

PVRC Newsletter February 2015

President's Letter – Ethan K8GU

As I write this, the CQ WW 160 CW

and ARRL January VHF contests are underway. Time is of the essence around the K8GU station these days, but I'll probably get on VHF for a bit and work a few PVRCers and friends since I still don't have an antenna up for 160.

Why are you a member of PVRC? Chances are, someone worked you on the air in a contest or saw your score in the results and invited you to a meeting or to operate together. Or maybe you've been around since the dawn of time. Are you getting anything out of your membership? Are you learning to become a better operator, learning more about amateur radio, especially contesting and DXing? Are you meeting other hams who share common interests? I hope so. One of the great things about competition of all kinds is that it's a process of constant *improvement*, of self and of equipment. ...and once you can't improve anymore,

you can share it with those of us who are still improving!

Back in the days when the SNR on the CQ-Contest reflector was a tad bit higher, Trey, N5KO (WN4KKN at the time), keyed a brilliant essay on what it takes to win contests. There are a number of other contributors to this worthwhile thread, including our own Fred Laun, K3ZO. N5KO's thesis is that there are no secret tricks, only years of experience and mentoring that yield the skills of a top operator. The thread can be found here and is worthwhile to read.

As a club, we provide a venue to hone our skills. We are the ones who spur each other on to keep our butts in the chair a little longer or provide encouragement and advice. That brings me to a point I was remiss in addressing last month: Ex-officio President KE3X requested that I call attention to the list of Presidents' Awardees from 2014 which were not announced in the Newsletter. They can be found in the table below.

Ken noted when he presented a number of the Awards at the Holiday Dinner in Fairfax that this list is incomplete because several other well-known hosts have received similar awards in the past few years. Anyhow, this goes to show that most of the chapters have one or more gracious hosts and skilled mentors from whom we can all learn a great deal. Thank you for your commitment to PVRC.

For CW contesters, February ends the winter contest season with the NA Sprint and ARRL DX. Phone ops get another month with ARRL DX and WPX in March. And, if you are a RTTY nut, your contest season is still in full swing for a few months although February is busy. Post your plans to the reflector! Get us excited! I'm hoping to be back in KH8 for ARRL DX CW, but that's still tentative for the moment. See you on the bands...

2014 PVRC President's Award Winners

N4YDU	Nate Moreschi	For Sustained Outstanding Performance In Low Power Contesting Within PVRC
N ₃ QE	Tim Shoppa	PVRC Most Improved Contester - 2014
N4AF	Howie Hoyt	For Outstanding Service as PVRC Webmaster
N2QT	Mark Sihlanick	For Outstanding Service as Head of PVRC Southwest VA Chapter
W ₃ LPL	Frank Donovan	For Outstanding Service in Station Hosting and Mentoring New PVRC Members
NR4M	Steve Bookout	For Outstanding Service in Station Hosting and Mentoring New PVRC Members
WX3B	Jim Nitzberg	For Outstanding Service in Station Hosting and Mentoring New PVRC Members
W4RM	Bill Mara	For Outstanding Service in Station Hosting and Mentoring New PVRC Members
N ₁ LN	Bruce Meier	For Outstanding Service in Station Hosting and Mentoring New PVRC Members

PVRC Officers:

President: K8GU Ethan Miller
Vice President: W3LL Bud Governale
Vice President: K3AJ Tom Valenti
Secretary: W4VIC Vic Culver

Treasurer: N3RR Bill Hider

Trustees:

K3MM, N3OC, WX3B, W4ZYT, N4NW, K2AV, KE3X, K4ZA, K3WRY

PVRC Charter Members (all SK):

W3GRF, W4AAV, W4KFC, N0FFZ, W4LUE, W7YS,

VP2VI/W0DX, W3IKN, W4KFT

PVRC Website: http://www.pvrc.org

The \$25.01 Headset: Ain't Pretty, But Great Personality – Art K3KU

If you've been following the CQ-Contest Reflector lately, you saw my queries about a certain boom-mic headset. I think I'm going to have to replace this home-brew job I made about eight ago. It's a K6LL design, passed to me by W3LPL.



Frank called it the \$25.01 special: your on-hand headset, a piece of wire from your junk box (I think my red wire is #10), a penny, and a Heil element for \$25 (back then). The foam rubber baffle is my own innovation.





My headphones are Montgomery Ward, model GEN 650A, probably pre-1969. The Nylon lacing cord is likely from 1962

K6LL - I still have a couple of these kicking around! I don't use them anymore though, because now my mic audio is routed through a sound card, and good quality computer headsets are relatively inexpensive. The Elecraft K3 is also set up for computer mics. I am using a Yamaha CM500 headset, and I'm very happy with it.

Pulling an All-Nighter – from <u>www.bbc.com</u> via N5AW

When Kevin Morgan pulls an all-nighter he relies on a tried-and-tested strategy to get him through. His work area is brightly lit, he often eats a snack part-way through the evening and he takes a 90-minute nap before going to work. He also makes sure there is plenty of ground coffee available.

The stuff of a sleep scientist's nightmares? Not exactly. Just ask the scientist. Morgan is a professor of psychology and director of the clinical sleep research unit at the University of Loughborough in the UK.

All Night Long

Have to burn the midnight oil? Top tips from the experts:

- Bank sleep ahead of time to ensure you're fresh
- · Do the most difficult tasks first
- Nourish yourself with protein snacks throughout the night
- · Work in bright light and keep warm

Although sleep scientists do not advocate working through the night, Professor Morgan says there are a few benefits. "There are fewer distractions at night," he said. "You can control your environment."

Advisable or not, all-nighters are part of life for many of us, whether due to heavy workloads, the demands of international working practices or our own habits.

Sixty percent of students surveyed by researchers at St Lawrence University in New York stayed awake all night at least once since entering the school, according to a 2008 study. The practice isn't limited to students cramming for exams. A 2012 survey commissioned for the UK teachers' magazine TES Connect found that 70% of 1,600 primary school teachers questioned had stayed up all night to complete work at least once in the previous three months.

All-night study spaces are a feature of many universities today, including reading room facilities at the University of Chicago in the US and the University of Bristol 24-hour Computer Room in the UK.

Asleep on the dinner plate

Paul Haswell, a Hong Kong-based partner at international law firm Pinsent Masons, is not a fan of all-nighters. Yet Haswell, a specialist in technology, employment and commercial law, finds they are sometimes unavoidable.

"I do not think that me or my team are as effective if they are sleep deprived," Haswell said. "I'd rather have a well-rested, efficient and stress-free team than one which is fighting to stay awake."

Staying awake all night can also play havoc with your personal life, as Haswell discovered on a dinner date the evening after he had pulled an all-nighter as a junior lawyer.

"I was absolutely exhausted, but couldn't dare cancel the date as I'd been planning it for months," said Haswell. "I ended up falling asleep during the starter. Woke up with my head on the table and a waiter explaining that my date had left in disgust. I never saw the lady in question again!"

Scientific research tells us that poor sleeping habits are bad for our health and well-being. The St Lawrence University study found that the marks for students who had never pulled an all-nighter were 7% higher than the marks for students who did stay up all night.

People who sleep fewer than six hours a night are more likely to develop impaired fasting glucose, a condition which precedes Type 2 diabetes, than people who sleep for longer, according to researchers at New York's University at Buffalo in 2009. And a sleepless night can lead to short-term euphoria and impaired decision making ability, according to scientists at the University of California, Berkeley and Harvard Medical School in 2011.

"Pulling an all-nighter is risky on several levels," said Dr Charles Czeisler, Baldino Professor of Sleep at Harvard Medical School. "You are also at acutely increased risk of causing an air or motor vehicle accident should you fly or drive after being awake all night."

Despite the risks associated with all-nighters, many of us do it. So what can we do to stay productive through the small hours and still function the next day? Here are some tips from the experts.

Bank sleep

Czeisler advises having a snooze once you realize you will not be going to bed that night. "If we take a mid-afternoon nap, the decrease in performance which normally occurs as we work on will be much less," said Czeisler. Maintaining good, regular sleeping habits most of the time can help us cope with an all-nighter, said Morgan.

"Do a bit of 'sleep banking' and get the amount of sleep you need most nights," Morgan said. "Don't allow unnecessary sleep debts to accrue in your life, and this will help when you do have to work through the night."

Nourish yourself

"Protein keeps us alert," advises Paula Mee, a dietician, nutrition consultant and broadcaster based in Dublin. "So the evening before you are going to stay up all night have a meal which is rich in protein, for example a chicken breast or a salmon cutlet. Too many carbohydrates can make us sleepy."

"You do not need to have another full meal during the night, our bodies have reserves for events like this," said Mee. "But mid-way through the night you could have a protein snack, perhaps some nuts and seeds, to help keep you alert."

Work in bright light

"Light is a signal of wakefulness for our biological clock and tells us that it is time to be awake and active," said Docteur Joëlle Adrien, neurobiologist and Research Director at l'Institut national de la santé et de la recherche médicale (INSERM) in Paris, France's national institute of health and medical research.

But be sure the light is the right colour. "Research shows a blue-tinted light will wake you up best, such as a blue-LED light," Adrien said. "Yellow light is not good for staying awake. It relaxes us, so avoid it if you want to work through the night."

Plan your night-shift tasks

Our cognitive ability will diminish as we work through the night, leaving us less able to perform tasks which require computing information, Morgan said.

"Divide your tasks in to two categories: cognitive tasks, which require thinking, and computing, and other tasks which are more routine, such as formatting your work," said Morgan. "Do the cognitive tasks first. You want your facts to be right."

"The more routine and pedestrian tasks should be done later, formatting your document for example," Morgan said.

Drink coffee

Caffeine reduces the effects of adenosine, a chemical that humans produce which makes us feel tired.

"Use caffeine strategically," Czeisler said. He advises drinking a cup of coffee at hourly intervals throughout the night.

Keep warm

Our body temperature dips to its lowest around 03:00 to 04:00. "You don't want to be distracted by being cold," Morgan said. "So make sure your environment is comfortably warm. I always have a fleece handy."

Take a morning-after nap

"Once you have finished your task, say around 08:00, send off the email and then go to bed for 90 to 100 minutes, which is long enough to allow us to have one full sleep cycle," Morgan said. "That should be enough to keep you functioning throughout the day, but not for driving, so never drive the day after an all-nighter."

And go to bed early that evening, he added. "You should be able to get back into your normal routine fairly easily," he said.

Just say no.....

"Tell your boss it is not reasonable to work through the night," is the advice of Adrien when it comes to an unexpected all-nighter. "Sleep deprivation has a very strong impact on your health. Of course, you may need to be diplomatic, and say OK, just this once, but not again. Just tell your boss no."

Original article here.

North American CW Weekend, June 5-7 – Don W4ZYT

The North American CW Weekend will be held in the DC area June 5-7. This has been a nice gathering of CW enthusiasts and others just interested in Morse communication.

This is a month later than in previous years, to allow for a broader participation. The CW Weekend is for Morse code aficionados of all stripes: members of FOC, FISTS, CWOPS, Straight Key Club, and Morse Telegraph Society, or any individual with a special interest in Morse code communication.

Rooms have been reserved at the Fairview Park Marriott in Falls Church, Virginia, at the special rate of \$99 per night. The special rate will be honored a day before and two days after the weekend for CW Weekend participants. A hospitality suite will be available at the Marriott for socializing and libations on Friday and Saturday evenings. Contact Marriott reservations at 800-288-9290 or 703-849-9400 and specify "The North American Weekend Room Block." You may also make reservations via the web site at www.marriott.com/wasfp/. Enter "RIARIAA" in the space for the Group Code to obtain the special room rate.

The Weekend kicks off with an informal pizza dinner on Friday, followed Saturday morning by brunch hosted by N3JT at his McLean home. The afternoon is free for touring or shopping. Cocktails and dinner follow at 6 pm at Clyde?s Restaurant at Tysons Corner. We generally meet on Sunday morning at the Marriott for an informal breakfast before heading home. On Sunday afternoon, tours of the world famous W3LPL station and antenna farm may be available by pre-arrangement with Frank.

A modest registration of \$25 per person is requested to defray the cost of the hospitality suite and refreshments. Contact W4ZYT, Don, at w4zyt.don@gmail.com to register or for questions. Come and join your fellow brass pounders for a pleasant and memorable event!

Membership News

PVRC added several new members since the last newsletter. Please welcome:

- Charles K4UQ from the Southwest Virginia Chapter
- Bob W4OGH, Pete N4UP, Gabrielle N2GTS, Mike AE4ML, Owen KK4URZ, Dave N4DSF and John N4QWF in the Rappahannock Valley Chapter.

Chapter leaders please remember to complete the <u>Meeting Attendance Report</u>.

Upcoming Contests and Log Due Dates

Contests This Month

Feb 8 - NA Sprint CW

Feb 14 - CQ WW RTTY WPX

Feb 14 - PACC

Feb 21 – ARRL DX CW

Feb 27 - CQ WW 160 SSB

Feb 28 – NAQP RTTY

Logs Due This Month

Feb 3 – ARRL RTTY Roundup Feb 25 – ARRL VHF

See WA7BNM's Contest Calendar for more detail and the latest information.

From the PVRC Treasurer – Bill N3RR

PVRC has chosen not to implement an annual Dues requirement. We depend on the generosity of all of our club members to finance our annual budget. In addition, active PVRC members are expected to participate and submit logs for at least two PVRC Club Competition contests per year.

When contemplating your donation to PVRC, each member should consider the benefit you are receiving from PVRC and its many opportunities for your personal growth in our wonderful hobby, then donate accordingly.

Direct donations to PVRC via Credit Card or PayPal may be made by clicking this "Donate" button and clicking the next Donate button that appears on your screen:



Eyeball QSO Directions

The latest info on local club meetings and get together will always be sent out on the PVRC reflector and posted on the PVRC web site.

NW Region: Meetings are generally held on the third Tuesday of each month at the Golden Corral Frederick, MD 5621 Spectrum Dr. Frederick, MD 21703 PVRC Meets in the BANQUET ROOM (301) 662-5922

From Interstate 270 south of Frederick, MD take MD Route 85, "Buckeystown Road" NORTH. First right on Spectrum Drive. Restaurant is in a couple of blocks. Most arrive about 6 PM for dinner and informal discussions. The meeting begins at 7:00 PM.

Contact: Jim WX3B

Central Region: Meets monthly the second Monday of each month, except June, July & August). The location alternates between the below MD and VA locations. Pre-meeting dinners start at 6:00 pm and meetings start at 7:30 pm.

VA LOCATION: Anita's, 521 E. Maple Ave, Vienna, VA. Tel: 703-255-1001. Meets at this location during the months of February, April and October. Contact: Rich NN3W

MD LOCATION: Max's Café. 2319 University Blvd W, Wheaton MD 20902. Tel: 301-949-6297 People usually begin arriving at the restaurant around 6:30. Meets at this location during the months of January, March, May, September and November. Contact: Art K3KU

The Laurel, MD Region: Bill N3XL The PVRC get-together is held at the first <u>LARC</u> meeting each quarter at the clubhouse.

The Annapolis Crew: Dan K2YWE Meetings are held on the 4th Wednesday of each month at Broadneck Grill in Annapolis. We gather at about 5:30 PM and order dinner about 6. We break up usually before 8 PM. E-Mail <u>K2YWE</u> to be put on the e-mail reminder list.

PVRC-NC: The PVRC NC-East chapter meetings are held at Manchester's Bar and Grill on the 9100 block of Leesville Rd. in North Raleigh, with "QRM" beginning at 6:00pm and the dinner meeting following shortly thereafter. The meeting is held monthly on the 1st Thursday of most months, cancellations or changes usually announced on the PVRC-NC website. The PVRC NC-West Chapter holds its meetings on the 4th Monday of each month at the Mellow Mushroom, 314 W. 4th St., Winston-Salem, NC. Ragchew at 7:00pm, dinner meeting starts at 7:30pm. All contesters and interested guests are invited!

Over the Hill Bunch: The group meets for lunch at noon alternately in Maryland at the College Park Holiday Hotel Route 1 and the Beltway or in Virginia at the Parkview Marriot near route 50 and the Beltway. Meetings generally are held on the last Wednesday of the month and are subject to change. Meetings are announced by E-Mail. All PVRC members, non-members interested in membership and guests are welcome. For information contact Roger Stephens, K5VRX, 703-658-3991 for Virginia meetings; or Cliff Bedore W3CB or get on 147.00 for Maryland meetings.

Downtown Lunch Group: Meets on the 3rd Wednesday or Thursday of the month in the downtown area of Washington, DC. Locations occasionally change, but are always Metro accessible. Details are sent out on the PVRC reflector. Feel free to contact Eric W3DQ or Brian WV4V for details and directions.

Southwest VA Chapter: The Southwest VA group meets each Wednesday at about 8:30 AM at Hardees at 20265 Timberlake Road in Lynchburg, VA. This is an informal gathering, but normally has about 10-12 attendees. Contact Mark Sihlanick N2QT, Tel: 434-525-2921

Southern Maryland Chapter: We meet on the last Wednesday of each month at Nicolletti's Pizza located at: 22741 Three Notch Road, California, MD 20619 Phone: 301-863-2233. Check out their menu here.

Talk-in on 145.350 (-) PL-156.7

Meet and Eat 6:30 – 7:30, PVRC meeting afterwards.

Contact the Chapter Chair, Tom Shelton, ND3N at GL1800Winger<at>Verizon<dot>net or (240) 434-3811 with any questions

The Tidewater Chapter meets the 3rd Tuesday of every month at Frankies Place for Ribs located in the Fairfield Shopping Center on the corner of Kempsville Road and Providence Road in Virginia Beach, VA. The dinner starts after 6:00 PM and the joint VADXCC and PVRC meeting starts around 7:15 PM. All Amateurs are invited.

If you'd like to add or correct a listing, contact K3TN for inclusion in the Newsletter!

Now a Word From Our Sponsors

PVRC doesn't ask for dues, but the Club does have expenses. Please donate online here. You can also support the Club by buying from the firms listed who advertise in the newsletter, or by getting your company to sponsor the newsletter!

QSL CARDS By LZ1JZ WWW.LZ1JZ.COM



By Scott KA9FOX

- •Free Ham Radio Classifieds (most popular ham swap site)
- •Low Cost Web Hosting, Email & Domain Name Services
 •Web Design & Development
 http://www.QTH.com





Your source for DX News!

The Daily DX - is a text DX bulletin that can be sent via e-mail to your home or office Monday through Friday and includes DX news, IOTA news, QSN reports, QSL information, a DX Calendar, propagation forecast and much, much more. With a subscription to The Daily DX you will also receive DX news flashes and other interesting DX tidbits. **Subscriptions are \$49.00 for one year or \$28.00 for 6 months**.

The Weekly DX - is a product of The Daily DX that can be sent weekly to your home or office via e-mail in the form of a PDF (portable document format). It includes DX news, IOTA news, QSN reports, QSL information, a DX Calendar, propagation forecast and graphics. *Subscriptions are \$27.00 for one year*.

Get a free two week trial of The Daily DX and The Weekly DX by sending a request to **bernie@dailydx.com.**

The Daily DX 3025 Hobbs Road Glenwood, Maryland 21738 Phone: 410-489-651 Skype w3ur-bernie



BURBANK, CA

1525 W. Magnolia Blvd, 91506 (818) 842-1786 (800) 854-6046 Eric, KAGIHT. Mgr. Magnolia between S. Victory & Buena Vista burbank@hamradio.com

OAKLAND, CA UAKLAND, CA 2210 Livingston St., 94606 (510) 534-5757 (800) 854-6046 Mark, WIZYN, Mgr. 1-880 at 23rd Ave. ramp oakland@hamradio.com

SAN DIEGO, CA 5375 Kearny Villa Rd., 92123 (858) 560-4900 (800) 854-6046 Tom, KM6K, Mgr.

Hwy. 163 & Claremont Mesa sandiego@hamradio.com

SUNNYVALE, CA 510 Lawrence Exp. #102. 94085 (408) 736-9496 (800) 854-6046 Dan K6DN. Co-Mgr. Howard, W6HOC, Co-Mgr.

So. from Hwy. 101 sunnyvale@hamradio.com

NEW CASTLE, DE

(Near Philadelphia) 1509 N. Dupont Hwy., 19720 (302) 322-7092 (800) 644-4476 Rick, K3TL, Mgr. RT.13 1/4 mi., So. I-295 newcastle@hamradio.com

PORTLAND, OR

11705 S.W. Pacific Hwy. 97223 (503) 598-0555 (800) 854-6046 Leon, W7AD, Mgr. Tigard-99W exit from Hwy. 5 & 217 portland@hamradio.com

DENVER, CO 8400 E. Iliff Ave. #9, 80231 (303) 745-7373 (800) 444-9476

John, N5EHP, Mgr. denver@hamradio.com PHOENIX, AZ p Ave., 85021

1939 W. Dunlap Ave., 85 (602) 242-3515 (800) 444-9476 Gary, N7GJ, Mgr. 1 mi. east of I-17 phoenix@hamradio.com

ATLANTA, GA 6071 Buford Hwy., 30340 (770) 263-0700 (800) 444-7927 Mark, KJ4VO, Mgr. Doraville, 1 mi. no. of 1-285 atlanta@hamradio.com

WOODBRIDGE, VA (Near Washington D.C.) 14803 Build America Dr. 22191 (703) 643-1063 (800) 444-4799 Steve, W4SHG, Mgr. Exit 161, 1-95, So. to US 1 woodbridge@hamradie.com

SALEM, NH

(Near Boston) 224 N. Broadway, 03079 (603) 898-3750 (800) 444-0047 Chuck, N1UC, Mgr. Exit 1, I-93; 28 mi 28 mi, No. of Boston salem@hamradio.com

Special Holiday Discounts Off Our Already Low Prices!



VX-2R 2M/440 HT

WiRES compatible
 1300 Memory channels

Call For Low Price!

\$5

50/2M/220/440 HT

VX-7R/VX-7R Black

50/2M/220/440 HT

• Wideband RX - 900 Memories

- 5W TX (300mw 220Mhz)

Li-lon Battery

- Fully Submersible to 3 ft.

- Built-in CTCSS/DCS

Internet WIRES compatible

Now available in Black!

FT-60R

Low Price!

S5. HRO Caupo

2m/440 HT
 5W Wide-band receive
 CTCSS/DCS Built-in
 Emergency Auto ID

World's smallest Dual-band HT w/ wide RX

1.5 W RF output

GREAT YAESU WINTER SPECIALS Through 12/31/06



FT-897D VHF/UHF/HF Transceiver

- HE/6M/2M/70CM DSP Built-in
- HF 100W (20W battery)
 Optional P.S. + Tuner TCXO Built-in

Call Now For Our Low Pricing!



FT-817ND HEAVHEAUHE TOVR

- 5W @13.8V ext DC USB. LSB. CW. AM, FM Packet (1200/9600 Baud FM) 200 mems built in CTCSS/DCS TX 160-10M, 6M, 2M, 440 Compact 5.3′ 1.5″ × 5.5″, 2.6 lbs FNB-85 NiMH battery + NC-72B included
- **Call Now For Low Pricing!**



FT-8800R 2M/440 Mobile

- V+U/V+V/U+U operation
 V+U full duplex Cross Band repeater function
 50W 2M 35W UHF
 1000+ Memory channels
- · WIRES ready

Call Now For Low Pricing!





 Direct Keypad Entry
 Sw output
 209 memories
 Ultra Rugged FREE

Call Now For Special Pricing!



Ultra compact HF, VHF, UHF

- . 100w HF/6M, 50w 2M, 20w UHF
- DSP included 32 color display
 200 mems Detachable front panel 175K-857 required.

Call for Low Price!



FT-7800R 2M/440 Mobile

- 50w 2m, 40w on 440mHz Weather Aler1
- Weather Alert
 1000+ Mems
 WIRES Capability
 Wideband Receiver (Cell Blocked)

Call Now For Your Low Price!



FT-2000 HF + 6M tcvr

- . 100 W w/ auto tuner . built-in Power supply
- DSP filters / Voice memory recorder
 3 Band Parametric Mic EQ 3 IF rooting filter



FT-8900R Quadband Transceiver

- 10M/6M/2M/70CM Wires capable 800+ memories Built-in CTCSS/DCS Remotable w/optional YSK-8900

Call Now For Special Pricing

FREE SHIPPING



Bencher's Skyhawk and Skylark Antennas, plus Butternut Antennas are now part of DX Engineering.

For years, Amateur Radio operators have relied on these antennas for both HF contesting and DXing. Now, the Skyhawk, Skylark and every Butternut Antenna model will be manufactured and sold exclusively by DX Engineering. You can also find all the service, repair and replacement parts you'll need to keep them in excellent condition at DXEngineering.com.

Skyhawk Tri-Band Yagi Antenna

The DX Engineering <u>Skyhawk Tri-Band Yagi Antenna</u> offers over 7 dB gain on the 20 and 15 meter bands, plus over 9 dB on the 10 meter band. A trap-free design ensures the best bandwidth possible. The use of aluminum and stainless steel hardware keep the antenna's overall weight down to around 75 pounds. The antenna has a 23 foot boom. It is easy to build and tune, and comes with a 2,500 watt balun.



Skylark Dual-Band Yagi Antenna

The DX Engineering <u>Skylark Dual-Band Yagi Antenna</u> delivers close to 8 dB gain on the 17 and 12 meter bands. The antenna also provides an SWR under 1.3 to 1 across each band, plus a front-to-back over 20 dB. It handles up to 5,000 watts (continuous). The Skylark's simple design eliminates any moving parts, which contributes to allweather reliability. Aluminum elements and stainless steel hardware also promote corrosion resistance. With a boom length of just 16 feet, the Skylark can handle winds up to 90 mph. A balun is included.



Butternut Antennas

DX Engineering welcomes Butternut Antennas to its family of products. Butternut has several critically acclaimed vertical antenna designs, including <u>2-band</u>, <u>6-band</u>, and <u>9-band</u> options that provide efficient performance. The antennas' compact size makes them easy to install, yet they will deliver significant performance on each band.



Stay competitive. Get the right parts and blazing-fast shipping. If your order is in by 10 pm Eastern and the parts are in stock, DX Engineering will put it on a truck the same day. Request your catalog and shop online 24 hours a day, 7 days a week at DXEngineering.com.



Extended Phone Hours!

Sales: 1-800-777-0703

Monday-Friday: 8:30 am to Midnight Saturday & Sunday: 8:30 am to 5 pm

Tech: 1-330-572-3200 Monday-Friday: 8:30 am to 7 pm

DX Engineering.com Online 24/7

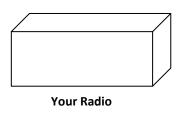
All Times Eastern Country Code: **+1** Sale Code: **1502PVRC**

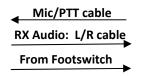


Attention: Contesters

7 Big <u>Problems</u> that are Probably <u>Affecting Your Scores</u> Right Now!

How The RF Connection's <u>Mike-Link</u> and <u>Shure</u>[©] Legendary Performance [™] <u>Broadcast Headsets</u> Solve them ALL!







Headset cable



The RF Connection's Mike-Link

Shure BRH440M Broadcast Headset

Problem #1: Foot Not Near Footswitch, QSO Missed

Solution #1 Use Your Finger Instead!

- Mike-Link finger-touch PTT
- Momentary SPST switch
- Positive tactile feel



<u>Problem #5</u>: Operating CW, you have a "pain in the head" after "Y" hours on-air

Solution #5 - Use Mike-Link

Periodically, Flip the Reverse/Inphase Audio Switch

 Reverses mono audio source for greater listening pleasure



<u>Problem #2</u>: You wear eyeglasses and you have a "pain in the temple" after "X" hours on-air

<u>Problem #3</u>: Brand 'Z' comfortable headset solves problem #2, BUT <u>increases</u> external background noise

Solutions #2 & #3 Use Shure BRM440M Broadcast Headset

- External background noise isolating
- Closed back—noise isolating
- Gamer-style, circumaural (over-theear) ear cup pads



Problem #4: "RF in your mic audio OM!"

Solution #4 - Use Mike-Link

Ferrite RF suppression chokes included on:

- microphone audio
- receiver audio
- PTT

<u>Problem #6</u>: Special microphone is needed for your ICOM radio

<u>Problem #7</u>: External batteries needed when your ICOM-specific headset is used with other radio brands

Solutions #6 & #7 Use Mike-Link & Shure BRM440M

- Built-in, user-selectable, Active ICOM pre-amp
- External power/battery NOT required
- Built-in, user-selectable mic input impedance 2.5K or 10k

Call For Your FREE REPORT:

"The R.F. Connection's 'Mike-Link' and Shure© Legendary PerformanceTM Broadcast Headsets"

Call Joel for your <u>SPECIAL PVRC PRICE!</u>

301-840-5477