



# *PVRC Newsletter*

## *September 2013*

### President's Letter – Rich NN3W

**H**ello PVRC!

Welcome back to the Fall contesting season. We've got a lot of action in store in the upcoming period including: WAE SSB, CQWW, and – of course – November Sweepstakes! More on that in a minute.

While summer is usually a period to relax, take it easy and throttle back, this was not the case in PVRC-land. Dozens of PVRCers took to the air between July 13 and 14 from stations across Maryland, Virginia and North Carolina in the form of W1AW/4 and NU1AW/3. The competition was fierce and, literally, thousands of QSOs were made by the two teams.

My heartfelt thanks to NR4M and W3LPL for serving as captains for the teams, to the one dozen stations or so stations that opened up their homes to guest operators, to the operators of W1AW/4 and NU1AW/3 who put in the effort to put PVRC on the air in a terrific contest, and to the PVRCers across the area who worked both W1AW/4

and NU1AW/3 and who spotted us. A job very, very well done.

Looking forward, we have lots on the calendar coming up. As noted above, WAE SSB and RTTY are coming up in the next couple months, as is the CQWW RTTY, SSB, and CW contests. Of particular interest is the fact that the CQWW CW event, owing to the number of Thursdays in November 2013, is the weekend **before** Thanksgiving weekend! No need to put yourself in the doghouse because your abandoned family and friends to play radio (or, alternatively, you do not have an excuse when you want to get away from friends and family to play radio).

We also have the latest installment of the age old tradition – November Sweepstakes. PVRC has owned the coveted ARRL Unlimited Club Competition gavel for four or five years in a row. There are rumors from the Left Coast of a renewed effort to return a gavel to NCCC. We will be commencing our defense of our title very shortly. With the Sun starting to give up the ghost as it

pertains to sunspots, conditions should start to favor us again as the incentive to run to 15 meters diminishes and bands like 40 and 80 become more vital to scoring.

So much to do...so little time.

73 Rich, NN3W

### PVRCers at the August QCWA Meeting – Mark N2QT



*N2QT and K2KW (if you see anything you need on the table, I've still got it!)*

#### **PVRC Officers:**

President: NN3W Rich Didonna  
Vice President: KE3X Ken Low  
Vice President: K8GU Ethan Miller  
Secretary: W3LL Bud Governale  
Treasurer: WR3L Dave Baugher

#### **Trustees:**

K3MM, N3OC, WX3B, W4ZYT, N4NW, K2AV, N4ZR,  
K4ZA, K3WRY

#### **PVRC Charter Members (all SK):**

W3GRF, W4AAV, W4KFC, N0FFZ, W4LUE, W7YS,  
VP2VI/W0DX, W3IKN, W4KFT

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

## Ed and Susanne's Excellent BY Adventure - and Ham Dinner – Ed W3EKT

My adventure loving wife, Susanne W2PHS, and I returned home at 2 AM June 14, having spent 3 weeks in China. The highlight of our trip was meeting several members of a small Beijing amateur radio club. What follows is the tale of how our China trip came to be.

### IN THE BEGINNING

Susanne, ever keen on “life-long learning”, had gone back to school in January taking several classes. Near the end of her course in Microbiology at Howard Community College in Columbia, MD, she picked up a handful of brochures from the schools International Education Office opining that “she needed a reward for receiving an A in the course!” She really wanted to go to Turkey, an idea I quickly dispelled, too much turmoil, way too close to Syria. However, another program that interested us both was “Arts, Culture in China, Fine Arts 102” - the die was cast!

The weeks before we left were a whirlwind of activity, such as obtaining visas, changing funds to Yuan, thinking seriously about packing, what to take, etc. Radio operating was not possible, as far as I could foresee, so I never considered taking even a handy talky. But I did take an ample supply of QSL cards and a ball cap with my name and call on the front. At least, I could “advertize” our hobby while in China.

Initially, I planned to “audit” the course for no credit. I mean, what would I do with college credits at age 76, especially in Fine Arts? However, that idea changed when the price of the trip increased due to rising airfares. To help offset the additional cost, the school was able to offer enrolled students a partial scholarship. Which meant I had to register as a student! (Susanne was already enrolled) So, I submitted my application with the required \$25 registration fee...which was promptly refunded a few days later-- “the fee is waived for military veterans.” Eventually, we both received a \$500 scholarship so no additional funds were required. Fine, I considered that money a partial refund of my real estate taxes!

### WE'RE OFF!

The first leg of our journey would take us from DC's Reagan Airport up to Toronto. But wait! That flight was to leave at 0600 on 22 May. Therefore, the school arranged for a van to transport us from the college to DCA. We met the van at HCC at 0230, all went well at the airport, and the flight was fine. But wait - now, we had a **five hour** layover in Toronto! Since the projected flight time to Shanghai was 14 hours, Susanne upgraded us to First Class-- so we had a bed, much better than “steerage” in the back.

The Air Canada plane was a Boeing 777 300 ER (Extended Range) and was overbooked, not unusual these days. This long light was also fine, and we arrived pampered and well rested. After a few days of touring Shanghai and its art museums, we flew up to Xi An (She Ahn) to visit The Terra Cotta Warriors (lots of walking) followed by more...Art Museums! (a recurring theme during the entire trip) On May 28, we left Xi An for Peking – no, make that Beijing, our final destination. In Beijing we stayed in a dorm room at The Central Academy of Fine Arts (CAFA.)

## **CAFA**

The school is located in a rather industrial looking neighborhood of Northeast Beijing. High tension towers sit just outside the fence line as do concrete slabs of some long defunct factory. Although everything is functional, I wouldn't call the Academy a pretty place. The cafeteria used small machines that read your "meal card" electronically and deducted the cost of the meal. Which was practically nothing, as we were each given a card with 150 Yuan to last us two weeks! (divide by 6 to get dollars). A boiled egg cost 1.2 Yuan, a bowl of soy milk 2, a bowl of hot soup with floating mystery veggies and scraps of meat with a fried egg on top – 12 Yuan or roughly, 2 bucks. We subsisted on a "plant based diet" for the most part - lots of rice and veggies, soya this and that. No cow's milk and as a matter of fact, I never saw a cow the entire time we were in-country.

Susanne and I had a private room with its own bath in a building reserved for visiting and international students and faculty. Most of the Chinese students were housed in other dorms, 3-4 bunk beds in the same sized room as ours. They had communal toilets/showers, barracks style. Although the school laundry will wash clothing for practically nothing, they have no dryers so everything is hung on balconies to dry.

## **THE CURRICULUM**

During our two weeks at CAFA, we had formal classes each morning. 9 AM was Tai Chi, 10am was Chinese Language complete with pictograms (oh yeah) followed by an hour of other subjects pertaining to the arts: Film, music, and poetry. One day we were taught how to paint bamboo by a non-English speaking instructor, That was interesting! Afternoons were devoted to excursions to ... Art Museums of course!

Well, we also toured other interesting sites. Weekends were for the biggies: The Great Wall, The Forbidden City, The Temple of Heaven, Tiananmen Square, The Olympic Village with its "birds nest" stadium. These outings were usually "on the bus, off the bus" with lots of walking. I lost 3 pounds partially due to the food. However, we also attended a Chinese version of "dinner theater" featuring beautifully costumed performers. One evening we attended a ballet at the Chinese National Opera House, a fabulous building. The performing group was German, the ballet was written by a Frenchman, Chinese dancers also participated and the piece was set in Baghdad ...and viewed by Americans. How "international" is that??

Short papers were due as was a five to ten minute oral presentation the day before we flew home. One final longer paper is required next week in order to earn the 4 credit hours in Fine Arts 102.

## **BEIJING HAMS**

On arrival at CAFA, I sent an email to BA1PK, a known contester asking if he knew of any hams living in Beijing near CAFA. He forwarded my note to Huo, BA1AK who corresponded with me via email using an English to Chinese translation program. His work schedule along with my school activities made getting together problematical. We finally had mutual free time and he invited Susanne and me to dinner with some members of his ham club on Friday, 7 June. We accepted and he sent a ham friend, ex M3KDU, to pick us up at the CAFA as he owns a car.

## CHINESE HAM DINNER

M3KDU, our driver, was university educated in the UK, so his English was excellent. However, on his return to China he was told “the license is not valid in China.” So, he is “a man between calls”, trying to obtain a Chinese ticket. A total of 6 Chinese hams attended the dinner, plus BA1WJ’s wife who is a dentist. She spoke passable English and sat next to Susanne (first row on the right in the picture below). Other than KDU, none of the others were fluent in English.



They treated us to an elegant dinner in an excellent restaurant. By far, the best food we had in China (but pricy). There were at least 12 dishes, including elaborate Peking Duck. I received eating lessons (how to use chopsticks, and what dish came before another). In true Chinese custom, the host (who had invited everyone else), picked up the total tab, which was probably equivalent to his weekly salary. But they were highly honored to have a once-in-a-lifetime visit by a veteran US ham operator (and they honor senior citizens in their country). They reverently referred to me as Mr. Brun.

The group was a mixture as two were Class 1 and operate CW on the HF bands. The others held lower class tickets, VHF and up, the “shack on the belt types.” Our host, BA1AK was thirty as was one other ham. Other than Susanne and I, no one else was over fifty.

Early in the dinner, I heard BA1WJ beeping Morse: Dah dit dit dit, Dit, Dit, Dit Dah Dit.” I promptly “answered” Dit Dah Dit and a one liter bottle of Chinese beer showed up in front of my plate. My kinda people!

Even though we spoke no Chinese and few of the Chinese spoke any English, we had a great time. QSL cards were exchanged along with “C U ON AIR” etc. A good time had by all and we will all remember the evening fondly.

## WRAP-UP

I'll remember the simple things: Some of the Tai Chi moves as well as the instructor, Lisa. Some of the language, like "Ni hao!" (nee how.. Hello) as well as the tonal aspects of Chinese. All of the Chinese people taking pictures when we were out touring. They now have photos with some old guy in the background with "those funny W3EKT letters on his hat!" They will probably wonder what does that mean?" The fact that China has over 100 million eBikes, that silently slide up from behind you at 25 mph, ride down the wrong side of the street in the dark with no lights or helmet.

I was astounded by country's extreme poverty, side-by-side with great wealth. Collectively, the Chinese people have \$13 Trillion USD available for investment and spending. Tens of thousands of relatively new high end autos --- and yet, millions on bicycles and mopeds and scooters as well as powered trikes with a small "flat bed" piled high with goods for market. Poor, elderly, street sweepers in straw hats wielding brooms made of twigs and brush, like you see in third world countries.

Would I do it again? Yes...but would pack differently as I took too much. The way to travel is to buy what you need in-country, use it, leave it when you go home. Fun trip for sure and I am now a Registered College Student with 4 credit hours in Fine Arts 102 on my Howard Community College Record. And, more importantly, have made new friends in a small amateur radio club in Beijing.

## Membership News – Bud W3LL

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

- Tricia N3DUH in the Northwest chapter
- Jean KI4DDC in the Southwest Virginia chapter
- Ken NX3K, Hugh KA3TTW and Jim W3JMB in the Laurel MD region
- Sally G2YL in the Rappahannock Valley region.

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

## Low Cost Remote Contesting– Mike WoYR

There are a lot of frustrated people out there. They're hams. Lots of them are contesters for whom those once fabulous weekends pass by as sad disappointments. They are people who once enjoyed their hobby to the fullest until they moved. Why? For some, it is the despicable HOA. For others they're in an adult care facility where it's just impossible to have a station. Some in nursing homes could get to contest stations (if invited) but they cannot stay there long, so they're dependent on others. It's a shame. These are experienced operators whose minds are still sharp!

But not all frustrated contesters are older. Many are young or middle-aged hams who would like to engage in contesting but live in apartments or other places where operation would be impossible. A few skulk around, furtively stringing up nearly-invisible wires and eking out contacts.

Is there any hope for these frustrated people?

There is. Thanks to the Internet, computers and freeware/shareware, these operators can participate in contests, remotely from their home locations and once again fully enjoy their hobby. They can send and receive CW, RTTY and SSB, log their operations, control the rig and amplifier, select and turn antennas and send and receive packet DX station spots, all by remote control.

A loosely organized group of guys known as TeamK4VV has developed the K4VV Remote Contesting Project. It's taken somewhat more than a year and a lot of sweat, brain power and time, but very little money. It all works. There is some wonderful and effective remote interfacing equipment out there, but it's expensive. TeamK4VV resolved to see how far we could go with remote contesting, spending money only when absolutely necessary. We now have three fully-remotable positions at K4VV and have spent just over \$200 to achieve this. We built and developed the rest ourselves.

K4VV is a super-station owned by Jack Hammett. Jack built the station with multi-operator contesting in mind. Sadly, Jack's health has deteriorated but he retains great interest in the station and has urged us on towards our goal. We use both Remote Operators (ROs) and In Station Operators (ISOs) at K4VV. Here is how it is done:

**Accessing and Controlling the Station's Computer:** Remote control of a contesting station can be achieved many several software applications. We tried several and found that for our purposes, LogMeIn works best. There is a freeware version of LogMeIn which meets all our requirements. (If you intend to use only CW and RTTY and not SSB, you can download and install the freeware versions of LogMeIn Pro, which has its own one way audio channel. This will eliminate the need for also installing Skype, which is explained later.)

If you are setting up your computer to operate as an RO, you should only install the small Active X application from the LogMeIn site, not the whole LogMeIn application.

The remote station to which you will connect will supply you a User Name, Password and Access Code, all of which you'll use to connect to the remote station's computer. When you are connected, you'll see on your computer's screen a display, exactly as if

you were sitting in the remote station shack. It is high resolution and full-screen and quite amazing. You can launch and close all the applications on the remote station's computer, just as if you were there!

**Hearing and Sending Audio:** Now, you will need a way to hear the remote station's receiver. This can be achieved in two ways:

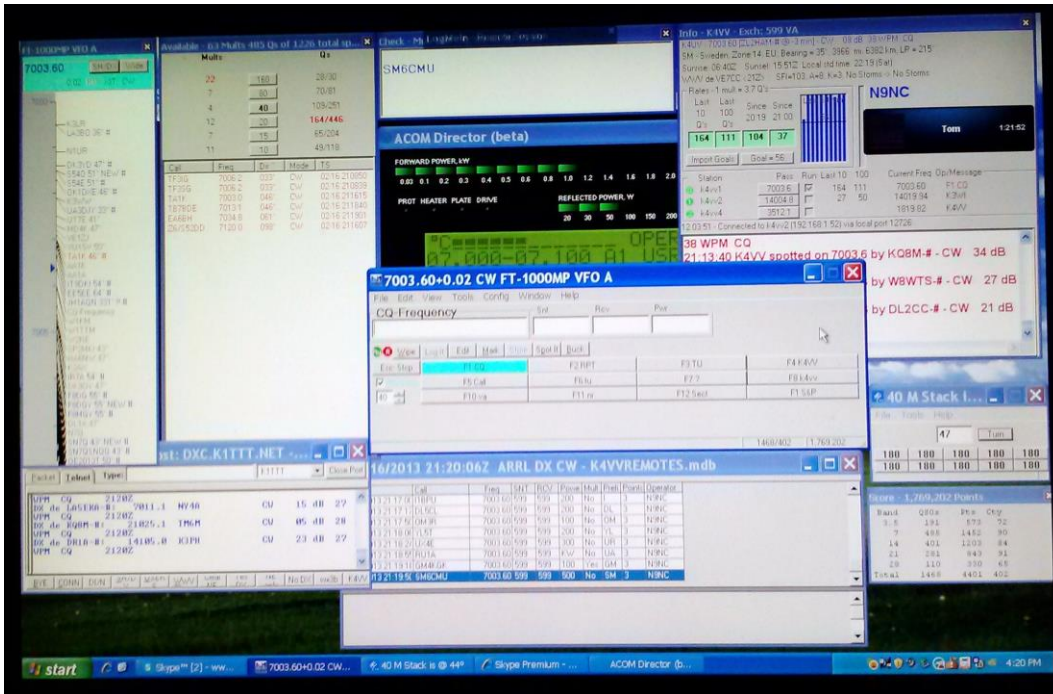
1. Use the audio channel supplied as part of LogMeIn Pro, or,
2. Install Skype on your computer and call the Skype account on the remote station computer. You will need to know the Skype address of the remote station computer. It is set up to automatically answer incoming calls from ROs.

Audio from the receiver output is coupled to the remote station's computer soundcard through an audio isolation (600-600 ohm) transformer. Likewise, audio from the soundcard output is routed to the transceiver's line audio input through another audio isolation transformer. There is no hum or RF on send or receive. Skype has an excellent AGC system so, once levels are set, they remain unchanged. When SSB is used, the quality of modulation is such that we frequently receive compliments. If you use only CW or RTTY, you will not need Skype, so long as the remote station is using LogMeIn Pro.

**Rig Control and Contesting Software:** At K4VV, we use N1MM Logger contesting software. Keep in mind that we are only interested in contesting, not DXing, DX recording keeping, station logging, etc. N1MM provides ROs with all the transceiver controls they need. Fortunately, all of our operators are familiar with N1MM so there is no steep learning curve for them. All have found that N1MM contains an amazing panoply of rig control features which make remote rig control almost a "snap."

There is no need for N1MM Logger to be loaded onto the RO's computer. The RO manipulates N1MM from his end through LogMeIn. When the RO logs into N1MM he enters "Ctrl+O" on the keyboard and enters his own call sign. At that point he can configure the N1MM operating screen as he desires and save the screen configuration. Whenever he logs in under his call sign, his personal preferences in screen "design" will be called up. The same is possible with CW, RTTY and SSB macros once they are loaded and properly configured file names are assigned.





Here is how Tom N9NC configures the N1MM screen. Tom's rate-getting abilities are clearly shown by the vertical "rate" bars in the upper r.h. corner, just to the left of his call sign. The ACOM Director software display in the center, shows Power Output and SWR LEDs. The Rotor Control widget is just above the score box on the lower r.h. side.

**Amplifier and Rotor Control:** All of the remotable positions at K4VV use ACOM 2000A amplifiers. These can be remote controlled using the ACOM Director software from MØYOM. The software allows monitoring of all amplifier parameters but does not include a way to reset the amplifier, should it "kick out," due to overload. I have developed a way to reset the ACOM 2000A remotely, using a USB relay card and control software. Details will be furnished upon request.

Thanks to KU1T and N2IC an RO can turn antennas for the band he's on. N1MM's excellent rotor control routine allows the operator to instantly turn the right antenna. All he must do is type in the prefix and hit "Alt+J." The Big Berthas ramp up to speed, then ramp down and come to a stop at the correct heading.

ROs can also instantly choose to go from high yagi stacks to low yagis, fixed on the Caribbean and South America just by clicking on a button on the screen. This is achieved through a USB relay card and control software.



Here are two of the three remotable positions at K4VV. At least one operator is always on duty to deal with technical “hiccups.” The station can be configured from SO to M/M.

I want to thank KU1T, K3ZJ, N9NC, K3WI, AI2C, N4PD, N2IC, KB3CS, W4AU, W4GOV, K6CT, HA5LV, K0ZR and NC4S for their hard work, time spent beta testing and contribution to Team K4VV. We all thank Jack and Sharon Hammett for encouraging this special use of K4VV.

We will be glad to share any of our ideas with other contesters. If you are interested in operating K4VV either as an ISO or as an RO, please contact us.

## Upcoming Contests and Log Due Dates

### Contests This Month

- Sept 6 – All Asian SSB
- Sept 8 – NA Sprint CW
- Sep 14 – WAE SSB
- Sept 15 – NA Sprint SSB
- Sept 21 – Scandanavian CW
- Sept 30 – CQ WW RTTY

### Logs Due This Month

- Sept 1 – CQ WW VHF
- Sept 2 – ARRL UHF

See WA7BNM's [Contest Calendar](#) for more detail and the latest information.

## ET3AA Operation – Ken K4ZW



Ken K4ZW with Adula KB3WXC and Tsegaye KB3WWJ.

## The Editor's Last Word – John K3TN

Thanks to Ed W3EKT, Bob W0YR and Ken K4ZW for submissions this month. I've got a few items on the hook for the October issue, but please send any photos or contest write-ups or anything else you might have of interest.

It is never too soon to think about Sweepstakes!

73 John K3TN



## **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 City Buffet, 1306 W. Patrick Street, Frederick, MD. (301) 360-9666. It's in a small shopping center. Most arrive about 6 PM for dinner and informal discussions. The meeting begins at 7:00 PM.

From W. Patrick Street, turn up McCain Dr. (the Mountain View Diner is on the corner), then turn right into the shopping center, then turn left and search for a parking place. The City Buffet is tucked back in the left corner of the shopping center behind the Mountain View Diner. You can't see the City Buffet from W. Patrick Street. 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!

**Central Virginia Contest Club: Ed NW4V** Meets the first Tuesday of the month at St. Martins Church, 9000 St. Martin Lane, Richmond VA, (between W. Broad St. and N. Parham Road). Our meeting begins at 7PM.

**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

**SOMD Region Meeting:** The Southern Maryland Chapter meets at 6:30PM on the first Tuesday of even numbered months. We meet in the vicinity of Charlotte Hall, MD, with the specific location (usually a local restaurant) to be announced several weeks prior to the meeting (keep an eye on the reflector). These meetings are open to all PVRCers, guests, and those interested in joining PVRC. Contact Tom AB3IC for information: e-mail: [GL1800Winger@verizon.net](mailto:GL1800Winger@verizon.net) - cell: 240-434-3811

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 send PayPal donations via [DAVE@WR3L.NET](mailto:DAVE@WR3L.NET) or by snail mail to Dave's address at [QRZ.com](http://QRZ.com). 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](mailto:bernie@dailydx.com).

The Daily DX  
3025 Hobbs Road  
Glenwood, Maryland 21738  
Phone: 410-489-6518  
Skype w3ur-bernie



O.D.	Per Foot
.375	\$.50
.5	\$.70
.625	\$.80
.75	\$.90
.875	\$.95
1	\$1.00
1.125	\$1.10
1.25	\$1.30
1.375	\$1.40
1.5	\$1.50
2.0	\$2.25

6063-T832 Aluminium  
 TX38 Triband Yagi Antenna  
 10-15-20 Meter with Monoband Performance  
 2 Elements on 15 and 20 and 4 Elements on 10  
 All hardware weather resistant  
 Antenna Rated for over 100 MPH

**Official Antenna of WRTC 2014**

U-Bolt Saddle Clamps for 1.25" Tubing – 3.5" Tubing  
 Galvanized – Zinc Plated – Stainless Steel  
 Monoband Yagi Antenna Kits for 6-20 Meters  
 Custom Built and Designed Yagi Antennas

[www.cycle-24.com](http://www.cycle-24.com)  
[sales@cycle-24.com](mailto:sales@cycle-24.com)  
 870-715-8228

**THE R. F. CONNECTION**  
 "Specialists in RF  
 Connectors and Coax"

213 North Frederick Avenue  
 Suite 11-F  
 Gaithersburg, MD 20877

**Tech Support:**  
**301-840-5477**

**24-hour Fax:**  
**301-869-3680**

**Order line:**  
**800-783 -2666**

**Email:** [rfc@therfc.com](mailto:rfc@therfc.com)

Please visit us at:  
[Http://www.therfc.com](http://www.therfc.com)

**Our catalog includes:**

UHF Series, N Series, BNC Series, Adapters, F Series, DIN Plugs, Portable Radio Power, DIN Plugs, Hardline Connectors, Audio Connectors, Microphone Connectors, FME Series, SMA Series, Reverse Thread SMA Connectors, MCX Series, MMCX Series, Adapter Kits, Reverse Polarity (TNC, N, SMA), 39 coax types and 5 balanced lines

**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  
**(800) 854-6046**  
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.)  
14803 Build America Dr. 22191  
(703) 643-1063  
**(800) 444-4799**  
Steve, W4SHG, Mgr.  
Exit 161, I-95. So. to US 1  
woodbridge@hamradio.com

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

Special Holiday Discounts Off Our Already Low Prices!



# HAM RADIO OUTLET

WORLDWIDE DISTRIBUTION

**GREAT YAESU  
WINTER SPECIALS  
Through 12/31/06**



**FT-897D** VHF/UHF/HF Transceiver

- HF/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** HF/VHF/UHF TCVR

- 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" x 1.5" x 6.5", 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!**



**VX-2R** 2M/440 HT

- World's smallest Dual-band HT w/ wide RX
- 1.5 W RF output
- WIRES compatible
- 1300 Memory channels

**Call For Low Price!**

**FT-60R**

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

**Low Price!**

**VX-7R/VX-7R Black**

50/2M/220/440 HT

- Wideband RX - 900 Memories
- SW TX (300mw 220Mhz)
- Li-Ion Battery
- Fully Submersible to 3 ft.
- Built-in CTCSS/DCS
- Internet WIRES compatible

**Now available in Black!**

**VX-6R**

- 2M/220/440HT
- wideband RX - 900 memories
- SW TX 2/440, 1.5W 220 MHz TX
- Li-ION Battery • EMI system
- Fully submersible to 3 ft.
- CW trainer built-in

**NEW Low Price!**

**VX-150**

- 2M Handheld
- Direct Keypad Entry
- 5w output
- 209 memories
- Ultra Rugged

**Call Now For Special Pricing!**



**FT-857D**

- Ultra compact HF, VHF, UHF
- 100w HF/6M, 50w 2M, 20w UHF
- DSP included • 32 color display
- 200 mems • Detachable front panel (YSK-857 required)

**Call for Low Price!**



**FT-7800R** 2M/440 Mobile

- 50w 2m, 40w on 440mhz
- 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 roofing filters

**Call Now For Low Pricing!**



**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**

AZ, CA, CO, GA,  
VA residents add  
sales tax. Prices,  
specifications,  
descriptions,  
subject to change  
without notice.

Look for the  
HRO Home Page  
on the  
World Wide Web  
<http://www.hamradio.com>

**COAST TO COAST  
FREE SHIPPING**

UPS - Most Items Over \$100  
Rapid Deliveries From  
The Store Nearest To You!

