



PVRC Newsletter

January 2015

President's Letter – Ethan K8GU

Happy New Year!

A new calendar year in PVRC means a new slate of officers. So, a brief word of thanks is in order to retiring President Ken, KE3X, and to retiring Secretary Alan, AA4FU. Welcome to incoming Vice President Tom, K3AJ, and Secretary Vic, W4VIC. Thanks to Bill, N3RR, and Bud, W3LL, for sticking out another term as Treasurer and Vice President, respectively.

For the benefit of the majority of PVRC who were not at the Holiday Dinner in Fairfax, VA, I'll make a brief introduction. I've been a ham since 1993, when I was 12 years old. I started contesting a couple of years later to work on DXCC. Contesting was far more interesting than DXing, and I quickly found that with 100 watts and a wire, CW was more fun than phone. Moving from Ohio to Minnesota to Illinois for graduate school, I was a member of MRRC, MWA, and SMC,

before moving to the DC area in 2009 and joining PVRC.

My home station is modest, probably equivalent to what the average PVRCer has: a full-sized wire vertical for 80 meters, a dipole for 40 meters broadside E/W, and a G3TXQ hexagonal beam on a pole out back for the high bands. I ran a pair of Kenwood TS-930Ses for many years before replacing them with an Elecraft K3/100 and K2/100 recently. I have a single 3-500Z amp that gets used occasionally.

Professionally, I'm an ionospheric physicist. But, in terms of ham radio, work benefits more from my ham radio knowledge than ham radio does from my professional knowledge. As I mentioned at the Holiday Dinner, most active contesters and DXers know far more about propagation than I do. But, this work does usually afford an exotic trip or two every year and I try to get on the air.

Since I'm pulled in a number of different directions within and beyond amateur radio, I am endeavoring to keep my focus as PVRC President pretty simple:

1. Win the November Sweepstakes Unlimited Club Competition.
2. Continue to support N3RR in formalizing the tax status of the Club as a 501(c)7 organization.
3. Continue to develop PVRC as a premier contesting club in competitive, technical, service, and social aspects of amateur radio.

I will elaborate on these in the coming months. In the meantime, January hosts

a couple of events at which PVRC has excelled in the past: the North American QSO Parties on CW and SSB, the ARRL RTTY Roundup, and CQ 160 CW. As many of you know, we won the three-way NAQP Challenge between NCCC, SMC, and PVRC last year. Remember that the scoring for the NAQP Challenge has a multiplier for the number of participants, so even if you get on for a couple of QSOs, please be sure to submit a log and claim a score for PVRC.

Let's hope the good conditions we've had recently continue for a few more months. See you on the air (and off).

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

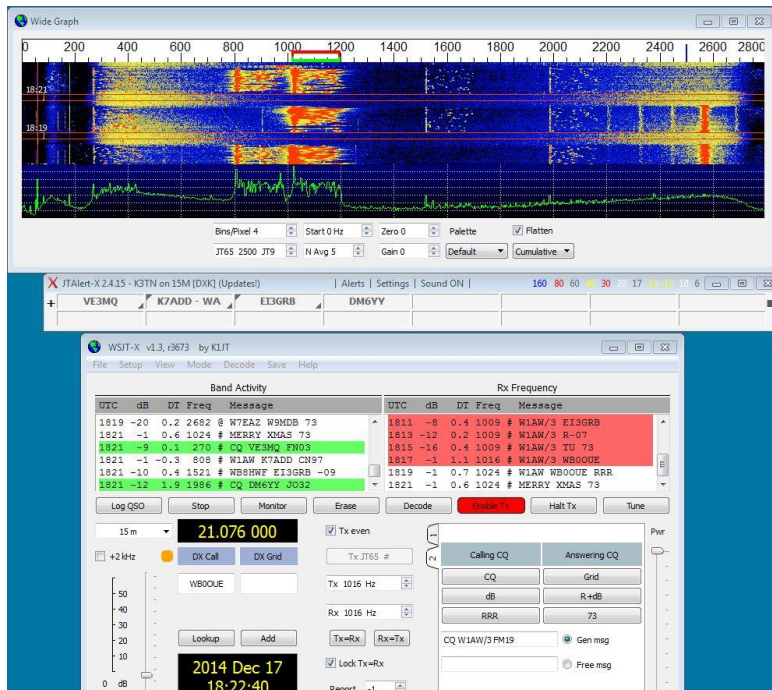
PVRC Website: <http://www.pvrc.org>

Exploring the Opposite Ends of the Rate Spectrum – John K3TN

At 1200Z on 17 December, I showed up at W3LPL to put in a shift on 12m as part of Frank's W1AW/3 operation. I didn't think 24 Mhz would be open that early, but Frank's station is an early band opener, to say the least – the second CQ led to a never ending cacophony of calls. I quickly went split, and started running EU, with the occasional UA0, 9H1 and VP8 calling in, as well as many locals – and John N3AM operating his home station remotely from his snowbird QTH in Florida. About 3.5 hours later, K3SC tapped me on the shoulder to take over the position, and I had around 400 QSOs in the log.

I had told Frank I would try putting W1AW/3 on JT65 from my shack. JT65 is a bizarre mode where you transmit tones for 47 seconds to send a whopping 13 characters, then take a 13 second break and listen for the next 47 seconds, repeat. A "QSO" essentially takes 4 minutes, but you really only have to pay attention for 13 seconds per minute, as you set up the next message. Not exactly blood-pressure increasing excitement, but since JT65 was originally designed to support moon bounce communications, it does get through when you would think the band is absolutely dead.

I had some work to do in the shack and JT65 is something you can easily keep an eye on while doing other things, so away we went on 15 meters.



A half hour later I had a whopping 6 QSOs in the log – it made Sunday afternoon of Sweepstakes seem like a rate fest. I QSYed to 10m and cranked out 4 more Qs in 16 minutes and then just couldn't take the excitement anymore. The next day I added a few Qs on 12m and 20m and called it quits.

If you enjoy watching paint dry, you can find good information on JT65 [here](#).

Web-based Skimmer Report Comparison Tool – Chip N2YO

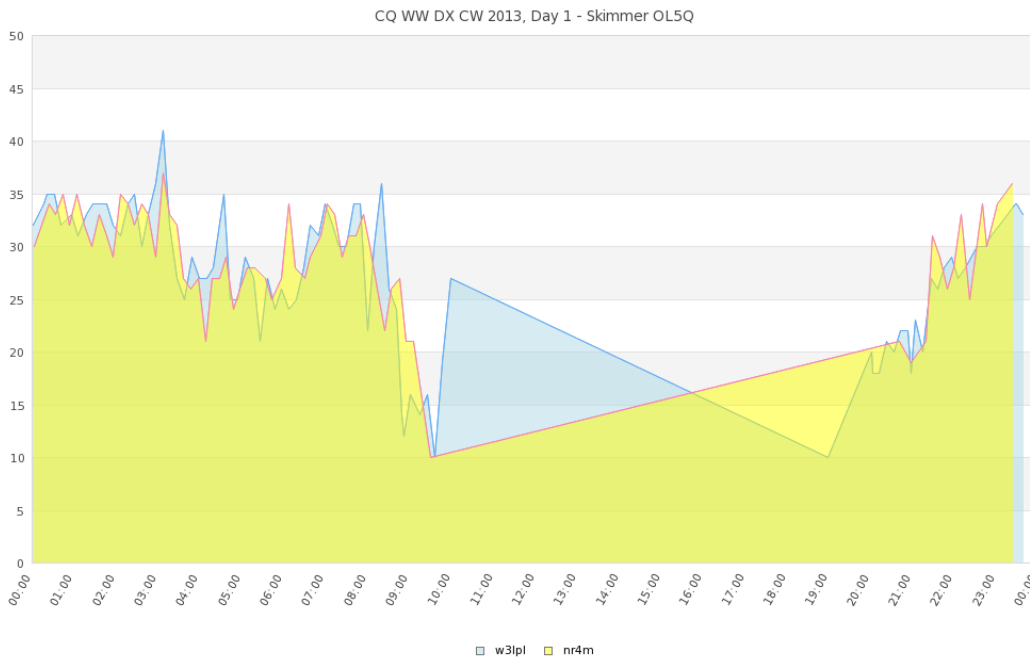
I just finished coding on a tool that may be useful for contesters.

Raw data submitted by skimmers in previous contests are available on reversebeacon.net. I think it would be useful to extract the reports just for one station as spotted by a given DX skimmer (placed in Europe for instance) for a single band and see the variation of the signal strength during a day of contest. If plotted on a graphic some interesting patterns specific for propagation or antenna directivity may become visible. Even more useful would be to compare 2 similar stations competing on the same band and see how were they heard in different places of the world.

In theory the analysis can be done with regular Excel spreadsheets since the file format is CSV, however only day 1 of CQ WW DX CW 2013 has over 2.8 M records, while day 2 more than 2.9 M records. Excel can't handle that, but that's easy for a database.

Please give it a try [here](#).

An example would be to compare W3LPL against NR4M on 40m, on day 1 CQ WW DX CW 2013, as per the skimmer OL5Q. This can be done directly with this [link](#).



At this time only CQ WW DX CW 2013 skimmer reports for day 1 and day 2 (Nov 23 and 24) are loaded in the database.

Any feedback is appreciated.

73 Chip N2YO

CW Ops Mini-contests – Hank W6SX



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Join us for CW fun. Three one-hour three sessions: 1300-1400Z Wednesday, 1900-2000Z Wednesday, and 0300-0400Z Thursday(Wednesday night).

CWops Tests rules are at <http://www.cwops.org/cwt.html> .

Everyone welcome. You don't need to be CWops member to join the fun.

CWops Tests exchange. Members: Name and CWops Member Number. Nonmembers: Name and State, Province, or DX Country Prefix.

Lots of contacts or just a few, please report your result to <http://3830scores.com/> .

The first rule of CW is to have fun and to share the fun.

CW Exuberantly,

Hank, W6SX

CWops Tests Manager



For the CW Op Who Has Everything – John N3AM

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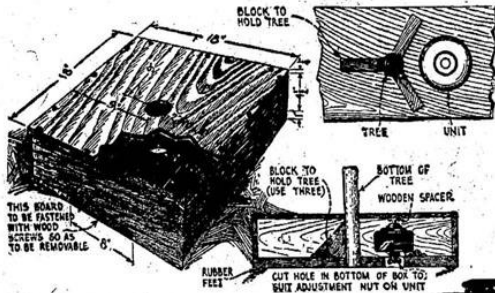
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W211

How You Can Easily Make a Radio Christmas Tree



Combining the Fir and Music to Express the Spirit of the Yuletide.



CHRISTMAS trees and music are synonymous almost. It takes both of them to give the spirit of the Yuletide its fullest expression. How much more effectively this can be done by combining the two; in other words, make a musical Christmas tree! And so the thought of a radio Christmas tree becomes self-evident to an astonishing degree. Moreover, it is not only simple to accomplish, but double in its purpose, for you make your Christmas tree musical and at the same time provide the necessary base for the tree. This you must have anyway, and you do away with a cause for real vexation, which you have so often experienced.

The idea, in other words, is simply to make a box which will become the holder for the tree and at the same time, being of wood—and therefore sonorous—becomes a good radio loud speaker.

Such a box, according to Hugo Gernsback, who explains in *Radio News* how to make the device, works astonishingly well as a loud-speaker, and with a five-tube radio receiver produces sufficient volume to fill a large room. Mr. Gernsback does not recommend using a set with less than five tubes, as the volume would probably not be loud enough.

The entire box is made out of lumber one inch thick, with the exception of the top board, which may be some veneer wood 1/4-inch thick, or even less. This receives the sound vibrations, transmitting them to the surrounding air, and for that reason the wood must be thin. Across the bottom there is a removable piece of wood eight inches wide, the reason for this being explained later.

The next important adjunct is a good loud-speaker unit. Those now in vogue on cone speakers are the best for this purpose, working most satisfactorily. The one used in the illustration of the original model is a unit which was originally designed to be fastened to a piano sounding-board, in order to make the radio music come directly from the sounding board of the piano. The loud-speaker unit is fastened against the removable board. Units of different types, of course, will have to be handled differently.

Above—The Construction of the Resonant Box Which Also Becomes the Base for the Christmas Tree. The Top of the Box Must Be of Thin Veneer Wood. The Heavy Wooden Bottom Strip Is Equipped with Three Blocks to Hold the Tree. The Loud-Speaker Unit Must Be Placed in Correct Relation to the Resonant Top Part of the Box. An Adjusting Screw Is Provided to Regulate the Unit. Right—The Christmas Tree After Insertion in the Resonant Box Which Is Connected to the Radio Set.

The pin of the loud-speaker, when the board is put into place, rests upon the small wooden block. This wooden block is not absolutely essential, as the pin of the loud-speaker may rest against the veneer board, if necessary. There should also be a hole for adjusting the loud-speaker, which is important. In this combination a unit that cannot be adjusted is useless, as it would be almost impossible to get the right tension between the vibrating pin and the veneer board unless you can puncture the veneer board itself and provide some adjusting means on this. This could, perhaps, be done with a machine screw; and by moving this back and forth the correct adjustment could be obtained. Mr. Gernsback does not recommend this method. Once the loud-speaker is adjusted it needs no further attention.

The sounding box is equipped with two holes. The first one, which is made in the top, must be larger than the Christmas tree and its sides should not touch the latter. If it does, the vibrations of the veneer board will be checked, and the volume will not be anywhere near as good. The second hole is in the removable board, and should fit tightly the stem of the tree. Three angle boards are then attached to the board. These angle boards surround the tree closely and hold it firmly in position. This gives a steady support, and with the large base of the box, eighteen inches square, there will be no danger of the tree toppling over.

In order to assemble the contrivance, the tree is first laid down horizontally upon the floor, after which the box is pushed over the bottom part of the tree. Then the board, with its three blocks to hold the tree, is put into place, and screwed down to the box. The tree is then ready and will be found to hold firmly. In order not to mar the surface of the table, the bottom of the box is provided with rubber cushions, which can be bought at any hardware store. The box itself may be painted or polished or decorated to suit individual tastes. A hard-rubber composition bushing, which may be secured from any electrical supply store, is screwed into one of the sides to let out the loud-speaker cord and to finish off the assembly nicely. Before lighting the tree, the loud speaker unit should be tried to see if it gives the full sound, and after the speaker is once adjusted it can be left in this position. After the whole has been assembled and the tree placed on the table or floor, the radio set can then be turned on. The effect is very mysterious, particularly if the connecting cord is hidden. It will then seem as if the music comes directly from the tree.

From Tarzan.org

Membership News

PVRC added one new members since the last newsletter. Please welcome Charles AI4WU from the Colonial Capitol Chapter

Chapter leaders please remember to complete the [Meeting Attendance Report](#).

Upcoming Contests and Log Due Dates

Contests This Month

- Jan 1 - SARTG RTTY
- Jan 3 - ARRL RTTY Roundup
- Jan 10 – NAQP CW
- Jan 17 – NAQP SSB
- Jan 23 – CQ WW 160 CW
- Jan 23 – REF CW

Logs Due This Month

- Jan 6 – ARRL 160M
- Jan 12 – ARRL 10M
- Jan 20 – OK DX

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:



The Editor's Last Word – John K3TN

For February, I'm going to renovate and republish the PVRC Contest Cookbook for ARRL DX that we put out waaay back in 1990. Jim N3JT has updated his old entry and Fred K3ZO and Scot K)DQ are contributing write-ups. Anyone with hinks/kinks, tricks, ideas, strategies, war stories, whatever about the ARRL DX test, send them to me.

Happy new Year!. As always, send any contributions to jpescatore at aol dot com.

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 [LARC](#) 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 [K2YWE](#) 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

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!

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Phone: 410-489-651
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ANAHEIM, CA
(Near Disneyland)
933 N. Euclid St., 92801
(714) 533-7373
(800) 854-6046
Janet, KL7MF, Mgr.
anaheim@hamradio.com

BURBANK, CA
1525 W. Magnolia Blvd. 91506
(818) 842-1786
(800) 854-6046
Eric, KA6IHT, Mgr.
Magnolia between
S. Victory & Buena Vista
burbank@hamradio.com

OAKLAND, CA
2210 Livingston St., 94606
(510) 534-5757
(800) 854-6046
Mark, W7YN, Mgr.
I-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
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Leon, W7AD, Mgr.
Tigard-99W exit
from Hwy. 5 & 217
portland@hamradio.com

DENVER, CO
8400 E. Hill Ave. #9, 80231
(303) 745-7373
(800) 444-9476
John, N5EHP, Mgr.
denver@hamradio.com

PHOENIX, AZ
1939 W. Dunlap Ave., 85021
(602) 242-3515
(800) 444-9476
Gary, N7GI, 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 I-285
atlanta@hamradio.com

WOODBRIIDGE, VA
(Near Washington D.C.)
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(703) 643-1063
(800) 444-4799
Steve, W4SHG, Mgr.
Exit 161, I-95. So. to US 1
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The Store Nearest To You!



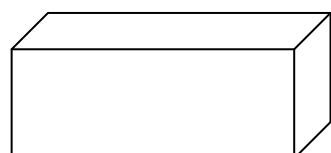
Attention: Contesters

7 Big Problems that are Probably Affecting Your Scores Right Now!

and

How The RF Connection's Mike-Link and
Shure® Legendary Performance™ Broadcast Headsets

Solve them ALL!



Your Radio

← Mic/PTT cable
RX Audio: L/R cable
From Footswitch →



The RF Connection's
Mike-Link

← Headset cable →



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



Problem #5: 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



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

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

Solutions #2 & #3

Use Shure BRM440M
Broadcast Headset

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



Problem #6: Special microphone is needed for your ICOM radio

Problem #7: 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 Performance™
Broadcast Headsets"

Call Joel for your SPECIAL PVRC PRICE!

301-840-5477

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

Solution #4 - Use Mike-Link

Ferrite RF suppression chokes included on:

- microphone audio
- receiver audio
- PTT

DX ENGINEERING®.com

Pro 7 Headset

Blending comfort and fidelity, the new [Pro 7](#) is a dual-channel stereo aviation-style headset. Its unique audio balance control lets you adjust the sound level for each speaker, which is awesome if you need to keep “one ear free” during contests. A phase reversal switch can let you hear weak frequencies better. The gooseneck mic boom can be used on either the right or left ear.



HF/50 MHz All-Mode Transceiver

As the pinnacle of Icom's base station radios, the [IC-7600](#) delivers a significant performance advantage for contesters and DXers. It features an advanced RF design that results in exceptional dynamic range. There are three selectable roofing filters, and a fully-adjustable IF filter lets you pull in those rare contacts. Casual rag-chewing is also a real joy, without annoying interference. The IC-7600 covers 160 to 6 meters; find more specs [online](#).

ICOM



Navassa-5 Yagi Antenna

Though it was designed for DXpeditions, this five-band Yagi is perfect for any operator looking to get active on the 10, 12, 15, 17 and 20 meter bands. The [Navassa-5's](#) unique design packs full 2-element monoband performance into a five-band antenna, all through a single coax run. It also has a wide, flat VSWR curve on each band that promotes excellent wideband operation. Optional 6 meter [add-on kit](#) is available for additional band coverage.



Coaxial Cable Assemblies and New PL-259 Connector

Each DX Engineering high-performance, low-loss 8U, 213U and 400MAX [coaxial cable](#) assembly is made with its revolutionary new PL-259 connectors. The connectors feature a machine-crimped shield that provides a 360° electro-mechanical connection, plus a hand-soldered center pin. Every weather-shielded assembly is hi-pot and continuity tested in the USA. They come in multiple lengths; custom lengths are also available.

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. **Get What You Want and Get on the Air with a DX Engineering Gift Card.**



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DX ENGINEERING®



November 1, 2014

Dear Amateur Radio & DX Enthusiast,

Next year is the 66th consecutive year for the International DX Convention. The meeting, sponsored by the Northern California DX Club, will be held at the beautiful Visalia Convention Center in downtown Visalia, CA. IDXC, the premier DX Convention in the United States, is attended by over 800 serious DX'ers and contesters looking to improve their skills, their stations and see the latest equipment.

Convention Highlights:

- Full day of training on Friday, April 17, 2015: Contesting and DXing Techniques
- Friday Evening Dinner Options: TopBand, IOTA, and Contesting
- Open DX Forum
- 15-20 DX & Technical Seminars
- 35-40 Exhibitors in large Exhibit Hall
- QSL Card Checking
- Great Raffle Prizes
- Eyeball QSOs w/DX Friends
- Excellent Keynote Speakers
- Access to great California vacation destinations (see description on website)
- Registration Starts: 12-08-2014
- Website: dxconvention.org

We intend to make IDXC 2015 the best DX Convention ever, and hope you'll be able to join us.

Sincerely,

John Miller, K6MM
Kevin Rowett, K6TD
Rich Seifert, KE1B
IDXC 2015 Co-Chairmen

