



Volume 55, Number 6

June 2005

The Pres Says!

Rick Brown
KØSU

Well folks, here we go again. By the time you get this it will be time for the Megafest. We can still use a few helping hands to sell tickets, help with tables, hand out door prizes etc. Please contact Kate, WB9BAH or me if you are willing to help.

Of course Field Day is only two weeks after that. We are going to be in the mountains this year! Dan, KBØPPM is our club chairperson as we team with MARC on this effort. It is always a fun time and personally one of my favorite ham radio operating activities. Please get with Dan to help out with this great time.

The PPRAA Board of Directors is looking for a site and date for the annual picnic. We hope to get it back in August this year and still not have too many conflicts with public service events. If you can help out with this by finding a site, cooking, or cleaning up please let us know.

We are looking for someone to help with membership. Les does a great job keeping our membership database up to date! We are looking for someone who will go a step beyond that and encourage new and old members to become more active by taking part in various things sponsored by our club.

As usual there are many events going on this summer with support of the various radio organizations. I hope you take part as much as you can and have a safe summer.

Take Your HT to Work Day

Tuesday June 21, 2005

What's that?

The very best Amateur Radio recruiter is a ham.

On June 21st we are encouraging all hams in the US that have an HT to take it with them to work. Wear it on your belt, put it on your desk or some other place **where your co-workers can see it**. We hope that it will raise curiosity and questions. This is a chance for you to talk to them about ham radio! At lunchtime, show them how it works. Make some contacts while they are watching. Even better, **let them talk** on the radio! Then invite your co-workers to come see you at Field Day weekend. There they can meet even more hams, see a full station in simulated emergency operations, learn more and get information so that they too can get their Technician license.

When it's all done, just mail in a report to: HT Workday, ARRL, 225 Main St., Newington, CT 06111, listing four things:

- 1) your call sign
- 2) how many non-hams watched you make a contact during the day
- 3) how many non-hams were you able to get to talk on your radio
- 4) how many non-hams said they would come to your Field Day site

The people with the highest activity levels will be eligible for prizes including the new ARRL Handbook, or Antenna Book or Operating Manual. Continued on page 7.

Board of Directors

Pres. Rick Brown KØSU k0su@adelphia.net 531-9423
 VP Christopher Taylor NC6T nc6t@arrl.net 260-8081
 Sec. John Wishart KCØJFH kc0jfh@arrl.net 481-2439
 Treas. Kate Muniz WB9BAH* wb9bah@elpasotel.net
 ZB Ed. Dennis Major NØABC n0abc@arrl.net 531-6774
 Dir. Al Penney VO1NO*
 Dir. Pat Kelly KCØMIR* pwkellysr@juno.com 591-0948
 Dir. Dennis Major NØABC* n0abc@arrl.net 531-6774
 Dir. Mike Anderson WV7T wv7t@arrl.net 229-8610

* In final year of 2-year term.

PPRAA Meeting Information

The Pikes Peak Radio Amateur Association meets monthly at 7 pm on the 2nd Wednesday of each month at the El Paso County Health Department Auditorium, 305 S. Union Blvd, downstairs at the apex of the two buildings. For a map, please visit our web site at <http://www.qsl.net/ppraa/> or contact any of the board members for more information.

Amateur Radio License Exam Information

The Pikes Peak Radio Amateur Association Volunteer Examiner (VE) team holds testing sessions every other month, in even-numbered months. They're held on the 2nd Saturday of these months at 9 AM, at the Colorado Technical University, 4435 North Chestnut (just west of I-25 and just south of Garden of the Gods Rd.). Exam fee is \$14.00 for 1, 2, 3, or all 4 elements at a session. Checks should be payable to ARRL/VEC. For further details and for a list of what to bring, contact Erik Mugele KGØXE or Dennis Major NØABC, or visit the PPRAA web site.

PPRAA Simplex Net

Don't forget about the PPRAA Simplex Net on Thursday nights at 7 pm! Jim Harris ABØUK and Pat Kelly KCØMIR have been doing a bang-up job in keeping the net going from week to week. Join everyone for a good time, find out the latest, test out your ability to copy other stations via simplex, and listen to the ARRL Audio News! The frequency is 146.58 MHz simplex and the backup frequency is 146.55 MHz, in case the primary frequency is busy.

PPRAA Is A Nonprofit 501(c)(3) Organization

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

Committee Chairs / Points Of Contact

Auditing Open
 Asset Mike Stansberry KØTER
 E-Mail Refl. John Wishart KCØJFH kc0jfh@arrl.net 481-2439
 Field Day Dan Scott KB0PPM
 Swapfest Kate Muniz WB9BAH wb9bah@elpasotel.net
 Historian Ron Deutsch NKØP
 Interference Bill Petty NØNJX
 Membership Les Borst KCØNC
 Programs Christopher Taylor NC6T nc6t@arrl.net 260-8081
 Publicity Christopher Taylor NC6T nc6t@arrl.net 260-8081
 Public Service Mike Stansberry KØTER
 Tech. Ed. Mike Anderson WV7T wv7t@arrl.net 229-8610
 VEC Liaison Dennis Major NØABC n0abc@arrl.net 531-6774
 VE Contact Erik Mugele KGØXE ve@teuton.org 278-4363
 Webmaster Doug Nielsen N7LEM n7lem@n7lem.net

AMSAT Coord. Tom McDaniel NØNTX
 ARRL Awards Mgr. Rick Brown KØSU
 ARES Emerg Coord Dean Haskins KAØPII
 ARES Liaison Mike Stansberry KØTER
 ARRL Section Mgr. Jeff Ryan KØRM
 CCARC Liaison Kate Muniz WB9BAH
 HamCon Chairman Jerry VerDuft ADØA
 RACES Officer Doc Cornell WØMCT

PPRAA Web Site and E-Mail Reflector

PPRAA web site is at <http://www.qsl.net/ppraa/>, which is maintained by Doug Nielsen, N7LEM. Thanks, Doug! Stay on top of new or short-fused developments by subscribing to our e-mail reflector: <http://mailman.qth.net/mailman/listinfo/ppraanet>. Thanks to John Wishart, KCØJFH for maintaining the reflector!

Upcoming Club Programs

June: Field Day and last minute swapfest prep.

Deadline for Next Ø-Beat Articles

The deadline for the July 2005 Ø-Beat is July 3. Send all submissions to the editor via e-mail, US Mail, telephone or in person.

Please feel free to submit an article – we're always looking for fresh content!

Club Meeting Minutes

PPRAA

Club Meeting Minutes 11 May 2005

The meeting was called to order by President Rick Brown KØSU at 7:02 pm at the El Paso County Health Department auditorium followed by introductions around the room.

Silent Keys – none.

Pat KCØMIR/Al VØ1NO moved/seconded to accept April meeting minutes as printed. Passed.

Treasurer's Report - Kate WB9BAH
\$2115.94 income for year to 5/10/05
\$2816.47 expenses for year
\$8220.40 total account balances
\$1350 is projected for Megafest LPHS gymnasium and table rental.

Committee Reports

Auditing – Kate – will take place next Saturday.

Field Day – Dan KBØPPM - will be June 26-27 at the Agilent recreation site north of Woodland Park. Setup will be on Friday June 25. Tom NØNTX is taking orders for Field Day shirts and pins. Our web site now has updated information with a map. He still needs to arrange for porta-potties.

Satellites/AMSAT – Tom NØNTX – India's new ham satellite is now in operation. See www.amsat.org for details.

Membership – Les KCØNC – three new members have put us at 168 members.

Programs/Publicity – Christopher NC6T – our next meeting (June 8) will concentrate on Field Day preparation.

Tech Ed – Mike WV7T – Tech classes are being held on Saturdays, 9AM-noon. Field Day at

Mike's house is available for those not able to make the Woodland Park site. Many books are available for loan. Contact Mike at wv7t@arrl.net.

Webmaster – Doug WØMHP - Field Day info now available. Calendar was updated.

ARRL Awards – Rick KØSU – no activity this month.

ARES – Mike – will be supporting an upcoming emergency exercise and a bicycle event.

ARRL - Jeff KØRM – federal legislation has been requested to have FCC relook at BPL rules. Email and fax support for this action is requested. ARRL contributed a Repeater Directory for a door prize and more are available for recruitment either through the club or through Jeff. They are available for new or renewal memberships.

RACES – Doc WØMCT – the move of the OEM to 101 W. Costilla has been completed. The RACES meetings will be the 3rd Thursday of the month. The next speaker will be a representative from the dispatch center.

CCARC – Kate – April 23 meeting. Repeater coordination is current focus. Band plan changes are the current focus of attention. Website is www.ccarc.net. Repeater pairs are being reviewed and new applications are being accepted. Grant sponsorship is still available for ARRL courses. BPL – contact Bob Witte KØNR on any activity re BPL. CCARC elections were held. October meeting will be held in Colorado Springs.

Swapfest – Kate – will be June 11 at LPHS in Monument. June 4 planning meeting at Kate's work location. Setup activities on Friday evening are in question due to change in tables being provided by the high school. Programs: ARRL forum is scheduled. Tom volunteered for an AMSAT presentation. Volunteers are needed to man the club equipment table. An auction is

planned after the Swapfest – we need someone to run this.

Announcements

Pat KØMIR – Pikes Peak Hill Climb is June 25 and volunteers are still needed. Contact kØmir@arrl.net for info. June 18 is first safety meeting.

Tom NØNTX has signup list for Field Day shirts and pins.

Bill KDØJU has PPFMA applications available.

Dick Cullen WØMNX– Assn of Public Safety Communications Officials International (APCO Intl.) Annual Conference will be held August 22-24 in Denver. ARES/RACES/MARS will have a booth at this activity. They need volunteers to plan and man the booth. Contact Bob Sayers WØOFA 719-392-7142 or Dick Cullen WØMNX 719-630-1392 if interested.

Interference - Bill Petty NØNJX – some unusual activity has been noted on 146.57 MHz in the evenings, so you might listen for that.

Old Business: None

New Business: None

Hammie Award: Dave awarded the Hammie to Christopher Taylor

After break and door prize drawings, Rick Brown KØSU presented the program “Six Meters – The Magic Band.”

Meeting was adjourned at 9 pm.

Next meeting: 2nd Wednesday of the month, 7 PM, El Paso County Health Department auditorium (same place, different name), 305 S. Union Blvd., CS, CO.

Submitted by:
John Wishart KCØJFH, Secretary.
Date: 27 May 2005

Board Meeting Minutes

PPRAA

Board Meeting Minutes

23 May 2005

The meeting was called to order by President Rick Brown KØSU at 7 PM at his home.

Attendees: Bryan Anderson, Mike Anderson WV7T, Rhoda Anderson KB2BZY, Rick Brown KØSU, Dennis Major NØABC, Doug Moloney WØMHP webmaster, Christopher Taylor NC6T, and John Wishart KCØJFH.

Mike/Dennis moved/seconded that the April board meeting minutes be approved as printed. Passed.

Treasurer’s Report - no report.

Rick said that Pat KCØMIR requested that we procure a large banner for swapfests, meetings, etc. Size should be suitable for placing on the front of a table or hanging on a wall. Suggested color is yellow. Tabled until we can get more info on cost, size, design, etc.

Swapfest:

Rick indicated we still don’t know what setup will be involved yet. Startup will be at 6AM June 11. John Wishart volunteered to help with table assignment at 6AM. Satellite and ARRL forums are set along with a VE Exam session (10AM).

Field Day:

Setup will start on Friday afternoon. Location will be at the Agilent recreation site north of Woodland Park.

Picnic:

Tentative dates: August 6 or 7 or 20 or 21. Christopher will check on dates and park site availability.

Zero Beat deadline: Saturday 28 May to Dennis. Meeting location name has changed to El Paso County Health Department (not the OEM

anymore).

Doug has added tech reference (band plans, bands) to our website. He scrubbed the existing links and added new one. He also added a printable club calendar.

Meeting was adjourned at 7:40 PM.

Next meeting: Monday following club meeting, location TBD.

Submitted by John Wishart KCØJFH, Secretary.
Date: 27 May 2005

May Foxhunt

Hello everyone,

This month's foxhunt proved to be a fun and challenging event, where not everything was as it first seemed!

Several of the foxhunting "regulars" were unable to participate this month due to such feeble excuses as "it's my wife's birthday" and "I have a sucking chest wound"! We did have two new foxhunters show up however - brothers Nathan KC8WVW and David KB0OM, aged 15 and 17 respectively. They were paired up with Dave N0UVR, a grizzled veteran foxhunter! One other team joined the hunt - husband and wife team Michael K0MLA and Susan KC0SYA, ably assisted by their two daughters Jessie and Sammie.

The fox was located in the Black Forest Regional Park. I thought that it was a relatively unknown park - when I mentioned it to Kate WB9BAH, she indicated that she had never heard of it, and she lives in Falcon. What I didn't know was that Michael had hidden the fox in the same park in January, a hunt that I had missed!

The fox came on as scheduled at 1315 on Sunday afternoon, and at 1330 the two teams

left the parking lot in front of the War Memorial off Union Blvd. I hurried off to the park to join teammates Kate and Jeremy (no call - yet!).

I was afraid that the fox wouldn't be heard downtown, but this was not a problem. I heard it in every nook and cranny as I drove along Platte Avenue. Of course, that's not too surprising. Unlike the HT's that we have used in previous hunts, this fox was packing a punch! I used a Kenwood TM-241 on medium power, sending 25 watts into a vertical dipole antenna about 10 feet off the ground. Did I mention that everything was camouflaged?! I had problems seeing it, and I knew exactly where to look! The higher power confused the teams at first - Michael got out searching on foot at one point because the signal strength was so strong, and he was still south of Woodmen Blvd!

Camouflage and high power weren't the only tactics to deceive the hunters. The signal was modulated with a varying tone in order to confuse anyone using "Handi-Finders". As well, there were decoys! Scattered throughout the area were two wire antennas, a mag-mount whip, several pieces of coax cable, and the Mother of all Decoys - a piece of PVC pipe with a wire antenna and piece of coax sticking out the top, and a fox controller belonging to Jim AB0UK peeking out the bottom. The controller even had a battery, and an LED blinked on and off just as it should!

It wasn't until almost 2 hours into the hunt (and several hints later) before the teams arrived at the park. Although they had taken far different routes, they pulled into the parking lot within 30 seconds of each other. It took another 35 minutes to find the actual fox, though both teams found plenty of decoys! Susan finally spotted the dipole at 3:52, and David KB0OM found it for his team 2 minutes later.

Of course, mileage had to be factored in as well as time in determining the winner. Each mile counts as 5 points, plus a point for each minute.

The final score was determined as follows:

Michael K0MLA: 142 minutes (142 points), plus 34.3 miles (171.5 points) for a total of 313.5 points (second place).

Dave N0UVR: 144 minutes (144 points), plus 29.4 miles (147 points) for a total of 291 points (first place!).

Following the hunt we all retired to the Red Robin Restaurant on North Academy for the presentation of Foxy, and for an enjoyable meal.

Next month's hunt will be organized by Dave and his team - congratulations Dave, David and Nathan!

73
AI, VO1NO / W0

El Paso County RACES Activities



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

No report provided.

Pikes Peak ARES



<http://www.ppares.org/>

No report provided.

Upcoming Amateur Radio Events

This year, the Rocky Mountain Division Convention will be held in Utah, at:

Ruby's Inn - Bryce, Utah

July 29 - 31, 2005

More info at: www.utahhamfest.org

June 11, 2005 – PPRAA annual MEGAFEST!



CCARC Meeting Report

The Spring meeting of the CCARC (Colorado Council of Amateur Radio Clubs) was held April 23, 2005 in Pueblo CO. Tim Armagost, WB0TUB is chairman of this group.

One of the duties of the CCARC is to oversee the coordination of the repeaters in Colorado. Doug Sharp, K2AD, is Frequency Coordinator. The band plans are available for download at www.ccarc.net. There were no changes made to the 2 meter band, however Doug reported that there are no 2 meter pairs available to assign to new repeaters. He is working on finding pairs that “have gone dark”, i.e. repeaters that are not operating, or that are merely “paper repeaters” and just taking up space for now. His plan is to allow about 2 months before declaring such repeaters dead. At that

time, around July 1st, he will start accepting applications for new pairs. He cautioned, just because an application is submitted and accepted does not guarantee assignment of a frequency pair.

The new 70cm and 902-928 frequency band plans were reviewed and approved, and they also can be downloaded from the website. A few changes were made on those bands.

Jeff Ryan, K0RM, our ARRL Colorado Section Manager reported that the ARRL Executive committee will soon be voting on a new Band Plan. Go to the ARRL website for the band plan which is proposed. Jeff urges every ham, both HF and VHF to look at this plan, and contact the Rocky Mountain Division Director, Rev Morton, WS7W at ws7w@arrl.org with your opinion about these changes.

Jeff also mentioned that the Grant sponsorship for AERC courses is coming to an end. If you have been putting off taking this course, now is the time.

Bob Witte, K0NR spoke as chairperson of the BPL in Colorado team. Currently, the team does not have any indication of any utility seriously pursuing BPL technology. They did meet with Ft. Collins utilities about their BPL plans, which seem to have been shelved for the time being. Bob requests that any and all Colorado hams, report any information they hear from their utilities, or in their local news sources, regarding interest in BPL to him, so that the team can determine the seriousness of the threat, and meet with the utility regarding interference with licensed amateur radio operators.

The elections for Vice Chairman and Treasurer were announced. John Maxwell, N0WBW, received another term as Vice Chairman and Wayne Heinlen, N0POH, was elected Treasurer for another term.

George Stoll, WA0KBT, a ham from Parker and an engineer, spoke on eloquently on BPL.

The October meeting of CCARC will be held in October in Colorado Springs, jointly hosted by CMRG and PPRAA.

Submitted by Kate Muniz, WB9BAH, PPRAA representative

Take Your HT to Work Day

(Continued from page 1.)

What else?

There will be monitors on various repeaters randomly scattered throughout the country. If you are heard during the lunch hour of 12 to 1 (your local time) participating in HT Workday, showing your radio to a non-ham, you just might have one of the special monitors come back to you telling you you've just won a new ARRL Repeater Directory.

And...

W1AW will be running via echolink and also checking into repeaters and sites across the country during their lunch hour of 12 to 1 p.m. local time. Bear, from the Christmas Toy Drive, and his friends will be giving away Repeater Directories to hams participating in HT Workday.

Summary

This is a chance to have a lot of fun, recruit new hams, invite people to Field Day, get publicity, and show off Amateur Radio. Many people would like to have the capabilities of ham radio in a crisis but don't know where to start. The best recruiter is another ham who can show, guide and explain how to get their Technician license, then link them to the right people in your area. I hope you have fun and make the most of it!

Allen Pitts, w1agp
Media & Public Relations Manager
ARRL

CW Beginner's Guide

By

Frank Skinner KA4JQZ

Part 2

Correctly Reporting RST

What is RST? It is a common method among hams to report how the other station sounds to you. Half is opinion and the other half is using signal strength meters. RST stands for Readability, Signal strength, and Tone. Readability or R is on a scale of 1 to 5, and both S and T on a scale of 1 to 9. An RST of 599 would be the strongest cleanest report possible. For really incredibly strong signals some hams will refer to a 20 or 30 over S9, reflecting an S-meter reading.

The R in RST:

Readability is somewhat subjective, it depends a lot on interference and your ability to copy through interference. R5 is normal or you copy everything fine, R4 means you are copying most with some difficulty. R3 is ability to copy 50 percent of what is being sent and so forth down to R1, which means you are probably not copying at all but a few letters.

The S in RST:

Signal strength can be very objective, use your "S" meter on your radio to see where the other signal is peaking. This gives an accurate measurement of their signal on your setup using your type of radio. Which means it really does not matter as long as they can copy you and is mostly useful in comparing difference antennas. After a while you will not need to use your "S" meter and will be able to judge by sound alone.

The T in RST:

Tone is the most misunderstood and misused report. Only rarely will I give a report less than a 9 for tone. For example, if someone has a bad AC hum on their signal, key clicks, chirp, or is drifting badly in frequency, I may give them a report on tone depending on my ability to copy their signal and then explain that they have key clicks, an AC hum or chirps. The important thing to remember is if the

other stations tone is not a 9 then explain to the other station what you are hearing so they may have an idea on how to trouble shoot their problem.

The important thing to remember is to be honest. I find that I would rather have an honest report of how another station is copying me than the generic 599 that DX stations shoot out to everyone regardless of how you sound. I often hear other stations thanking me for a signal report. This is not a good practice since the RST is based on your stations ability and should be objective and not subjective. The RST another station gives you should not influence your honest ability to receive that station because there are many factors that influence a RST like, antenna, power used, propagation, QRM and QRN that maybe different at you location vice the other stations location.

A common way to send a RST report is replacing the "9" with a "N", for example 599, they will send the letter "N" in place of the number "9" so it will be copied 5NN. Another example is sending a "T" instead of a zero when reporting your power level for example, PWR IS 1TT, instead of 100. This is just a short cut to save time sending common characters in every QSO.

Using CW Abbreviations and Q Signals

Abbreviations are very commonly used in CW. They save time and are understood by all countries. Once you have been in the air and made a few contacts some will come naturally to you. There are many Q signals and abbreviations in the amateur radio community and some from the military that you may hear in use. The list below is not at all inclusive but are some of the more common ones you can expect to hear on the air.

ADR	address	GN	good night	RIG	Transciever
AGN	again	GND	ground	RPT	Repeat
BK	break	GUD	good	SK	end of transmission
BN	been	HI	the telegraphic laugh	SRI	sorry
C	yes	HR	here	SSB	single side band
CL	closing	HV	have	TMW	tomorrow
CUL	see you later	HW	how	TNX-TKS	thanks
DE	from	N	no	TU	thank you
DX	distance	NR	number	UR	your
ES	and	NW	now	VY	very
FB	fine business	OM	old man	WX	weather
GA	go ahead	PSE	please	XYL	wife
GB	good bye	PWR	power	YL	young lady
GE	good evening	R	received as transmitted	73	best regards
GM	good morning	RCVR	receiver	88	love and kisses

And the International "Q" signals, recognizable in any language:

QRL	Is the frequency busy?	QRT	stop sending
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QRM	Man-made interference	QRX	wait, standby
QRN	Natural noise or static	QSB	fading
QRO	increase power	QSL	acknowledge receipt
QRP	decrease power	QSY	change frequency
QRS	send slower	QTH	location

Don't get worried about using abbreviations when you are starting out with CW. It is perfectly OK to spell out words during a QSO. It's just easier using abbreviations. There are many more CW abbreviations and Q signals that you can find on the Internet or any Operating Manual but these are some of the most common ones you will hear. There are also a whole series of QN_ signals for use on CW traffic nets.

Some punctuation marks commonly used on CW are; the period, comma, question mark and BT. To separate thoughts during a CW contact a period or a BT (dah dit dit dit dah) are commonly used, I recommend the BT. You'll hear the slash symbol sometimes (dah dit dit dah dit) to note portable or QRP operation for example. Like KA4JQZ/0 or KA4JQZ/QRP.

The "K" letter used at the end of each CW transmission indicates, "end of transmission - go ahead". When two hams engaged in a CW conversation do not wish to be disturbed by anyone else breaking in, they may send "KN" instead of "K" at the end of each transmission. Or if a ham wants to limit the extent of his CQ, he may also use KN. For example, "CQ RI CQ RI CW RI de KA4JQZ KA4JQZ KN" says this ham would like to be answered only by hams in the state of Rhode Island.

Here are a few other commonly heard CW expressions that are actually combinations of letters sent as a single character. You will encounter these CW symbols on the air.

Wait, stand by (AS)	dit dah dit dit dit
Slash (DN)	dah dit dit dah dit
End of message (AR)	dit dah dit dah dit
End of contact (SK)	dit dit dit dah dit dah
and of course, Break (BT)	dah dit dit dit dah

At the very end of a CW contact you may hear the two stations sending dits at each other, this derives from the old expression, "shave and a haircut, two bits". It sounds like dit dit-dit dit dit, dit-dit. The first station will send the dit dit-dit dit dit and wait for the second station to send dit-dit in return. This was more popular on CW years ago, but you will still hear it today. Today it may be shortened to sending just the final dit-dit, as in "73 AC7RG de KA4JQZ SK dit-dit". New hams more frequently use the full dit dit-dit dit dit, dit dit expression than more experienced hams. Not uncommonly when ending a QSO and trading dit dits with the other ham, you may hear a third, or even a fourth station add their own dit dit. They were listening along in silence to your QSO, and decided to add their two bits as well. This is an unprofessional operating habit. If the eavesdropping station wants to make their presence known with a few dits, they should send their callsign, and start a legitimate QSO. Just goes to show that as you transmit on the ham bands, there are likely more than just a few folks listening.

Other CW Characters

It is very rare to hear any of these on the air in the amateur bands but they are often heard in ship to shore communications and are nice to know in case you ever hear them. I would not use them in the amateur bands since most hams will not have any idea what you are sending.

Colon	[:]	dah dah dah dit dit dit	Underline	[_]	dit dit dah dah dit dah
Semicolon	[;]	dah dit dah dit dah dit	Paragraph	[]	dit dah dit dah dit dit
Hyphen	[-]	dah dit dit dit dit dah	Dollar sign	[\$]	dit dit dit dah dit dit dah
Double hyphen	[=]	dah dit dit dit dah	Multiplication sign	[x]	dah dit dit dah
Quotation	["]	dit dah dit dit dah dit	Addition sign	[+]	dit dah dit dah dit
Apostrophe	[']	dit dah dah dah dah dit	Understood	[]	dit dit dit dah dit
Left-handed bracket	[(]	dah dit dah dah dit	Attention	[]	dah dit dah dit dah
Right-handed bracket	[)]	dah dit dah dah dit dah	Underline	[_]	dit dit dah dah dit dah

Until next time, 73 es C U LTR DE KA4JQZ CL

Membership Application for the Pikes Peak Radio Amateur Association, Inc. P.O. Box 16521, Colorado Springs, CO 80935-6521		
Date: _____ <input type="checkbox"/> New Member <input type="checkbox"/> Renewal	In which activities would you like to participate?	
Name: _____	Field Day <input type="checkbox"/>	
Address: _____	Demonstrations <input type="checkbox"/>	
City: _____ State: _____ Zip: _____	Nets or round tables <input type="checkbox"/>	
Call: _____ Class: N T + G A E Phone: _____	Organize activities <input type="checkbox"/>	
Mbr of ARRL? <input type="checkbox"/> Yes <input type="checkbox"/> No E-mail: _____	Teach ham classes <input type="checkbox"/>	
Additional Family Members to Join/Renew:		
Name: _____ Call: _____ Class: _____ ARRL? _____	Full Member \$15: <input type="checkbox"/>	Family Membership \$18: <input type="checkbox"/>
Name: _____ Call: _____ Class: _____ ARRL? _____	Over 65 \$10: <input type="checkbox"/>	Over 65 Family \$12: <input type="checkbox"/>
Name: _____ Call: _____ Class: _____ ARRL? _____	Associate \$12: <input type="checkbox"/>	Ø-Beat Only \$12: <input type="checkbox"/>
		Donation to Club: \$ _____
		Total Enclosed: _____
MAKE ALL CHECKS PAYABLE TO "PPRAA"		
Please indicate how you'd like your Ø-Beat delivered: <input type="checkbox"/> Standard hardcopy via U.S. Mail (Defaults to standard hard copy in the event that NO check boxes are checked) <input type="checkbox"/> As a PDF file attachment via e-mail, to help save a few bucks <input type="checkbox"/> I'll save the club a few bucks and download it from the Web!		
Circle your interests <input type="checkbox"/> HF / <input type="checkbox"/> V/UHF / <input type="checkbox"/> FM / <input type="checkbox"/> SSB / <input type="checkbox"/> Digital / <input type="checkbox"/> DX / <input type="checkbox"/> Contests / <input type="checkbox"/> Technical / <input type="checkbox"/> Hardware / <input type="checkbox"/> 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!!

Central States VHF Convention

The 39th annual Central States VHF Convention will be held in Colorado Springs July 28-30 at the Sheraton Hotel. A complete family program is planned in conjunction with great technical presentations. The technical program will feature subjects like the first 48 Ghz EME contact presented by Al Ward W5LUA.

Colorado is a great place to be in July. The hotel, in full view of Pikes Peak, is offering a special convention rate for attendees. A free shuttle bus is provided to the hotel from the Colorado Springs airport. The convention starts with an evening at the Flying W Ranch on the 28th of July with an old west chuck wagon dinner and cowboy music program under the stars.

Complete registration information is available on the Central States VHF Society web site at (CSVHFS.org). Come have a great time with us in Colorado Springs. For more information, phone 719-331-7051.

Lauren Libby W0LD
Conference Chairman

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

First Class Mail

To: