



VOLUME 71 ISSUE 12
Dec. 2020

PPRAA Club Officers

President	Don DuBon, N6JRL⁺
Vice President	Tom Oliphant, KØBUL⁺
Secretary	Jay Winterton, WØWJ⁺
Treasurer	Dick Kohlhaas, W5UDM⁺
Ø-Beat Editor	Jerre Redding, WAØBCM
Webmaster	Douglas Nielsen, N7LEM
Past President	Jim Bishop, KD0KQL
Board	John Bloodgood, KDØSFY*
Board	R, Lee Glazer KEØYSE
Board	Dennis Major, NØABC
Board	Logan Perry, KEØKZA
Board	Anthony Mitchell, KEØLQK
Board	Mike McLaughlin, KØJT*
Board	Michael Walter KEØTWK
Board	Mike Anderson, WV7T*

* In final year of 2-year term

+ One year officer position

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

Monthly Ham Breakfast

New Day Café, 5901 Delmonico Dr
Saturday, 2 January 2021
8 – 9:30 AM



PPRAA General Membership meeting (12 December) will be virtual

– There will be an online meeting via Zoom. The business meeting starts at 7 PM, but get your dinner and beverage of choice and check in any time after 6 PM for a social hour. Club members check your email for info or email [Officers](#) to receive the Zoom information.



PIKES PEAK RADIO AMATEUR ASSOCIATION

Minutes of the Board Meeting November 9, 2020

CTO: N6JRL@1830

In Attendance: Don Doubon N6JRL, LD W0XLD, John KD0SFY, Jim KD0KQL, Dan Burtis KE0WJL, Logan KE0KZA, Joe KE0TPW, Jim KD0KQL, Anthony Mitchell KE0LQK, Jason K0WTF, Dennis N0ABC, Jerre WA0BCM, Mike Walter KE0TWK, Doug N7LEM, Richard Kohlhaas W5UDM, Jim RADER KD0NQM

Old Business:

SK's: Cliff n0zuq, Joe Caughlin KA0FGY.

VP: Got blue box, pouch with money, tried to get a speaker for the meeting but fell through. Does have something planned for Dec and Jan.

Treasurers Report: One expense: Paypal fees. A few donations and membership dues, also interest.

VEC Testing Report: Cancelled for this Saturday due to COVID concerns. May direct folks to Woodland Park or Monument VE testing sites.

Zero Beat Report: Should be ready tomorrow for review.

Webmaster Report: Standing by for ZeroBeat. Is up to date regarding VE cancellations.

Secretary's Report:

PPARES Report: Fairly quiet. Red Cross WINLINK training on the 14th. Anyone who wants to get their feet wet with Winlink, this is a good exercise.

Megafest Report: May not have a Megafest in 2021.

Internet Committee: Nothing new to report.

Christmas Party 2020: Cancelled.

Thursday PPRAA Net: No one to report.

Chapter 58 Report: No meeting.

New Business:

Possible Donations: Don and Mike went over. Potential for sale, some donation. Kenwood TS-450S, and other station accessories. Up for board approval for purchase. Dennis N0ABC Moves KE0TWK Seconded.
Motion passes.

Will need a tower climber.

Committee Discussion:

PPRAA Committees by bylaws Article VII

Should we update the list of committees for the website?

Updated spreadsheet, will probably solicit volunteers during the general membership meeting.

Account overview

11 Member dropped due to non-payment.

Discussion of Door Prize vs Raffle

Asset Committee Discussion

Modify Article 7, Section 12. Remove language regarding publication of the inventory in ZeroBeat.

Denis NOABC moves to petition the membership regarding the language of changing “to ensure publication” to “announce completion” Doug N7LEM Seconded Motion passes.

KD0KQL: American Legion Radio Club special event for Veterans Day. Inviting people come by and operate.

Contact Harvey Lacado K1JU. MBCA@comcast.net

Motion to Adjourn: N6JRL.



PIKES PEAK RADIO AMATEUR ASSOCIATION

Minutes of the General Meeting November 11, 2020

11NOV2020 PPRAA General Meeting Notes

MEETING START: 7:00pm – 41 Participants

PLEDGE Don N6JRL

Armed Forces Medley by Don for Veterans Day

SILENT KEYS: N0ZUQ, KA0FGY

INTRODUCTIONS:

NEW HAMPS/MEMBERS?

Current count is 218

VE Testing Dennis N0ABC

VE session for this weekend is cancelled due to COVID concerns.

TREASURER REPORT: DICK W5UDM

Not a lot to report. Mostly just paypal fees.

SECRETARY REPORT: K0WTF Jason

Nothing really to report. El Paso County COVID response has moved to Level 3, so new restrictions

ZEROBEAT: JERRE WA0BCM

Updated Zerobeat with regards to mitigating phishing attempts.

WEBMASTER REPORT; DOUG N7LEM

VE Cancellations are updated, Zerobeat is posted. Email links are put together via javascript and are not easily scapable by bots.

PPARES REPORT; John Bloodgood KD0SFY

Red Cross Winlink exercise on the 14th. If you don't have Winlink over Radio, you can participate via the internet. Further information is on the PPARES.NET website. If anyone needs additional help, please contact KD0SFY

MEGA FEST REPORT: Jim Rader KD0NQM

At present time, it does not appear feasible for a 2021 Megafest.

VICE PRESIDENT Joe KE0TPW (presentation?)

KD0KQL: To try to help out the newer hams. Resistors, how are they valued?

Kilo, Mega, things of that nature.

Proposed change to the bylaws regarding the publication of the inventory in the zerobeat due to security issue. Access will be allowed to members via the members only page of the website. Voting via poll. Approved via unanimous decision. 34 vote yes, 0 no out of 40 possible. 40 members in call, 218 members on roster, 18% > 15% threshold.

QCWA CH. 58 Report Mike WV7T or Don N6JRL

Did not have a meeting. If you're interested in more information, go to QCWA.org and look for Chapter 58. They're looking to do a fox hunt and may get the club involved as well.

PPRAA ; Thursday night net

KD0KQL: 2 Meter Good turnout, good questions, good information being shared. A lot of people seem to be enjoying it. Running in the high-teens to mid-twenties for checkins.

K0BUL: 10 Meter USB:

K0BUL: 6 Meter USB:

Christmas Party; update Don N6JRL Cancelled due to COVID concerns.

MEETING ADJOURN: 9:00PM OR BEFORE

K0WTF moves to adjourn

N0ABC Seconds Motion passes.



Isotron 160/80

www.isotronantennas.com

The Best Way To Operate HF

Easy installation
Excellent performance
Durable construction
CC&R Friendly (XYL also)

Please forward this article to those you feel would be interested.

GETTING A HF ANTENNA TO WORK part 4

Last time there was information about inductors, one component of a resonant circuit. Now capacitance, the other component will be described.

A capacitor is made of 2 metal surfaces parallel to each other in close proximity, but not making electrical contact. The larger the surface area of the metal, the higher the value of the capacitor.

When we energize a capacitor by putting an alternating current across each plate, a static charge develops. + on one side and - on the other. This starts current flowing much like a battery. When the current reverses, the current flow does also. There is no current flowing through the capacitor because it is highly insulated. It is like a miracle except we can make this happen any time we want.

Since the capacitor has a very high resistance between the plates, it offers a resistance to the Alternating current we apply to it. This resistance is called "**CAPACITIVE REACTANCE**" or X_c . Like inductive reactance it also is measured in ohms like a resistor.

As the frequency applied increases, the capacitive reactance or resistance decreases and vice versa. It reacts opposite to an inductor.

A capacitor is rated in Farads. Given this value it can be looked up on a reactance chart and the resistance can be determined for any frequency.

Capacitors not only come with a Farad value, but also with a maximum voltage rating. If exceeded the capacitor can be ruined.

Therefore, as frequency increases to the capacitor, the reactance decreases. With an inductor, as frequency increases, reactance increases. One is decreasing while the other is increasing.

When the 2 are in the same circuit, at some special point in frequency the 2 reactances will be the same or equal. Then a wonderful thing happens - **RESONANCE!**

Future articles we will see more how this works and how it applies to your antenna.

73, Ralph W0EJA Dec 2020

If you have questions about the product or articles feel free to contact me.

Bilal Company
137 Manchester Dr.
Florissant, Co. 80816 U.S.A

PH/FX: 719/687-0650
wd0eja@isotronantennas.com

My name is Russell Gross, KD9FAL, and I am honored to be one of this year's recipients of the Foundation for Amateur Radio Scholarships. Thanks to your generous donation from the Pikes Peak Amateur Radio Association, I am able to pursue a Bachelors of Science in Technology Management: Computer Network Systems Administration at Southeast Missouri State University.

Thanks Again and 73's

Russell Gross KD9FAL

Russell Gross
32772 Delhi Rd SAINT LOUIS MO 630
Brighton, IL 62012

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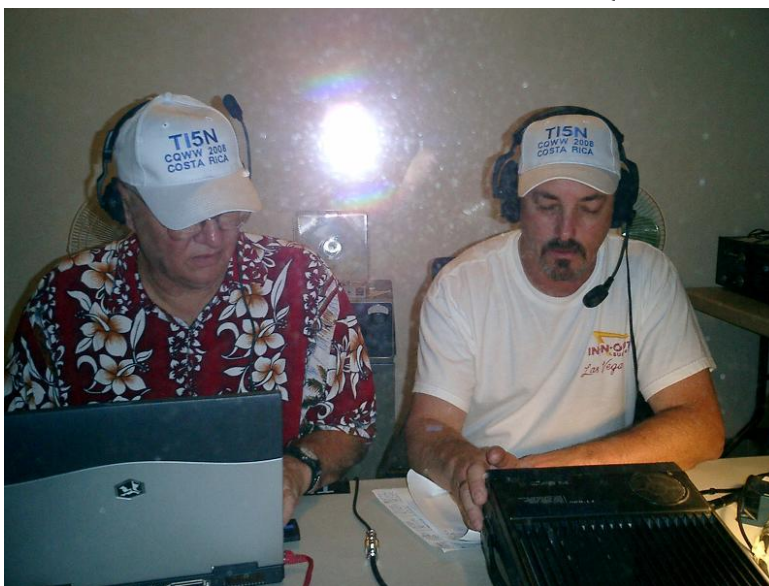
Michael Derbort, KC0ELG
Pikes Peak Radio Amateur Association
505 Cimarron Rd.
Monument, CO 80132

2-842905



N6JRL

N0ZUQ SK



(CQWW SSB Contest 2008 at T15N Costa Rica)

On October 24th 2020 Cliff Mikkelson N0ZUQ (brother of N6JRL) passed away at his home in Colorado Springs, Colorado. An avid ham since 1970 Cliff is a member of the ARRL and QCWA as well as being a long time member of DARA and PPRAA. Cliff has worked at every Hamvention in Dayton since 1996 and was on the DARA team in Friedrichshafen, Germany in 2017. Cliff was a co founding member of the Dave Kalter Memorial YDXA which has sent youth operators to DX locations since 2010. Cliff was on many teams that went annually to T15N in Costa Rica for the CQWW SSB contest. He was an early member of the Cheyenne Mountain Repeater Group (CMRG) and helped to design, build and maintain 5 repeaters on mountain tops around Colorado. In 2000 he was instrumental in the construction of the Freemont Peak site and was well known for his fantastic elk stew on winter visits.

Professionally Cliff was a Chief Engineer for many AM and FM radio stations including Clear Channel and Salem broadcasting in Colorado Springs, Denver and Ft. Collins.

Cliff is survived by his wife Lisa (KB0RLJ), son Cliff JR. brothers Frank DuBon ex (WB6RMB), Don DuBon (N6JRL), Sister Dorothy (Mickey) Anglestein and many nieces and nephews. Cliff was a VE and an Ordained Minister. Some of his close friends include Dave Novotny (WA6IFI) and Jeff Ryan (K0RM) Rocky Mountain Division Director.

Dayton Hamvention Cancelled

Refund Information

Due to unfortunate cancellation of Hamvention 2020, we know that tickets, inside booth spaces and flea market spaces have been purchased. These purchases have been made by online credit cards, mail order checks and purchased from our outside vendors. All refunds will be through the same method of purchase. All credit card sales will be refunded to the original card used to make the charge. All check and cash sales will be refunded by check. We anticipate all refunds completed as soon as possible but not later than August 1.

We are offering the following options.

1. Obtain a refund.
2. Obtain a 2021 ticket instead. (to be mailed around January 1, 2021) Hamvention 2021 May 21-23
3. Donate to Hamvention (no refund)

For all general admission (not inside or flea market) online and mail orders, email tickets@hamvention.org with your preference. Emails already received will be processed as indicated. Inside booth holders please email exhibits@hamvention.org with your refund preference. If you opt for the hold until 2021 they will contact you to verify.

Flea Market staff will be contacting each flea market space holder personally concerning refund of space(s). For those who purchased tickets at Hamcacion in Orlando, please send your ticket (keep a copy for your records) and last four of credit card for credit card refund (if purchased by card) otherwise it will be by check mailed to you.

Hamcacion Hamvention forum ticket winners, please email tickets@hamvention.org with your ticket number and address information. We will send you replacement 2021 tickets early next year.

If you purchased a ticket at one of our outside vendors then please return to the place of business and they will handle your refund.

Mail correspondence to:

Hamvention Tickets - 2020 refunds

PO Box 1446

Dayton, OH 45401-1446

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.

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

Major Events

PPRAA Megafest has been cancelled

**Postponed until 2021 – the 2020 ARRL Rocky Mountain Division Convention
Hamcon Colorado**

- Postponed until 2021
- Location: Parker, CO
- More info [here](#).

You shop. Amazon gives.

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

December 1981:

Al ADØZ proposes performing a club inventory and marking all property with labels. Frank WBØPAJ writes an article on George Ohm, the person after which Ohm's Law is named. December meeting is home brew night! The club discovers that it's no longer incorporated, at least, according to certain information gained by WBØLTV who contacted the secretary of state. A committee is still working on the bylaws and on getting legal assistance for the tax exempt status.

ARRL Outgoing QSL Bureaus

www.arrl.org/outgoing-qsl-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 WOCDS 2M repeater as well. Considering our KOPRA repeater is being relocated, using the WOCDS 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/parkerradioassociation parkerradio.org

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



PPRAA VE EXAMS

**(MONTHLY) JANUARY and FEBRUARY EXAMS HAVE
BEEN CANCELLED**

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. A copy of your **amateur radio license** (if any).
4. The **ORIGINAL** of any relevant **CSCEs** 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, 000PPRAA 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.

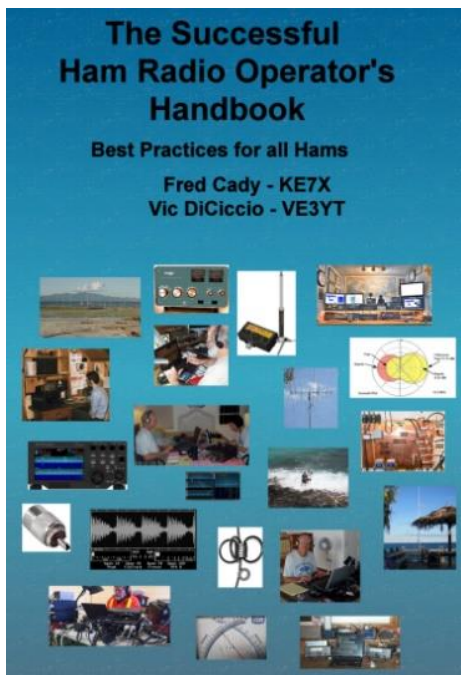
If attending, please BE SURE to bring the following items to the session:

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.

4. **Cash, Check or Money Order for \$15** (standard ARRL VE Fee). Checks and money orders should be made out to MARC and covers all the different exams you wish to take at the VE session.

MARC VE Team policy, as with many VE Teams, is to not allow same day retests on failed exams. For already licensed hams, MARC members should be monitoring the MARC repeater system 146.820- or 448.650- (both 107.2 Hz) if you need help with talk-in. 73 Dean Buckhouse



The Successful Ham Radio Operator's Handbook

This new book is aimed at new or returning hams to help them understand the practical aspects of the hobby, how to use their radios, build antennas and baluns, and get on the air successfully. In it you will find explanations of how the various parts of your ham radio - the transmitter and receiver – work, plus how these are being implemented using software defined radio technology. Operating techniques for VHF/UHF repeaters, HF radio DXing techniques, and the new digital modes are covered. Radio propagation, antennas, transmission lines, SWR and the mysteries of baluns are explained. Building your HF station, choosing a radio, connecting your radio to a computer, and mobile and portable operation are extensively covered.

Both the pdf and spiral-bound printed versions are available from Lulu.com, and the print copy is also sold by DX Engineering. You can find them via the links below:

<http://www.ke7x.com/successful/ordering-the-successful-ham-radio-operator-s-handbook>

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