Marking, 6710 Virginia Pkwy., Ste. 215, PMB 52, McKinney, TX 75071. www.qrz.com/db/k5u

Nov. 7, 1400Z – 2000Z, W4CA, Roanoke, VA. Roanoke Valley Amateur Radio Club. **Mill Mountain Star.** 14.265 7.265. QSL. Roanoke Valley ARC, P.O. Box 2002, Roanoke, VA 24009. www.w4ca.com/special-events

Nov. 9 – Nov. 10, 1700Z – 0100, N9H, Rochester, NY. W2JLD. **Hedy Lamarr Day 2021.** ROC-HAM/EchoLink 531091; AllStar 2585,47620,47918; other EchoLink conferences will be connected for this. QSL. John Derycke, W2JLD, 85 Amherst St., Apt. 2, Rochester, NY 14607. www.roc-ham.net

Nov. 12 – Nov. 13, 1400Z – 2100Z, NB9QV, Manitowoc, WI. USS *Cobia* Amateur Radio Club. **Celebrating Veterans Day.**

14.240 7.240. QSL. Fred Neuenfeldt, W6BSF, 4932 S. 10th St., Manitowoc, WI 54220. www.qrz.com/db/nb9qv

Nov. 13, 1500Z – 2100Z, WX4SC, Gaffney, SC. Carolina Amateur Radio Emergency Services. **Cherokee County Veteran's Appreciation Day.** 7.225 145.150 (no tone). Certificate. CARES, P.O. Box 8006, Gaffney, SC 29340. ki4mjk@gmail.com or www.facebook.com/Carolina-Amateur-Radio-Emergency-Services-230499684304071

Nov. 13, 1700Z – 2359Z, N16IW, San Diego, CA. USS *Midway* (CV-41) Museum Ship. **Celebrating Veterans Day and US Marine Corps Birthday.** 14.320 7.250 PSK and CW on various HF bands; D-STAR on various reflectors. QSL. USS *Midway* Museum Ship COMEDTRA, 901 N. Harbor Dr., San Diego, CA 92101. *Check spotting networks to find us on HF. www.dstarusers.org to find N16IW, and Reporting Note to see what reflector we're using. www.qrz.com/db/n16iw*

Nov. 13 – Nov. 14, 1700Z – 0000Z, W6TOI, Downey, CA. Downey Amateur Radio Club, Inc. **70th Anniversary.** 28.425 21.325 14.270 7.225. Certificate. Downey Amateur Radio Club, P.O. Box 207, Downey, CA 90241. <https://darcarc.wordpress.com>

Nov. 17, 1500Z – 2400Z, K7GST, Prescott, AZ. Yavapai Amateur Radio Club. **NRA's 150th Birthday Party.** 21.3325 14.250 14.040 7.250. Certificate. eCertificate (preferred) or direct to: YARC, P.O. Box 11994, Prescott, AZ 86304. www.w7yrc.org/nrabirthday

Nov. 17 – Nov. 19, 0800Z – 2000Z, W4H, Mars Hill, NC. High Appalachian Mountain Amateur Radio Society. **2021 Hammarlund Radio Hullabaloo.** 14.250 14.071 14.045 7.250. QSL. Jerry Robinson, P.O. Box 366, Mars Hill, NC 28754. www.hamars.club

Nov. 20, 1400Z – 2000Z, W1M, Russell, MA. Western Mass Council BSA. **WHO A Weekend.** 7.060 7.250 14.060 14.250. QSL. Tom Barker, 329 Faraway Rd., Whitefield, NH 03598. *Paper logging, eQSL, and USPS for QSL card.*

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

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

Submissions must be received by ARRL HQ no later than the 1st of the second month preceding the publication date; a special event listing for February QST would have to be received by December 1. In addition to being listed in QST, your event will be listed on the ARRL Web Special Events page. Note: All received events are acknowledged. If you do not receive an acknowledgment within a few days, please contact us. ARRL reserves the right to exclude events of a commercial or political nature.

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

Contest Corral

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

Contest Corral

November 2021

Check for updates and a downloadable PDF version online at www.arri.org/contest-calendar.

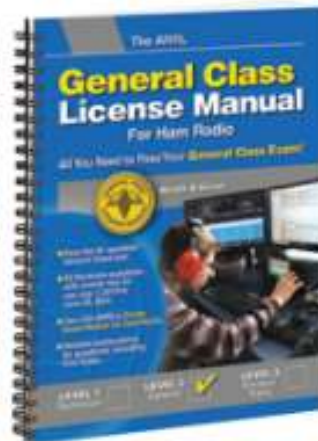
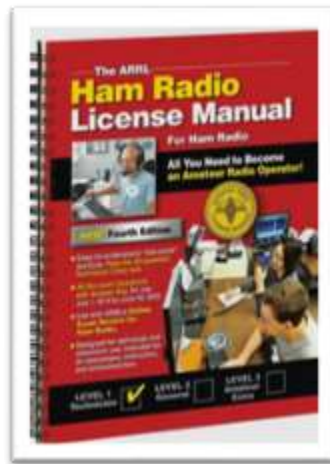
Refer to the contest websites for full rules, scoring information, operating periods or time limits, and log submission information.

Start - Finish Date-Time	Date-Time	Bands	Contest Name	Mode	Exchange	Sponsor's Website
1 0000	1 0100	1.8-28	K1USN Slow Speed Test	CW	20 WPM maximum; name, SPC	www.k1usn.com
1 0600	1 0859	3.5, 7	Silent Key Memorial Contest	CW	RST, SK call sign you want to recognize	skmc.hu/en/rules.html
1 2000	1 2130	3.5	RSGB 80-Meter Autumn Series, Data	Dig	RST, serial	www.rsgbcc.org/hf
2 0100	2 0159	1.8-50	Worldwide Sideband Activity Contest	Ph	RS, age group (OM, YL, or youth)	wssac.com/rules.html
2 0100	2 0300	3.5-28	ARS Spartan Sprint	CW	RST, SPC, power	arsqr.blogspot.com
2 1700	2 1900	3.5-14	RTTYops Weekspint	Dig	Other's call, your call, serial, name	rttyops.com
3 0230	3 0300	1.8-21	Phone Weekly Test - Fray	Ph	Name, SPC	perluma.com/Phone_Fray_ConTEST_Rules.pdf
3 1300	3 1400	1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	cwops.org/cwops-tests
3 1700	3 2000	144	VHF-UHF FT8 Activity Contest	Dig	4-char grid square	ft8activity.eu/index.php/en
3 1900	3 2000	1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	cwops.org/cwops-tests
3 2000	3 2100	3.5	UKEICC 80-Meter Contest	Ph	6-char grid square	ukeicc.com/80m-rules.php
4 0000	5 0300	7	Walk for the Bacon QRP Contest	CW	13 wpm max; RST, SPC, name, mbr/power	qrptest.com/pigwalk40
4 0300	4 0400	1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	cwops.org/cwops-tests
4 0700	4 0800	1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	cwops.org/cwops-tests
4 1700	4 1900	3.5-14	RTTYops Weekspint	Dig	Other's call, your call, serial, name	rttyops.com
4 1800	4 2200	28	NRAU 10-Meter Activity Contest	CW Ph Dig	RS(T), 6-char grid square	nrrcontest.no
4 1900	4 2000	3.5, 7	EACW Meeting	CW	RST, mbr (if any), nickname, EA province or DXCC	eacwspain.es/eacwmeeting
4 2000	4 2200	1.8-50	SKCC Sprint Europe	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
5 0145	5 0215	1.8-21	NCCC RTTY Sprint	Dig	Serial, name, QTH	www.ncccsprint.com
5 0230	5 0300	1.8-21	NCCC Sprint	CW	Serial, name, QTH	www.ncccsprint.com
5 2000	5 2100	1.8-28	K1USN Slow Speed Test	CW	20 WPM maximum; name, SPC	www.k1usn.com
6 0500	6 1200	3.5-28	IPARC Contest, CW	CW	RST, serial, IPA, US state (if USA)	www.iparc.de
6 1200	7 1200	1.8-28	Ukrainian DX Contest	CW Ph	RS(T), 2-letter Ukraine oblast or serial	urdx.org/rules.php?english
6 1300	6 1330	144	Two-Meter Classic Sprint	CW Ph	serial + 4-char grid square	twrc.info
6 2100	8 0259	1.8-28	ARRL Sweepstakes Contest, CW	CW	Serial, precedence, your call, check, ARRL/RAC Section	www.arri.org/sweepstakes
7 0500	7 1200	3.5-28	IPARC Contest, SSB	Ph	RST, serial, IPA, US state (if USA)	www.iparc.de
7 0800	7 1200	Any	EANET Sprint	CW Ph Dig	RS(T)	fediea.org/news/?news=20201108
7 1400	7 1700	3.5-28	High Speed Club CW Contest	CW	RST, mbr or "NM"	www.highspeedclub.org
10 1700	10 2000	432	VHF-UHF FT8 Activity Contest	Dig	4-char grid square	ft8activity.eu/index.php/en
10 2000	10 2130	3.5	RSGB 80-Meter Autumn Series, SSB	Ph	RS, serial	www.rsgbcc.org/hf
13 0000	14 2359	3.5-28	WAE DX Contest, RTTY	Dig	RS, serial	darc.de/der-club/referate/conteste
13 0000	14 2359	3.5-144	Day of the YLs Contest	CW Ph	RS(T), YL/OM	ka1uln.blogspot.com
13 0000	15 2359	1.8-7	PODXS 070 Club Triple Play Low Band	Dig	RST, SPC	www.podxs070.com
13 0001	14 2359	28	10-10 International Fall Contest, Digital	Dig	Name, mbr or "0", SPC	www.ten-ten.org/
13 0500	14 1100	50-1296	SARL VHF/UHF Analogue Contest	CW Ph	RS(T), 6-char grid locator	www.sarl.org.za
13 0700	14 1300	1.8-28	JIDX Phone Contest	Ph	RST, JA prefecture number or CQ zone	jidx.org/jidxrule-e.html
13 1200	14 1200	1.8-28	OK/OM DX Contest, CW	CW	RST, 3-letter OK/OM district code or serial	okomdx.crk.cz/index.php?page=english
13 1200	14 2359	1.8-50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
13 1600	13 1800	3.5-28	FISTS Saturday Sprint	CW	RST, SPC, name, mbr or "0"	fistsna.org/operating.html#sprints
13 1900	15 0500	1.8-432	CQ-WVE Contest	CW Ph Dig	Name, location code, years of service	cqwe.cboh.org/rules.html
13 2300	22 0300	1.8-14	AWA Bruce Kelley 1929 QSO Party	CW	RST, name, QTH, equipment year/type/power	antiquewireless.org/homepage
14 0700	14 1700	3.5-28	FIRAC HF Contest	Ph	RS(T), serial	www.firac.de
14 1400	17 0800	1.8-144	Classic Exchange, Phone	Ph	Name, RS, SPC, rig manufl/model	www.classicexchange.org
15 0100	15 0300	1.8-28	4 States QRP Second Sunday Sprint	CW Ph	RS(T), SPC, mbr or power	www.4sqr.com
18 0000	19 0300	14	Walk for the Bacon QRP Contest	CW	13 wpm max; RST, SPC, name, mbr/power	qrptest.com/pigwalk20
18 0130	18 0330	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or power	naqcc.info
19 1600	19 2200	3.5	YO International PSK31 Contest	Dig	RST, serial, country or YO county	www.yo5cqr.ro/Rules.htm
20 0000	21 2359	50-1296	ARRL EME Contest	CW Ph Dig	Serial report	www.arri.org/eme-contest
20 1200	21 1200	3.5-28	LZ DX Contest	CW Ph	RS(T), 2-letter LZ district or ITU zone	lzdxbfrra.org/rulesen.html
20 1600	20 2359	1.8	All Austrian 160-Meter Contest	CW	RST, serial, district code (if OE)	www.oevsv.at
20 1700	21 0100	1.8	REF 160-Meter Contest	CW	RST, serial, department code	concours.r-e-f.org/reglements/index.php
20 1900	20 2059	1.8-50	Feld Hell Sprint	Dig	RST, mbr, SPC, grid	sites.google.com/site/feldhellclub
20 1900	20 2300	1.8	RSGB 1.8-MHz Contest	CW	RST, serial, district code (if UK)	www.rsgbcc.org/hf
20 2100	22 0259	1.8-28	ARRL Sweepstakes Contest, SSB	Ph	Serial, precedence, your call, check, ARRL/RAC Section	www.arri.org/sweepstakes
21 1300	21 1700	3.5, 7	Homebrew and Oldtime Equipment Party	CW	RST, serial, class	qrpc.de/contestrules/hotr.html
21 2100	21 2300	3.5-28	FISTS Sunday Sprint	CW	RST, serial, SPC, name, mbr or "0"	fistsna.org
21 2300	22 0100	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	qrptest.com/pigrun
24 0000	24 0200	1.8-50	SKCC Sprint	CW	RST, SPC, name, mbr or "none"	www.skccgroup.com
24 2000	24 2100	3.5	UKEICC 80-Meter Contest	CW	6-char grid square	ukeicc.com/80m-rules.php
25 2000	25 2130	3.5	RSGB 80-Meter Autumn Series, CW	CW	RST, serial	www.rsgbcc.org/hf
27 0000	28 2359	1.8-28	CQ Worldwide DX Contest, CW	CW	RST, CQ zone	www.cqww.com/rules.htm
29 2000	29 2130	3.5-14	RSGB FT4 Contest Series	Dig	4-char grid square	www.rsgbcc.org/hf

There are a number of weekly contests not included in the table above. For more info, visit: www.qrpfhunting.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.

Upcoming FCC Exam Session Preparation Sites

(Virtual only; physical classes are unavailable this month within 100 miles of Ventura)



Upcoming FCC Exam Test

(Within 100 miles) 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

Goleta CA 93117-3271

11/13/2021

Sponsor: Santa Barbara ARC

Time: 9:00 AM (Walk-ins allowed)

Contact: Tom Saunders

(805) 452-0840

Email: tsaund@cox.net

VEC: ARRL/VEC

Location: Impulse Communications

6144 Calle Real

Pre-registration preferred

Register on team website

Goleta CA 93117-3271

Website: www.sbarc.org/ve-exam-registration/

Valencia CA 91355-2008

11/20/2021

Sponsor: Santa Clarita ARC

Time: 8:00 AM (No Walk-ins / Register or Call
ahead)

Contact: Ronald B. Klein

(661) 259-0948

Email: testing@w6jw.org

VEC: Greater LA VEC

Location: United Methodist Church of Valencia

25718 McBean Pkwy Rm B

Valencia CA 91355-2008

Calabasas CA 91302

11/21/2021

Sponsor: Goodkin Family

Time: 9:30 AM (No Walk-ins / Register or Call
ahead)

Contact: Norm Goodkin

11/21/2021

(818) 613-2257

Email: hamclass@goodkin.net

VEC: Greater LA VEC

Location: On-Line

ONLINE ONLY - visit website to register

Calabasas CA 91302

Website: <https://hamstudy.org/sessions/glaarg/wb6ohw>

Santa Monica CA 90403-5610

12/11/2021

Sponsor: The PAPA system

Time: 7:00 AM (No Walk-ins / Register or Call
ahead)

Contact: Norm Goodkin

(818) 222-7893

Email: hamclass@goodkin.net

VEC: Greater LA VEC

Location: Fromin's Deli and Rest

1832 Wilshire Blvd

Http //Papasys Org

Pre-registration required

Santa Monica CA 90403-5610

Thousand Oaks CA 91360-6861

12/12/21

Sponsor: CVARC

Time: 8:30 AM (No Walk-ins / Register or
Call ahead)

Contact: Andy Ludlum

818-370-3402

Email: agludlum@gmail.com

VEC: ARRL/VEC

Location: County Sheriff's E County Station,
Community Room

2101 E Olsen Rd between Hwy 23 & Reagan
Library

Thousand Oaks, CA 91360-6861

Website: CVARC.org

On Exam Day Bring the Following Items:

1. One legal photo ID (identification):
 - a. State Driver's License, b. Government issued Passport, c. Military or Law Enforcement Officer Photo ID card, d. Student School Photo ID card, e. State Photo ID card.
2. If no photo ID is available, two forms of identification:
 - a. Non-photo State ID card (some states still have them), b. Birth certificate (must have the appropriate seal), c. Social security card, d. Employer's wage statement or Minor's work permit, e. School ID card, f. School or Public Library card, g. 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/minors without a photo ID need to bring only one of the above items if a legal guardian presents their photo ID; otherwise two non-photo IDs are required. Minor children (under the age of 18) may be accompanied in the room by an adult during the test.
4. FCC Registration Number (FRN): VECs are required by the FCC to submit your FRN with your license application form. New license applicants must create an FCC user account and register their Social Security Number (SSN) in the FCC Commission Registration System (CORES) before attending exam sessions. Registrants will be assigned an FRN which will be used in all license transactions with the FCC. For instructions on how to register your SSN and receive an FRN from the FCC, visit the FCC's Registration page and the FCC's Registration instructions page. Per FCC rules, a valid email address is also mandatory on the application form.
5. If applicable, bring a printed copy of your Amateur Radio license. Acceptable copies or printouts of licenses are available from the following sources: the official license or reference license printed from the FCC website or license data printed from the ARRL website or QRZ website. The original(s) and photocopy(s) of any Certificates of Successful Completion of Examination (CSCE) you may hold from previous exam sessions. If your license has already been issued by the FCC, the CSCE showing license credit is not needed. The candidate is required to show proof of the current license to the team but the team is no longer required to submit the proof to the VEC. Expired license proof must be submitted to the team and to the VEC for processing to FCC. These photocopies will not be returned. Instructions on how to obtain an official FCC license copy are on our Obtain License Copy web page.
6. Two number two pencils with erasers and a pen for in-person sessions.
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 and the phones' calculator function may not be used. In addition, iPhones, iPads, Androids, smartphones, Blackberry devices and all similar electronic devices with a calculator capability, 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 fees. The FCC hasn't started to accept the \$35 fee, which will be paid directly to the FCC.
9. Be aware that some information about you will be made publicly available on the FCC's website.

Trivia for November 2021

1. A goldfish has 1 second longer attention span than a human being.
 2. In the state of Florida, the highest point is only 341 feet above sea level.
 3. The term Paddy Wagon came from early America, when police would take away the Irish citizens after committing crimes.
- Happy Thanksgiving
Dana **KG6WXE**

Calendar November 2021

The calendar will be discontinued starting with December's edition as it is available and updated on K6MEP.org

(<https://www.qsl.net/k6mep/events.html>)

- 1: **K6MEP Monday Night Net and Zoom Meeting; ACS/ARES District Meeting**
- 2: **ACS/ARES Tuesday Night Net**
- 6: **CVARC Radio School**
- 7: **K6MEP Board Meeting; Newbie Net**
- 8: **K6MEP Monday Night Net and Zoom Meeting, please volunteer for NC**
- 9: **ACS/ARES Tuesday Night Net**
- 11: **Winlink Thursday**
- 12: **K6MEP Monthly Club Meeting and Presentation "The Sun and Ham Radio Propagation" by Denney N6HV**
- 13: **Ride for the Red; CVARC Radio School**
- 14: **Newbie Net**

15: K6MEP Monday Night Net and Zoom Meeting, please volunteer for NC

16: ACS/ARES Tuesday Night Net

20: CVARC Radio School

21: Newbie Net

22: K6MEP Monday Night Net and Zoom Meeting, please volunteer for NC

23: ACS/ARES Tuesday Night Net

25: Thanksgiving

27: CVARC Radio School

28: Newbie Net

29: K6MEP Monday Night Net and Zoom Meeting, please volunteer for NC

30: ACS/ARES Tuesday Night Net

The Bored Net announcement will be discontinued starting with December's edition as it is available and updated on

<http://www.cvarc.org/event/bored-net-on-bozo/2021-10-02/>



Bozo Repeater 147.885 -offset PL 127.3

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. We will have a Zoom meeting following the net.

K6MEP, the Ventura County Amateur Radio Club, meets at 19:30 hours on the second Friday of each month at The Dudley House, 197 N Ashwood Ave, Ventura, CA. The club meeting will also be on Zoom. Our next meeting will be on 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 (phonetically), name and if you are a VCARC member. If you are not a member of the club, please include your QTH or location.

Please check in now.

(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 _____ (Name) _____ call sign), tonight's VCARC net control, signing off and returning the repeater to its normal use.

Convention and Hamfest Calendar

Steve Ewald, WV1X, sewald@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
TI = Talk-in frequency
Adm = Admission

Alabama (Montgomery) — Nov. 20 **DFHQRSTV**
8:30 AM – 2 PM. Spr: Montgomery ARC. Alcazar Shrine Temple, 555 Eastern Blvd. TI: Call W4AP 146.84 (123 Hz). Adm: \$8, includes one admission and ticket. w4ap.org/marc/hamfest

Arizona (Marana) — Nov. 13 **DFHQRSTV**
7 AM – 1 PM. Spr: Oro Valley ARC. Marana Middle School, 11279 West Grier Rd. TI: See website. Adm: \$5. Tucsonhamradio.org

Arizona (Mesa) — Dec. 4 **DFHQRSTV**
7 AM – 3 PM. Spr: Superstition ARC. Superstition Springs Center, 6555 E. Southern Ave. TI: 147.120+ (162.2). Adm: \$5, kids under 12 free. superstitionsuperfest.org

Florida (Ocala) — Dec. 4 **DFHQRSTV**
7:30 AM – 3 PM. Spr: Silver Springs Radio Club. First Christian Church, 1908 East Ft. King St. TI: 146.610 (123 Hz). Adm: \$10. k4gso.us

Florida (Pinellas Park) — Nov. 13 **DFHRTV**
8 AM – noon. Spr: St. Petersburg ARC. Freedom Lake Park, 9990 46th St. N. TI: 147.06 (no PL). Adm: Free. Email: kc1yl@yahoo.com

ARRL WEST CENTRAL FLORIDA SECTION CONVENTION

December 10 – 11 Plant City, Florida

DFHQRSTV
Fri. 1 PM – 6 PM, Sat. 8 AM – 4 PM. Spr: Florida Gulf Coast Amateur Radio Council. Strawberry Festival Expo Building, 301 Berryfest (was N. Lemon). TI: 145.410 (131.8 Hz). Adm: \$9 Advance, \$10 door. www.fgcarc.org

ARRL CENTRAL DIVISION CONVENTION

November 13 – 14 Fort Wayne, Indiana

DFHQRSTV
Sat. 9 AM – 4 PM, Sun. 9 AM – 2 PM. Spr: Allen County Amateur Radio Technical Society. Allen County War Memorial Coliseum, 4000 Parnell Ave. TI: 146.880 (no tone). Adm: \$6 both days, \$3 Sun. www.fortwaynehamfest.com

Louisiana (Harahan) — Nov. 13 **DFHQRSTV**
8 AM – 1 PM. Spr: Crescent City Amateur Radio Group. VFW Hall, 1133 Hickory Ave. TI: 146.82 (114.8 Hz). Adm: \$5. ccarg.org

Michigan (Troy) — Dec. 5 **DFHRTV**
8 AM – noon. Spr: L'Anse Creuse ARC. Balkan American Community Center, 1451 East Big Beaver Rd. TI: 147.08 (100 Hz). Adm: \$10. www.n8lc.org

Mississippi (Ocean Springs) — Nov. 12 – 13 **DFHQRSTV**
Fri. 4:30 PM – 8 PM, Sat. 8 AM – 3 PM. Spr: Jackson County ARA. St. Martin Community Center, 15008 Lemoyne Blvd. TI: 145.110 (123 Hz). Adm: \$5. www.jcmsara.com

Missouri (Brookline) — Nov. 13 **DFHRTV**
8 AM – 1 PM. Spr: Nixa ARC. The Barn House Event Center, 5484 W. Sunshine St. TI: 147.015 (162.2 Hz). Adm: \$10. smlrs.files.wordpress.com/2021/07/2021-nixa-arc-hamfest-flyer_reva.pdf

Nebraska (Norfolk) — Nov. 20 **DFHRTV**
8:30 AM – 2 PM. Spr: Elkhorn Valley ARC. Inc. CHC Hall, 105 Elm Ave. TI: 146.73 (131.8 Hz). Adm: \$5. qsl.net/evarc

New Jersey (Fair Lawn) — Nov. 26 **DFHR**
5 PM. Spr: Fair Lawn ARC. Fair Lawn Senior Center, 11-05 Gardiner Rd. TI: 145.470 (167.9 Hz). Adm: \$2. auction.fairlawnarc.org

New York (Hicksville) — Nov. 14 **DFHQRSTV**
9 AM – 1 PM. Spr: Long Island Mobile ARC. Levittown Hall, 201 Levittown Parkway. TI: 146.850 (136.5 Hz). Adm: \$6. Email: k2knb@arrl.net

North Carolina (Benson) — Nov. 21 **DFRTV**
8 AM – 1:30 PM. Spr: Johnston ARS. American Legion Building, 605 N. Wall St. TI: 147.270 Adm: \$9 Advance, \$10 door. www.jars.net/jarsfest-2021

Ohio (Delta) — Dec. 4 **DFHRTV**
8 AM – 11 AM. Spr: Fulton County ARC. Villadelta Memorial Hall, 401 Main St. TI: 147.195. Adm: \$5. k8bxq.org/hamfest

VIRTUAL ARRL WISCONSIN STATE CONVENTION

November 13, Online
9:30 AM – 4:30 PM. Wisconsin ARES/RACES Conference. Adm: Free. www.wi-aresraces.org



Emergency and Volunteer Training

This page will be discontinued starting with December's edition as it is available on the internet at <http://arcventura.org/> and most in-person classes have been discontinued due to health laws.

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



FEMA Courses (<https://training.fema.gov/is/crslist.aspx>)

This page will be discontinued starting with December's edition as it is available on the internet.

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.

ACS/ARES Frequency Updates

This page will be discontinued starting with December's edition as Andy K6AGL maintains an up-to-date list (<https://www.vccomm.org/wp-content/uploads/2020/10/ACS-Frequency-List-2020-10-03.pdf>). The VC area emergency coordinators list can be found at <https://www.vccomm.org/organization-contact-list/>.

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 (-) PL 127.3 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.

K1NGL 145.360 Mhz (-) PL 156.7 Kimberly Peak

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

Other Good Area Frequencies ...

AA6DP 147.090 Mhz (+) No PL Catalina

K0AKS 147.150 Mhz (-) PL 127.3 TOaks

K6CPT DCS 145.300 Mhz (-) PL 100.0 LA DCS

K6CPT DCS 147.270 Mhz (-) PL 100.0 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 (-) PL 131.8 SBARC

KB6C 147.735 Mhz (-) PL 100.0 Oat Mt / MMRA

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@arri.net

Assist ACS RO/Deputy DEC: Rick Tate, KQ6NO Email: kq6no@arri.net

Area 1 Simi Valley EC: Bill Woods AB6BW Email: wwoods1@socal.rr.com

Area 2 TO, Conejo Valley EC: Zack Cohen, N6PK, Email: n6pk@arri.net

Area 3 Camarillo, Somis EC: Avi Cami, K6AVI Email: avi@camis.us

Area 4 Oxnard, Hueneme, Mugu EC: Jim Inman, KB6JI Email: jamesinman@roadrunner.com

Area 5 Ojai EC: Wayne Francis, W6OEU Email: w6oeu@arri.net

Area 6 City of Ventura EC (acting): James (Jim) Aguirre KM6GUE Email: KM6GUE@gmail.com

Area 7 Santa Paula, Fillmore, Piru EC: James (Jim) Aguirre KM6GUE Email: KM6GUE@gmail.com

Area 8 Moorpark, Santa Rosa Valley EC: Marc Hanley KM6B, Email: km6b@arri.net

ACS/ARES Training and News Rob Hanson W6RH

(This page will be discontinued starting with December's edition as the Ventura County ACS/ARES has a newsgroup: main+subscribe@vc-ac.s.groups.io. You can click on the link and request access. Your request will be reviewed and approved by a moderator)

Rob Hanson W6RH Ventura County ACS Radio Officer, Ventura County ARES District Emergency Coordinator.

The organization's website is <https://www.vccomm.org/> and there is a calendar link to view the upcoming activities and events (such as Ride for the Red). The frequency list can be found at <https://www.vccomm.org/frequencies/> Packet frequencies are listed at <https://www.vccomm.org/wp-content/uploads/2020/08/Ventura-County-Packet-2020-08-28.pdf> .Frequency Lists Formatted for Radio Programming Software are here: <https://www.vccomm.org/frequency-lists-formatted-for-radio-programming-software/>

Ham radio operators make a difference in disaster

TV station KTUL reports many in Louisiana are still without power and cell service following Hurricane Ida but one form of communication that's been helping folks for decades, ham radio, is still able to make those vital calls.

Ham radio isn't reliant on WiFi or cell service; just devoted operators.

Paul Teel WB5ANX, an emergency coordinator for Tulsa County and part of the Tulsa Amateur Radio Club, said when he checked more than half the state of Louisiana was without cell signal.

Thankfully, by the next day, around 80 percent had signal, but it's a tricky situation without power to charge those critical devices. "When somebody hears, 'Hey, they're ok and they made it through the storm,' it's a sense of relief and it's great that we're able to participate in that," Teel said.

Teel's job is to work with local agencies such as the Tulsa Emergency Management Agency to get messages in and out between responders.

"TEMA would be likely to lead agency if there's a county-wide disaster and we're going to take our instructions from TEMA," Teel said. "It's really important to note that we do not deploy on our own, we only deploy when requested."

Watch a video of the TV news item and read the full story at

<https://ktul.com/news/local/local-ham-radio-operators-make-a-difference-in-disaster-ready-if-called-for-ida>

This is a good report on the ACS program run by the City of Los Angeles.

Click the link to view the excellent video.

(Continued on next page)

ACS/ARES Training and News Rob Hanson W6RH (Continued)

Amateur ham radio operators help LAFD keep residents safe during emergencies Spectrum News 1 (California)

Preparing for the worst and hoping it never happens — that's the order of the day for Michael Schlenker, who is perched atop San Vicente Mountain Park on a Saturday morning. He is a volunteer with the Los Angeles Fire Department Auxiliary Communications Service, which is comprised of more than 100 amateur ham radio operators spread across four bureaus.

When all else fails during a disaster, they jump into action.

What You Need To Know

- **The LA Fire Department Auxiliary Communications Service is comprised of more than 100 amateur ham radio operators spread across four bureaus**
- **Amateur ham radio operators provide backup communications during emergencies**
- **Michael Schlenker, the West Bureau Communications Unit leader for the volunteer group, conducts quarterly drills such as relaying fire and medical calls**
- **Valley Bureau Communications Unit Leader Bill Coss has volunteered for almost 20 years and loves doing the work to support the community**

"Cell phone towers will go down, the power will go out and your cell phones will be rendered obsolete for communication," Schlenker said. "If you have a ham radio, you're able to reach out to those in your neighborhood or community."

That is exactly why the group is so valuable to the LAFD for backup communications. On this day, he led a three-hour drill across the Southland, relaying fire and medical calls, just as they would during a disaster.

Schlenker got his operator's license seven years ago, but his passion for radio goes way back.

"My grandfather had a police and fire scanner and so as a kid, we'd sit and listen to all the calls that go out. It was just fascinating to hear that," he said.

LAFD Capt. Michael Horst said the volunteers are crucial, especially while California deals with another devastating fire season. More than 1.8 million acres have already burned this year, and officials warn the state is on track to surpass last year's record of more than four million acres burned. (Continued on next page)

ACS/ARES Training and News Rob Hanson W6RH (Continued)

"The fires are burning longer and hotter because [of] the drought here in California, where it's challenging the fire department resources as well as the critical infrastructure, our cell phone and radio networks," he said.

At the main dispatch center where the fire department takes hundreds of 911 calls every day, Horst said ham radio operators can relay crucial messages if a radio site burns down in the field or if there are prolonged power outages from utilities to reduce the risk of wildfires.

"They can actually sit down at a console. Our dispatchers can send them messages, try to request updates," he said.

Out in the field, ham radio operator Bill Coss has spent almost 20 years volunteering with the fire department's auxiliary communications service. For him, it's about helping out fellow residents during an emergency.

"Trying to be prepared for any type of situation that might arise, typically it's an earthquake and trying to support the community," he said.

Schlenker and other operators jumped into action during the 2017 Skirball Fire, which impacted his neighborhood in the Santa Monica Mountains, helping residents evacuate and get to safety.

"To be sitting at home watching the aerial shots on TV and then looking out the window and seeing it for real, just the anxiety; your adrenaline level really increase," he said.

"Luckily where I live, the fire was blowing in a different direction and away from us, so we knew we were not in the threat of the fire path."



73, Rob W6RH

Page 31 of 51

ARES

This page will be discontinued starting with December's edition as ARRL has an ARES page:
<http://www.arrl.org/ares>.

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.

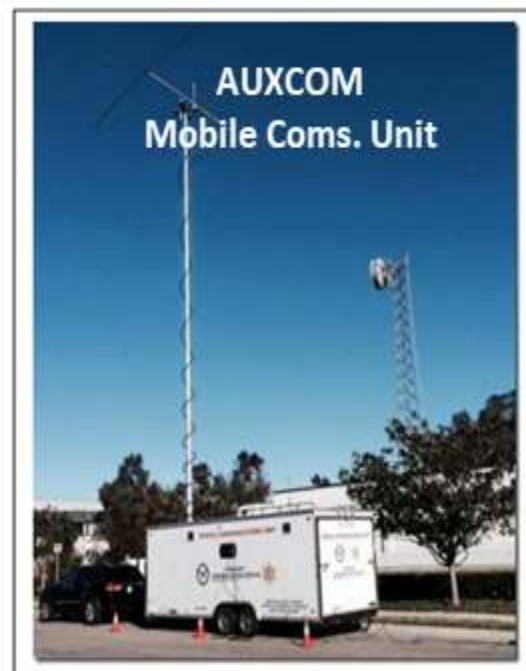
PR-101: ARRL Public Relations (EC-015)

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.



Local Area Radio Weekly Nets

(This page will be discontinued starting with December's edition as CVARC maintains the list)

<http://www.cvarc.org/local-nets/>

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 75M on 3.987 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 (1st 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 PL 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 www.mrcwestord/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.

ARRL Santa Barbara Section John Kitchens NS6X

(This page will be discontinued starting with December's edition as the ARRL Southwestern Division Santa Barbara Section has its own website (<http://www.arrl.org/Groups/view/santa-barbara>)
Volunteers,

Firstly, thank you for allowing me to serve as the Section Manager for another two years - no one opposed me in the election, so I was automatically appointed. If anyone wants to be the next Section Manager, think about it, and get the nomination form completed. It will be due in ARRL Headquarters by September, 2023.

Secondly, we still need a few people to volunteer to help grow amateur radio. Volunteers get a cool ARRL badge. We could use volunteers for: Assistant Section Manager from San Luis Obispo and Santa Barbara Counties

Section Traffic Manager (to work with other traffic managing groups and other Sections)

Section Youth Coordinator

Section Club Coordinator

Additional Technical Specialists and a Technical Coordinator

Each club should have a public information officer or coordinator.

There are only 8 active affiliated clubs in the Section, or clubs that let me know that they are active. The clubs are:

Estero club

Paso Robles ARC

Santa Barbara ARC

Cal Poly ARC

Ventura County ARC

Simi Settlers ARC

Ventura County ARS

Conejo Valley ARC

UCSB has a club, but I do not hear anything about happenings at the school. There are other affiliated clubs in the Section, but I have not had responses from them when I sent emails. The League is updating our affiliated club lists, so if you are not one of the above clubs, let me know. If you want your club to be either affiliated, or to be "recognized" as a club, please send a note to me to let me know you exist, or want to remain affiliated.

There is a lot going on at ARRL Headquarters to improve communications to all hams, not just members. Many new programs, specifically directed at clubs, are to be released in the next few weeks. New stuff is coming.

So send an email to me at NS6X@ARRL.org. Let me know what you think, what you want to see from ARRL, what you want us/me to know and definitely if you want to be a part of making ham radio better.

(Continued on next page)

ARRL Santa Barbara Section (Continued)

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:

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) (Continued on next page)

ARRL Santa Barbara Section (Continued)

Traffic manager - (the traffic system in the Section runs well, but needs a bit of coordination throughout the Section, and most importantly, finding new bodies to join the traffic system. Maybe the various Morse groups could provide people to be trained as traffic messengers).

Public Information Coordinators - (We have an excellent PIO, but each club should have someone who handles public information contacts, such as social media, print media, video (television, cable, YouTube etc.) media and more.)

Section Youth Coordinator (Doesn't need to be a teenager, but it could be. Someone who will focus ham radio toward the youth - schools, makers etc. Someone to help clubs do so, if they are so inclined.)

Club Coordinator (help get clubs active, motivated and working in the general support for ham radio.

Some other type of groups will bring in a speaker to talk at all clubs for a reduced cost.

We would like to have a Santa Barbara Section conference again. Need someone to help make it happen - just a small conference/Hamfest - look at the Yuma Arizona Hamfest.

Technical Specialist (working with the Technical Coordinator, maybe have experts "Elmers" for various aspects and specialties. How to get on FT8 (why won't my computer key my KX3; I can 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.



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.

SB QST @ ARL \$ARLB016

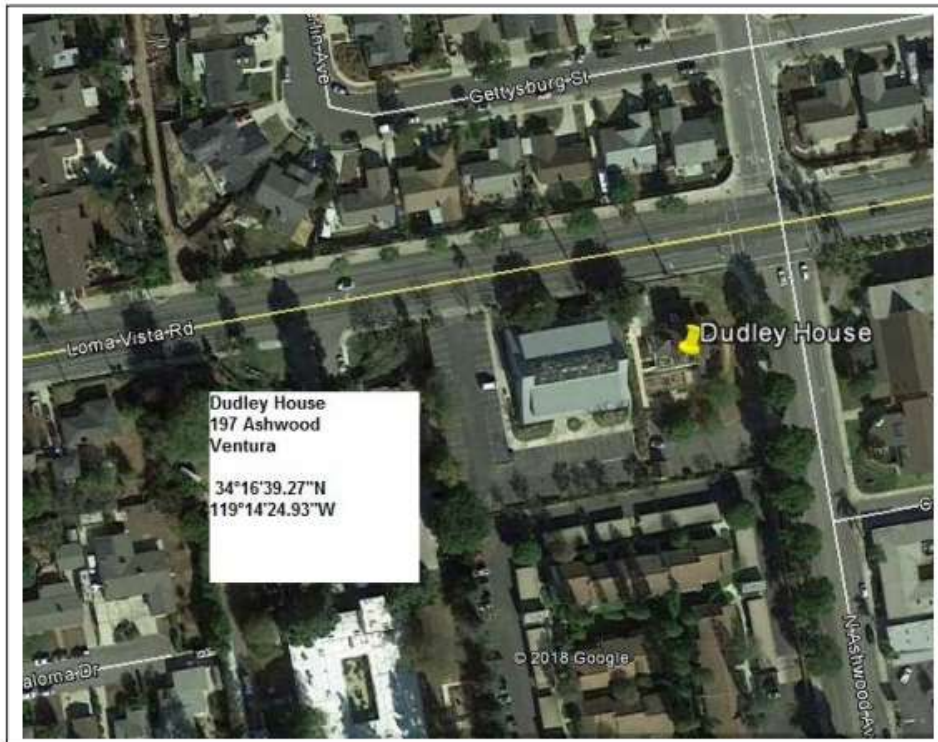
John Kitchens, NS6X

PO Box 178

Somis, CA 93066

805.216.2569 NS6X@ARRL.org

Meeting Location Maps (This page will be discontinued starting with December's edition as
(<https://www.qsl.net/k6mep/events.html> has the maps)



ARRL News

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

Jon Jones, NØJK, n0jk@arrl.org

The World Above 50 MHz

Solar Cycle 25 Brings November F2



F2 propagation on 50 MHz may appear for the northern hemisphere in November 2021 as the pace of Solar Cycle 25 picks up. Solar Cycle 25 is running ahead of schedule, with the peak possibly occurring in fall 2024, which is a year earlier than previously predicted. The effect of the winter anomaly begins in November, which creates higher F-layer MUF (maximum usable frequency).

The most likely scenario for a 6-meter F2 opening in fall 2021 is during, or just after, a geomagnetic storm. The high geomagnetic activity can boost the MUF on north-south paths, such as North America to the Caribbean and South America or North America to Oceania. It takes a much higher sustained solar flux for the transatlantic path to open. Watch websites such as Solarham.com and Spaceweather.com for updates.

2021 Perseid Meteor Shower

KB7Q (DN54) 222 MHz, Wyoming
Gene Shea, KB7Q, operated from the Beartooth Plateau (DN54fw) on 222 MHz in August (see Figures 1 and 2). He worked eight stations on MSK144 meteor scatter, including W5ZN at 1,150 miles for his state #45. On moonbounce, he logged four stations, including WA4NJP for his state #48. Dave, N9HF (EL99) also worked KB7Q/p on EME using JT65B for his state #42 on 222 MHz.

N7GP/R (DN76, DN77, DN85, and DN86), South Dakota

Also in August, Tom, N7GP/R (ex-WA8WZG), was active on 6 meters. He made 237 contacts, most on

MSK144 and a few on FT8. I (NØJK, EM28) logged Tom in DN77 and DN85 on MSK144. AAØMZ (EM29) worked him in DN85 for one of his last Fred Fish Memorial Award (FFMA) grids.

NØLL/P (EM07), Kansas

Larry, NØLL, operated again from EM07, focusing on 6 meters. He made 94 good MSK144 contacts, 111 FT8 contacts, and 30 incomplete contacts. He was on the air by 5 AM each day until around 1:30 PM in the afternoon. He tried to work Hal, N7NW (CN87), who only needs a couple of grids to complete the FFMA, with EM07 being one of them, but there was only one decode from Hal. Overall, Larry said

the Perseid meteors "were excellent." (see Figure 3). He noted that he "had some intermittent E_s for FT8 during the late morning." He made one MSK144 2-meter contact with KC4AAW (EM85). He used a five-element Yagi up 15 feet and 70 W.

On the Bands

50 MHz. Sporadic E continued through the first 2 weeks of August. Steve, NN4X (EL98), worked 20 European stations on August 1. On August 2, he picked up TZ4AM and 5T5PA. On Tuesday, August 3, he worked G1RZN.

Rich, K1HTV (FM18), worked 5T5PA, TZ4AM, 8P6ET, 9Y4D, J35X, and others on August 3. On August 4, WA2GFN (FN20) worked W5KDX (DM65) on SSB. KE6GFI (DM34) worked from EL96 north to NJØF (EN34) and west to W7YOZ (CN87) on SSB. On August 10, K9RX (EM84) copied OD5ET and worked G4IFX and another European station on August 12. That appears to be the last of the 2021 transatlantic E_s season.



▲ **Figure 1** — Gene Shea, KB7Q, set up a portable operation for 222 MHz from grid DN54 in Wyoming. [Gene Shea, KB7Q, photo]



► **Figure 2** — Gene's, KB7Q, portable 222 MHz MSK144 and EME station. [Gene Shea, KB7Q, photo]

ARRL News (Continued)



Figure 3 — Composite of 17 separate Perseid meteor shower streaks, ranging in time from 3:07 to 4:24 AM CDT on August 14, 2021. Looking northeast from near Bowman Woods Park in Cedar Rapids, Iowa, skies were clear. The constellation Perseus is at the upper left. The Pleiades star cluster is at the right center, and the constellation Taurus at the lower right. [Gregg Alliss, KE0RBK, photo]

K9RX worked VK4QG on EME on August 14. On August 16, Ron, K3FR (FM18), worked VO1SIX (GN27) on FT8. The last 6-meter E_s in North America reported for August was on the 25 – 26. K3FR reported contacts from Florida to Colorado. I worked KD5M (EM60), W4LID (EM77), and WB4QOC (EM95) on FT8.

144 MHz Tropospheric Opening.

A major tropo opening took place the last week of July. Several days of intense tropo associated with a stagnant high-pressure system took place from July 27 – 29. On July 27, WQ0P (EM19) worked stations as far as K4RCA (FM06) on 2 meters, with many contacts on 222 and 432 MHz. N0LL (EM09) worked as far as KE8FD (EN80).

I (EM28) worked K9MRI (EN71) and WZ8D (EM89) on FT8 with 50 W and a M2 Yagi. The best day for stations in eastern Kansas was on July 28.

WQ0P, K2DRH (EN41), and KA9CFD (EN40) worked many stations. There was strong tropo from Kansas to W4, with K4NKT (EM64), W3CP (EM74) and KC4AAW (EM85) going in my log on FT8, along with many W8 and W9 stations. I worked WA9DU (EM69), filling in EM28 for him. I had a PSK flag from W3IP (FM19) at 1,483 kilometers.

Sam, K5SW (EM25), worked N8DJB (EM77) on SSB. The tropo moved east on July 29. Stations in Alabama worked to W8 and W4. NV4B/R was on from rare grid EM54 and worked stations from Kansas (WQ0P) to Wisconsin (KO9A).

On August 4, a rare late-season 2-meter E_s opening occurred. WZ1V (FN31) worked KA9CFD (EN40) at +21 dB, as well as K0TPP (EM48) and W5LDA (EM15) around 2300Z. Gary, N2AMC (FN30), logged W5LDA at 0032Z at 2,051 kilometers. On August

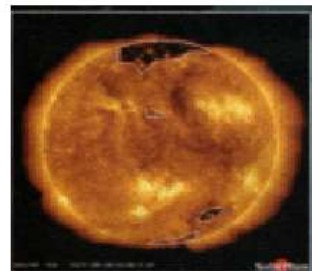
13, Rich, N0HJZ (EN34), worked W1XX (FN41) in Rhode Island on 2-meter SSB on meteor scatter "on a 15-second burn." He noted that there was few people on 144.200 MHz SSB or CW.

On August 18, FG4ST (FK96) decoded CT1ETL/1 (IM58), calling CQ on 144.174 MHz FT8 at 2232Z at –20 dB. FG4ST was working EA8 on tropospheric propagation across the Atlantic. A two-way contact would have achieved the Brendan Shields award which, according to Irish Radio Transmitters Society, "will be awarded to each of the operators of the two amateur radio stations which first establish two-way communication between the continents of Europe and America (North or South) within the 2 Metre Amateur Band [using an all-terrestrial, non-artificial means of propagation]." For more information about the Brendan Awards, consult Ev Tupis', W2EV, article, "The Brendan Awards: Insights for the New Millennium," from the August 2002 issue of *QST*.

The tropo continued through August 20. Ramsey, NP3XF, worked EA8BPX, EA8CTK, and EA8CXN on 144.250 MHz SSB. On August 28 – 29, K7ULS worked 20 stations on EME in the Russian EME contest, including TA1D at 0904Z at –27 dB.

222 MHz. K7ULS (DN41) worked W0VTT (EN33) on MSK144 on August 6 at 1134Z. The contact took an hour to complete.

432 MHz. WQ0P (EM19) worked K4RCA (FM06) on July 28 using FT8 tropo at –8 dB.



(Continued on next page)

ARRL News (Continued)

Frequency Measuring Test — November 2021



Due to a high solar flux, two stations will cover North America.

Ward Silver, N0AX
n0ax@arrl.org

Solar Cycle 25 is causing an increased number of sunspots, but a higher solar flux makes propagation a little more difficult on the lower bands. Because of this, the Frequency Measuring Test (FMT) will use a dual-station format this November. This should give stations throughout North America an opportunity to receive and measure a strong signal.

If you've never entered an FMT before, information on how to measure the frequency of a carrier is available at www.k5cm.com.

Measurement Software

The free software tools available are quite advanced. If you're already using the *WSJT-X* suite on FT8 or WSPR, you can use its frequency calibration mode as a sophisticated frequency measuring tool. George Allison, K1IG, discusses how to use *Spectrum Lab*, *fldigi*, and WSPR

for FMT measurements at www.ve2azx.net/technical/FreqCal.pdf.

Additionally, Joe Taylor, K1JT, explains how to use *WSJT-X* for frequency measurement in *Accurate Frequency Measurements with your WSPR Setup* (physics.princeton.edu/pulsar/k1jt/FMT_User.pdf).

FMT Schedule and Format

The FMT "runs" will start with a call up at 0230 UTC on November 12 (Thursday evening in North America). FMT Manager Connie Marshall, K5CM, notes that the call up may start earlier than the listed times to establish a clear frequency, if necessary, but every effort will be made to start the key down transmissions at the published time in Table 1. A single, unmodulated carrier will be transmitted near those FMT frequencies.

K5CM will transmit from Oklahoma, and Michael Suhr, W8RKO, will transmit from Ohio. Be prepared to

tune to find the call up transmissions, if necessary.

Similar to last year, there will be a slight shift in the frequency to be measured. You'll hear the frequency shift shortly after the call up. The test transmission will be near (but not exactly on) the call up frequency. One measurement for 40 meters and one reading for 80 meters should be submitted.

Submit your measurements using the data entry website at fmt.arri.org/fmtentry.php. Results will be published immediately following the data entry deadline, 0200 UTC on November 15 (Sunday evening, November 14, in North America).

Table 1
Frequency Measuring Test Schedule

Start: November 12 at 02:30 UTC (Thursday evening in North America)

Results: Submit measurements online until November 15 at 02:30 UTC (Sunday evening in North America)

40 Meters: K5CM near 7064 kHz
02:30 Call up
02:33 Key down
02:34 End 40-meter run

40 Meters: W8RKO near 7064 kHz
02:45 Call up
02:48 Key down
02:49 End 40-meter run

80 Meters: K5CM near 3598 kHz
03:00 Call up
03:03 Key down
03:04 End 80-meter run

80 Meters: W8RKO near 3598 kHz
03:15 Call up
03:18 Key down
03:19 End 80-meter run

If there's interference on the published frequency, tune around to find the FMT transmissions.

The online data entry form is available at fmt.arri.org/fmtentry.php. Please include notes and observations about making your measurement, including the equipment used and any special techniques. Results are published immediately following the submission deadline.

ARRL News (Continued)

Rick Palm, K1CE, k1ce@arrl.net

Public Service

Around the Horn: An Emergency Message Routing Test

Doug Stevens, WA2BBS, is an active member of the ARRL Eastern Pennsylvania (EPA) Section Amateur Radio Emergency Service® (ARES®) in Luzerne County, Pennsylvania. The late EPA Section Emergency Coordinator (SEC) Walter T. (W.T.) Jones, WN3LIF (SK), mentored Doug and a group of hams during an emergency message routing test, which Doug discusses in this month's column.



Our primary goals as ARES members are to train, practice, and prepare to be communicators during a disaster. There are many modes available for passing communications traffic, but you must always consider the worst-case scenario.

Message Routing During a Disaster

Imagine that you're at a distant incident and are given a message that must get to the county Emergency Operations Center (EOC), but all the repeaters are down and you can only hear one station. With no other outlet available, you must use that station to send the message.

The second station can only hear you and one other station, so they send the message on to the third station, and so on, until the message reaches its destination. The message can't be

sent back to a station that already handled it, because that wouldn't send it where it needs to go. The route the message takes depends on who can hear who.

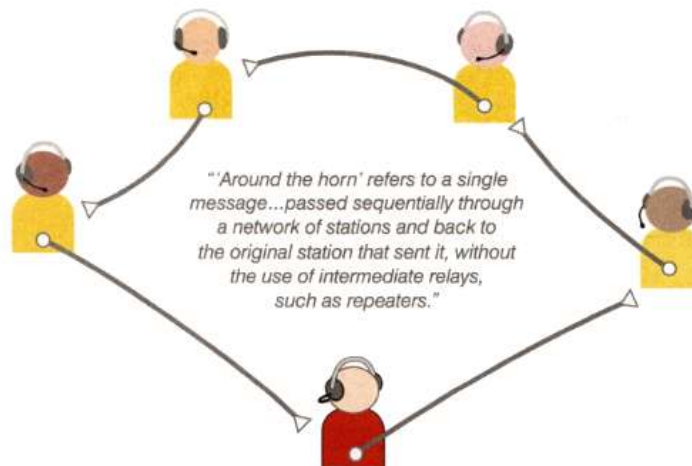
The ARRL EPA Luzerne County Digital Net has been working on this problem and found that antenna issues, radio settings, terrain, and the use of digital modes can present several challenges. We're pretty good at handling messages digitally on the repeaters, but wondered what would happen if we operated using only simplex. We've done several simplex voice tests to find out if the results are the same as with a digital mode, such as *fldigi* or Winlink.

Performing the Test

Our SEC, WN3LIF (SK), came up with a test that he called "around the horn." For this test, there's no limit to

the number of players, but once you're registered for the test you must participate. In baseball, "around the horn" means that if there are no runners on base and fewer than two outs after a strikeout, the ball is tossed from the catcher to third base, second base, the shortstop, first base, and then the pitcher — each player only handles the ball once.

For the purposes of ham radio, our use of "around the horn" refers to a single message getting passed sequentially through a network of stations and then back to the original station that sent it, without the use of intermediate relays, such as repeaters. The digital modes and frequencies used are up to the participants. We chose to use VHF/UHF digital simplex and the *fldigi* suite of programs for our test, but any modes can be used.



(Continued on next page)

ARRL News (Continued)

At the beginning of your test, the message originator (who is also the final station to receive the message) will prepare a message and announce on voice that the test is starting. Next, they'll send the message to the first station designated on the list provided by the team. The message may only be sent using the chosen software (we used *flmsg*).

Each station will receive the message and send it to the next station, then save it (there's no need to "save as"). The contents of the message must not be altered, and each station can only handle it once during the test. A successful receive ("bad files" are not permitted) means that the station copied the message without checksum errors. The file name and contents must appear exactly the same as in the original message.

Once the message has been received by the next station, the sending station's participation in the test is complete; they can't receive the message again and send it to another station.

The message routing is up to the discretion of the participants. The net members must work as a team to determine how the route will work (it may help to try out your voice mode of choice prior to the test). Planning can be done any time before the "around the horn" test, and net members may communicate on voice during the test for coordination purposes. The message cannot be passed on your voice mode.

At the end of the test, all participating stations email their saved copy of the message to the originating station. For the test to be deemed a success, all stations in the net must successfully receive the message and send it to the next station, with the originating station being the last to receive it.

Participating stations must register with the originating station before the test. Stations are allowed to move to a better location, as long as they aren't more than 5 minutes away from their station's license address location.

Results

When the ARRL EPA Luzerne County Digital Net tried this test, we had one failure, but otherwise it was a success. Several issues arose prior to the test that included radio setup, antenna placement, mode used, etc. We were able to work through most of the issues.

We encourage all ARES groups and county Emergency Coordinators to try "around the horn" and share their results with each other.

I would like to thank WN3LIF (SK), for giving us this challenge and acting as mentor and referee. Other group participants were Thomas Davis, N3XMB; John DiLiberto, AB3ZI; Robert Nygren, N3RN; Robert Folmar, KB3VS; Christopher Keller, WA2EXI; Richard Tyira, KC3FKW; Timothy Chase, KC3MES, and John Denisco, K3DBG.

(Continued on next page)

ARRL News (Continued)

Propagation Tools and Resources for Contesting



*Ken Caruso, WO1N, with Andrew Rodland, KC2G,
and members of the Yankee Clipper Contest Club (YCCC)*

HF propagation predictions provide data that, when analyzed, can help you maximize your rate and multipliers during DX contests. Real-time propagation tools may help you more rapidly adjust to changing conditions during the event.

It is hard to find a substitute for operating experience when it comes to understanding propagation from your home station, especially if you've been operating from your station for multiple solar cycles. Keeping an eye on the basics

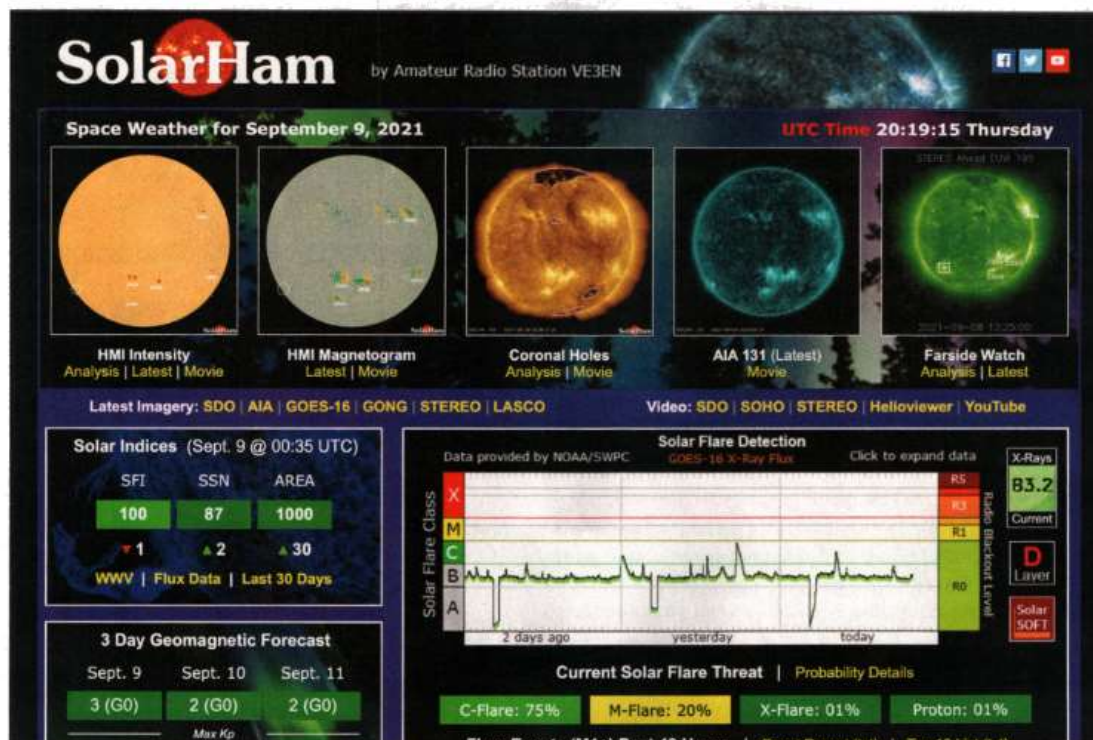
(sunspot numbers, geomagnetic activity, grayline) and reviewing past logs from prior solar cycles with similar conditions can remind you of any unusual openings.

When operating from a new station location (perhaps remotely or on a DXpedition), you might not be familiar with the propagation characteristics from that location. Employing the tools described here before and during the event can help you to develop a sense of what to expect.

Many of these tools are interactive online resources that you can use for

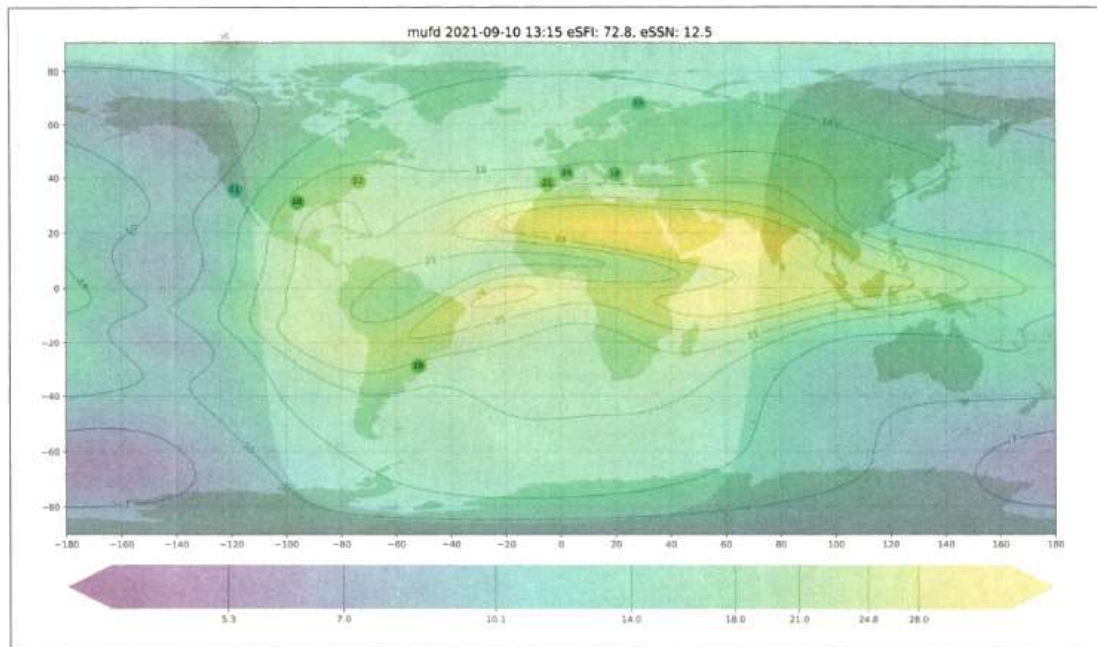
planning your contest effort. You can gather data and develop an operating strategy. While identifying major band openings to maximize your rate is important, analysis might reveal secondary paths to help you eke out a rare multiplier or two. In the end, more contacts and more multipliers result in a higher score for you and your contest club.

Other websites that offer real-time data can help you understand the current conditions during a contest, but be aware that using real-time data could land you in the contest's assisted class.



The SolarHam site (solarham.net) aggregates data from several sources to create a snapshot of current space weather conditions.

ARRL News (Continued)



The real-time maps at prop.kc2g.com are based on real-time ionospheric data.

Planning Tools

SolarHam — solarham.net — by VE3EN brings together useful data from NOAA, NASA, Environment Canada and other agencies, with links to the original sources. This site is the total snapshot of the current space weather conditions, an important factor in developing propagation predictions.

VOACAP Online for Ham Radio — voacap.com/hf/ — was put together by Jari Perkiomaki, OH6BG; James Watson, MØDNS, and Juho Juopperi, OH8GLV. It translates the tabular VOACAP predictions from days past into very informative graphical presentations. The site has been recognized for excellence by the YASME Foundation.

Proppy — soundbytes.asia/propy/ — is an HF propagation prediction website developed by James Watson, MØDNS. Proppy utilizes the ITU's ITURHFPROP application for predictions. Excellent graphical displays of area and point-to-point predictions can be produced. Short Wave Listeners

are considered, with a tab focused on International Broadcasters.

Real-Time Monitoring Tools

Real-Time HF Propagation Prediction — hamwaves.com/propagation/en/index.html — maintained by Serge Stroobandt, ON4AA, is a useful presentation of the current HF propagation influencers. Especially useful is the real-time MUF (maximum usable frequency) and OWF (optimum working frequency) information.

PSK Reporter (pskreporter.info/pskmap.html) and **WSPRnet** (wspnnet.org/drupal/) are useful for keeping an eye on what QSOs are really happening right at the moment.

DXMaps.com is likewise useful for viewing QSOs that are happening in real time.

aprs.mennolink.org (worldwide) and **www.propquest.co.uk** (Europe) display VHF path enhancements such as E_s or tropospheric ducting.

prop.kc2g.com/ provides near real-time maps and data describing ionospheric conditions and is recognized as a game-changer for the amateur community by moving from prediction-based analysis, to analysis based on real-time ionospheric data. Data from the network of ionospheric sounders (GIRO) is merged with NOAA Ap estimates to produce global values for foF2, hmF2, MUF, and foE. MUF isolines are estimated and plotted across the globe.

These tools synthesize an astounding array of complex inputs that describe the anticipated or current propagation conditions. You can employ these tools to develop your operating plan, and to identify when to look for rare multipliers or band openings. Armed with real-time data, you can quickly react to the ever-changing conditions experienced during a contest. The net result should be an increase in your contest score from wherever you operate.

ARRL News (Continued)

Contesting Do's and Don'ts

by members of the Florida Contest Group



To someone just starting out, contesting can seem to be the ultimate insider's sport. Contesters who are at the top of the standings over and over always seem to be in the right place at the right time, and seem to find band openings that mere mortals can only dream of. More importantly, they seldom make the big mistakes that sometimes sink their competitors.

A number of years ago, some of the experienced and accomplished members of the Florida Contest Group distilled their decades of experience into a list of do's and don'ts that would help all contesters position themselves for success before, during, and after a contest. Even if you apply just one tip out of dozens to your next contest operation, we think it will help your score. Good luck!
— W4WF, K5KG, K1TO, K8NZ, K4XS

Planning Ahead

- Do any necessary antenna work as far in advance as possible.
- Think about your contest strategy in advance.
- Decide on your category.
- Select your power level. Remember to check whether if the contest rules include a power multiplier for QRP or LP, and whether your power level is compatible with your category.
- Select and update logging software, and test the interface with your transceiver.
- Record and test CW, RTTY, and/or SSB messages in advance.
- Ensure your signal is clean — no key clicks or SSB splatter. Ask a friend to evaluate your signal on the air if needed.

- If you're multi-op, set up and test your logging network.
- Set your goals — personal best? Top 10? 500+ QSOs?
- Prepare snacks, meals, and drinks in advance.
- Consider your sleep schedule in advance and set an alarm clock (before the contest starts!).
- Know the log submission deadline.
- If possible, be active on the air for a few days before the contest; try to get a feel for propagation and activity.
- Check **NG3K.com** and *The Daily DX* for activity from rare multipliers (in a DX contest). Keep the list handy during the contest.

During the Contest

- Start on time — don't give up operating time at the beginning!
- Send your full call when calling another station — no partials or last-two.
- Avoid time-wasting fillers, but remain approachable and friendly-sounding.
- If the rates drop, turn your keyer speed down. On phone, use your "friendly voice."
- Don't be a packet rat. Verify calls from the cluster and RBN.
- Use your software's Note function to record notes about any questionable QSOs.
- Work dupes — arguing about dupes wastes time.
- If you're operating from a DX location and you start to get a string of 6–10 dupes, you've been spotted incorrectly. Your best choice is often to find a new frequency (thanks W2OX/V47KP).

- Tune in the direction of the sideband — tune up the band on USB, tune down the band for LSB.

After the Contest

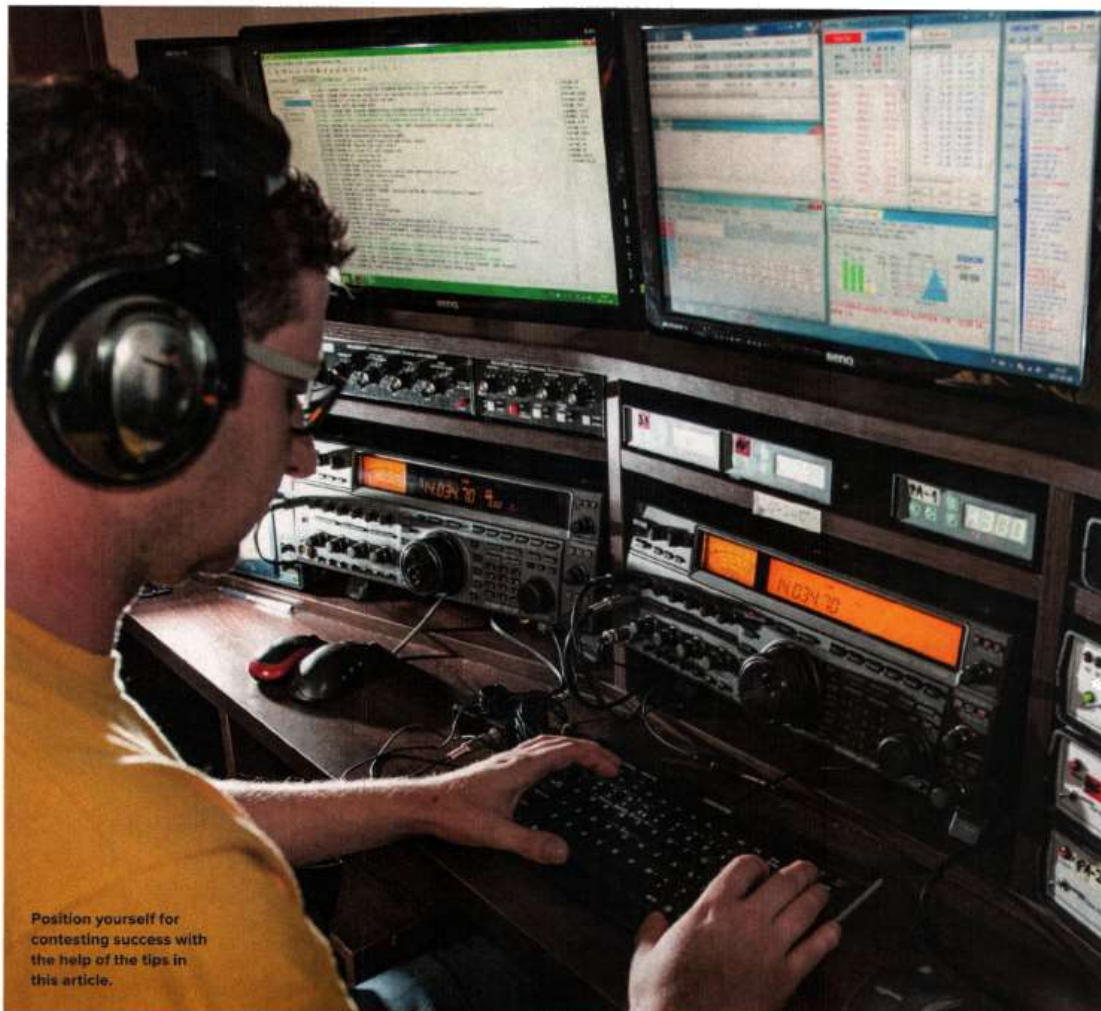
- Save your log to your logging computer, and back it up to a flash drive or elsewhere.
- Turn off your rig and disconnect your antennas.
- Check your Notes file and resolve any issues noted during the contest.
- Report your score to **3830scores.com**.
- Submit your Cabrillo file to the contest sponsor before the deadline.
- Let your family know that you're alive and well!

Tips Applicable to All Contests

- Read the rules *before the contest!* Not only will it help you determine your entry category, you may find special band segments and other unusual rules that are not immediately obvious. You may even find that the rules have changed from the last time!
- If your goal is to win your category or Section/state, look over the previous year's results.
- Establish a goal for your effort, whether it's beating your buddy, beating your score from last year, working a few new ones, or just operating for as long as it's fun.
- Be honest with yourself about your station's strengths and weaknesses, and spend more time on bands and modes that play to those strengths.
- Know your radio's functions and how to use them. There are few things more satisfying than getting the first QSO after a rare multiplier goes split

(Continued on next page)

ARRL News (Continued)



HENRYK KOTOWSKI, SM0JHF

- because you know how to set your second VFO without fumbling.
- If your radio has a second receiver, try using the second RX to search and pounce more efficiently. Start at the bottom of the band with one RX and the top of the band with the other. It may seem awkward at first, but you'll soon be doubling your S&P rate.
- Try to think outside the box. To avoid the Sunday doldrums in Sweepstakes, K8MR operates from 3–4 different stations with different call signs. He's always "fresh meat," and often his combined scores exceed the winning single-operator score.

- Invite someone to operate your station if you can't get on, or organize a multi-op entry. Hosting and multi-ops are great opportunities to teach or learn contesting skills while enjoying the fellowship of like-minded testers.

When Planning a Part-Time Entry

- Consider the bands, modes, and operating times that will allow for the most fun.
- Consider using packet/RBN unless you're philosophically opposed, but as the saying goes, "trust, but verify" those packet spots!

Tips for Low-Power Entries

- Choose your CQ frequency carefully. First, send "QRL?" to make sure the frequency isn't occupied. Don't open up with 100 W next to someone running high power and large antennas; you'll have a tough time getting traction.
- A few minutes calling CQ costs little and there is much to be gained. In most contests, the number of operators who are tuning the band at any given time far exceeds the number who are calling CQ. If you find a spot, jump in!

(Continued on next page)

ARRL News (Continued)

Club Contesting

Eric Silverthorn, NM5M, DFW Contest Group



Contesting as part of your club is yet one more way to have fun. Radio clubs around the country collect scores from their members and compete against other groups in the Club Competition category.

Each contest organizer has different policies on Club Competition, so be sure to familiarize yourself with the rules. For example, ARRL requires that members of a club effort reside and operate within 175 miles from the club center.

To operate as part of a club effort, you can still get on the air from your home station, as you normally would. After the contest, upload your log to <https://contest-log-submission.arrl.org/>. Be sure to include your radio club's information when you submit the log, so that your score is added to your club's overall score.

Club operating activities can be a lot of fun, especially if you compare your group's score with groups from a similar geographic area or ARRL Division. ARRL breaks out club efforts according to the size of the group, as a way of keeping operations competitive. Small clubs enter the Local category, and larger groups may qualify for the Medium or Unlimited categories.

Aside from creating a greater amount of on-air activity, club competition is a wonderful way to motivate amateurs in your area to participate in the contest and maximize their effort for the benefit of the club. Small stations as well as large stations are encouraged to participate.

The DFW Contest Group (in the North Texas Section) often organizes club efforts to maximize our score in various contests. A few weeks before a contest, emails are sent to

motivate members to get on the air. We also encourage multi-operator stations to invite members who don't have a home station to join their larger effort.

One of our members, George Perkins, N5UI, has created a club score listing on our website, www.dfwcontest.com. Listing individual scores has created an incentive for our members to get on the air, and it gives the club leadership insight into who is getting on the air. ARRL offers awards to high-scoring clubs, so there is motivation to win!

ARRL Sweepstakes CW 2020

Call	Name	Category	QSO's	Net's	Total
K0SM (K0GA)	Bill	SO High	1,031	84	227,000
K3RT	Paul	SO Unlimited High	1,391	83	197,796
W4KZBT	Charles	SO Unlimited Low	478	82	77,734
K4QR	Andy	SO Unlimited Low	410	83	69,050
K4MS	Bob	SO Low	364	80	58,240
K3CT	Lance	SO Unlimited High	115	83	52,280
W4GN	Harry	SO Unlimited High	305	81	49,066
W3CD	Yan	SO Low	234	76	35,548
N0CHA	Frank	SO Low	230	68	36,340
W4OV	Don	SO Low	204	67	27,334
W4VEX	Charles	SO High	148	58	17,184
N4DRR	Eric	SO Unlimited High	140	60	16,800
K3HBA	Robert	SO Low	130	50	7,650
K3ICW	Henry	SO Low	108	45	7,234
Total					800,000

DFW Contest Group lists members' scores on the group's website, to encourage members to participate in contests.

Contest Clubs

Though any club can mount a group effort in a contest, some clubs specialize in radiosport. Here are just a few.

CONTEST CLUB

Alabama Contest Group
Arizona Outlaws Contest Club
Arizona VHF Society
Carolina DX Association
Central Texas DX and Contest Club
Contest Club Ontario
DFW Contest Group
Florida Contest Group
Frankford Radio Club
Hudson Valley Contesters and DXers
Kentucky Contest Group
Mad River Radio Club
Minnesota Wireless Assn
Mt Airy VHF Radio Club
Niagara Frontier Radiosport
North Coast Contesters
North East Weak Signal Group
Northeast Maryland
Amateur Radio Contest Society
Northern California Contest Club
Potomac Valley Radio Club
Rochester VHF Group
Society of Midwest Contesters
South East Contest Club
Southern California Contest Club
Tennessee Contest Group
Texas DX Society
Western Washington DX Club
Willamette Valley DX Club
Yankee Clipper Contest Club

WEBSITE

alabamacontestgroup.org
www.arizonaoutlaws.net
www.azvhf.org
www.cdxa.org
www.ctdxcc.org
www.va3cco.com
www.dfwcontest.com
floridacontestgroup.org
www.gofrc.org
www.qsl.net
www.n4gn.com/kcg
www.madriverradioclub.org
www.w0aa.org
www.packratvhf.com
www.qrz.com/db/NF2RS
www.northcoastcontesters.com
www.newsvhf.com
www.nemarc.org
www.nccc.cc
www.pvrc.org
www.rvhf.org
www.w9smc.com
southeastcontestclub.com
www.socalcontestclub.org
k4tcg.org
www.tdxc.net
www.wdxc.org
vwdxc.org
www.yccc.org

Local News

From: PETER HEINS [mailto:k1fjm@aol.com]

Sent: Friday, October 29, 2021 7:57 AM

To: Vcars Members; cvarc@groups.io; arrlsb@mailman.qth.net Arrl

Cc: Bill Graham; n6ze

Subject: [ARRLSB] Bill Graham, KV6J (SK)

I regret to inform the Thousand Oaks amateur radio community that Bill Graham, KV6J, Extra, formerly of Thousand Oaks, CA & most recently, a 20 year resident of Kona, HI made his final QSO & flight yesterday.

He was a great friend of mine with our common airline careers, ham radio, & coffee drinking.

RIP, Bill

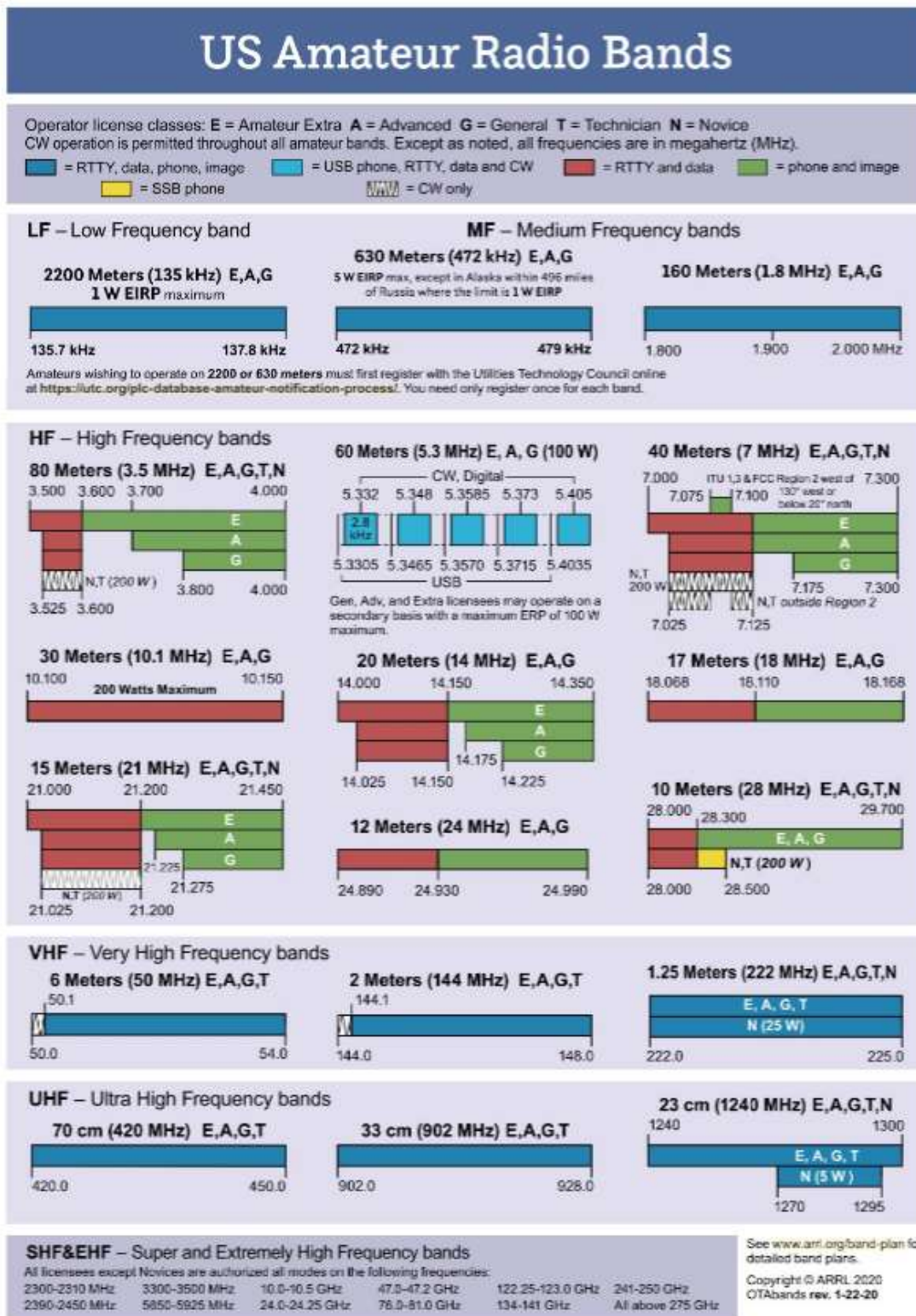
Bt73

Pete,N6ZE



Photo by [Jake Weirick](#) on [Unsplash](#)

US Amateur Radio Bands



W1AW Schedule

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).

