



VOLUME 63 ISSUE 5

ARRL AFFILIATED-SPECIAL SERVICE CLUB

May 2013



Mobile NVIS

Steve KL7IZW

Monthly Ham Breakfast

LOCATION

Time is from 8:00-9:30 AM

All are warmly invited to come on down and join us!

Zero Beat Newsletter

Comments, suggestions, and submissions are always greatly appreciated. Help make your club newsletter better.

WV7T@ARRL.NET



May PPRAA Club Meeting

The May 8th club meeting will be at the IHop on Stetson Hills Blvd (just west of Powers Blvd). 5749 Stetson Hills Blvd.



PPRAA Club Officers

President	Mike Derbort	KCØELG
Vice President		
Secretary	Diana Nordstrom	KCØNPP
Treasurer	Pam Scott	WØPRS
Board	Tom Brereton	WØTOM
Board	John Wishart	KCØJFH
Board	Doug Neilsen	N7LEM
Board	Jim Bishop	KDØKQL
Board	Virgil Yost	NØXRS
Board	Kerrienne Dixon	KDØIPR
Board	Jim Rader	KDØNQM
Ø-Beat Editor	Mike Anderson	WV7T

All officers can be contacted at:

boardmembers@ppraa.org

Garden of the Gods Amateur Radio Club



Garden of the Gods ARC meeting

First Monday of each month at Fargos Pizza at 11:30 am. All are welcome.

PPRAA FACE BOOK

<http://www.facebook.com/pages/PPRAA-Pikes-Peak-Radio-Amateur-Association/185833894769325?v=wall>

PPRAA Field Day 2013



PPRAA Field Day 2013

Who: PPRAA members, local amateur radio operators, friends, guests, and elected government officials.

When:

Setup: June 22rd, 1530

Operations: June 23th, Noon until June 24th Noon

Tear Down: June 24th, Noon

Where:

3622 Bar 10 Road, Calhan, CO

Talk In: 146.580

Technical Education



Mike Anderson, WV7T
Teaching Ham Radio Since 1972
wv7t@arrl.net
719-229-8610

Licensing

License classes

Sundays

Pre-registration required
Call to register 229-8610

Hands-on classes

Hands-on from 3-5 pm on **Saturdays**.

Pre-registration required

Call to register 229-8610.

Hands-on Training

The hands-on training will use training modules to teach basic electronics, trouble shooting, and the use of oscilloscope, multi-function meters, audio signal generators, and antenna analyzer.

Study Materials

Licensing and technical books are available at Centennial Electronics. Kits are also available to build and gain experience in electronic construction.





GETTING AN HF ANTENNA TO WORK

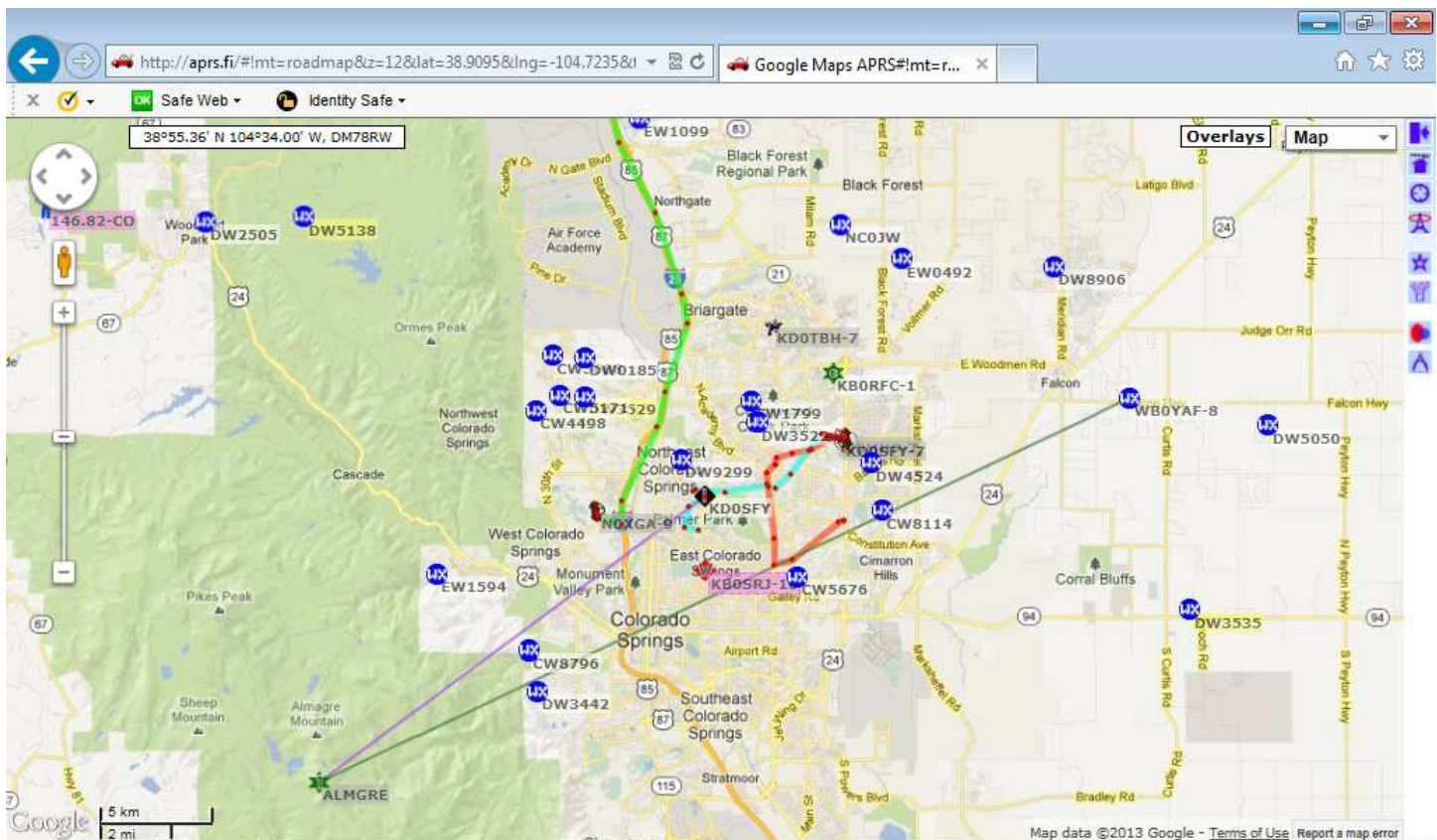
In the last article a metal mast was recommended to mount your antennas on. However, if you choose to use a non-metallic support much of this information will still apply. You need to choose the spot your antenna is going to be installed. Next you need a feedline. Our comments will be concerning coax. It is good practice to run your coax from the antenna to the station as neatly as possible. Secure the coax down the mast or tower either right to it or with an appropriate stand-off, then exiting the mast or tower where needed to run to the station. If you need to run the coax along a roof or exterior wall, use stand-offs. This is for your safety and it will maintain a neat appearance. If it doesn't work at least it will look good. How much coax to use? On an antenna that is resonant my preference is not to use a choke made from a coaxial coil. You can always add one later if needed. When you run your feedline to the station, leave a few feet extra to be comfortable with the connections. Coiling 50 to 100 feet of extra coax will change things and you will need to be pretty schmart with antennas to figure it out. Of course you are going to be in time. What about grounding? Back to the mast or tower, ground the bottom of these structures to at least a 4 foot ground rod near the structure. If your mast or tower is elevated from ground, then an applicable ground wire should be attached to the bottom. The ground wire should NOT touch the building, so use stand-offs, this is for your safety, also keep the coax and ground wire as separate as possible. Inside, start initially with no extra ground wires other than the ground connection to your electrical source. Normally this is all that is needed. Once you have the antenna system working and you want the comfort of more ground wires, you can add them. The next article will be on more details on getting the antenna to work.

73,
Ralph Bilal
BILAL COMPANY
137 MANCHESTER DR.
FLORISSANT, CO. 80816 U.S.A
PH/FX: 719/687-0650
wd0eja@isotronantennas.com

A-1 Operator Nominations

A-1 Operators consider nominating someone to become a member of A-1 Operators Club. Recognize those who embody the professionalism and skills of the best of the best.

APRS



I know some people have been experimenting with digital modes and the club had an APRS demo a while back, which piqued my interest in getting an APRS HT. I picked up a Yaesu VX-8GR HT and have been learning and experimenting with APRS and thought I might share my experiences and where I have gone.

I had a hard time seeing reports from my HT on aprs.fi or openaprs.net and after running some quick path profiles I saw that between the antenna, the low power of the HT, and the coverage in our area that I just wasn't hitting an Internet Gateway (lgate) or digital repeater (digi) most of the time. If I hooked my HT up to my home station Diamond X-300 multi-element vertical, I had no problem being heard.

So... I came at the problem a couple ways. 1) Better antenna(s) for the HT. 2) Build an lgate.

#1 was pretty straight forward. I tried an MFJ-1717S on the HT and on a window mount for the car. This gave good results on the HT and mediocre results on the car. Changed the car antenna to a Diamond MR77S and had good results.

In regards to #2, I initially used an old Dell laptop and an even older Pro-2006 Radio Shack scanner hooked to a discone in the attic. I could easily hear APRS traffic on 144.390 MHz. I attempted to use AGWPE's sound card TNC capabilities, but it just would not work (later heard that this is a common problem with the sound board in Dell laptops). Using UIView, I was able to send my home station info to the APRS servers and show up on aprs.fi and openaprs.net.

Shopping around, I found the TNC-X -- an inexpensive TNC with built-in USB Type B. This meant no conversion USB cable and no power supply was needed. It was perfect for my needs. MFJ makes their own licensed version, the MFJ-1270X. CAUTION: As I found out the hard way, MFJ included the wrong manual for this (manual version 1A vs board revision 3). In fact the manual online and the manual in the box, both marked 1A, were different and neither was correct. You also need USB drivers and those were not included in the box nor did the manual tell you where to get them -- after some searching it took me three tries to find the correct drivers from the correct site. I finally was able to contact the original TNC-X designer/kit maker, John Hansen, W2FS, and he graciously pointed me in the correct direction.

With my TNC-X now working properly, I found out that I no longer needed AGWPE and could just use UIView. A couple tweaks here and there and I had a functional receive only lgate and I could see local HTs and mobiles gating thru me to the APRS servers.

Testing with this hooked up to the discone showed decent coverage, but I have an aluminized sheetrock wall on one side of the attic, so I switched to the roof mounted X-300 for much better coverage. I was easily gating traffic from the south side of town and via digi ALMGRE and even one down on Highway 10, WBØJRG-7, between Walsenburg and La Junta.

This was RF to 'Net receive only, which is great, but I also wanted to be able to send from the 'Net to RF. After looking over some transceivers I settled on a Yaesu FT-2900R. I did not need the higher power, but it has a great heat sink so heat shedding gave it a slight edge over the slightly less expensive FT-1900R. I want to be able to use the X-300 antenna for my home station rig, so I also picked up a slightly smaller Diamond X-50 vertical for dedicated APRS use.

Cutting over to the FT-2900R was a bit of a problem because it does not have an accessory or auxiliary interface, I had to use the external speaker jack and the microphone jack. Getting the audio volume aligned to the TNC took some fiddling and use of an o'scope, but eventually I got it working. I had to make my own interface to the mic jack, but that was pretty straight forward. I have the transmit power on the lowest setting, 5 Watts. So far I have not had to tweak the mic gain on the radio or transmit audio in the TNC, but I may try to optimize that in the future.

Setting up UIView for transmit seemed a bit daunting, so I reached out to TAPR (Tucson Amateur Packet Radio) and they put me in touch with Steve Dimse, K4HG, one of the original lgate gurus and he helped get me squared away. I settled on the Wide1-1 setting as best for what I was trying to do. Initial testing so far appears promising. I was able to be heard by nearby stations and on my HT and I was able to send a message from UIView to my HT. The real test will be if someone from outside our area can send a message out through my lgate to an HT or mobile.

I will be playing some more with this to fine tune all the options and any feedback from APRS capable members would be helpful -- especially from any members with APRS experience.

I purposefully kept this small, light, relatively inexpensive, and portable. I found a music equipment cabinet with a shallow depth case so I can move the lgate as situations require. I am also looking into providing emergency power options. A very recent mod was to extend a couple of the TNC jumpers to toggle switches on the front panel so I do not have to open the box to change modes.

Hopefully the extra coverage will be useful for everyone, but especially for ARES. If necessary for ARES use, we can always move off the 144.390 MHz nation-wide APRS calling frequency to an area emergency net frequency.

This has been a fun, learning experience for me and I wanted to make it known that I now have this fixed/portable capability.



John Bloodgood, KDØSFY

ARRL Incoming QSL Bureaus

www.arrl.org/incoming-qsl-service

ARRL Outgoing QSL Bureaus

www.arrl.org/outgoing-qsl-service

ARRL Affiliated Clubs-Outgoing QSL cards

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.

PPRAA Apparel

Both **Silk Screen and Embroidered** (Shirts, T-Shirts, Hats, Badges, etc.), members pay for individual shirts. Embroidered - Club logo = \$7. Call sign and name ordered together = \$7, Call sign or name ordered separately = \$5 each. The number to call to order is: (719) 591-6151. Monograms by Jane.

Silkscreened - T-Shirts with a one color left chest logo only no name or call sign: Small thru Xlarge: \$8.75 ea. T-Shirts with one color logo on left and name with call sign on right side: Small thru Xlarge: \$9.60 ea. for XXlarge add \$2.00 per shirt. POC Dick Thompson, WØRAA 719-520-0288

Events In Colorado

2013 HamCon Colorado

- June 28-30, 2013 at the Rocky Mountain Park Inn in Estes Park, Colorado.

Megafest

MEGAFEST. Saturday July 27th, 2013. Hours are from 0800 to 1300 (Vendors at 0600) Ticket sales start at 0730.

Location is at Lewis-Palmer High School. 1300 Higby Road, Monument, CO

Ø-BEAT MAY 1983

The May meeting will be held at the Palmer House Motel, corner of Fillmore and N. Chestnut. There'll be an equipment check-out for folks helping with the National Sports Festival. Progress is continuing on the NSF: there'll be a control station at Vandenberg Hall at the USAFA, and message centers at the Field House and at Festival Headquarters. Eight people are taking the novice classes. Upcoming swapfests include the Lamar Swapfest at the Nat'l Guard Armory on Hwy 287 on May 22, and the MARC swapfest on July 9 and 10.

CONTESTS

May 2013

May 2013

± AGCW QRP/QRP Party	1300Z-1900Z, May 1
± NCCC RTTY Sprint	0130Z-0200Z, May 3
± NCCC Sprint Ladder	0230Z-0300Z, May 3
± Araucaria VHF Contest	0000Z, May 4 to 1600Z, May 5
± 10-10 Int. Spring Contest, CW	0001Z, May 4 to 2359Z, May 5
± Microwave Spring Sprint	0600-1300 local, May 4
± ARI International DX Contest	1200Z, May 4 to 1159Z, May 5
± 7th Call Area QSO Party	1300Z, May 4 to 0700Z, May 5
± Indiana QSO Party	1600Z, May 4 to 0400Z, May 5
± New England QSO Party	2000Z, May 4 to 0500Z, May 5 and 1300Z-2400Z, May 5
± MIE 33 Contest	2300Z, May 4 to 0300Z, May 5
± WAB LF Phone	1000Z-1400Z, May 5
± RSGB 80m Club Championship, SSB	1900Z-2030Z, May 6
± ARS Spartan Sprint	0100Z-0300Z, May 7
± CWops Mini-CWT Test	1300Z-1400Z, May 8 and 1900Z-2000Z, May 8 and 0300Z-0400Z, May 9
± NAQCC-EU Monthly Sprint	1800Z-2000Z, May 8
± NAQCC Straight Key/Bug Sprint	0030Z-0230Z, May 9
± QRP Minimal Art Session	1600Z-2200Z, May 9
± NCCC RTTY Sprint	0130Z-0200Z, May 10
± NCCC Sprint Ladder	0230Z-0300Z, May 10
± Slobzhansky Sprint Contest	1800Z-1959Z, May 10 (SSB) and

± VK/Trans-Tasman 80m Contest, Phone	2000Z-2159Z, May 10 (CW)
± EUCW Fraternizing CW QSO Party	0800Z-1400Z, May 11
± HPC World Wide DX Contest	1000Z-1200Z, May 11 and 1800Z-2000Z, May 12
± CQ-M International DX Contest	1200Z, May 11 to 1159Z, May 12
± SKCC Weekend Sprintathon	1200Z, May 11 to 1159Z, May 12
± VOLTA WW RTTY Contest	1200Z, May 11 to 2400Z, May 12
± Portuguese Navy Day Contest	1200Z, May 11 to 1200Z, May 12
± Nevada Mustang Roundup	1500Z, May 11 to 1500Z, May 12
± FISTS Spring Sprint	1700Z, May 11 to 1700Z, May 12
± 50 MHz Spring Sprint	1700Z-2100Z, May 11
± RSGB 80m Club Championship, Data	2300Z, May 11 to 0300Z, May 12
± The Day of YLs	1900Z-2030Z, May 15
± UN DX Contest	0600Z, May 18 - 1800Z, May 19
± His Maj. King of Spain Contest, CW	0900Z, May 18 to 0900Z, May 19
± Aegean RTTY Contest	1200Z, May 18 to 1200Z, May 19
± EU PSK DX Contest	1200Z, May 18 to 1200Z, May 19
± Feld Hell Sprint	1200Z, May 18 to 1200Z, May 19
± Baltic Contest	1600Z-1800Z, May 18
± UA2 QSO Party	2100Z, May 18 to 0200Z, May 19
± Run for the Bacon QRP Contest	1300Z-1659Z, May 19
± SKCC Sprint	0100Z-0300Z, May 20
± CWops Mini-CWT Test	0000Z-0200Z, May 22
± RSGB 80m Club Championship, CW	1300Z-1400Z, May 22 and 1900Z-2000Z, May 22 and 0300Z-0400Z, May 23
± NCCC Sprint Ladder	1900Z-2030Z, May 23
± CQ WW WPX Contest, CW	0230Z-0300Z, May 24
	0000Z, May 25 to 2359Z, May

- ± Portuguese Navy Day Contest, Digital
- ± QRP ARCI Hootowl Sprint
- ± SARL Digital Contest
- ± MI QRP Memorial Day CW Sprint
- ± NCCC Sprint Ladder

26
0800Z-2000Z, May 25
2000 local - 2359 local, May
25
1300Z-1600Z, May 26
2300Z, May 27 to 0300Z, May
28
0230Z-0300Z, May 31



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 k0hbx@arrrl.net or call (719) 687-8758.

If attending, please BE SURE to bring the following items to 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 **SOCIAL SECURITY NUMBER** (now required – this includes children) or **FRN** number.
3. Your **ORIGINAL** amateur radio license (if any) **AND** a **PHOTOCOPY** for the VE Team to keep.
4. The **ORIGINAL** of any relevant **CSCEs** you have **AND** a **PHOTOCOPY** for the VE Team to keep.
5. **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 Wes KØHBZ

PPRAA VE EXAMS

(February, April, June, August October December)

PPRAA VE session will be held at 9 am on the second Saturday of the even months at Colorado Technical University.

Directions to CTU are at the PPRAA website ppraa.org.

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

3. Your **ORIGINAL** amateur radio license (if any) **AND** a **PHOTOCOPY** for the VE Team to keep.
4. The **ORIGINAL** of any relevant **CSCEs** you have **AND** a **PHOTOCOPY** for the VE Team to keep.
5. **Cash, Check or Money Order for \$15** (standard ARRL VE Fee). Checks and money orders should be made out to ARRL and covers all the different exams you wish to take at the VE session.

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

Galen Steele AGØA
PPRAA VE Contact
719-213-1109

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.



If you can't find gold, you can use your gold pan to sort parts!

Ditz n Bitz

For Sale or Wanted

Do you have something to sell, trying to find something or just want to see something get to a good home? Send it in to wv7t@arrl.net and see it in Dits and Bits.

Also, visit the PPRAA Forum's online Ditz and Bitz at www.ppraa.forumotion.net !!

FOR SALE

All types of ham gear

Dave KØIRP

dlgivan@msn.com

5 element 10m beam \$100 obo

2m base station antennas (Cushcraft)

3 mobile speakers \$5 ea

80m Double Bazooka antenna \$30

160m sloper antenna \$30

Mike WV7T@arrl.net

229-8610

Tailtwister Rotor

\$250 obo

David W5DUU

719-352-5212

Mike NØMUD

N0mud@aol.com cell 210-7175.

I have a Yaesu FT-60, drop in charger, owners manual, a spare body with a spare battery. The spare body will listen but you can't transmit on the spare FT-60. I use the spare body to charge the spare battery in the drop in charger. The good FT-60 already has programmed frequencies in it and it works perfectly and there is also a speaker/microphone that works perfectly. There is also a cigarette lighter plug. I would like \$185.00.



A truly healthy ham workshop



Sometimes you just don't feel like horsing around.

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

Date: _____ ☐ New Membership ☐ Renewal

Name: _____

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

E-mail address: _____

☐ 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

**Pikes Peak Radio Amateur Association, Inc.
P.O. Box 16521
Colorado Springs, CO 80935-6521 USA**

To: