

PIKES PEAK RADIO AMATEUR ASSOCIATION (PPRAA)

Special points of interest:

- Ham Breakfast
Mar 1st and Apr 5th
- PPRAA Board Meeting
Mon March 10th
Daniel's Taco
- PPRAA Membership Mtg
Wed March 12th
IHOP 5749 Stetson Hills
Blvd
- 10 Meter Net
Every Thursday
7:00 pm
28.390 MHz USB

Inside this issue:

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Sunset - Pikes Peak from the PPRAA Station



Ø-BEAT

Photo: Dan WØRO

Volume 64 Issue 3

March 2014

PPARES Region 2 District 2

ARES® (Amateur Radio Emergency Service®) is organized and established by the ARRL and local ARRL elected officials. ARES® has no limit on the amount of on the air training and practice it can have. ARES focus is on Amateur (Ham) Radio, Emergency Management, Communications and Community Service

ARES also performs, free of charge, communications for Public Service Events, such as: walk-a-thons, bike-a-thons, parades and fund-raising events.

ARES® works hand in hand with FEMA, CERT, SKYWARN, American Red Cross, Salvation Army, HDCS, and others needing emergency communications.

For more information on the ARES program visit the ARRL

For a nice list of resources to

get you ready for ARES activation, I have found the St Louis ARES website to have a great list with associated links:.

<http://www.stlares.org/resources-main.html>

PPARES Public Service Events are used to help train you to become a better emergency communicator.

Some upcoming events include:

- ⇒ 5/3 Falcon 50—Must have a DoD card to participate
- ⇒ 5/17 North Cheyenne Canyon Run
- ⇒ 6/8 Garden 10 Mile
- ⇒ 6/21 MTCC 100
- ⇒ 6/29 PPIHC
- ⇒ 7/4 Summer Roundup
- ⇒ 8/16 Pikes Peak Ascent

- ⇒ 8/17 Pikes Peak Marathon
- ⇒ 8/24 Bile Hill Climb
- ⇒ 9/27 Tour de Cure

To find out more about these events please browse to the PPARES event sign-up page at:

<http://www.wavelinedata.com/ARESPSE/Default.aspx>

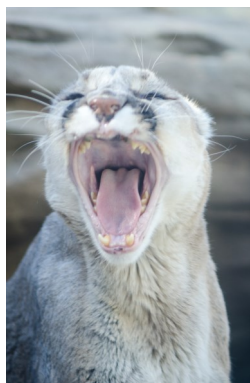
If you are wondering how to get involved you can find the local ARES links off the PPRAA.org home page. Listen in on the weekly ARES nets, drop by an event and observe and talk to the folk in ARES. Feel free to drop by the PPARES quarterly meetings, or talk to people at the PPRAA meeting.

Club Station Work Days

We are starting a club station work day activity which will be held immediately after the Ham Breakfast. The Ham Breakfast is the first Saturday of the month. The first work day will be March 1st.



Solar Panels to be installed at the PPRAA station this Spring.



**Intense discussions
sometimes occur
between board
members!**

Photo: Dan WØRO

PPRAA Officers and Board of Directors

PPRAA Board of Directors consists of four elected officers, seven board members, as well as the past president (time limit dependent). The Ø-Beat editor is a board appointed position and is also a member of the board.

Officers include:

- ⇒ President
- ⇒ Vice-President
- ⇒ Secretary
- ⇒ Treasurer

To send board members email, browse to the officers section of our website: <http://ppraa.org/about-ppraa/officers>

President	Michael Derbort	KCØELG
Vice-President	Jim Bishop	KDØKQL
Secretary	John Wishart	NGØI
Treasurer	Pam Scott	WØPRS
Board Member	Doug Nielsen	N7LEM
Board Member	Tom Brereton	WØTOM
Board Member	Jim Rader	KDØNQM
Board Member	Diana Nordstrom	KCØNPP
Board Member	Jim Harris	WØEM
Board Member	Virgil Yost	NØXRS
Board Member	Chris Schroeder	KDØUQI
Ø-Beat Editor	Dan Scott	WØRO

**Solar forecast
with calculated
propagation
information can
be found on
<http://ppraa.org>**

PPRAA Online Resources and Social Media

PPRAA Website

<http://ppraa.org>

The PPRAA website is the cornerstone for club related information, events, and technical information.

In addition you can register, pay dues, and submit donations. Donations to the PPRAA college scholarship fund are managed by FAR Scholarship Committee .

Facebook / Google+

Follow activities as they unfold, or get reminders of upcoming events.

Links to both Facebook and Google+ social media sites can be found on the PPRAA.org.

Or from each social media site search on: Pikes Peak Radio Amateur Association

PPRAA Forums

The PPRAA forums are intended to allow users to exchange of ideas, ask and answer amateur radio related questions, and plan/discuss upcoming events.

This is a fantastic, but underutilized, tool.

Check it out and register at: PPRAA.Forumotion.net

PPRAA Monthly Activities

Membership Meeting

Held the 2nd Wednesday of the month starting at 7:00 pm

IHOP

5749 Stetson Hills Blvd

(Just west of Powers Blvd)

Next meeting is

March 12th

NOTE: Many show up at 6 pm for kibitzing and a bite to eat.

Board Meeting

This meeting is held the Monday prior to the general membership meeting. The location is:

Daniel's Taco Shop

6:30pm—8:00pm

6817 Space Village Ave
(Just outside the north gate of

Peterson AFB)

Board Meetings are open to all members.

Ham Breakfast

Location changes monthly
1 - Mar 8:00 am - 9:30 am
Susie's Westside Cafe,
1686 South 21st

10 Meter Net

Every Thursday at 7pm
Starts on 28.390 USB.
May move to other bands within the technician class allocations

Megafest—July 26th

Mark your calendars NOW:

Megafest—July 26th

Table setup will be Friday, July 25th from 4pm-6pm. Please drop by and give your club a hand getting the school ready for Megafest.

On Megafest day, Vendors are allowed in at 6am.

General admission entry begins at 8am.

Raffle drawing will be at noon in the gymnasium.

Megafest is scheduled to end at 1pm, we generally start cleaning up sometime between noon and 1pm.

We are already collecting prizes for the hourly door prizes. If you know someone that would be willing to donate door prizes, please ask them and get that prize to the

PPRAA Megafest committee.

Check the website for updates.

We can always use more help prior to, during, and after Megafest. Like the raffle drawing, you do not need to be present to help!

Page 3



HamCon Colorado HF beam antennas

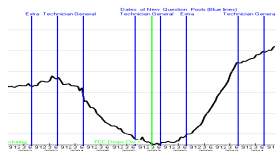
Photo: Dan WØRO

What? A Record Level of US Ham Licensed

Bob—KØNR is a long time member of PPRAA. This article is reposted from his site:

See KØNR: Radio Enthusiast
sat www.k0nr.com

The ARRL just reported that the number of FCC amateur radio licenses hit an all time high of 717,201 at the end of 2013. Since we all know that the interwebz has made ham radio communication obsolete :-), this is a difficult statistic to comprehend. Joe Speroni AH0A keeps a useful collection of ham licensing statistics including the ability to generate plots of the data. I used Joe's site to generate this plot of total US amateur licenses versus time. Note that the vertical axis does not start at zero, so the plot tends to exaggerate the amount of change.



From this plot, we see that the number of licenses was in decline from about 2003 to 2007. The no code Technician license was introduced in 1991 which is earlier than the data on this chart. The FCC completely dropped the Morse Code requirement from all license classes in 2007, as

indicated on the chart. (See Wikipedia for the exact dates.) The decline in licenses was reversed at that time and has been growing ever since. There is an interesting inflection point in 2010 that coincides with the release of a new Technician License question pool. The line is noticeably less steep after this point, which seems to imply that something happened to slow down the rate of new licenses.

Over the last ten years, Technician licenses have grown slightly as a percent of the total, going from 47% to 49%. So about half of US licenses are Technician. The grandfathered Novice and Advanced class licenses are in a slow decline and currently represent 2% and 8% (respectively) of the total licenses. The percent of General licenses has grown slightly over the past ten years, from 21% to 23%. Extra class licenses showed the most growth over the decade, going from 15% to 19% of total licenses.

While it's encouraging to see continued growth in the number of ham radio licenses, these statistics immediately raise a number of questions:

How many of these licensees are Silent Keys and their FCC license is just clocking time until it hits the 10 year expiration date?

Given the aging ham population, when will we hit a demographic brick wall and see the number of licenses decline?

How many of these licensees are actively involved in ham radio? I have a number of friends that keep their FCC license current but are never on the air.

Clearly, the 10 year license term will tend to mask any decline for a while but it seems that sooner or later the numbers will flatten off and probably start to decline. I don't know of anyone that has collected and analyzed the age distribution of hams, so I am basing this on what I see at radio club meetings and major ham radio events.

How many of these licensees are active? Really difficult to say. It seems that in the 21st century, people have many activities to choose from and their interest in any one of them may fade in and out. Not everyone is a Full Up 24/7 Ham Radio Enthusiast.

In the mean time, I am going to keep teaching Tech license classes and helping people get started in a hobby that I find to be a lot of fun. Remember the The Universal Purpose of Amateur Radio: To Have Fun Messing Around with Radios.

73, Bob KØNR

**“...FCC amateur
radio licenses
hit an all time
high...”**



**A moment of
silence for
Michael
Dassero**

**Retired Petty
Officer**

**Retired Police
officer**

NØMUD



**Memorial
Mike Dassero NØMUD**
Picture by WV7T
Mike Anderson

PPRAA General Membership Meeting—12 February 2014

PPRAA General Meeting

12 February 2014

Vice President Jim Bishop called the PPRAA general meeting to order at 7:00 PM at IHOP Restaurant at 5749 Stetson Hills Blvd.

Silent Keys – Mike NØMUD

Minutes were approved as published.

2014 Goals and Objectives

New leadership

Financials - Add 20 new paying members, make \$2500 on Megafest

Club station - at least one station permanently online, trailer completed

Special Events

- 75 years of service by our club

- Scouting event

Committee Reports

Treasurer's Report - Pam - \$8,817.35 in the accounts as of 12 Feb 2014

Asset Committee - Virgil - working on the club station

Club Station update - Dan - will be going out after the ham breakfast (1st Sat of the month) to work on the station.

Electronic Media - Doug - nothing new to report.

Technical Education - Mike is still tutoring for Tech class license.

Zero Beat - Deadline for article submissions is February 25.

ARES Update - Jim Bishop reported on ARES events and upcoming activities (www.ppara.org) that need volunteers.

Scholarship Fund

Please donate to our fund for the 2014 school year. \$378 has been donated so far this year. Donations can be made via PayPal on the PPRAA website (ppraa.org).

Megafest 2014 - Saturday, July 26th at Lewis Palmer High School, Monument, CO. Please consider joining the planning committee. Raffle tickets have been received and may be purchased now.

School Club Contest

ARRL School Club Contest is being conducted this week.

VE Report

VE session is on the even months, 1st Sat of the month. Members are encouraged to get qualified to be a Volunteer Examiner.

Jim W0EM related a story about providing assistance to a local ham building an Elecraft transceiver.

Program

Ralph Bilal WD0EJA from Isotron Antennas (www.isotronantennas.com) gave an informative presentation on his Isotron compact antennas.

Upcoming Events / Notices

- Ham Breakfast - Sally's on 21st St, Sat, Mar 1, 8-9:30AM.
- Thursday night net: Meets on the air every Thursday, 7PM, at 28.390 MHz (USB, 10m band) #273.
- Next Meeting: 7:00PM, 12 March 2014, IHOP Restaurant, Stetson Hills Blvd. & Powers. Program: Hidden transmitters by Neil.

- Board Meeting: 7:00PM, 10 March 2014, Daniel's Taco Shop.

Respectfully Submitted,

John Wishart NG0I

Secretary

23 February 2014

30 Years Ago

March meeting was held at the Guiseppe's Restaurant in the Baggage Room.

Fifty-five members present at the February meeting. A short article on building a "passive" repeater on the front page. The Aurora Hamfest is coming up on March 18.

The swapfest will be at the International Polka Palace on Busch St and 21st this year. Doug WBØMHP solves an RFI case, determining the radio was within FCC specs.

Education Committee purchased ham radio tapes last month which will be used in the classes at North Jr. High School. Mike KØTER elected as VP to fill the vacancy from last month.

Another board member resigns due to not enough hours in a day. NØDV Dave vacates his position this month. The club is short of committee chairmen, and is in need of presentations again.

PPRAA supporting the Walk for Mankind on April 14. CCARC met on March 24 at Show Biz Pizza, hosted by the PPRAA.

PPRAA Board Meeting—10 February 2014

Present: John Wishart, Pam & Dan Scott, Virgil Yost, Jim Bishop, Diana Nordstrom, Jim Rader, Jim Harris, Tom Brereton, Chris Schroeder, Jim Harris, and Doug Nielsen

Vice President Jim Bishop called the PPRAA board meeting to order at 6:40 PM at Daniels Taco Shop Restaurant.

January board meeting minutes were approved as published.

2014 Goals & Objectives

1. New Leadership - how do we get new members of the board and leadership teams? We are trying to recruit new members for this positions also. Individual contacts are recommended.

2. Financials

- Members - 20 more paying members is our goal (150 total)
- Megafest - \$2500 profit is our goal. Suggestion was made to have a representative at area club meetings to sell raffle tickets. Pam noted that we have to keep track of ticket sales and receipts closely for our records.

3. Club Station - goal: at least one operating position and the building completed.

4. Special Events

- We would also like to have a special events station for the 100th anniversary of ARRL around May 20 or so operating as WIAW/0.
- 75 yrs of service
- Scouting event

Committee Reports

Treasurer's Report - Pam stated we have a bank balance of \$9010. as of 31 Jan 2014

2014 Budget - Pam provided

Building Committee

Station Building - Need to work on the floor

Land Use Agreement - No action to get the signature as yet.

Megafest 2014 - raffle tickets ordered and their receipt is imminent.

CO QSO Party 2014 - Doug stated some rule changes were discussed.

Electronic Media - no report

Asset Committee - Virgil discussed antennas at the club station. We have planned the tower locations. He also suggested that we install a gate for an estimated cost of about \$100. The trailer also needs to be sealed up against weather better.

A motion was made & seconded that we authorize up to \$200 for installation of a gate. Passed. Also moved and seconded to authorize up to \$200 for other supplies for other repairs on the trailer.

Scholarship Fund

Pam didn't have the balance immediately available, but she estimated about \$300-400 at this time. We are also investigating the possibility of

applying for a grant for the \$30K perpetual fund.

Zero Beat

Dan noted that he still needs articles for Zero Beat.

ARES

Jim Bishop reported on several local events that need volunteer support.

Tech Ed - skipped

Unfinished Business

El Paso County Combined Club Membership Proposal - tabled.

Email vote was taken earlier in the month to accept the 3-tiered pricing schedule (\$12/15/17) for the Megafest tables. Passed.

Elections & Open Appointments

Pam is Megafest Chairperson

Next Board Meeting: Monday, 10 March 2014, at Daniel's Taco Shop.

Around The Table

Doug: Motion made/seconded to authorize funds to reserve tables at other hamfests to sell raffle tickets. Passed. Also spoke about the ARRL 100th anniversary events.

Meeting was adjourned at 8:04PM.



“Email vote was taken earlier in the month to accept the 3-tiered pricing schedule....”



Pam's, WØPRS,
"Mighty Woof"

Photo: Dan WØRO

**"When you
purchase the 90
degree elbows
find the most
compact sizes.
This will allow
the....."**

WBØTGE "Mighty Woof" 2m/440 Dual Band Fan Dipole (DBFD)

Part 2—Construction

The antenna is constructed using 1/2" copper pipe and copper fittings. Cost <\$25. The center section utilizes a 1/2" NIBCO CPVC SxSxS Tee purchased at Home Depot. This plastic tee inside diameter matches the outside diameter of 1/2" copper pipe. The antenna is constructed using 1/2" copper pipe and copper fittings. Cost <\$25. The center section utilizes a 1/2" NIBCO CPVC SxSxS Tee purchased at Home Depot. This plastic tee inside diameter matches the outside diameter of 1/2" copper pipe.

Construct two half sections of the dipole using the dimensions in the following image (Image A).

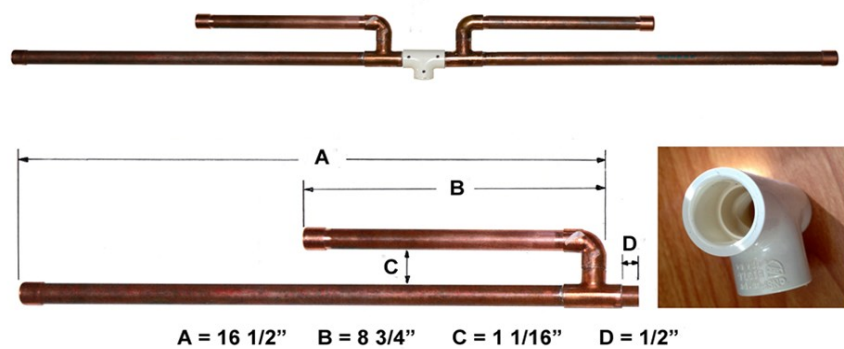


Image A

WBØTGE 2m/440 Dual Band Fan Dipole (DBFD) "Mighty Woof"

As you cut the copper pieces fit them together and measure the result. Measure with the end caps on the ends of the two long sections. The end caps are included in the finished dimensions. Cut each piece of copper pipe a little long initially so that you can trim to fit the finished dimension later. This is necessary because copper fittings vary in dimension between manufacturers. Use a 7/8" length piece of copper pipe to butt join the elbow to the tee at the base of the dipole half. Also the piece on the bottom of the dipole half should not extend more than 1/2" from the tee.

When you purchase the 90 degree elbows find the most compact sizes. This will allow the elbows to be butt soldered to the tees for the proper center dimension of the fan dipole without having to trim one or both of the elbows to make them shorter.

After all of the pieces have been cut/trimmed, fitted together and measured, solder the pieces using lead free solder and flux.



Image B

WBØTGE 2m/440 Dual Band Fan Dipole (DBFD) "Mighty Woof"

(NOTE: I know there are discussions that plumbing flux should never be used on electronics, however, this is not electronics it's plumbing, so don't worry. This soldering method is what is needed for the outside use of these antennas.

Wear protective clothing, work in a well ventilated area, and observe proper safety precautions whenever soldering.)

Looking at Image B, drill three 1/8" pilot holes on one side of the plastic tee about 1/4" from the ends of the openings. The image shows the 1/2" self-tapping screw used and the hardwood dowel used as the mounting mast for the antenna. Sand the dowel end to match the inside diameter of the tee. Make it a press fit and long enough to seat completely into the tee opening. The copper pipes and wood dowel are secured to the tee using the self-tapping screws.

After soldering the two half sections together it's time to assemble the antenna. The dipole half's need to be driven into the plastic tee. If you look at Image A, inside the tee on each hole is a ledge about 1/2" down inside. This ledge is where the dipole half's rest when the antenna is assembled.

Take the two dipole half's and insert them into opposite sides of the tee. Orient the tee so that the center hole is facing opposite the two shorter elements per Image A

Place one end of the antenna on a piece of wood, using another piece of wood for protection,

tap the other dipole end and force the dipole half's into the tee until both are seated completely up to the copper tee of each half or resting on the ledge. Secure the plastic tee to each dipole half using 1/2" self-tapping screws through the previously drilled holes and into the piece of copper pipe pressed into the plastic tee as shown in Image C. The screws will drill into the copper pipe without pre-drilling the pipe. Don't over-torque the screws. Attach the dowel also with a self-tapping screw. It is important that the screws "screw" into the copper pipe for connection of the coax.

(NOTE: If self-tapping screws are not available, pre-drill a small hole for the size screw available. Use the holes drilled in the plastic tee for a guide since the copper pipe is already seated in the tee.)

Now you are ready to attach the coax to the antenna (Image C). Separate the shield from the center conductor insulation for a distance of about 2-3 inches. Attach circular wire end rings to the coax and center conductor. Take out the

screws attaching the dipole half to the tee and attach the coax to the antenna using the dipole half screws. It doesn't matter which wire goes to which side.

(NOTE: Had the coax ring connectors been installed while the copper pipe was being drilled with the self-tapping screw, excess torquing of the cables may have occurred as the screws seated themselves against the plastic tee. The screws can now be re-tightened with a screw driver.)

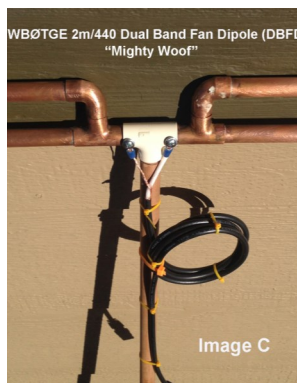
A SO-239 Jack Panel Mount with two sturdy copper wires attached to it as leads can be used instead of the direct

wiring of the coax to the dipole. Solder or screw the leads of the SO-239 to the dipole half's.

Wind a loop using about four or five turns of coax (about 5 inch diameter) to provide an RF choke. A good idea would be to silicone the screws to prevent oxidation and finally seal the coax attachment area with rubber electrical tape which will conform to the shape of the tee.

The coax should trail away perpendicular to the antenna for a distance greater than 1/2 wavelength before making a turn, else the feed-point impedance may be affected and drive up SWR somewhat. Wire tie the coax to the mast.

This antenna has a very broad bandwidth and the SWR is consistent and low throughout it's intended frequency ranges as can be seen by the SWR plots (Images D and E). Thanks to Bob, KØNR for providing the plots and Stu Turner, WØSTU for editorial help.



Agilent Technologies: N9912A

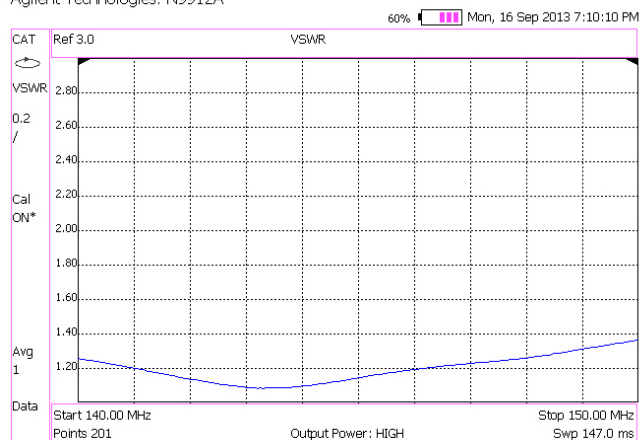


Image D

WBØTGE 2m/440 Dual Band Fan Dipole (DBFD) "Mighty Woof"

Agilent Technologies: N9912A

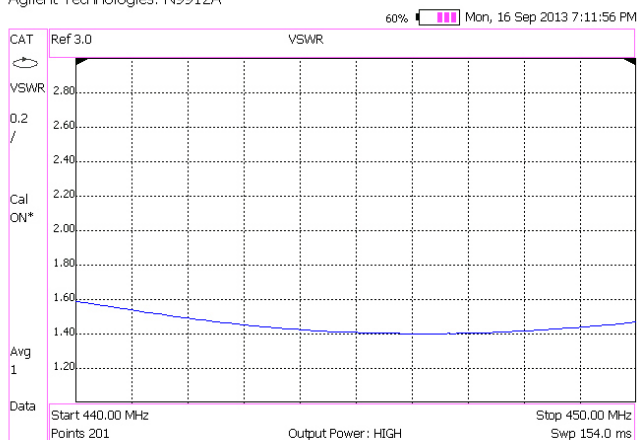


Image E

WBØTGE 2m/440 Dual Band Fan Dipole (DBFD) "Mighty Woof"

WØTLM License Classes

Ham Radio two-Day License Class

Saturday, April 12th and 19th
8 AM until 5 PM

Tri-Lakes Monument Fire
Station I

- * Learn and earn your technician's class privileges
- * Pass your FCC license exam the second day
- * Live equipment demos
- * Learn to operate
- * Find out how to participate in emergency communications

Registration fee: \$25

Must have:

HamRadioSchool.com Technician License Course
Class taught by the authors and more.

For more information contact:
bob@k0nr.com

April Meeting

The topic in April will be
Jamboree on the Air (JOTA).

We will be teaching about
JOTA to the scout leadership
in the Pikes Peak Council in
March .

Please attend the April
meeting to find out about
JOTA, local Boy Scouting
interest, and various ways you
and participate.



Ham Cram: Good for amateur radio or no?

Ham Cram: Good for amateur
radio or no?

I've been teaching one-day Tech classes, often referred to as "ham cram" classes for several years now. As a result, a couple hundred people now have amateur radio licenses. I'm proud of that, but sometimes a doubt or two creeps in. The doubts come from whether or not I'm teaching the students enough

I also sometimes think about whether or not, my No-Nonsense study guides (www.kb6nu.com/tech-manual) should have more technical content. Recently on my blog (www.kb6nu.com), I've been posting sections of the next edition of my No-Nonsense, Technician Class License Study Guide. One comment reads,

"Oh my, now I see why my beloved USA is falling behind in math/technology/university on the world stage. Lack of rigor brings down real world knowledge and this sad trend plagues our country at every level. Your book helps students pass the exam but not learn proper physics."

The commenter is right about my study guides not trying to teach students about math or physics. There are many other books out there that do that. I disagree, though, that my study guides and my one-day classes are part of a "sad trend."

For one thing, an amateur radio license is not a degree in electrical engineering. Not only that, the Technician Class license is the very first rung on the amateur radio ladder. So, the question is how much knowledge should we require of

someone just starting out in our hobby/service?

Secondly, I always stress that an amateur radio license is really a license to learn, and getting a Tech license is only the first step in a lifelong learning journey. I've been a ham a long time, and I'm constantly learning new things. And, I'm learning them because I have an amateur radio license. Without the privileges that my license gives me, I wouldn't be able to do the things I'm doing to learn them.

I sometimes regret that I can't teach people more during my one-day classes, but when you get right down to it, there's only so much you can expect. I know that a lot of my students have gone on to get General Class and Extra Class licenses and have turned in to great amateur radio operators. Presumably, they've learned a lot in the process.

Having said all that, I'm curious as to what you think about this? Are ham cram classes good for amateur radio? If not, what else should we be doing to help people get involved and enjoy amateur radio?

=====

When he's not teaching class, Dan, KB6NU enjoys working CW on the HF bands and building kits. For more information about his operating activities and his "No-Nonsense" series of amateur radio license study guides, go to KB6NU.Com or e-mail cwgeek@kb6nu.com.

"...I always stress that an amateur radio license is really a license to learn.."

Getting an HF Antenna to work—Part 10

Last article was on matching the Radiation resistance of the antenna to 50 ohms. Observing with a Noise Bridge and using the earth ground to affect match.

What if the antenna is way up in the air out of reach?

This is where a little forethought will help. No matter where you put your antenna, give attention to being able to bring it down easily.

Many operators use pulleys to do this. They mount it in the trees, on poles, towers or where ever you plan to install your antenna. With a rope system, the feed point of the antenna can be lowered for access and maintenance.

The best place to check the antenna is where it will be fixed. Not always the best place to make measurements.

Using the Noise Bridge, you can connect the little instrument to the feed point of the antenna with a double male connector. Set the X control on 0 and the

R control to 50. Then send it up into the permanent position. Go to your receiver and observe the noise generated from the bridge. Now you can scan the band to find the point where the noise is minimum. This will be your resonant point and should be addressed first. If you need to lower or raise the frequency of the antenna, this is the time to do it.

If you have found that the minimum noise is not completely gone, then you can drop the antenna again and move the R control slightly in either direction. If you still have your phone handset to hear the receiver, then you can make this final assessment at the antenna site.

If you are doing a fixed antenna on a tower that needs to be climbed, take the Noise Bridge and phone up with you. You can do all your work at one time while up there.

If you are going to use a metal pole to mount your antennas,

give it some thought about being able to tilt the pole over easily for tuning and maintenance. There is a variety of pulley arrangements that can make raising and lowering the mast quite easy.

Using the Noise Bridge takes a little pre-planning. Are there analyzers that can test an antenna from the convenience of the radio room? There are. Next article will mention what to look for.

73,
Ralph WD0EJA
February 2014
BILAL COMPANY
137 MANCHESTER DR.
FLORISSANT, CO. 80816

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



THANK YOU
Ralph—WD0EJA
for your excellent
presentation at the
February PPRAA
meeting.



Dits and Bits (For Sale)

The Dits and Bits column is included in the Ø -Beat when a personal amateur radios item for sale is received via an email sent to :

zerobeat@ppraa.org

We currently accept amateur radio advertising to be included at the Ø -Beat editor's discretion. Currently there is not charge, but that may change in the future.

For Sale:
IC-7200
w/original boxes.
Non-smoker.
Very low hours.
\$750 OBO
Call: Steve 719-440-5067



QST review of the IC7200
can be found at:
http://www.icomamerica.com/en/products/amateur/hf/7200/IC7200_QSTReview.pdf

**Each VE team
of PPRAA and
MARC are
affiliated and
accredited by
the ARRL/VEC**

Testing for your New or Upgrade Amateur Radio License

Colorado Springs

The PPRAA conducts a ARRL affiliated Volunteer Examiner (VE) session on the second Saturday of every even numbered month plus a VE session during Megafest.

The next PPRAA VE session will be April 12th.

Location:

Colorado Technical University
4435 North Chestnut
Colorado Springs, CO

Directions can be found at:

ppraa.org/ve-testing

Contact:

Dan Martin

VE@ppraa.org

Woodland Park

The Mountain Amateur Radio Club VE team is affiliated with, and accredited by, the ARRL/VEC.

The MARC VE Team GENERALLY offers VE sessions at 10:00 A.M. on the first Saturday of the odd numbered months at the Woodland Park Library (same location as the MARC monthly general meetings).

While walk-ins are always welcome, we do appreciate knowing how many people are planning to attend.

If possible, please contact our VE Team Contact person Wes Wilson (KØHBZ), and indicate which exams you are planning to take.

For more information see:
<http://www.nx0g.org/ve.html>

What to bring

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

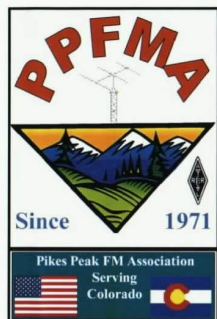
Your FRN or SOCIAL SECURITY NUMBER (now required – this includes children).

Your CURRENT ORIGINAL amateur radio license (if any) and a PHOTOCOPY for the VE Team to keep.

The CURRENT ORIGINAL CSEs you have and a PHOTOCOPY for the VE Team to keep.

Cash, Check or Money Order for \$15 (standard ARRL VE Fee). Checks and money orders should be made out to either PPRAA or MARC (site dependent). This covers all exams you wish to take at this VE session.

NOTE: PPRAA and MARC VE Team policy, as with many VE Teams, is to not allow same day retests on failed exams.



"Above Them All"
www.ppfma.org

Pikes Peak FM Association Inc. annual meeting

PPFMA will be holding their annual meeting this month at:

Colorado Springs Police Station
Gold Hill Division
955 W. Moreno Ave

The date and time are:

March 22 from 10:00-13:00

Everyone is invited

The Pikes Peak FM Association is a nonprofit, amateur radio VHF/UHF group which operates and maintains VHF and UHF communications facilities serving the Colorado Springs and Pikes Peak region.

Through its repeaters, the PPFMA supports many of the other organizations (such as ARES, RACES, and Skywarn), emergency operations and public service events throughout the region.

PPFMA is the organization supporting the 146.97 and 448.450 very wide area repeater systems.

You can support PPFMA by joining. Membership applications will be available at the annual meeting or can be found on their web site at:

www.ppfma.org

Contest Corner

The following list are contests and QSO parties I thought looked interesting. For a full list of contest, visit www.hornucopia.com. Or Google "8-day contests".

Mar-1 ARRL Int DX SSB
Mar-2 DARC 10m Digital
Mar-8 Ohio QSO Party
EA PSK63 Contest
Mar-9 Wisconsin QSO Party
Mar-15 BARTG HF RTTY

Mar-15 Feld Hell Spring
Mar-16 Run for the Bacon QRP
Mar-22 Oklahoma QSO Party
Louisiana QSO Party
QCWA QSO Party
Mar-26 CWops Mini-CWT
Mar-29 CQ WW WPX

April State/Province QSO

Parties:
Apr-5 Mississippi
Apr-12 New Mexico
Georgia

Apr-19 Michigan
Apr-20 Ontario
Apr-26 Florida

This is only a short list of the contests for March. The list includes all the state and province QSO parties for both March and April.



Technician License Question of the Month

By WØSTU on April 9, 2013
Posted to:
www.hamradioschool.com

TIA03

Which part of the FCC rules contains the rules and regulations governing the Amateur Radio Service?

- ◇ Part 73
- ◇ Part 95
- ◇ Part 90
- ◇ Part 97

The Federal Communications Commission (FCC) is an independent United States federal government agency established by the Communications Act of 1934. It is charged with regulating interstate and international communications by radio, television, wire, satellite and cable. Its jurisdiction covers all 50 states, Washington DC, and all U.S. possessions.

The FCC establishes rules for the regulation of communications by the means listed above. The agency organizes communications rules by "parts," each part defining rules and regulations associated with a specific area of communications. For example, Part 0 defines the organization of the FCC itself, and Part 11 outlines the

Emergency Alert System of the United States. Radio broadcast services are governed by Part 73, and the Amateur Radio Service is established and governed by Part 97.

Part 97 is divided into seven subparts, and each subpart contains multiple paragraphs, each specifically numbered and addressing specific rules of the Amateur Radio Service. All regulation paragraph numbers related to the Amateur Radio Service will begin with "97" and a decimal addition will follow. For example, paragraph 97.113 (a)(4) identifies music using phone emissions as a prohibited transmission, along with communications to facilitate a criminal act, encoding to obscure meaning, deceptive or false messages, and obscene or indecent words or language. General operating standards are listed under 97.101, and 97.101(d) specifies that maliciously causing interference to any radio communication is prohibited. There are many more from which many of the Technician exam pool questions have been derived and that are covered in the HamRadioSchool.com Technician License Course book, Chapter 2.0.

The seven subparts of Part 97 are:

- ◆ Subpart A -- General Provisions
- ◆ Subpart B -- Station Operation Standards
- ◆ Subpart C -- Special Operations
- ◆ Subpart D -- Technical Standards
- ◆ Subpart E -- Providing Emergency Communications
- ◆ Subpart F -- Qualifying Examinations Systems
- ◆ Appendices

You can find a convenient listing of all Part 97 rules at the American Radio Relay League (ARRL) link: <http://www.arrl.org/part-97-amateur-radio>

The answer to Technician question TIA03, "Which part of the FCC rules contains the rules and regulations governing the Amateur Radio Service?" is D: **Part 97.**

Ham Radio School.Com is a learning system consisting of "The Book", "The Web Site", and "The Apps". Check it out!

"Which part of the FCC rules contains the rules and regulations governing..."



**PIKES PEAK RADIO
AMATEUR
ASSOCIATION**

Send membership application to:

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

General Questions:
ppraa@ppraa.org

ØBeat:
zerobeat@ppraa.org



ppraa.org

Get Radio Active, Get On The Air

Membership Application:

Date: ____ / ____ / ____ **New Membership: Yes / No**

Name: _____

Address: _____

City/State/Zip: _____

Call: _____ **Class:** ____ **Phone # (____)** _____

Email: _____

Are you a ARRL member: Yes / No

Additional Family Members:

Name1: _____ **Call:** _____ **Class:** ____ **ARRL Member: Yes / No**

Name2: _____ **Call:** _____ **Class:** ____ **ARRL Member: Yes / No**

Name3: _____ **Call:** _____ **Class:** ____ **ARRL Member: Yes / No**

____ **\$15.00 Full Member**

____ **\$10.00 Full Member over 65**

____ **\$18.00 Family Membership**

____ **\$12.00 Family Membership over 65**

\$ ____ **Membership Amount**

\$ ____ **Scholarship Fund Donation**

\$ ____ **PPRAA General Fund Donation**

\$ ____ **Total**

Scholarship Fund

The PPRAA strives to provide educational and recreational activities for its members intended to further their knowledge in the art of radio communications. The PPRAA encourages its members to participate in public service communications, civil defense, charitable fund drives and other activities for which amateur radio is particularly adapted. In this spirit of public service the PPRAA embarked over three years ago on creating a scholarship fund to promote undergraduate students to excel in the Engineering and Sciences. The fund will award one \$1,000 scholarship per year and be open to any student who is pursuing an undergraduate degree in either Engineering (Electrical, Civil, Mechanical, Chemical, Aeronautical, Astronautical) or the hard sciences (Physics,

Chemistry, Computer Science) at any accredited university with an emphasis on Colorado institutions. The scholarship program will be managed by the Foundation for Amateur Radio located in Washington, DC and with help from Amateur Radio enthusiasts such as you; it will be ready for the 2015 school year.

Anonymous donations may be made directly to the scholarship fund at:

FAR Scholarship Committee
P.O. Box 911
Columbia, MD 21044

Checks to: PPRAA Scholarship

Online, secure, donations can be made at:

ppraa.org/donations.

Consider adding a donation to your membership when you renew online.



Support the PPRAA Scholarship Fund
Picture of Colorado College