



Field Day 2004

weekend of June 26/27

Although described as an emergency preparedness exercise, Field Day is much more than just that. It provides an outstanding opportunity for Amateurs to get together to socialize, learn new techniques, swap tall tales, and simply enjoy what this great hobby has to offer.

The Pikes Peak Radio Amateur Association of Colorado Springs and the Mountain Amateur Radio Club of Woodland Park will join forces for Field Day this year. The site will be the Saint Gabriel The Archangel Church, north of Research Parkway, between Austin Bluffs and Scarborough in Briargate (see maps). The church is currently under construction, but we have permission to use the area for Field Day. This is one of the highest locations in the city, and should provide a clear takeoff for signals from HF to UHF. With several acres, there is more than enough room for stations, RVs and visitor parking.

We will operate in the 2A ("Two Alpha") category. This means that we will operate two HF stations simultaneously.

We have decided that one will be for voice (SSB) and the other for CW. We will have many other stations for people to use however. The VHF/UHF station will cover the 6 meter, 2 meter and 70 cm bands. Given our high location and the strong chance of sporadic E propagation, we should do quite well. There will also be a satellite station to make use of the AO-40 and FM satellites. Finally, for the newer, inexperienced, or inactive Amateurs, or for those not licensed at all, we will have a GOTA station. GOTA stands for "Get On The Air", and will give people an opportunity to operate without the pressure of a large pileup.

The actual contest part of Field Day will start at noon on Saturday, 28 June and end 24 hours later. Set up will start on Friday at noon, and continue on Saturday morning. Volunteers will be required to assist with set up, and with tear down on Sunday afternoon.

Station captains have been established.

(Continued on page 5)

Issue 54
Volume 6
June 2004

Club Information	2
Club and Local News	3
Crossword Puzzler	4
Satellite Operations	7
Roster	8
Public Service	10
Calendar	12
The Back Page	12

Please Note:

Please have all content for the June issue submitted by May 25.

Articles are needed to keep 0-Beat interesting so submit yours now.

June VE session will be at the SWAP-MEET

PPRAA SWAPMEET

Saturday June 12, 2004

0800 to 1300 (Vendors 0600) Ticket sales 0730

Meetings Our monthly meetings are held on the 2nd Wednesday of each month at 7 pm, temporarily at the El Paso County Office of Emergency Management, 305 S Union Blvd. Our Annual meeting is in October. Check the web site for any changes.

Regular License Exam Sessions

Our ARRL VE test sessions are on the 2nd Saturday of even numbered month. Our ARRL VE test sessions are on the 2nd Saturday of even numbered months at 9:00 AM. Contact Erik KGØXE for details.

Examinees need to bring (1) \$12, preferably a check or money order payable to ARRL/VEC; (2) picture ID; (3) the signed original and a copy of your current amateur radio license and CSEs you have (we keep the copies); and (4) a pen, pencil, and calculator if needed. Memory calculators will be checked.

Location:

Community Room of the new Fire Station #19, 2490 Research Parkway, near the NE corner of Chapel Hills Drive and Research Parkway. The Community Room is on the west side of the building.

PPRAA Web Page See it at <http://www.qsl.net/ppraa/>. Thanks to Lee Inman KØQED for maintaining these pages.

Get on the PPRAA E-mail Reflector Stay on top of new or short-fused developments. Subscribe at <http://mailman.qth.net/mailman/listinfo/ppraanet>. Thanks to John Wishart KCØJFH for maintaining this list.

PPRAA Simplex Net New time and day to be announced soon.

Nonprofit Organization The PPRAA is a federal 501(c)(3) nonprofit organization and welcomes all contributions. Your contributions/ donations may be tax-deductible.

Officers and Directors

President	Al Penney	VO1NO
Vice President	Dennis Major	NØABC
*Secretary	Joanie VerDuft	KCØGMI
Treasurer	John Hasling	KØAAI
*Board Member	Tom McDaniel	NØNTX
Board Member	Kate Muniz	WB9BAH
*Board Member	Ben Cruise	NØLNW
*Board Member	Jerry VerDuft	ADØA
Ø-Beat Editor	Tom Dawson	KCØNRZ

* Indicates this Director is in the 2nd year of a twoyear term

Committee Chairs & Other Contacts

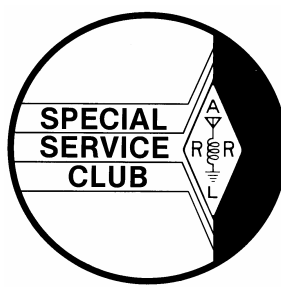
Activity	Open	
Auditing	Kate Muniz	WB9BAH
Asset	Mike Stansberry	KØTER
E-Mail Reflector	John Wishart	KCØJFH
Historian	Ron Deutsch	NKØP
Interference	Bill Petty	NØNJX
Membership	Les Borst	KCØNC
Programs	Dennis Major	NØABC
Publicity	Open	
Public Service	Mike Stansberry	KØTER
Hamfest	Kate Muniz	WB9BAH
Technical Education	Linda Hedges	KBØRKW
VE Testing	Erik Mugele	KGØXE
Video Librarian	Dennis Major	NØABC
Webmaster	Lee Inman	KØQED
AMSAT Coordinator	Tom McDaniel	NØNTX
ARRL Awards Mgr	Rick Brown	KØSU
ARES EC	Sid White	K4ARM
ARES Liaison	Mike Stansberry	KØTER
ARRL Section Mgr	Jeff Ryan	KØRM
CCARC Liaison	Moe Pierce	WBØRTF
HamCon Chairman	Jerry VerDuft	ADØA
RACES Officer	Les Borst	KCØNC

Upcoming Club Programs

June Program: This will be our Field Day preparation presentation. Our illustrious (club) president hopes to be in town to present this, but if not, an able alternate will present.

July program: To be determined/confirmed.

The Ø-Beat is published monthly in the interest of the members of the Pikes Peak Radio Amateur Association, Inc, P.O. Box 16521, Colorado Springs, CO 80935-6521. Permission is granted to reprint articles provided credit is given to both the author and the Ø-Beat. For membership and subscriptions see the back inside cover of this publication. Monthly advertising rates: Full page \$48; Half page \$24; Quarter page \$12; Business card \$6. Rates are billed quarterly. Send advertisements and payments to Pikes Peak Radio Amateur Association, Inc, P.O. Box 16521, Colorado Springs, CO 80935-6521.



Articles for the Ø-Beat Deadline for articles or ads is the 26th of the month. Submit articles by e-mail, US Mail, telephone or in person to the editor. Editor reserves right to edit for readability, grammar, spelling, punctuation and length.

Ø-Beat Available Electronically in PDF form via e-mail and on the web at <http://www.qsl.net/ppraa/zerobeat.htm>. Contact the editor for details.

Club and Local News

President's Message

June 2004

Two big events for the club take place this month. The first, our annual swapfest, will be held on Saturday 12 June at the Lewis-Palmer High School in Monument. This is one of, if not the largest swapfest in all of Colorado, so if you need something chances are you'll find it there. Kate WB9BAH and her team have worked very hard to make the event a success, but as many of you know she was involved in an auto accident some time back. This has left her with terrible headaches, and she is afraid that she might not be able to function on the day of the swapfest. Based on the response she received when she asked for assistance at the last meeting though, I know that you will all be there on Friday afternoon to help set up, and to tear down and clean up afterwards.

The second event will be Field Day. Details are published elsewhere in the newsletter, but I just want to add a few words about my philosophy on Field Day. This is one of the primary events of the year for Amateur Radio clubs across North America. No other club activity draws as many people from across the continent. This is an outstanding opportunity for new hams and old-timers alike to learn about a wide variety of techniques, from antennas to operating, to ATV and APRS. Yet out of the 140 members in the PPRAA, we'll probably be lucky to get more than 30 to visit the Field Day site (think I'm exaggerating – last year 27 club members signed the visitors' log). A lot of those will be "tire-kickers", who will show up just long enough to be able to say they were there, but who never do any actual operating.

I have to ask why? Why don't more people come out for Field Day, and why don't those who do show up sit down and actually operate on the air? I can understand that some cannot leave their homes, but that doesn't explain the majority who don't show up. And yes, some have to work, or take the kids to soccer, or any of the millions of things that we all have to do. But are you telling me that out of an entire weekend you can't spare a few hours to support the club and practice the skills we will have to use in the event of a natural disaster or another terrorist attack? If you actually believe that you can't,

then you are either far too busy for your own health, or your time-management skills suck!

So, I'll be blunt! Get off your butts and come out to Field Day! If the only time you can spare is 2:00 am to 3:00 am, then fine – I'm sure the handful of operators we have will appreciate a break in the SSB of CW station. And I expect you to do something. I don't care that you've never operated in a contest before. Guess what – everyone has to start somewhere! That's why we have the Get On The Air station.

Okay – "Rant Mode" off! It looks like the planned General Course that Rick K0SU had hoped to start will have to be postponed. Rick has changed jobs, and isn't able to commit to teaching right now. He may be able to do it in the fall. In the meantime though, Mike WV7T has stepped forward to offer an alternative. Mike is the new Technical Education Officer, and the club librarian as well. He has an entire house available as a hamshack, and has been very active helping hams upgrade. While he won't actually be teaching a course, he has the ARRL videos, a collection of technical books, and room for those who wish to conduct self-study and maybe discuss what they've learned afterwards. He also has a lot more to offer – he will have further information to pass on later.

The club's BPL letter was published on the FCC website. Thanks very much to all those who reviewed the initial drafts and offered suggestions. Remember – BPL poses a serious threat to the HF and low-VHF bands. Don't think that a few letters will stop it. We must all be vigilant and unafraid to let the FCC and our elected officials know what we think. Like the War on Terror, the fight to keep our frequencies is an ongoing struggle that requires we all play our part. The club can offer assistance, but you have to sit down and write a letter.

That's all for now. The entertainment at June's meeting will cover everything you need to know about Field Day – I'm hoping for a good turnout!

73

AI VOINO / W0

Board Meeting Minutes

5/17/04

The PPRAA Board of Directors met at the home of KØAAI on 5/17/04. Those present were President - Al Penney VOINO, VP - Dennis Major NØABC, Secretary - Joanie VerDuft KCØGMI, Treasurer - John Hasling KØAAI, and Kate Muniz WB9BAH. Mike Anderson WV7T attended as an observer. Board Members absent were Tom McDaniel NØNTX, Jerry VerDuft ADØA, Ben Cruise NØLNW and Tom Dawson KCØNRZ. Last year's Swap Fest account was reviewed and suggestions made to improve it for this year's account. Dennis NØABC noted that Barns and Noble wants \$21 for their Ham Radio for Dummy Books. The Board suggested Dennis contact HRO to see what their price would be hopefully at a discount. After discussion, the Board voted to purchase Ham Radio for Dummy books for the various libraries at a total cost not to exceed \$250. Al suggested the purchase be made after Field Day and we provide a press release of same. Last months Board meeting minutes was reviewed, discussed and approved. Prospects for future programs was discussed. Swap Fest planning was discussed and other than hourly prize donations, everything seems to be in order. Field Day planning was discussed. We are in need of one more generator and two Barbeques for cooking. There will be a snack on Friday evening, coffee and donuts Saturday morning, lunch on Saturday, a potluck on Saturday evening, and breakfast Sunday morning, noon Sunday whatever's left. Al noted the new club Publicity Director is Chris NC6T. Mike WV7T, an ARRL Registered Instructor, requested to be listed as Technical Education POC in Ø-Beat as well as the Club Librarian as Mike now has a facility to store and maintain various sources of training material and equipment. Mike will also provide articles on this activity for Ø-Beat. The Board was receptive to Mike's proposal and Al will contact Linda Hedges to coordinate the Technical Education POC situation. Al suggested club member participation in the various operating contests which he will talk more about at the club meetings. Al also reminded us of the upcoming Club picnic and will be looking for someone to head it up. Meeting adjourned at 9 pm. Respectfully submitted by Joanie KCØGMI, Secretary

PPRAA Club Meeting Minutes

5/12/04

The May meeting of PPRAA was called to order by President Al Penney VOINO at 7 pm. There were no silent keys noted. Introductions were made around the room. The April meeting minutes were approved. John KØAAI gave the Treasurer's report; for period of 4/12/04 through 5/12/04 income was \$143.80, expenses were \$201.09. Al noted that Ø-Beat expenses were more than exhausting membership dues and the Board may have to propose a raise in membership dues for 2005. Les KCØNC announced that we have 139 paid-up members and renewals are still coming in. Les also noted that the RACES/ARES support to the WMD exercise went very well. Kate WB9BAH reminded everyone of the Swap Fest on June 12th and that she would need help on Friday setting up tables, etc. Bill NØNJX agreed to stage a T-Hunt after the Swap Fest at around 1300. Bill also advised that there is someone playing music on 146.52 and requested that anyone hearing it report their location to him. Moe WBØRTF announced that there is a new Chairman of CCARC and the Secretary is Judy Hilton, KCØHVD. Al VOINO advised we will be using the same Field Day site as last year and encouraged everyone to come out for FD. Al announced that Rick KØSU has changed jobs and will not be able to conduct the General Exam Class at this time so it will be deferred until this fall. Al also advised that Tom NØNTX had a mild heart attack while in Missouri and is now doing better; and Dick WBØDUL was in Penrose Hospital for heart surgery today. Al also noted the following: our letter on the BPL issue has been sent to the FCC and is posted on their website; the Board has agreed to offer the UCCS students a PPRAA membership for the balance of this year for \$6 each; all members should make sure they are on the PPRAA reflector (contact John KCØJFH if you are not); coffee at IHOP after the meeting; our give-away table at the meetings; and we still need a Publicity Director. Dennis NØABC advised the cost for the book "Ham Radio For Dummies" will run anywhere from \$11.50 to \$23 each. Jerry ADØA advised he is taking orders for club badges at \$10 each. Rob N7LV gave the Tech Talk on a Doublet Antenna which he recently built. The Hammy Award was passed from Troy WØTLB to Mike WV7T for all of his great work in conducting code classes and tutoring new hams. Congratulations Mike! After a break the door prizes were drawn and then Jerry ADØA gave a presentation on Amateur Radio Frequency Propagation. Meeting adjourned at 9:10 pm. Respectfully submitted by Joanie KCØGMI.

(Continued from page 1)

Their job is to organize a particular station and ensure that all necessary equipment is obtained. The station captains are:

CW	Mike Stansberry, K0TER
SB	Dan Scott, KB0PPM
Satellite	Tom McDaniel, N0NTX
VHF/UHF	Tom Gill K0GIE and Brian Gauck KC9EMW
GOTA	Rick Brown K0SU

If you wish to assist with or operate a particular station, then contact the appropriate band captain – they can certainly use your help!

We will use the GenLog software for computer logging. This is a Windows based program, and is very easy to use. A demonstration of it will be given at the June meeting.

Safety at Field Day is paramount. In addition to the normal dangers associated with putting up towers and antennas, we will have to contend with the threat of fire and lightning. Please read the article on safety.

Three demonstration modes will be exhibited at Field Day. They are:

APRS	Lee Inman, K0QED
Packet Node	Lee Inman, K0QED
ATV	Jeff Ryan K0RM

Joanie KC0GMI is in charge of food. A separate article will detail the menu, but suffice to say that we will be well fed. A small fee will be charged for certain meals to cover costs, but the Saturday evening meal will be subsidized by the club as in the past. It will also be a potluck, so this is a great opportunity to try out some new recipes!

There will be an eating canopy tent, measuring 30' x 20'. This will provide shade from the sun, and will keep any rain off. We do not have enough tables and chairs, so if anyone has a source for them (a church group for example), please let me know. Otherwise we will all have to bring our own.

By the time you read this, media releases will have

been sent to the various media outlets in the city. An important aspect of Field Day is public relations. It is critical that the public be more aware of who we are and what we do. The vast majority of our elected officials probably have no idea what assistance Amateurs provide in times of crisis. It is up to us to make sure they are aware – this is how we can protect our frequencies from commercial interests and BPL, and how we can overturn restrictive covenants!

Should you have any questions, don't hesitate to contact me at volno@arrl.net, or on 146.52 simplex. I hope to see you at Field Day!

73 de AI VOINO / W0

Field Day Safety

AI, VOINO/ W0

Safety at Field Day is paramount! No matter how well we plan and execute our Field Day plan, we won't have much fun if someone is injured. Please take the time to read and heed the following advice.

Protective equipment: The following self-protective equipment is recommended:

Work gloves

Sturdy boots

Hard hat (when erecting antennas)

Long pants

Sunhat (once antennas are up)

Be very careful when antennas or towers are being put up or taken down. It is very easy to walk into the tip of an antenna and lose an eye. Make sure that the base of a tower cannot "kick out" when being raised into position. If worse comes to worse, get out of the way and let an antenna fall – it can be replaced, but you cannot!

Summers can be quite hot in Colorado Springs. Be careful when handling materials that have been lying in the sun – they can become hot enough to burn! Use sunscreen and a wide-brimmed hat to prevent sunburn and skin cancer. Drink plenty of water! At a Field Day in Nova Scotia a few years ago, we had several people come down with minor cases of heat exhaustion, and the heat is much more intense here! Don't feel guilty about taking it a little easy! The Field Day site also has barrel cactus and other thorny plants, and has some

(Continued from page 5)

rough ground, so long pants and sturdy boots are necessary.

Fire Safety: I don't need to remind you about the threat of wildfires. Even though we are surrounded by paved roads, a grassfire would ruin our coax cable, cut the guy ropes on the towers, and make a real mess of our RVs and cars! If you must smoke, please be careful with your ashes and butts. Don't smoke in the tents or near the generators or gasoline.

In order to fight any fire that might break out, I ask band captains and our cooking staff to always have a fire extinguisher nearby. I also ask everyone to bring a shovel in case we need to put out a grass fire.

Lightning: This region is second only to Florida in number of days with lightning. Lightning kills an average of 73 people a year in the USA – more than tornadoes, hurricanes or earthquakes. The very factors that make our Field Day location great for antennas also make it susceptible to lightning.

For Field Day we will follow the "30-30" rule. If thunder is heard within 30 seconds of a flash of lightning (indicating that it is within 6 miles), then we will shut down all stations and send people to a safe location. We will remain in the safe area until 30 minutes after the last flash or sound of thunder.

What constitutes a safe location? Near or in towers, tents or open areas are NOT safe locations! The nearest safe location for us will be inside a fully enclosed metal vehicle such as a car, truck or bus. If your RV is made of fiberglass or plastic, then it will NOT do – you must be inside a metal container. Windows must be up, and you should not touch the metal inside the vehicle. Antennas to radios should be disconnected and grounded if possible.

If you are outside and feel your hair start to stand on end or your skin tingle, or if you hear crackling noises, then lightning may be about to strike you. Drop down quickly; bend forward, feet together, with your hands on your knees and your head between your knees. Do not lie flat – you want to make yourself as small as possible and have minimal contact with the ground.

If someone is struck by lightning, the following actions are recommended:

Call 911. Remain calm and provide directions to the

location, and number of victims.

Ensure there are no more casualties. If the area where the victim is located is a high-risk location, then rescuers may be placing themselves in great danger. Remember, lightning can and does strike in the same location more than once!

Evacuate the victim if necessary. Unless they have fallen or been thrown some distance, lightning victims rarely suffer major fractures or severe bleeding that would preclude moving them to a safer area. Do not be afraid to move them if you feel it is necessary.

Resuscitate the victim. If breathing has stopped, start artificial resuscitation. If you decide to move the victim, give a few quick breaths first. Check for a pulse at the carotid artery (neck) and begin CPR if necessary. Get the victim to the hospital as quickly as possible.

Conclusion: Let's all pay attention to safety and have a great Field Day!

Ham Radio Community College

For many years while a member of numerous ham clubs I have found no real technical education for people, something formal to give pre and post licenses the introductory technical knowledge to really get a full flavor of Amateur Radio.

John, N0QJS, Mike, N0MUD, and myself considered this need at great length. The need for active Elmers and technical experts, a permanent location for meetings, classes, presentations, video topics, hands-on projects, a ham station available for training and use by hams, a technical Library with books and magazines for checkout, and a facility for on and off line training.

Months of planning, collecting donations of materials, a yard sale to bring in monies to purchase needed training equipment and materials (it brought in \$400), test equipment, books and magazines, has given form to the program now known as the Ham Radio Community College (HRCC). Many video courses are being acquired, hands-on projects are in progress, Morse Code classes have been active for the past 5 years. In the field activities are in the planning stages. With the support of the Pikes Peak Radio Amateur Association and the Rocky Mountain Navy Amateur Radio Club additional training support is being pro-

(Continued on page 14)

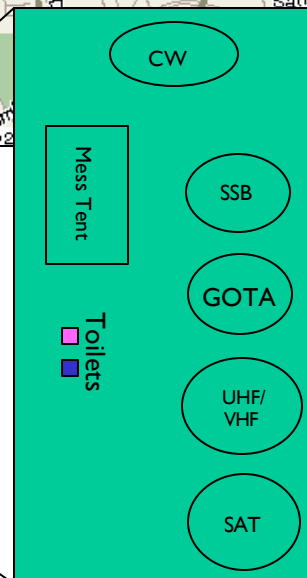
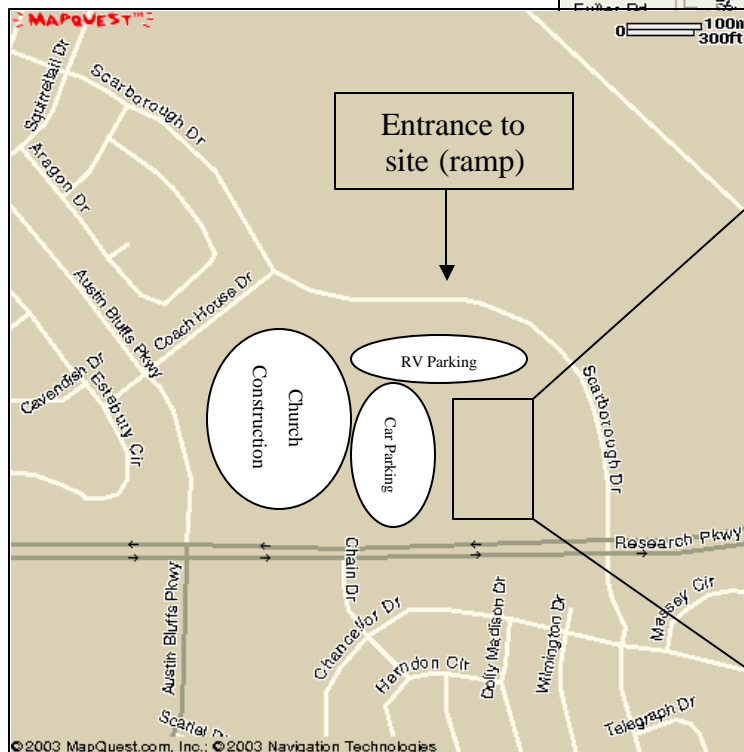
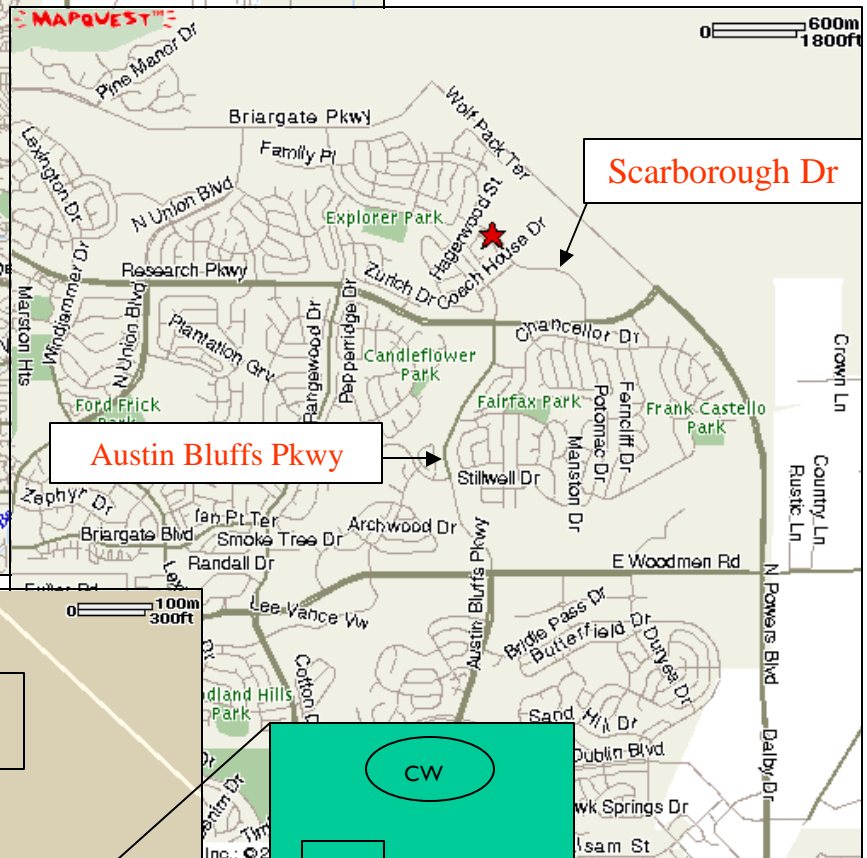
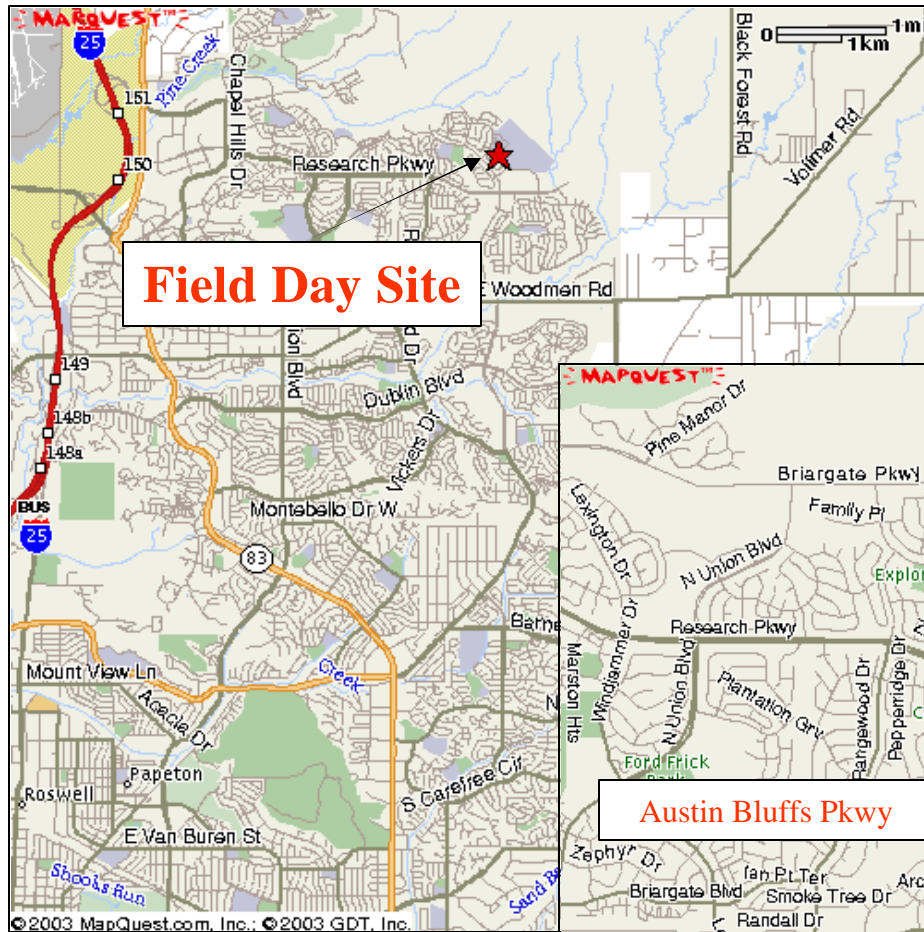
PPRAA / MARC Field Day location!

Driving directions:

North on Powers Blvd until it curves and becomes Research Pkwy. West on Research until Scarborough. North on Scarborough until in front of Liberty High School.

From I25, take Exit 151. At light turn right (south) on Hwy 83 to next light. Turn left (east) onto Research Pkwy. Continue east on Research until Scarborough (after Austin Bluffs). Left on Scarborough until in front of Liberty High School.

The Field Day Site is the big field (surprise!) in front of Liberty High School.



Field Day Contest Exchange (Or what they say during a contest!)

In any Amateur Radio contest, it is necessary to accurately exchange information for a QSO to “count”. Depending on the contest, this information, called the “exchange”, can be a signal report and serial number, the transmitter power in watts, the location grid, or even the operators’ age! For Field Day, the exchange is the operating class and ARRL/RAC section (see the list at the end of the article).

Our operating class will be 2A (Two Alpha). Our ARRL section is Colorado (big surprise there!). Let’s say that the GOTA (Get On The Air) station is using the callsign K0SU, and VE1FO in Nova Scotia calls us. The exchange would go like this:

K0SU

VE1FO

CQ Field Day, CQ Field Day, Kilo

Zero Sierra Uniform, QRZ?

K0SU, this is Victor Echo One Fox-trot Oscar, Two Fox-trot Maritime

VE1FO, Roger. You are Two Alpha

Colorado, QSL?

QSL, 73.

Thanks, Kilo Zero Sierra Uniform , QRZ?

Notice how quickly the exchange went. In calling CQ Field Day we gave our callsign using proper phonetics. This makes it easier for others to copy it correctly – if they make a mistake, we will both lose credit for the QSO. We finish the CQ with “QRZ?” which indicates to others that we have stopped transmitting and are listening for a response. By always doing it the same, we make it easier for others to know when to call us.

The Nova Scotia station gave our callsign first. This lets us know that he is calling us – in a busy contest stations can be on top of each other, and we might “answer” someone who is actually calling another station we might not be able to hear. We would enter the QSO in our log, and later be penalized when the computers analyze the logbooks. If it were to happen often enough, stations can actually be disqualified in some contests!

Notice that VE1FO did not use phonetics for our callsign – he knows we know our own callsign – he just wants us to know that he has copied it correctly. He did use phonetics for his own callsign though. Again, this is to make

it easier for us to copy it. He also gave the complete exchange – Two Fox-trot Maritime. This means that his group is operating 2 HF transceivers and is operating in an Emergency Operations Center (EOC), which just happens to be located on Mount Hope Avenue in Dartmouth, Nova Scotia (I froze my butt off on the roof of that building in December 1999, putting up antennas for Y2K!).

It is important that the complete exchange be given in the first transmission. If VE1FO had not, it would have required another transmission from both them and us. This would have added another 10 seconds to the complete QSO. Big deal you say! Just multiply 1000 QSOs by 10 seconds – it would have added 2 hours, 26 minutes to the time to make those 1000 QSOs! Conversely, we could have made several hundred more QSOs in that period – the difference between doing well in a contest and winning it!

When we answered, we gave the other station’s callsign (again, without phonetics, just so that he knows we are answering him and that we have his callsign correct), and gave our part of the exchange. We finished with “QSL?” This is the indication for the other station to go ahead. It also makes him answer us so that we know he has copied the information. It is very annoying when the other station does not confirm that he has copied everything correctly. You waste time calling him when he has moved on to another station.

The Nova Scotia station responds with “QSL”, and adds “73”. Hard core contesters would never waste the extra second it takes to say 73 (NOT 73’s!), but Field Day is more relaxed, so don’t be afraid to throw in an occasional 73 or thanks. Just don’t recite your life story every QSO!

We end with “thanks”, but immediately start looking for other stations to work by giving our callsign and asking “QRZ?”

There – it took much longer to describe the complete QSO than it would have taken to actually make it! Just remember that the whole idea is to exchange the required information as quickly as possible, but it is of no use to copy the wrong information. If a station is too weak or fades so much that you cannot copy it, don’t be afraid to apologize and move on to another. You’ll probably work it later as propagation changes!

73 and see you at Field Day!

AI, VOINO / W0

Satellite Operations

Satellite Operations

SO-50 is available as a FM voice repeater for most of its passes. You can work it using a dual band HT and a small hand held beam such as the Arrow Dual Band antenna. Two separate radios can also be used.

436.795 MHz (+ Doppler) FM Downlink

145.850 MHz (67 Hz CTCSS) FM Uplink

These are some of the June weekend passes available: (Always make sure you hear the sat before transmitting.)

Time (Z) Azimuth Elevation RX Doppler

SO-50 position on Saturday, June 05, 2004 (UTC)

13:54:00	329.2°	+1.6°	+10 KHz
13:57:00	331.7°	+16.6°	+5 KHz
14:00:00	344.4°	+57.9°	0
14:03:00	140.6°	+36.8°	-5 KHz
14:06:00	145.8°	+9.9°	-10 KHz

SO-50 position on Sunday, June 06, 2004

04:12:00	179.3°	+10.8°	+5 KHz
04:15:00	143.4°	+31.8°	0
04:18:00	69.0°	+25.5°	-5 KHz
04:21:00	45.7°	+7.5°	-10 KHz

12:45:00	344.9°	+7.0°	+10 KHz
12:48:00	10.5°	+21.4°	+5 KHz
12:51:00	67.6°	+26.6°	0
12:54:00	105.3°	+11.8°	-5 KHz
12:57:00	119.7°	+0.1°	-10 KHz

14:24:00	319.9°	+0.6°	+10 KHz
14:27:00	309.7°	+13.7°	+5 KHz
14:30:00	272.5°	+35.1°	0
14:33:00	199.1°	+26.8°	-5 KHz
14:36:00	176.4°	+8.0°	-10 KHz

SO-50 position on Monday, June 07, 2004 (UTC)

04:42:00	214.8°	+13.8°	+10 KHz
04:45:00	225.9°	+54.3°	0

04:48:00	24.4°	+35.7°	-5 KHz
04:51:00	29.6°	+9.4°	-10 KHz

Time Azimuth Elevation RX Doppler

SO-50 position on Sunday, June 13, 2004 (UTC)

02:39:00	197.3°	+5.3°	+10 KHz
02:42:00	186.2°	+25.7°	+5 KHz
02:45:00	88.9°	+53.7°	0
02:48:00	43.0°	+17.5°	-5 KHz
02:51:00	36.5°	+2.2°	-10 KHz
12:54:00	310.2°	+5.1°	+10 KHz
12:57:00	287.7°	+18.2°	+5 KHz
13:00:00	236.2°	+24.8°	0
13:03:00	196.9°	+11.9°	-5 KHz
13:06:00	181.6°	+0.2°	-10 KHz

SO-50 position on Monday, June 14, 2004 (UTC)

03:09:00	225.4°	+5.0°	+10 KHz
03:12:00	238.6°	+24.3°	+5 KHz
03:15:00	325.2°	+50.5°	0
03:18:00	17.1°	+18.1°	-5 KHz
03:21:00	26.5°	+2.8°	-10 KHz

SO-50 position on Sunday, June 20, 2004 (UTC)

01:09:00	209.7°	+14.5°	+5 KHz
01:12:00	208.7°	+57.8°	0
01:15:00	31.8°	+34.7°	-5 KHz
01:18:00	31.8°	+9.1°	-10 KHz

SO-50 position on Monday, June 21, 2004 (UTC)

23:57:00	177.0°	+2.8°	+10 KHz
00:00:00	156.0°	+16.4°	+5 KHz
00:03:00	102.2°	+25.7°	0
00:06:00	59.5°	+12.5°	-5 KHz
00:09:00	44.3°	+0.7°	-10 KHz
01:39:00	243.1°	+10.6°	+5 KHz
01:42:00	278.2°	+30.6°	0
01:45:00	351.1°	+26.4°	-5 KHz
01:48:00	17.3°	+8.5°	-10 KHz

Time (Z) Azimuth Elevation RX Doppler

SO-50 position on Saturday, June 26, 2004 (UTC)

23:36:00	221.9°	+5.8°	+10 KHz
23:39:00	233.0°	+26.9°	+5 KHz
23:42:00	336.2°	+55.7°	0
23:45:00	20.9°	+17.9°	-5 KHz
23:48:00	27.9°	+2.5°	-10 KHz

SO-50 position on Sunday, June 27, 2004 (UTC)

22:27:00	181.8°	+12.4°	+5 KHz
22:30:00	143.1°	+36.4°	0
22:33:00	63.9°	+26.1°	-5 KHz
22:36:00	43.6°	+7.4°	-10 KHz

SO-50 position on Monday, June 28, 2004 (UTC)

00:06:00	246.2°	+2.3°	+10 KHz
00:09:00	266.6°	+14.9°	+5 KHz
00:12:00	315.9°	+25.0°	0
00:15:00	1.3°	+14.0°	-5 KHz
00:18:00	19.7°	+2.1°	-10 KHz

For other passes see: <http://www.heavens-above.com/> and select Saudisat 1C. Please contact me if you have any questions.

73 Tom

n0ntx, 570-1465 or n0ntx@amsat.org



ARRL Bulletin 18

ARLB018 FCC chairman responds to request to support ARRL restructuring Plan

FCC Chairman Michael K. Powell has assured US representatives Greg Walden, W7EQI (R-OR), and Mike Ross, WD5DVR (D-AR), that the Commission will act "as expeditiously as possible" on Amateur Radio restructuring. Walden and Ross wrote Powell a month ago to urge adoption of the ARRL's restructuring Petition for Rule Making (RM-10867) "in its entirety" along with rules changes needed to put it into place. Powell said the League's petition was one of many.

"At this time, the Commission staff is reviewing and analyzing carefully all of the petitions, comments and proposed rule changes in this area," Powell responded May 21. "Because this matter is of great importance to you and the almost 700,000 amateur radio operators nationwide, the staff is working diligently to create a comprehensive solution to address the proposals the petitioners have submitted." The next step in the process, he said, will be to prepare a notice of proposed rule making for the Commission's consideration.

In addition to the League's filing, Powell pointed out, the Commission received 17 other petitions for rule making that address examination requirements and operating privileges for Amateur Service licensees. The various proposals attracted more than 5000 comments, he noted--more than 800 of them on the ARRL's petition alone.

In their letter to Powell, Walden and Ross expressed their belief that the ARRL's plan "will encourage the development, refinement and use of new technologies; increase the number of young people involved in Amateur Radio; and provide incentives for Amateur Radio licensees to pursue technical self-training and opportunities for volunteerism in the best traditions of our country." Other restructuring plans were filed by the Radio Amateur Foundation, RM-10868, and by the National Conference of Volunteer Examiner Coordinators, RM-10870.

Fifteen other petitions for rule making came down on one side or the other of retaining the Amateur Radio Morse code examination requirement to operate on HF. Judging from Powell's letter to Walden and Ross, the FCC plans to address all 18 petitions within the framework of a single rule making proceeding.

Pikes Peak Region Ham Radio Events

Date	Event
Jun 9	PPRAA meeting
Jun 12	PPRAA Hamfest & VE session
Jun 13	PSE: Garden of the Gods 10-Mi Run
Jun 14	PPRAA board meeting
Jun 16	MARC meeting
Jun 17	RACES training
Jun 23	PSE: Starlight Spectacular
Jun 26	PSE: Pikes Peak Hill Climb
Jun 25-27	ARRL Field Day
Jul 11	PSE: Summer Roundup Trail Run
Jul 17	Northern CO ARC Hamfest
Aug 08	PSE: Race for the Cure
Aug 21	PSE: Pikes Peak Ascent
Aug 22	PSE: Pikes Peak Marathon
Aug 22	Denver Radio Club Hamfest
Aug 27-29	MARC Campfest
Aug 29	PSE: Emily Griffith Center Road Ramble

PSE-ARES Public Service Event

Luci Stansberry - PPARES Public Service Event Coordinator

Mike Stansberry - PPARES Asst. Public

Jess Miley

719 W 7th, Florence, CO, 81226

KØTAA

719-784-3040

Amateur & Hobby Radio Products. We Trade

30 day money back guarantee on used equipment.
Excellent Tech @35 per hour, Commercial rates higher

Shop closed June 1 to July 19

Will be at the Colorado Springs and Loveland Hamfests

Please call before you drive

The Amateur Radio Crossword Puzzler—Jargonautics for Hamsters

By H. Ward Silver, N0AX— May 23, 2003

Hams are make-do, use-it-up sorts of people, and that extends to the jargon of ham radio. A lot of regular English words have made their way into the Amateur Radio lexicon, only to have their original meaning unceremoniously dumped and replaced with a ham-brew concoction that only an etymologist would love. Jump right in and sling a little lingo!

Across

1. What we are
2. Names
8. Interrupt
12. Soviet space station
13. Opposite of "Mark" (abbr.)
14. Ionospheric hop
16. Lightest metal (symbol)
17. Simulated or passive replacment
18. Closing down (CW)
19. Output amplifier
20. Short, sharp audio interference
22. Combine with 29 Down to make a contact
24. Snowman from the Himalayas
25. Prefix meaning "no longer"
26. Typewriter
28. No amp means feet
32. From (CW)
33. Abbreviation for KP4 QTH
34. Abbreviation for KL7 QTH
35. Semi-automatic manual key

Down

36. Radio
38. Intermediate amplifier stage
39. Uninterrupted or perfect
41. Category for one operator (abbr.)
42. Ground plane (abbr.)
43. Maximum power (abbr.)
44. Make a second QSO
45. Certificates
48. Central American country (prefix)
49. Armstrong invented this mode (abbr.)
51. Headphones
52. Styles of sending CW
53. An unstable CW signal does this

Down

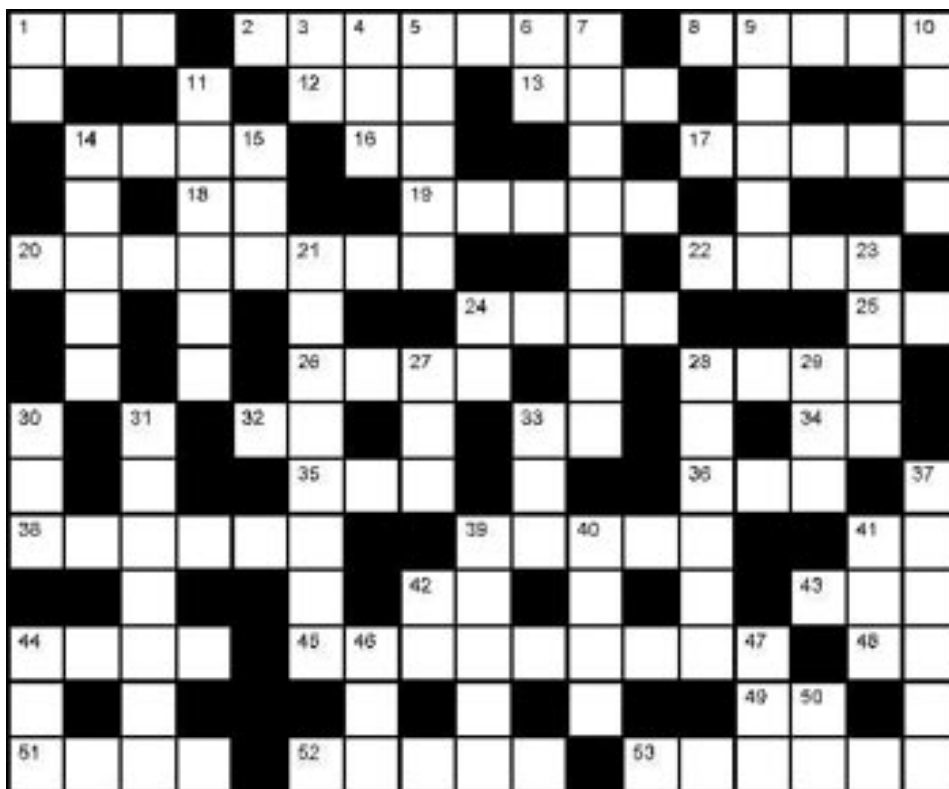
1. Telegrapher's laugh
3. Oldest voice mode (abbr.)
4. Failed to work the DX (abbr.)
5. Long-term frequency change
6. And (CW)
7. Interference from overmodulation

9. Impure CW tone

10. Use these to send CW
11. License
14. Unwanted emissions
15. Please (CW)
21. Equipment you built yourself
23. More than a day, less than a month
24. Young lady (CW)
27. List of contacts
28. Spurious received signal
29. Combine with 22 Across to make a contact
30. Poor operator
31. Type of antenna match
33. Super Hammarlund receiver
37. Receives a message
39. Talk and listen on different frequencies
40. Output adjustment on tube amplifier
41. Emergency test
42. Good luck (CW)
44. DX'ers club (abbr.)
46. French friend
47. Interference from radio-frequency signals
50. Male salutation (abbr.)

New VE session location.... Again!

After some discussion about the drawbacks of the police substation, we have decided to change the location of the VE sessions once again. This will be effective with the August (2nd Saturday) session, as June's session will be at the swapfest. The new location is in the Community Room of the new Fire Station #19, 2490 Research Parkway, near the NE corner of Chapel Hills Drive and Research Parkway. The Community Room is on the west side of the building. There is ample parking (for the users of the Community Room!) and there is no requirement for each and every person to sign in and/or show identification.



Public Service Communications



ARES

<http://www.qsl.net/ppares/>

VHF Net Tuesdays at 1900 on the 146.97 MHz
PPFMA repeater

Sid White K4ARM, PPARES EC

No report this month.



RACES

<http://www.qsl.net/epcraces/>

VHF Net Tuesdays at 1930 on the 146.76 MHz
CMRG repeater

Les Borst KCØNC, RACES Officer

The 2004 Global Mirror exercise is a matter of history. Now is when we look at what was done right and what was done wrong. I am sure that there will be many ideas as to what should be done if we have another similar exercise.

The primary problem I had with the day was the lack of use of Amateur Radio. During the hot wash it was clear that most City and County organizations are not aware of the capabilities of our hobby.

At the May 20, 2004 meeting of the El Paso RACES we were presented a very informative program on power line safety by a representative from Mountain View Electric. This information can be invaluable during our efforts to help out in any emergency situation that we may be called for.

The next RACES meeting will be on 17th of June at the county OEM at 7:00 PM.

n7lv at amsat.org and I'll get you on the roster. Please indicate if you have any problems with altitude and I can position you at a lower position. Remember, for this event you're stuck on the hill for the duration!

(If you've already contacted me about signing up, please send me another e-mail so I can make sure I've got you down.)

1. Last year's amateur radio support documentation (roster, handbook, maps, waiver forms,

etc) is posted at:

<http://www.qsl.net/n7lv/ppihc/>

2. There are a few after-action reports from past races where you can read about lessons learned during those events:

<http://www.qsl.net/aresco/00070414.htm>

<http://www.qsl.net/aresco/99070414.htm>

3. Visit <http://www.ppihc.com> for details about this year's race.

For critical times on Race Day, follow the links to: "2004 Race Info", then "Fans", then "Race Schedule".

82nd Running of the Pikes Peak Int'l Hill Climb: June 26, 2004

Rob, N7LV

For probably close to 50 years now, amateur radio operators have provided safety communications along the 12.42 mile course up the Pikes Peak Highway. This year will probably be no exception.

I say "probably" because I've had very little contact with the Hill Climb folks this year. I understand there is a new person taking over the function of Race Safety Communications, and I've heard from him only once. However, that shouldn't stop us from getting a list of volunteers to support this year's race, and I'm sure the race will go on, and they'll want our support.

As safety communicators, we are the eyes of the race safety officials at many locations along the highway where there are dangerous curves and little to no visibility by other safety officials. We typically put between 35 to 50 hams at strategic points along the course, many of which are not accessible by spectators, nor manned by race officials. Our function is to observe the race vehicles and report any problems that occur, such as vehicles off the course or stalled in the path of other oncoming race vehicles. Depending on your assigned location, this can be a pretty exciting event, or it can be just a quiet afternoon with little action. There's no telling. Either way, you and a companion can enjoy a day on Pikes Peak watching the race while serving in the safety position.

This event is an all-day event, starting as early as 0400, and running until mid-afternoon. There's still time left to visit Field Day!

If you're interested in participating in this event, you can check out notes from past events, then send me an e-mail to

Membership Committee Report

Please welcome these New Members

BOB	HATCH	KC0RVD
HOWARD	PHILLIPS	KB0PQK
JOHN	REICHL	AB0VN

Total Number of Members: 142

Zero-Beat
Articles Needed
 Please email to
KC0NRZ@ARRL.NET

ANNOUNCEMENT

I am pleased to announce that the PPRAA has a new Technical Education Officer. Mike WV7T will serve as the point of contact for anyone wishing to upgrade their license class, request help with a project or antenna raising, or just learn more about Amateur Radio. Mike and a few friends have turned an entire house into a ham shack, with (literally!) tons of equipment! He also has enough space for people to build projects, study books, and watch videos. This is important because he is also the club's new librarian, covering both books and videos. Mike will soon publish an article in the Zero Beat to explain what facilities he has available to help others.

Mike has assisted several people upgrade in the past several months, including Jim N0TUI who recently obtained his General Class.

73

AI VOINO / W0

Membership Application for the Pikes Peak Radio Amateur Association, Inc.

P.O. Box 16521, Colorado Springs, CO 80935-6521

Date: _____ ☐ New Member ☐ Renewal

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Call: _____ Class: N T + G A E Phone: _____

Mbr of ARRL? ☐ Yes ☐ No E-mail: _____

Additional Family Members to Join/Renew:

Name: _____ Call: _____ Class: _____ ARRL? _____

Name: _____ Call: _____ Class: _____ ARRL? _____

Name: _____ Call: _____ Class: _____ ARRL? _____

In which activities would you like to participate?

Field Day ☐

Demonstrations ☐

Nets or round tables ☐

Organize activities ☐

Teach ham classes ☐

Full Member \$15: ☐

Family Membership \$18: ☐

Over 65 \$10: ☐

Over 65 Family \$12: ☐

Associate \$12: ☐

Ø-Beat Only \$12: ☐

Donation to Club: \$ _____

Total Enclosed: _____

**MAKE ALL CHECKS PAYABLE
TO "PPRAA"**

Please indicate how you'd like your Ø-Beat delivered:

(Defaults to standard hard copy in the event that NO check boxes are checked)

☐ Standard hardcopy via U.S. Mail

☐ As a PDF file attachment via e-mail, to help save a few bucks

☐ I'll save the club a few bucks and download it from the Web!

Circle your interests ☐ HF / ☐ V/UHF / ☐ FM / ☐ SSB / ☐ Digital / ☐ DX / ☐ Contests / ☐ Technical / ☐ Hardware / ☐ Other _____

New and renewing members must submit a completed application form along with your check to the Treasurer.

Please Type or Print Clearly!

ALL NEW MEMBERSHIPS AND RENEWALS WILL BE PRORATED TO EXPIRE IN DECEMBER!!

(Continued from page 6)

vided. Books for the Checkout Library will soon line the bookshelves. There are even a few 2m rigs for loan to new hams. HRCC offers training in soldering, electronic components and how they work, DC/AC theory, antennas with labs, how to use test equipment, coax cable and connectors, license training (in planning), field trips, ham radio math, and so much



more is in the works. Active Elmers are needed for a citywide list available to prospective-new hams.

A huge number of very generous hams have donated desperately needed items to the program and we thank them one and all from the bottoms of our hearts. Without them we would not be operational today.

Hams who would like to assist in the training and development of training topics (very easy to do) are needed. Anyone who would like to help is warmly welcome to do whatever he or she has time to contribute. More donations are needed such as soldering irons, aluminum tubing, books, old broken antennas, whatever is cluttering your house (and will fit in our vans/trucks). We acquired an old canvas top camping trailer (circa 1961) which will be a summer project.

The Ham Radio Community College is up and running and continuing to grow as new possibilities are developed. If you would like to attend, help, or support the programs please contact Mike Anderson, WV7T, wv7t@arrl.net or 229-8610.

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

First Class Mail

To: