



VOLUME 71 ISSUE 2
February 2020

PPRAA Club Officers

President	<u>Don DuBon, N6JRL+</u>
Vice President	<u>Tom Oliphant, K0BUL+</u>
Secretary	<u>Jay Winterton, KD0VRB+</u>
Treasurer	<u>Dick Kohlhaas, W5UDM+</u>
Ø-Beat Editor	<u>Jerre Redding, WAØBCM</u>
Webmaster	<u>Douglas Nielsen, N7LEM</u>
Past President	<u>Jim Bishop, KD0KQL</u>
Board	<u>John Bloodgood, KDØSFY*</u>
Board	<u>Earl Watkins, AE2RW</u>
Board	<u>Dennis Major, N0ABC</u>
Board	<u>Logan Perry, KE0KZ</u>
Board	<u>Anthony Mitchell, KE0LQK</u>
Board	<u>Mike McLaughlin, K0JT*</u>
Board	<u>Stefan Kochis, K0EYE*</u>
Board	<u>Mike Anderson, WV7T*</u>

* In final year of 2-year term

+ One year officer position

All officers can be contacted at: boardmembers@ppraa.org

Monthly Ham Breakfast



Cracker Barrel, 8355 Razorback Road

8:00 to 9:30 AM Saturday, 7 March 2020

All are warmly invited to come on down and join



February PPRAA Club Meeting

The Feb. 12th 7PM club meeting will be at the Golden Corral on Palmer Park and Powers Blvd (just east of Powers Blvd).

1970 Waynoka Rd, Colorado Springs, CO 80915 [\(719\) 591-9870](tel:7195919870)

PPRAA Board Meeting Minutes Dec 9, 2019

Don N6JRL called the meeting to order at 18:30.

The board held a moment of silence in remembrance of silent keys Ken Frazer KE5JCB and Doc Cornell W0MCT.

W5UDM presented the treasurer's report, which included receipt of \$88 from Amazon Smile. KD0SFY reported the following events for PPARES:

- Thanksgiving support for the Salvation Army went well.
- Skywarn Recognition Day was held in Pueblo.
- The Salvation Army Christmas meals event is will require support.

KD0NQM and K0BUL bought prizes at HRO on Black Friday for next year's Megafest.

N6JRL reported that the PPRAA Christmas Party will be held this Wednesday at the Black Forest Community Center from 7 PM to 10 PM. There will be no meeting agenda. The event will be catered by The Dinner Basket.

- W5UDM recommended that name tags be available for members and spouses at the Christmas Party. He will buy the name tags.
- 67 adults and 6 kids have signed up so far. If other people show up, PPRAA won't turn anyone else away, but we are cutting it close on the number of meals purchased.

N6JRL passed along that KE5JCB (SK) had been very adamant that upon his passing, that the proceeds from the sale of his equipment be split between PPRAA and Youth DX Adventure (YDXA). This is also the wish expressed by his widow. PPRAA will auction off the equipment (since our club doesn't need most of it). Included in this batch is a brand-new surface-mount soldering kit, which will stay in the club. The equipment will be shown in a slide show at PPRAA's Christmas Party, and auctioned off during the January meeting. N6JRL presented the slide show for the board members.

WV7T brought up that the people holding the Thursday-evening 10-meter net need to report to the board what they do and mention during the net that it is a PPRAA net (since it is sponsored by PPRAA).

N6JRL and WV7T will be setting up a QCWA table at the Megafest. Discussion about starting a QCWA chapter within PPRAA was presented.

WV7T reported that

- the Pearl Harbor Day event in Ellicott had a good turnout.
- the new licensing class location is the Carl's Junior on Garden of the Gods - east of the I25 overpass.

A suggestion was made to create a certification program for access to the Ellicott station, with 3 levels of certification. Everyone receiving certification would be given a name badge showing their level of access and the lock combination.

KE0TWK presented information on the inventory of club equipment.

- It was agreed that inventory labels should be used.
- WV7T will perform research on inventory labels and prices and present this at the next board meeting.
- The final format of the inventory list and including pictures were discussed.

N6JRL led discussion on life memberships for PPRAA. Prices and age breakpoints were discussed. It was agreed that the board needs to do brainstorming on this issue and continue discussion at the next board meeting.

KD0KQL motioned and AE2RW seconded that PPRAA donate \$200 from its general account for YDXA support. Upon continued discussion, it was decided that the funds should come from the raffle account instead. AE2RW motioned and K0BUL seconded that the funding come from the raffle account, vice the general account.

N6JRL initiated discussion about lack of information about the status of PPRAA's scholarship award for 2019 (through Foundation for Amateur Radio). Michael Derbort, KC0ELG, who had been handling the scholarship for PPRAA, expressed his problems trying to contact FAR leadership on this issue. KD0SFY stated he had emailed the president of FAR and had heard back from him. There was discussion about bringing this function of coordinating with FAR back under PPRAA. W5DUU volunteered to take over the FAR scholarship program. KD0KQL added the information that FAR actually evaluates the scholarship applications and makes the award.

N0ABC suggested getting W0MCT's call sign as a replacement for WA0VTU. Coordination with W0MCT's next of kin to have W0MCT listed as a silent key was also discussed.

AE2RW -- asked about internet at Ellicott. He said that the WISP Canopy internet service might work and would be faster than DSL.

K3ILC recommended that PPRAA have a point of contact listed on the door to the Ellicott club station, in case of emergency.

K0JT motioned to adjourn, K0BUL seconded.



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ANTENNA TRAPS

These need to be carefully set and baited properly to catch the antenna you want.

How about, the traps need to be set properly to get the frequencies you want on one antenna.

An antenna trap is used to operate more than one band on one antenna. Verticals and dipoles commonly use traps for this purpose.

What does a basic trap do?

Usually it is a parallel resonant circuit. This is an inductor in parallel with a capacitor. This circuit has a high impedance at resonance. When put in line of an antenna, say a dipole, it can act as an insulator at resonance.

A 7 MHz 1/4 wavelength is about 33 feet. A single band 1/2 dipole for this band will be 66 feet. However, you want to operate on 3.5 Mhz also. What can you do?

As an ideal example, connect the trap at 33 feet on each side of the dipole. Then add a length of wire to the other end of the trap. When you are operating on 7 MHz, the trap becomes energized where the inductance and capacitance reactance become equal. This makes the trap have a high impedance. It will look like an insulator is put in the wire and the antenna will function on 7 MHz.

What do you do for 3.5 MHz?

A dipole for this frequency is normally twice as long. However, on 3.5 MHz the trap is not resonant, but looks like an inductor or loading coil in the dipole. To make the dipole resonant on 3.5 MHz you need a shorter length of wire than a single band dipole. This length will depend on the size coil used for the trap.

Now you have an efficient two band antenna.

You can build antennas that use several traps for multi-band operation. Of course, the more traps the trickier it becomes to have the antenna resonate on all the bands selected.

Setting your trap properly will catch the bands you want to use.

73,
Ralph WD0EJA

FEB 2020

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137 MANCHESTER DR.
FLORISSANT, CO. 80816 U.S.A
PH/FX: 719/687-0650
wd0eja@isotronantennas.com

New Amateur Extra-Class Question Pool Released

The new Amateur Extra-class license examination question pool, effective from July 1, 2020, through June 30, 2024, has been released and is available at the National Conference of Volunteer Coordinators ([NCVEC](#)) website.



The [2020 - 2024 Extra-class pool](#) incorporates significant changes compared to the current 2016 - 2020

question pool, which expires on June 30. The number of questions in the pool was reduced from 712 to 622. The result was 239 modified questions, 49 new questions, and 139 questions removed due to changes in what was felt to be an abundance of outdated questions, while areas of new technology and subjects were added.

In addition, an effort was made to balance the difficulty level, removing or replacing some questions deemed too easy or too difficult compared to the rest of the pool.

The 2020 pool has 10 diagrams, which have been renumbered because the new question pool has two fewer than the 2016 question pool.

ARRL Reshapes Podcast Offerings for 2020

In conjunction with the launch of its new [On the Air](#) magazine, which is aimed at those just beginning their journey in amateur radio, ARRL is reconfiguring its podcast lineup.

Heading up the new schedule will be a free companion podcast to the bimonthly *On the Air* magazine. The monthly *On the Air* podcast will take a deeper look into select features and projects from the magazine. Each month, host and *On the Air* Editorial Director Becky Schoenfeld, W1BXY, will offer additional resources, techniques, and hints to help less-experienced radio amateurs to get the most from the magazine's content.



In addition to the podcast, ARRL Product Development Manager Bob Inderbitzen, NQ1R, will curate a free *On the Air* blog featuring content from the communicators and makers who are the driving force of amateur radio today. The blog will highlight opportunities and activities available to new licensees. The *On the Air* blog is intended as an

entry point into the world of amateur radio for those seeking original voices and perspectives. Readers will be [invited](#) to take part in the conversation by sharing their stories and experiences.

The ARRL Board met at its annual meeting January 17-18 in Windsor, CT.

In even years, the ARRL board elects its officers for the next two years. President Rick Roderick, K5UR was re-elected by a narrow vote. CEO Howard Michel was not re-elected, also by split vote. The meeting minutes can be found on the ARRL's website by searching for "minutes" and clicking on the link. You can also subscribe to the minutes and have them emailed automatically: on the ARRL Web site, click on "Edit your Profile", then click on the box "ARRL Board meeting agendas and minutes". The Board meets twice a year, in January and July so this won't generate a lot of emails.

The ARRL is requesting feedback from members regarding the HF Band Planning Committee recommendations. The time window is short so act quickly if you wish to comment. Go to: <http://www.arrl.org/bandplan> ; on this page you can click the link to see the Committee's report and also provide your comments.

Start planning now for the 2020 ARRL Rocky Mountain Division Convention which will take place in Colorado this year August 8-9. The convention will be preceded by a DX University class on August 7th. See the convention planning website at www.hamconcolorado.com for information and registration.

Questions, comments? Share your thoughts with me-- email is best!

73,

Jeff, KØRM

+++++

Upcoming events in the Rocky Mountain Division: (more info @ ARRL.org: click on "hamfests")

Utah Digital Communications Conference

02/15/2020

Location: SLCC Miller Campus
9750 South 300 West

Sandy, Utah
Website: <https://utah-dcc.org>
Email: UtahDCC@gmail.com

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The Swapfest

02/16/2020

Location: Adams County Fairgrounds
9755 Henderson Road
Brighton, CO

Sponsor: Aurora Repeater Assc., Cherry Creek Young ARC,
& Rocky Mountain Ham Radio

Website: <http://n0ara.org>

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New Mexico TechFest

02/29/2020

Location: New Mexico Veterans' Memorial Event Center
1100 Louisiana Blvd SE
Albuquerque, NM 87101

Sponsor: Rocky Mountain Ham Radio – New Mexico

Website: <https://www.rmham.org/wordpress/new-mexico-techfest/>

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LARCFest

04/04/2020

Location: Boulder County Fairgrounds
9595 Nelson Road
Longmont, CO

Type: ARRL Hamfest

Sponsor: Longmont Amateur Radio Club

Website: <http://www.w0eno.org>

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Utah Valley Hamfest

2020 Utah State Convention

05/08/2020

Location: Utah Valley University UCCU Center

800 West University Parkway
Orem, UT 84057

Website: <https://utahvalleyhamfest.com>

Sponsor: Utah Valley Amateur Radio Club

Talk-In: 146.780- (PL 100.0)

Public Contact: Caryn Alarcon , KG7UUR

PO Box 1288 Orem, UT 84059

Phone: 562-965-6079

Email: k7uva@arrl.net

ARRL Rocky Mountain Division

Director: Jeff Ryan, KORM

k0rm@arrl.org

Major Events

The Swapfest

- Sunday February 16, 2020 (0900-1300)
- Adams County Fairgrounds
- Brighton, Colorado
- More info [here.](#)

LARC Fest

- Saturday, April 4, 2020 (0800-1400)
- Boulder County Fairgrounds
- Longmont, Colorado
- More info [here.](#)

2020 ARRL Rocky Mountain Division Convention Hamcon Colorado 2020

- Thursday, 6 August 2020: DX University
- Friday August 7 thru Sunday August 9, 2020
- Location: Parker, CO
- More info [here.](#)

PPRAA 75 years Special Event Station

PPRAA Veterans' Day Special Event Station

PPRAA Pearl Harbor Day Special Event Station

- QSL to: PPRAA, PO Box 16521. Colorado Springs, CO 80935-6521
- No need to send a SASE, we will send cards to all confirmed contacts.

Unraveling the Mystery of 1 × 1 Call Signs

The [1 × 1 Special Event Call Signs](#) system offers a way for clubs, groups, or even individuals to use a short call sign of special significance to the amateur community. These 1 × 1 call signs are [reserved](#) in advance for use in conjunction with short-term special events and commemorative operations. The FCC does not assign 1 × 1 call signs, so they are not "official."

On the matter of special event call signs, the FCC says, in Section 97.3(a)(11)(iii) of the Amateur Service rules: "The call sign is selected by the station licensee from a list of call signs shown on a common database coordinated, maintained and disseminated by the amateur station special event call sign data base coordinators. The call sign must have the single letter prefix K, N, or W, followed by a single numeral 0 through 9, followed by a single letter A through W or Y or Z (for example K1A). The special event call sign is substituted for the call sign shown on the station license grant while the station is transmitting."

The FCC also says in Section 97.119 (d): "Additionally, the station must transmit its *assigned call sign* at least once per hour during such transmissions." This requirement tends to be widely flouted, however.

A 1 × 1 Special Event Call Sign aids other radio amateurs by calling attention to the special event or other occasion. 1 × 1 call signs may be used for a variety of purposes, such as conventions, festivals, dedications, anniversaries, commemorations, and ARRL Field Day. Even local events qualify. There are 750 1 × 1 Special Event Call Sign possibilities, and radio amateurs of any license class may reserve one as far as a year in advance to use for up to 15 days. Of course, 1 × 1 Special Event Call Signs are recycled. It's first come, first served. See the [Frequently Asked Questions](#) page for more information.

The FCC has selected coordinators to approve and post 1 × 1 Special Event Call Sign reservations to a [searchable database](#). -- *Thanks to The Radiogram (Portage County Amateur Radio Society newsletter)*

You shop. Amazon gives.

PPRAA VE Session

Monthly on the second Saturday

Pikes Peak Regional Office of Emergency Management
3755 Mark Dabling Blvd, Colorado Springs, CO 80907, USA
Organizer: ve@ppraa.org

Amateur Radio Emergency Links Info

Amateur Radio and Emergency Communications

<https://alertfind.com/amateur-radio-and-emergency-communications/>

Disaster Preparedness on a Budget

<https://couponfollow.com/research/disaster-preparedness-on-a-budget>

From the annals of PPRAA history

February 1981:

A nice article on where our money goes. Our printing costs for the Ø Beat is about \$60, and for that we get 350 copies. Add \$15 for postage each month. Bill Allen KFØW will be looking into if the club would qualify for tax exempt status. This was prompted by the tax forms sent to us by the state. There'll be an HF CW get-together on 15m for all to participate. The Colorado Motorcycle Trail Riders donated \$200 to the club. The next meeting (February) will be at Sabin Jr. High and the program will be by Carl Smith WØBJW who is a vice president of the ARRL.

ARRL Outgoing QSL Bureaus

www.arrl.org/outgoing-qs1-service

ARRL affiliated-club stations may use the service when submitting club QSLs for its members in bulk ("pooling" their members cards together in one package) by indicating the club name inside the package. Club secretaries should check club affiliation on the ARRL web site to ensure that their affiliation is current. In a "pooled" package, each club member using this service **must also be an ARRL member**. Cards should be sorted "en masse" by prefix and a proof of membership should be enclosed for each ARRL member. QSLs for unaffiliated club calls may also be sent via the outgoing bureau to foreign destinations if the trustee of the club call is a member in good standing. The trustee's proof of membership must be included with the club call-QSLs.

Parker Radio Association

PPRAA Team,

Be sure to join us for our weekly nets Monday and Tuesday evenings!

First, Monday, at 8:30pm, on D-Star XRF223B, the PRA holds its D-Star net. There is plenty of conversations from everything digital to the latest projects and devices... from DStar / DMR / Fusion / Brandmeister / Hotspots, and even CW. This can be accessed via your local hotspot. Also, many have linked via the WOCD5 2M repeater as well. Considering our KOPRA repeater is being relocated, using the WOCD5 2M side would be best (please follow common/courteous practice when linking).

Second, at 8:00pm on Tuesday, is the PRA weekly analog net on the WOCFI 448.675 – (100Hz) repeater. This is a great way to catch up on the happenings of the PRA and is a great environment to ask any question related to the hobby or to give yourself some bragging rights on a recent license, upgrade, or new piece of equipment.

We'll see you on the air!

73,

KØPRA Your Friends at the Parker Radio
Association

www.facebook.com/parkerradioassociati

[on parkerradio.org](http://on.parkerradio.org)

[@ParkerCORadio](https://www.instagram.com/ParkerCORadio)



PPRAA VE EXAMS

(MONTHLY)

PPRAA VE session has relocated and will be held at 10:00 am on the second Saturday of the month at Pikes Peak Regional Office of Emergency Management
3755 Mark Dabling Blvd, Colorado Springs, CO 80907, USA

Organizer: ve@ppraa.org

TESTING IS FREE. Applicants will need the following items at the session:

1. A valid **PHOTO ID**, driver's license preferred (if you do not have a valid photo ID, please call for alternative identification requirements).
2. Your **FRN NUMBER** (Please obtain in advance of the session).
3. Your **ORIGINAL amateur radio license** (if any).
4. The **ORIGINAL of any relevant CSEs** you have **AND a PHOTOCOPY** for the VE Team to keep.

PPRAA VE Team policy, as with many VE Teams, is to not allow same day retests on failed exams. Anyone passing their Technician Class examination at a PPRAA test session will receive a free year's membership to the Pikes Peak Radio Amateur Association.

Jim Bishop kd0kql@hotmail.com, 719 332-5283
Dennis Major NOABC, PPRAA VE Contact



MARC VE EXAMS

(January, March, May, July, September, November)

The Mountain Amateur Radio Club (MARC) VE Team conducts VE exam sessions in Woodland Park every odd month at 10 am on the first Saturday in the Community Meeting Room of the Woodland Park Library, 218 East Midland Avenue. The MARC VE Team is affiliated with the ARRL/VEC and examinations for all classes of license will be offered.

Full information, including driving directions to the Woodland Park Library, is available under "VE Sessions" on the MARC website at <http://www.nx0g.org/ve.html> or contact Wes Wilson (KØHBZ) at k0hbz@arrl.net or call (719) 687-8758.

If attending, please BE SURE to bring the following items to the session:

A valid PHOTO ID, driver's license preferred (if you do not have a valid photo ID, please call for alternative identification requirements).

- 1. Your FRN NUMBER** (now required – this includes children Please obtain in advance of the session).
- 2. Your ORIGINAL amateur radio license** (if any) **AND a PHOTOCOPY** for the VE Team to keep.
- 3. The ORIGINAL of any relevant CSCEs** you have **AND a PHOTOCOPY** for the VE Team to keep.

Here is a link that describes the book in more detail:

<http://www.ke7x.com/successful>

Follow us on www.facebook.com/KE7XBOOKS to keep up-to-date on book news and to be notified of book discounts at www.lulu.com.

This book has 267 pages, 211 figures and diagrams, and 53 tables of data to make understanding the sometimes complicated ham radio operations much easier. The book follows KE7X's philosophy of presenting material in several forms to accommodate people with different learning styles -- reading, visualizing, hands-on -- with the many figures and text explanations and there are hands-on exercises throughout the book that can help you learn more about your particular radio.

Follow us on www.facebook.com/KE7XBOOKS to keep up-to-date on book news and to be notified of book discounts at www.lulu.com.

One instructor for new and advanced ham classes has said, "This book is exactly what is needed. I've seen some other books targeting the new hams that are less than satisfying both technically and in content but this one is right on the mark and covers so much information that I so often get asked about, during and after teaching classes."

Here are more details on the content:

- With nearly 110 years of ham radio experience between them, the authors are still excited about the challenges this wonderful hobby offers. *The Successful Ham Radio Operator's Handbook* will guide you when exploring some of these.
- Its goal is to help new operators and returning old-timers learn about the breadth of exciting ham radio activities and challenges available today.
- It answers the question "Why is ham radio relevant in the Internet age?"
- It covers a wide range of topics, helping the reader to understand the excitement of different facets of ham radio and to choose a challenging and exciting activity to pursue.
- It helps the reader better understand how the radio works. Many hams only use a small fraction of the features of their radio. For example, if you understand how a noise blanker or a roofing filter or the AGC works, you will be able to more easily use these, and other, features of your radio to your benefit.
- It provides exercises designed to apply the knowledge to cement your understanding of how your radio works without being radio-specific. It is good for all makes and models.
- It helps the reader get enough background to understand much of the jargon hams who pursue special activities, such as the various digital modes, VHF contesting and moon bounce. It quickly takes the novice reader to higher level of understanding and provides URLs and websites that help the reader go deeper into new interests.
- Antennas remain a key area where all hams can still successfully experiment and create a key part of their station. This book provides information to help new hams get started cutting their own verticals and dipoles. It explains why some popular multiband antennas may have compromises that impact performance.

- It gives practical guidelines about choosing transmission lines and building and using baluns and chokes.
- Digital modes such as RTTY, PSK and the new WSTJ modes are explained. The computer-to-radio connections needed for these modes are discussed and illustrated.
- Many hams are motivated by public service and emergency preparedness. This book describes typical local emergency organizations and national networks.
- Hams who like to operate while traveling will find practical information on reciprocal international agreements and how to get permission to operate legally.

Online Practice Test Sites



Study for your Amateur Radio License exam:

[Technician \(2018-2022\)](#)

[General \(2019-2023\)](#)

[Amateur Extra \(2019-2020\)](#)

[Other...](#)

HamExam.org Amateur Radio Practice Exams

Log in using <https://hamexam.org> or click [**register**](#) to create an account. If this is your first visit to the site, please read my brief [**introduction**](#).

QRZ.COM <https://www.qrz.com/hamtest/>

Eham <https://www.eham.net/exams/>

AA9PW.COM

Membership Application
Pikes Peak Radio Amateur Association, Inc.
P.O. Box 16521, Colorado Springs, Colorado 80935

Date: _____ New Membership Renewal

Name: _____

E-mail address: _____

Address: _____

City: _____ State: _____ Zip: _____

Call: _____ License Class: _____ Telephone: _____

Are you an ARRL member? Yes No

Additional Name: _____ Call _____ Class _____ ARRL member? Yes No

Additional Name: _____ Call _____ Class _____ ARRL member? Yes No

Additional Name: _____ Call _____ Class _____ ARRL member? Yes No

Full Member - \$15.00

Full Member over 65 - \$10.00

Free - VE Signature Required:

Family Membership (same address) - \$18.00

Family Membership (both over 65) - \$12.00