



Newsletter of the
Twin City DX Association

Volume 6, Issue 3
Summer, 2009



Inside this issue:

Member News! 5

Member Profile 7
K9OW

Goin' Remote 9
WØBV

Midway Memories 14
WØFS

MWA
Contest Corner 17
RTTY Tips
KØRC

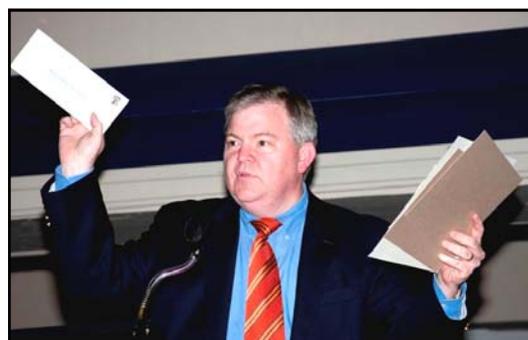
Gray Line Staff

**KØIEA
KØJUH
KØRC
WØBV**



**WØDXCC and Contest Central 2009
Receives an A+ by Attendees!**

The WØDXCC and Contest Central 2009 convention took place Saturday, July 18th in Rochester, MN at the Rochester Technical and Community College. It was sponsored by the Rochester Amateur Radio club, the Twin City DX Association, the Minnesota Wireless Association and the Rochester Technical and Community College. Attendees were treated to a full day of seminars on a variety of topics popular with the DXing and Contesting crowd, followed by the WØDXCC Banquet at 6:00pm.



Dr. Scott Wright, **KØMD** was chair of the convention, again this year.

Dr. Scott Wright, **KØMD**, who was chairman of the conventions says, "I appreciate all of the positive comments via email, regarding the WØDXCC and Contest Central 2009 meeting. It would not have been possible without all of the support from **ACØW, KØJUH, KØBUD, NØHZN** and **AIØM**, as well as the many "faculty" who participated from our region: **KØAD, ACØW, WØZQ, WAØMHJ, KØRC, WØGJ, KØIR, WØPR, WØBM, K4IU, KØUH, KØVH, WØSTV, WØSHL** just to name a few, plus the "faculty" from outside our circle."



John, **ON4UN** presented two programs from the comfort of his shack. He was able to see and interact with his audience.

John Develdore, **ON4UN**, was unable to attend due to travel issues, but participated from his home in Belgium via a web video conference. We were able to hear his 160 meter propagation program, see his shack and watch him operate his SO2R station (K-3 transceivers and Acom 2000 amplifiers). The web video conference was the talk of the day!

Others who presented seminars were:

Ralph Fedor, KØIR
- K5D, Desecheo Island
- DXing from Cold Spots

Glenn Johnson, WØGJ
- K5D, Desecheo Island
- DXing from Hot Spots

Carl Luetzelschwab, K9LA
- Sunspot Cycle 24
- 160m Propagation
- Low Band Receive Antennas

Mark Endorf, WAØMHJ
John Platt, WØZQ
- MN QSO Party and Mobile
HF Contesting

John Kennon, N7CQQ
- Clipperton DXpedition

Dave Anderson, K4SV
- TO5DX DXpedition

Bill Lippert, ACØW
- Contesting Software

Bob Chudek, KØRC
- RTTY Contesting

Rob Sherwood, NCØB
- HF Receiver Issues

Dean Straw, N6BV
- HF Antennas - DX or Domestic
- HF Antenna Planning
- Low bands From a City Lot
- Contesting Update and New Issues
- Single op, 2-Radio Contesting (SO2R)

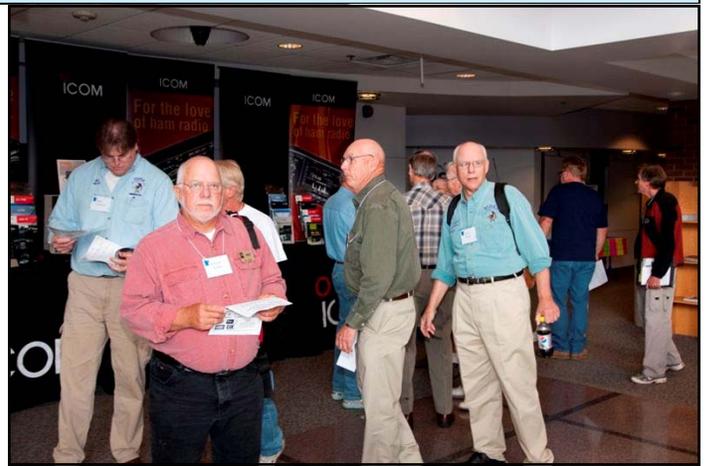
Pat Cahill, WØBM
- DXing From the Top of the World

Al Dewey, KØAD
- Contesting Update and New Issues
- Getting Started in Remote Contesting

Watch the www.w0dxcc.com website for posting of videos from the seminars.



Co-chair John, NØHZN greets arrivals Bill, WØOR and Mike, KØBUD at the RARC reception table.



Rich, WØDD studies his program to choose seminars. Also recognizable are NØODK, KØBS and KØEEO.



Ralph, KØIR presents "Desecheo - A Behind the Scenes Peek" to a big crowd.



Jim, **KØJUH** set up shop in the atrium to pitch TCDXA's "Dollars for DX" mantra.

Radio City, Force 12 Antennas, Yaesu, and ICOM were present as vendors. This made it possible for the attendees to operate the latest HF rigs, and compare them to one another.



John, **N7CQQ** and **KØMD** meet at the ICOM booth.

The WØDXCC Banquet started at 6:00pm, with over 100 DXers gathering to enjoy the evening activities.

The official welcome by Bill Dean, **WØOR**, got things underway, followed by comments from Chair, Dr Scott Wright, **KØMD**, and Stan Cram, **AIØM**.

After dinner, the Awards Ceremony was held, and the **WØDXCC 2009 DX Lifetime Achievement Awards** were presented to:

John Develdore, **ON4UN**
- for his contribution to low band DXing.

Dean Straw, **N6BV**
- for his contribution to antenna design, modeling, and propagation.

Carl Luetzelschwab, **K9LA**
- for his contribution to low band propagation modeling and sunspot cycle analysis.



Awards Master of Ceremony Bill, **WØOR** presents a **DX Lifetime Achievement Award** to Carl, **K9LA**.

The **WØDXCC 2009 Friend to the DXer Awards** went to:

Rob Sherwood, **NCØB**
- for his work with receiver design and analysis, and for introducing the concept of roofing filters into modern HF receiver design.

Dennis Motschenbacher, **K7BV**
- for his efforts to promote technology within ham radio, and his support of DXpeditions.

John Kennon, **N7CQQ**
- for his contributions to DXpeditions, including Clipperton and Midway

Dave Anderson, **K4SV**
- for his many DXpeditions to promote DXing around the world.

Ward Silver, **NØAX**
- for his many efforts to promote DXing and contesting, and writing about the hobby.



K7BV accepts his **Friend to the DXer Award**.

A special recognition was extended to five members of the K5D DXpedition who attended the banquet – Ralph Fedor, **KØIR**, Glenn Johnson, **WØGJ**, Jerry Rosalius, **WB9Z**, Grant Kesselring, **K1KD**, and Glen Kesselring, **KØJGH**.



**K5D ops (l - r):
KØJGH, K1KD, KØIR, WØGJ and WB9Z.**

The banquet program was on the K5D DXpedition, and was presented by Ralph Fedor, **KØIR**. It was a great story told by a world-class DXpeditioner.



Glenn Johnson, **WØGJ**, who was recently elected a vice president of the Northern California DX Foundation (NCDXF), spoke on behalf of the organization, and with the help of a well produced video, gave the audience a historical look at the NCDXF.

The raffle ticket sales raised over \$2,000 for NCDXF and TCDXA.

The lucky winners:

Grand Prize Yasesu FT-2000 PEP
- Mike Schultz, **KSØT**

ICOM IC-7000 HF/VHF Transceiver
- Robert Kimbrell, **W7KU**

Bengali CW Paddle
- Jim Junkert, **KØJUH**



Grand prize winner **KSØT**. Congrats Mike!!

Scott, **KØMD** said: “Thanks to all who helped make WØDXCC and Contest Central 2009 a success. And, thanks for attending and participating. It was great to see hams from all across the Midwest, in addition to Minnesota.”

The next WØDXCC is tentatively scheduled for Kansas City, MO in 2011.



Ham Radio Repair by **KØGX**

37 years of electronic repair experience.

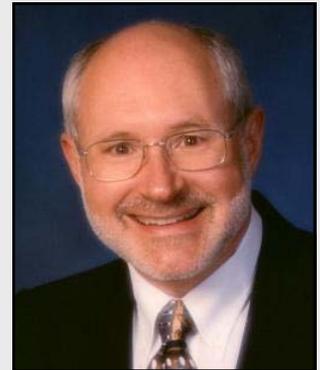
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Member News

NCDXF Announces its Newest Board Member and Vice President

At their November, 2008 board meeting, NCDXF voted and accepted Glenn Johnson, MD, **WØGJ**, as its newest director. And, in April, 2009, Glenn was elected to the Vice President's position, a position vacated by Al Burnham, **K6RIM**.



Glenn hardly needs an introduction anywhere in the DX community. He is a 58-year old orthopedic surgeon living in Bemidji, MN. Glenn was first licensed at age 15, and his awards include DXCC Top of the Honor Role, with 352 entities confirmed. Glenn is also an active contester, and was a referee at both WRTC 2002 and 2006.

Some of Glenn's more notable DXpedition activities have been **VKØIR**, Heard Island in 1997; expedition leader of **A52A**, Bhutan in 2000; **VU4AN/VU3RYJ** in 2006; **VU7RG** in 2007 and the co-leader of the 2009 **K5D** expedition to Desecheo.

His awards and honors are many, and include WØDXCC Mr. DX of the Year, CQ Hall of Fame, W9DXCC Special Humanitarian Award, and **VKØIR** and **VU7RG** DXpedition of the Year. All of Glenn's family, with the exception of his youngest, are Extra Class.

K5D Receives DXpedition of the Year Award!

The Southwest Ohio DX Association (SWODXA) presented the prestigious DXpedition of the Year Award to the **K5D** DXpedition on Friday, May 15th at the 2009 Dayton DX Dinner. Glenn, **WØGJ** (co-leader) and Ralph, **KØIR** were both team members of the K5D operation.



This year, there were two awards. The 2008 **VK9DWX** Willis Island DXpedition tied with K5D for DXpedition of the Year. TCDXA is a proud sponsor of both operations!



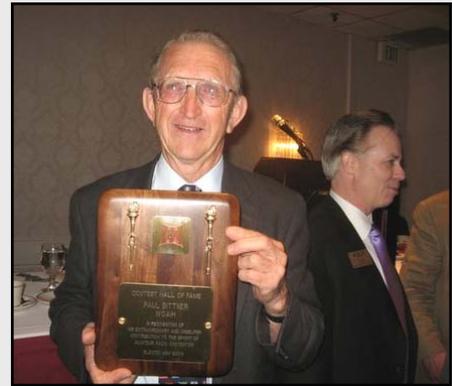
Member News

WØAIH, Rev. Paul Bittner

Inducted into CQ Contest Hall of Fame

On May 16th, at the Dayton Contest Dinner, Paul, WØAIH joined the ranks of the world's most famous contesters. Paul was inducted into the CQ Contest Hall of Fame.

Paul's multi-multi station near Eau Claire, WI, commonly called "The Farm," is known worldwide. Some well-known contesters that grew up under Paul's tutelage include **KTØR** (sk), **NØIJ**, **KØTG**, **KØAD**, **NØKK**, **NØAT**, **KB9S** & **NE9U**. Contesters from all over the world have visited from the Farm, including fellow Contest Hall of Famers.



Paul is a Lutheran Pastor (semi-retired). He and his congregation in Eau Claire started a mission in Kazakhstan (UN). Paul utilized amateur radio to open doors for this project. Several parishioners of the Kazakh mission have become licensed, and are active today.

Paul's world-class station includes many technical advances that are still in use today, including Alpha-ETO beta amplifiers and vacuum relay boxes used to convert Drake radios for full break-in CW.

Paul has done an incredible amount for our hobby and for humanity, and is highly deserving of this prestigious award. Paul was nominated by the Minnesota Wireless Assn (MWA).



Bob, K3EST presents the trophy plaque to Paul at the Dayton Contest Dinner.



A big bunch of Paul's MWA sponsors were at the Dayton Contest Dinner to congratulate him.
Standing (l to r): **KB9S**, **K3WT**, **NØAT**, **NØKK**, **KØAD**, **WØID**, **WØGJ**, **N9ISN**, **KL7YL**, **ACØW** and **NE9U**
Kneeling (l to r): **KØTG**, **WØAIH** and **KA9FOX**

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**Bill
Pike
K9OW**

Bill owes his interest in amateur radio to serving his country during the Korean War. It all started on a hilltop in North Korea in 1951, where he watched radio operators sending CW messages to other units. That was the beginning of his fascination with the Morse code, and in 1961 he was licensed with his first call sign – **K9FYZ**.

Bill's first rig was an SX-110 and E.F. Johnson Challenger. In the early years, he had a variety of rigs, including a Hallicrafters SX-111 receiver, 300-watt Globe Champ, Kenwood TS-820, Heathkit SB-220, and a Kenwood TS-830. From the beginning as a Novice, he has had an interest in DXing, and that has become his focus in amateur radio.

Bill resides near La Farge, WI, on 10 acres. His QTH is on a high bluff where his RF signals have a clear takeoff in all directions; a perfect site for antennas and DXing. The K9OW antenna system consists of the following:

Tower #1

70-foot Rohn 45 with a Mosley 53M five-band yagi (10, 12, 15, 17, 20), a 5-element 6 meter yagi, and a 2 meter vertical at the top. The tower is shunt fed for 160 meters, and uses 6 elevated radials to help achieve resonance, with a 50 kHz bandwidth.

Tower #2

50-foot Rohn 25 with a homebrew 7-element 6 meter yagi.

Tower #3

50-foot Glen Martin aluminum tower with 4 elevated radials and shunt fed for 160. It's spaced a quarter wave from the Rohn 45, allowing end fire phasing to EU and to the SW on 160 meters.

Vertical & Four Squares

Short vertical top loaded for 160 meters,
30 meter four square with homebrew phasing system,
40 meter four square with Comtek phasing system,
80 meter four square with Comtek phasing system.

And last, but not least, 1000 feet of beverage receive antennas.

(continued) 



The 70-ft. Rohn 45 with Mosley 53M 5-band yagi, plus 5-el 6m beam and 2m vertical. The tower is shunt fed for 160m, and uses six elevated radials.

When you have the good fortune of DXing from high ground on 10 acres, you have the luxury of having ample room for antennas. And Bill's is quick to tell you, "A guy can never have too many antennas."

Stepping into Bill's shack at the business end of all that aluminum, you'll immediately notice he is just as well equipped on the inside as he is on the outside. There's no shortage of transceivers in his shack. Lined up at the operating position are a Yaesu FT-1000D, FT-2000, and a Kenwood TS-2000.

Helping him get through in the pileups is a nice collection of amplifiers: Henry 2K, Cliperton-L, Ameritron AL-1200, and a SB-220 modified for 6 meters. Running the legal limit does not create any interference problems with Bill's neighbors, because he lives in a very



10 acres of open land is a perfect place for antenna farming. Here is Bill's 40m 4-square array. The 80m 4-square is in the background.

unique location. The neighbors surrounding him are Amish, and these folks do not have electricity (so they don't watch TV), which means *No TVI/RFI* issues for K9OW. We should all be so lucky!

Bill worked for Trane Air Conditioning Company in La Crosse, WI for 40 years, retiring from the position of superintendent in 1993. Bill's wife of 36 years, Karen, **KB9PMF**, became a silent key in 2004. Bill's two daughters and five grandchildren live nearby.

When he's not busy with amateur radio, you may find Bill checking on his beehives. 61 years ago in northern New York, he got his introduction to beekeeping. He's had as many as 200 hives. But, today, he's down to 51 hives which will produce 2 tons (*not a typo*) of honey. Honey bee production is dependent upon hot, dry weather. Bill sells his honey in 5-gallon pails, and his Amish neighbors are some of his best customers.

His impressive list of DX Awards attest to the fact that Bill has been very successful as a DXer:

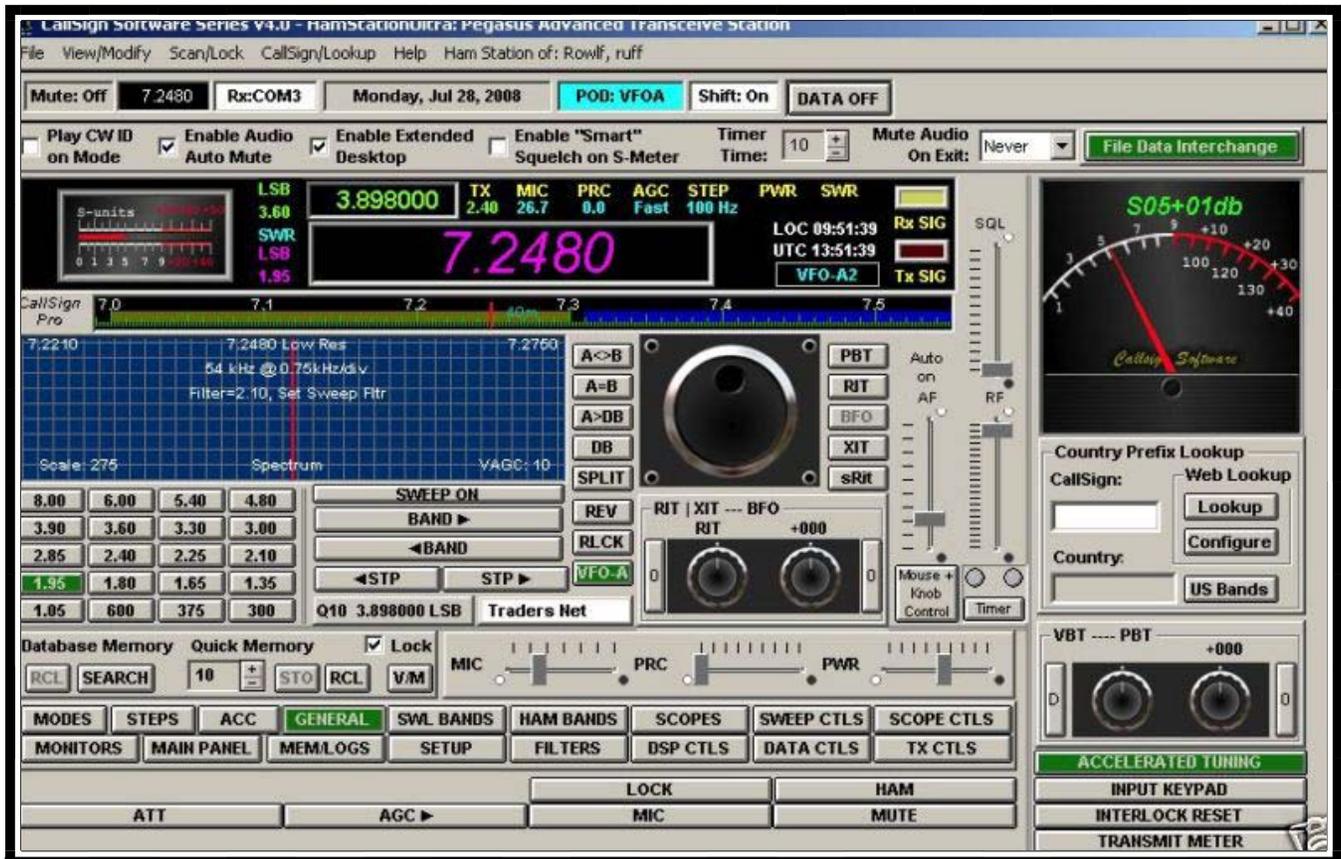
- DXCC #1 Honor Roll Mixed
(needs P5 for #1 on CW)
- Total entities: SSB - 354, CW - 346
- 9-Band DXCC
- 5-Band WAZ - 199 (needs zone 34 on 10 m)
- 160m DXCC - 190 worked/147 confirmed
- DXCC Challenge Award - 1486
- Bill's next goal: DXCC on 6 meters.

Among all these achievements is Bill's most memorable DX QSO: **JY1/A**, King Hussein, air mobile!



Goin' Remote to Stay Afloat Confessions of a Low Band Junkie

Bob, WØBV



In 1993, Kate (KØYV) and I moved into a subdivision with underground power lines. For 17 years prior to that move, we had lived in the shadow of a 64 kVA power line. It ran directly above and across our driveway. The electrical noise from that line made DXing on the low bands impossible. I identified dozens of noise sources along many miles of that power line. All attempts to get the REA to clean up the line proved futile.

Our new QTH was electrically quiet. I installed a GAP Voyager vertical, and began DXing on 80m. I could hear many Europeans on 160m, but they couldn't hear me. The GAP was a cloud warmer on 160. In '94, I put up a 160m inverted vee, and began working DX on Topband.

In 1995, I met Tim, NØTB, and he became my 160m Elmer. Among the many tips he shared was how to reverse-feed my 70 ft. tower for use as a Topband transmit antenna. It was the bottom of Cycle 22. The next two years on the low bands were HUGE fun! I was hooked. Trolling 80 and 160 for that elusive new band country, or bagging that rare DXpedition on the low bands was exciting. I had become a low band junkie.

While Cycle 23 ramped up, I continued to tune the low bands from October through March of each year. By 2004, as Cycle 23 sunspots waned, most DXers began to whine. But, I was silently excited about the possibility of a repeat of the fantastic low band conditions we experienced at the bottom of Cycle 22.

In 2004, for several reasons too boring to itemize, it became clear that it was time to start a new chapter in our lives. Kate and I made the tough decision to downsize to a townhouse. Obviously, townhouses and low band DXing don't mix. I knew I would have to get creative in order to stay in the low band DXing game.

I did some networking, and was tipped off by Steve, **WØIDS** to a 140 ft. Rohn 80 tower located in a rural area. I talked with the tower owner, and explained my situation. Luck was definitely with me. It turns out that the tower owner is one of the greatest people on the planet. He not only agreed to rent an inside corner of the his equipment building to me, but he was enthusiastic about my project.



The 140 ft. tower. If you enlarge the photo and put on your bifocals, you might see the antennas.

In September of 2005, Steve helped me hang some wire antennas from the tower, and I was back on the low bands. There is a sloping dipole for 80m. And, there are two antennas for 160m: an inverted vee, and a $\frac{1}{4}$ -wave wire vertical with 4 elevated radials. Another thing that Tim taught me is that a high-angle antenna (the inverted vee) is handy for some grayline openings.



Steve, **WØIDS** hangs wires from the Rohn 80.

This QTH has proven to be good for low band DXing, but it is far from ideal. The land around the tower is way too small for beverage (listening) antennas. And, there is constant S-9 electrical noise on 160m. It's not your common mode power line noise. It peaks in strength below 500 kHz, and is not a factor above 40m. To date, attempts to locate the noise source have failed.

Another handicap is the physical distance between the townhouse and the station. It's about 30 miles door-to-door. I was running up thousands of miles on the car, driving back and forth to work a new "counter." I came and went from the townhouse at some very odd nighttime hours. (I'm sure the neighbors who noticed had their own theories about what I was up to.)

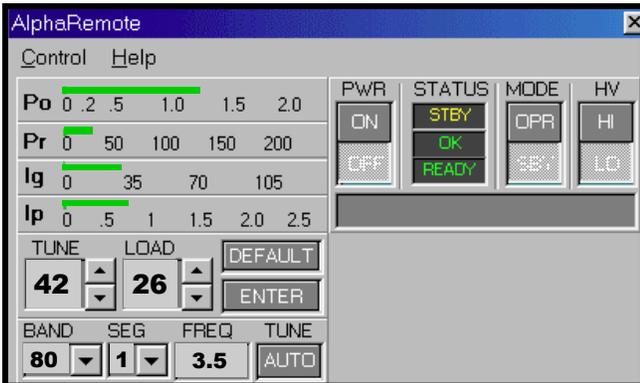
The greatest problem was with missing the DX that I wasn't there to work. It wasn't too difficult to predict when a DXpedition would be QRV on the low bands. But, resident amateurs in those semi-rare countries (e.g. – **T77C**, **TN5SN**, **TR8CA** etc.) are QRV on random nights. And, more often than not, they would be QRT by the time I drove 30 miles and warmed-up the rig.

So, after two years of running back and forth, I decided to try remote operation. My first purchase was an auto-tune amplifier. **K5RG** advertised his one-owner Alpha 87A, and I snapped it up. Ken had kept his 87A in like-new condition. And, he included the Alpha Digital Antenna Selector (aka DAS) as part of the deal. The DAS works together with a remote antenna switch to select antennas.



Alpha 87A plus Digital Antenna Selector (DAS).
-photo by K5RG

The Alpha 87A works with a computer program (free from Alpha) called “Alpha Remote.” This slick little program allows me to control every function of the 87A, including power on/off, amplifier bypass (Standby), and manual tuning. It also gives me continuous monitoring of all important parameters, including power out, reflected power, grid current, and plate current.



AlphaRemote™ software allows full remote control and monitoring of the Alpha 87A .

Then, it was time to pick a radio and radio control software. There are dozens of radio and control software combinations that will work well. Most late model radios offer a data output that allows software control of many (if not all) radio functions. There are many radio control software programs, including freeware versions. The radio control software is installed on a local computer, which we’ll call the “host computer.” The host computer is connected to the internet via a router and/or modem.

So okay, we’ve now got control of the radio with the host computer. But, how can we gain control of the radio from miles away, using a “remote computer?” Again, there are several ways to do this. In general, you want to be able to gain control of the radio control software on the host computer with the remote computer. This is easily done by establishing a Virtual Private Network (VPN) between the two computers (using the internet).

If two PCs are involved, the most straight forward approach is to use a Microsoft utility called Remote Desktop (Protocol) (RDP). This utility is included as part of the XP (SP1) and higher operating systems. RDP allows remote control of screen, mouse, and keyboard functions; and also passes audio. The short article by Larry, **WR1B** on page 50 of January, 2009 *QST* gives more detail on the use of RDP. If a Mac is used for the host computer and/or the remote computer, then Larry, **WØSX** or Mike, **WØWG** may be able to help. They both have established remote control of their radios using Mac computers.

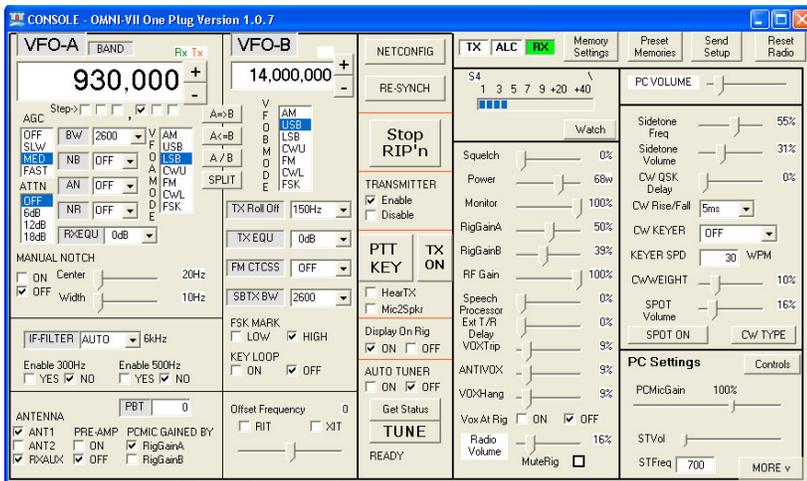
My host computer is a PC built by Gary, **KØGX** of **Electronix Servicing** (see page 5). It runs XP (SP2). Gary installed several extra serial ports to allow addition of future station control functions. For remote operation from home, I use a desktop PC running Vista. When on the road, I use a notebook PC running XP (SP3).

I selected the Ten-Tec OMNI VII as my radio. The Omni VII is (to date) unique, due to the fact that it offers the option of connecting the radio directly to an internet router and/or modem, thus



The remote radio: Ten-Tec Omni VII.

eliminating the need for a host computer. Ten-Tec offers software call “One Plug,” that installs on the remote computer for direct control of 90% of the Omni VII’s functions. One Plug is not glamorous software, but it certainly works very well. N4PY offers remote control software (for purchase), which is more refined. Other radio control programs, such as the very popular Ham Radio Deluxe (HRD) also work with the Omni VII, if a host computer is used.



Omni VII “One Plug” software. Not glamorous, but functional.



Remote control software for the Omni VII by N4PY - very slick!

A big percentage of DX on the low bands is worked in the CW mode. Ten-Tec radios have always been designed for smooth CW. Most of the focus on remote control of radios (so far) has been on the SSB mode. CW and non-audio digital modes (e.g. FSK) require some more thought. Ten-Tec addressed the issues associated with remote CW when they designed the Omni VII. This is the primary reason I chose the Omni VII.

This remote setup has worked very well – even better than I had expected. The main prob-

lems have been nuisance internet congestion and ISP server outages. I use a 7 mbps cable internet connection on the radio end, and a 1.5 mbps DSL connection at home. I am convinced that the cable internet connection is overkill. The connection will work fine with a 1.5 mps connection at both ends.

Regardless of internet speed, there is a data transfer delay, called “latency,” which needs to be compensated for. In my experience, latency runs (in round numbers) between ½ and 1 second. For example, the audio coming from the radio takes up to 1 second to be heard at the remote (operating) end. This delay has no significance in a ragchew QSO. But, it becomes very important in a contest environment, or when a DX operator is clicking them off at several Qs per minute. If a fast op does not hear you come right back to his exchange, he may start to resend the exchange by the time you start to transmit. To avoid doubling, you sometimes need to start your exchange before the fast op completes his transmission. This takes some getting used to.

I’ve operated remote during the past two low band seasons, and have had good success. It has allowed me to catch some of those resident ops in semi-rare entities, such as: 9M2AX, 4S7NE, T77C, TN5SN, TR8CA and SV9CVY. It has also given me a better chance of being QRV when those rare, magical conditions occur, such as an opening over the pole to zones 17, 18, 22 and 23. Hearing strong signals from UA9 and UAØ on Topband always produces an adrenalin rush.

If you’ve ever thought about establishing remote access to your station to allow you to play radio while you’re on the road or snowbirding in the south, I encourage you to take the plunge. It’s a fun and potentially rewarding project.

73 & good DX!

de Bob, WØBV

Major League Remote Low Band DXing

If you frequent the low bands, you are very familiar with the rock-crushing signal from **K9DX**. Most low band DXers know that John uses a 9-square array for 80m and another one for 160m. But, did you know that he operates *remotely* on 80 and 160m? His station is definitely a remote installation “on steroids!” Here are a few photos of John’s station, courtesy of Paul, **WØAIH**.



John, **K9DX** operates remotely from the comfort of his home. His antenna farm is several miles away.



Full control of antenna selection and direction, plus monitoring of power and SWR.



The 80m 9-square array of Titanex verticals. Part of the 2m moon bounce array in foreground.



The 160m 9-square array of Titanex verticals. The short posts support Beverage antennas.

Seen at TCFMC Field Day



Mike, **KØBUD** helps Mark, **KØKX** make CW delay adjustments on the Yaesu radio. (What’s wrong with this picture? Hint: **KØBUD** ≠ CW.)



Steve, **NØNO** was seen wiring the Go-To station. (Does this mean that Steve is radio active? Time to blow the spiders out of the Big Bertha!) 13

MY MIDWAY ISLAND TOUR OF DUTY 1965-1966

MEMORIES OF GOONEY BIRDS AND DXING FROM KM6BI

Clay Conard, WØFS

ed. - When Clay, WØFS, heard about plans to activate Midway Island (K4M) in October 2009, it brought back memories from the year he spent on the island in the mid 60s, while serving with the Navy Seabees.

He shares some of those memories with us now, as he recalls the antics of the Gooney bird. The military shared the island with these funny birds, and they were everywhere. Later in the story, Clay recalls operating from KM6BI, the club station on the island.



Midway Island: A Gooney paradise.

THE UNFORGETTABLE GOONEY BIRD

The first thing you notice about the adult Gooney bird is how it must run while flapping its wings to take off. Big and heavy, they need a long runway to become airborne. They remind you of a Boeing 747 taking off.

Their landings can sometimes be disastrous in appearance, ending up rolled over in a heap. They usually get up and shake their feathers out after a crash landing, and bobbing their heads, they walk away as if nothing happened. When on the wing and looking for a place to land, they pick a spot in the distance, and that's exactly where they will land. Nothing will detour them from their destination.



The unforgettable mating ritual of the Gooney bird.

On a more serious note, these birds are very heavy, and can injure you if you get in the way. A bicyclist reportedly suffered a broken leg when a landing Gooney knocked him off his bike.

Something you never forget is the Gooney bird's mating ritual. They repeatedly utter a sound like "ooooohh." Everywhere you went on the island during mating season, you would see this behavior.

The immature birds have very sharp beaks. I learned this the hard way. One day I brushed back a young Gooney pecking at my shoe laces. He did this a couple

of times, and I ended up going to sick bay to get a finger taped up that the young bird had chomped down on.



A young Gooney - beware of sharp beaks!

Gooney Bird Facts

Midway is one of many islands in the Pacific that the Gooney bird inhabits while mating, laying a single egg and raising its young. In formal circles it's known as the Albatross. It ranges widely in the southern Oceans and North Pacific, but is absent from the North Atlantic.

The Gooney is among the largest of flying birds. Of the 21 species of Albatrosses recognized by the International Union for the Conservation of Nature (IUCN), 19 are threatened with extinction. No other bird provides the range of humor in dancing, taking off and landing that this funny bird does.



AMATEUR RADIO ON MIDWAY ISLAND IN THE 60S

I cut my DXing teeth while on Midway Island. I held a General class license, and operated from the club station using **KM6BI**, as well as my own call, **WAØGFS/KM6**.

The club station was well-equipped with Collins equipment. One position ran a Collins KWM-2 transceiver and a 30L-1 amplifier, and the second position ran a Collins 75A-4 receiver, and a KWS-1 transmitter.



Operating position #1 at **KM6BI**.

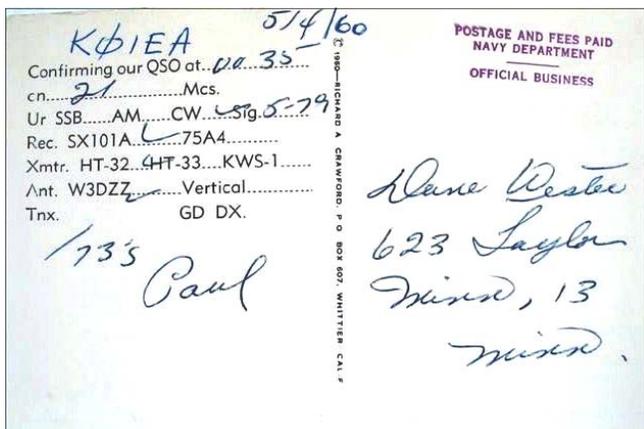


The aircraft hanger, with barracks in the background.

The station was located in an aircraft hangar, with the antennas on the roof, and mounted on tilt-over pipes. It was just over 100 feet above ground to the TH6DX and 4-element 15 meter beams.

Contesting and handling phone patch traffic accounted for some of my operating time, but by far the greatest amount of time was spent working the pileups. KM6BI confirmed Midway Island for many a deserving DXer.

One of those DXers was Dave, **KØIEA**, who remembers a 15 meter CW QSO with KM6BI on May 4, 1960, (before I arrived on Midway) and has a QSL to prove it.



In 1966, I operated in Field Day, using a KWM-2 from the club station, and a discone antenna. For my efforts, WAØGFS/KM6 received a performance award certificate from the ARRL.

Andy Devine, **WB6RER**, and General Curtis LeMay, **KØGRL**, stand out as two of my more memorable QSOs while operating from Midway

Island. Though I tried, it was always a challenge to get through the wall of W6s and W7s to work the Midwest.

In July of 1966, I completed my one year tour of duty on Midway Island. My last view of the island was from the air on the way to Hawaii, and eventually home. This photo captures the essence of the moment.

73 de Clay, WØFS



ed. - The quality of the black and white photos in this story, remind us of where photography was in the 60s. Clay shot them with an Argus C3 35mm camera, considered state-of-the-art in those days.

Be QRV for K4M!

October 9th to 19th

See www.midway2009.com

MIDWAY ISLAND 2009





The MWA Contest Corner

by Bob Chudek, KØRC

Tips for RTTY Contests

Originally, radio amateurs were excluded from operating “digital modes” by the FCC rules and regulations. That all changed in the spring of 1953, when the FCC authorized up to 1,000 cps shift, using the Baudot code on the HF bands. Operating RTTY became legal that year, and it didn’t take long for a group of enthusiasts to bring this mode to the airwaves. A basic demodulator and local loop circuit had to be built, and then a Teletype® Model 15 could be put into service.



Within 6 months, these fellows organized the first RTTY contest. This event was called the **RTTY Sweepstakes**, and it ran on the weekend of October 30 & November 1, 1953. Ten logs were received from the participants. The winner of this first RTTY contest was Tom White, **W3PYV**. His winning score was 440 points, calculated from 40 contacts across 11 states!

Using today’s technology, 40 contacts per hour is considered a very slow rate by top-ten contest operators. Imagine only making 40 contacts during a full 48-hour weekend! But, this sort of story is repeated often when comparing advancements across a 50-year span in technology. For example, in the 1960s I worked at Control Data Corp and assembled 8K memory units that were the size of your refrigerator. Today we can carry 32gb of memory in our pocket on a flash card the size of a stick of gum!

With the introduction of low cost personal computers, digital soundcards and powerful software for operating and logging, the growth in RTTY participation continues to climb every year. Digital signals populate the ham bands every day, and explode across the dial when the popular digital contests hit the airwaves on weekends.

Just like CW and SSB contests, RTTY contests come in a variety of flavors. There are DX-oriented contests, continental-oriented contests and some state QSO Parties have added this mode to their events, as well. The DX spotting networks come alive with callsigns from around the world during RTTY contests.

Whether you are an avid contester or not, you might see a “new one” posted on the DX spotting network during a weekend. If so, the following information can help you put the call into your log more quickly. I will show examples of poor operating practices, explain what is wrong with the approach, and show a better approach to logging a QSO. Some of these techniques are valid for CW and SSB contests, as well as RTTY, and probably won’t be anything new to you.

If you haven't operated digital modes before, the following information should help you find stations to work.

Today, the two major digital modes used are PSK31 and RTTY. Other modes exist, but these two modes will be where the majority of the action is found. RTTY was the original digital mode, and dominated the bands until soundcard technology matured and brought PSK31 to the airwaves.

Along with the introduction of the new technology, digital operators started to migrate from RTTY to PSK31 for a variety of reasons. The majority of casual digital QSOs now take place using the PSK31 mode. This is true, EXCEPT for contest weekends! The original 5-bit Baudot code has proven to be more efficient for quick exchanges of very short messages, so RTTY still dominates in that context.

If you tune the bands for RTTY stations during the week, it would be equivalent to going to the ballpark a day before the game... virtually no one will be there! But, on game day, the band will be packed with RTTY signals, often expanding beyond the traditional band plan frequencies.

On the 20 meter band, PSK31 signals will be found from 14.070 to 14.073 MHz. Traditionally, RTTY signals will be found from 14.080 to 14.100 MHz. During the popular CQWW RTTY and ARRL RTTY Roundup contests, I have seen RTTY signals fill the spectrum from 14.050 to nearly 14.150 MHz during peak activity and propagation!

Here's an important operating tip. It's good operating practice to avoid the 3-kHz slice of PSK31 operators, and also important to avoid the World Wide Beacon system on 14.100 MHz. It's appropriate to stay one-half kHz above or below the 14.100 MHz beacon frequency. That said, you WILL find operators trying to work stations in that slice of the band during contests, but it's best not to encourage this practice. (See sidebar on page 20.)

Now that you know where to operate, here are a few tips on good operating procedures. Even if you are not going to participate in the contest or turn in a log, this information can help you get a QSO logged more quickly. It works whether you want to "cherry pick" a few needed entities, or you become enticed to find a frequency and try your hand at running stations for awhile. The following section is presented from the perspective of my station running a frequency (I am calling CQ).

The contester will keep his CQ short.

Here are examples:

CQ NAQP KØRC KØRC CQ_

I send CQ and include my callsign twice.

This entire message at 60 wpm takes about 5 seconds to transmit.

I will standby and listen for 5 seconds, but no more than 10 seconds.

If I do not get an answer I call CQ again.

CQ NAQP KØRC KØRC CQ_

Alternating 5 seconds on and 5 seconds off, I can call CQ about 6 times a minute.

Few contesters will wait to call me if I call CQ non-stop for a half minute or more.

If I don't get a response in 5 to 10 seconds, waiting longer simply wastes my time.

Short CQs are less stressful on your equipment (amps, antennas, traps, baluns).

Unlike SSB or CW, RTTY is 100% duty cycle when transmitting.

CQ NAQP KØRC KØRC CQ_

Notice I end my CQ message with another CQ.

This lets a potential caller know I am looking for contacts, even if they miss the front part of my message.

If they don't see a CQ after my callsign, they should know I am either calling another station or working a contact.

The three CQ sequences shown above would be sent within a half minute.

The next example shows me calling CQ (in red) and I get an answer (in blue):

CQ NAQP KØRC KØRC CQ_
KØRC KØRC KØRC KØRC de KD8FS
KD8FS KD8FS KD8FS KD8FS PSE KKK_

There are a few issues with this response:

Don't send my callsign to me, I already know it.

Don't send "de," contest software doesn't need it.

Don't send your callsign more than 2 or 3 times.

Don't send prosigns, terminators, or other unnecessary information.

And above all, don't send me a report before I acknowledge your callsign!

The goal of a contest operator is to work as many stations, as quickly as possible. If you make a long-winded call as shown above, you are slowing the process to a crawl. Believe it or not, sometimes a station will send their report on their first transmission! I like to think they simply hit the wrong buffer key in the excitement of trying to work me!

Here is a better response:

CQ NAQP KØRC KØRC CQ_
KD8FS KD8FS_

Perfect!

The caller sends his callsign only twice.

His on-air time is less than 5 seconds

Notice he ends with a "space" (represented here by " _")

Including a trailing space character separates his callsign from any random characters generated by QRM or QRN after he stops transmitting

Here's the next part, from the start again:

CQ NAQP KØRC KØRC CQ_
KD8FS KD8FS_
KD8FS BOB BOB MN MN KD8FS_

I acknowledge his callsign.

I send my info once or twice, depending upon band conditions.

I end with his callsign a second time.

Putting his callsign at the end of my transmission will help to reduce QSO errors and repeat requests when there are many stations answering your CQ. When KD8FS listens for my response, other (long-winded) stations may still be calling, and their signals can cover up his callsign at the beginning of my message. When I repeat his callsign at the tail end of my message, there's a better chance that no one is still calling and interfering with my signal. Everyone will know who I am sending my report to, including KD8FS.

Depending upon band conditions, repeating the callsign at the end of the report message is an operator decision. If there isn't an unruly pileup, the callsign at the end of the message can be removed to save transmission time.

Here's the next part, from the start again:

CQ NAQP KØRC KØRC CQ_
KD8FS KD8FS_
KD8FS BOB BOB MN MN KD8FS_
TU KØRC AL AL MI MI _

Excellent!

He confirms he received my report by sending "TU" (thank you).

He sends my callsign, so I know the report is for me.

He sends his info twice.

Here's the entire exchange, start to finish:

CQ NAQP KØRC KØRC CQ_
KD8FS KD8FS_
KD8FS BOB BOB MN MN KD8FS_
TU KØRC AL AL MI MI _
TU CQ NAQP KØRC CQ_

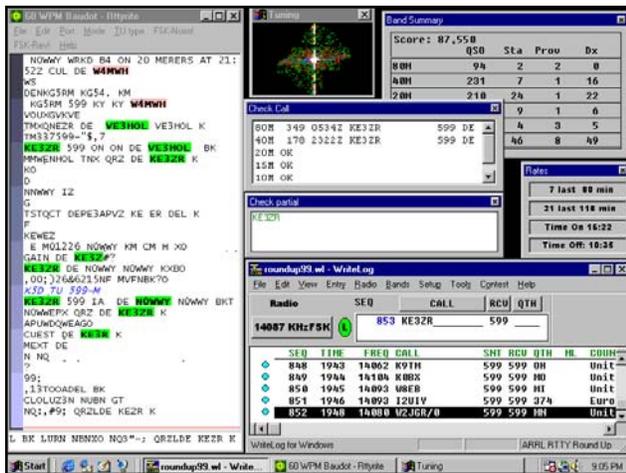
My confirmation to KD8FS is the "TU."

I immediately call CQ.

This message ends with the CQ to alert others I'm looking for a contact.

Working stations during a RTTY contest is slow paced when compared to CW or SSB contests. Making 3 contacts per minute is considered a very high rate. Squeezing 4 contacts into a log within one minute takes good conditions, very short messages, and precise timing by operators.

That said, RTTY provides a totally unique aspect to help you make contacts that isn't found in CW or SSB. All received information is printed on your computer screen and doesn't have to be "remembered." In addition, modern logging software allows you to point and click on the callsign and report. This information will be transferred into the appropriate logging field, eliminating the need to type anything on the keyboard! You can't do this when operating CW or SSB.



The next major RTTY DX contest is the CQWW DX RTTY scheduled for the last weekend in September (26 & 27 in 2009). Prior to that worldwide event are several other contests that provide an opportunity to hone your skills. The Scandinavian (SARTG) and Slovenia (SCC) contests will be on the air in August, followed by the Russian WW and CIS DX RTTY in September, before CQWW.

Visit the www.rttycontesting.com website and click the "RTTY Contest Records & Rules" link for a list of the popular events, their dates and links to the official rules of each contest.

An excellent overview of setting up a RTTY station can be found on Don Hill's popular website at <http://www.aa5au.com/rtty.html>.

'til next time,

73! Bob, KØRC



RTTY Bands

The HF RTTY sub-band boundaries are defined and limited by your license. Below are approximations of "normal" operating RTTY sub-bands, worldwide. When operating RTTY, be sure to respect the band guards around the IBP/NCDXA beacon frequencies, noted below.

10 meters - 28080 to 28100 kHz; during contests 28060 to 28150 kHz.

Note: PSK operation around 28120 kHz.

Avoid 28199.5 to 28200.5 kHz (IBP/NCDXA frequency 28200 kHz).

12 meters - 24910 to 24930 kHz, with most activity around 24920 kHz.

Avoid 24929.5 to 24930.5 kHz (IBP/NCDXA frequency 24930 kHz).

15 meters - 21080 to 21100 kHz; during contests 21060 to 21150 kHz.

Note: PSK31 operations around 21070 to 21072 kHz.

Avoid 21149.5 to 21150.5 kHz (IBP/NCDXA frequency 21150 kHz).

17 meters - 18100 to 18110 kHz with occasionally operations below 18100, but above 18090 kHz.

Note: It's illegal for USA stations to operate RTTY above 18110 kHz.

Avoid 18109.5 to 18110.5 kHz (IBP/NCDXA frequency 18110 kHz).

20 meters - 14080 to 14100 kHz; during contests 14060 to 14140 kHz

Note: MFSK16 operations around 14080 to 14082; PSK31 around 14070-14072 kHz.

Avoid 14099.5 to 14100.5 kHz (IBP/NCDXA frequency 14100 kHz).

30 meters - 10120 to 10150 kHz, with most operation around 10140 kHz.

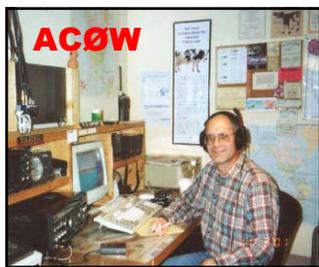
40 meters - 7025 to 7050 kHz and 7080 to 7100 kHz; during contests 7025 to 7100 kHz (USA stations are allowed RTTY between 7100 to 7125 kHz).

80 meters - 3580 to 3600 kHz (JA 3520 to 3525 kHz); during contests 3570 (or lower) to 3600 kHz.

RTTY operation above 3600 kHz is not permitted in the USA.

160 meters - 1800 to 1820 kHz (RTTY is very rare on 160 meters).

A BIG Welcome to Our Newest Members!



Mark Endorf, WAØMHJ
Ham Lake, MN



Bill Lippert, ACØW
Austin, MN



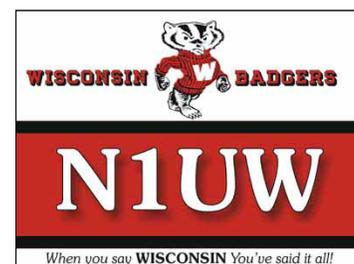
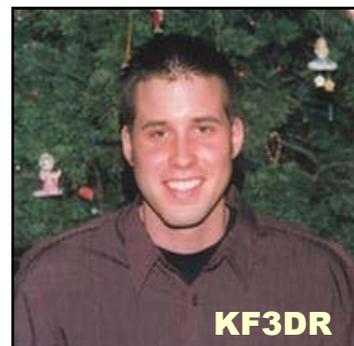
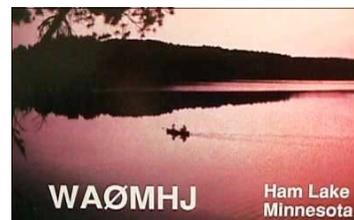
Randall McPherson, KF3DR
Minneapolis



Terry Van Benschoten, WØVB
Byron, MN



Frank Karnauskas, N1UW
Bloomington, MN



TCDXA Treasury Report	
July 27, 2009	
Submitted by TCDXA Secretary-Treasurer Jim Junkert, KØJUH	
Income:	
Carryover from 2008	\$ 649.61
2009 dues collected	2,810.00
2010 dues collected to date	25.00
Additional donations	275.00
Door prize ticket sales	350.00
Returned donations (ZS8 and FR/G cancelled)	400.00
Total YTD income	\$4, 509.61
Expenses:	
Bank service fees	\$ (26.00)
Postage, member certificates	(33.30)
Guest dinners	(100.00)
TCDXA banner (replacement)	(96.08)
Loan to RARC to be repaid after WØDXCC 2009	(1,249.90)
MWA plaque	(75.00)
Donation to K4M Midway DXpedition	(250.00)
Donation to VK9GMW Mellish DXpedition	(200.00)
Donation to CYØ Sable DXpedition	(200.00)
Total YTD expenses	\$(2,230.28)
Current Balance (07/27/2009):	\$2,279.33
Cash on hand	30.00
Total current funds	\$2,309.33

VKØIR
 ZL9CI
 A52A
 T33C
 3B9C
 TX9
 CP6CW
 3YØX
 K7C
 5A7A
 VU4AN
 VU7RG
 VK9DWX
 K4M



XU7MWA
 S21EA
 J2ØRR
 J2ØMM
 BS7H
 N8S
 3B7SP
 3B7C
 5JØA
 VP6DX
 TX5C
 9XØR
 K5D
 VK9GMW
 CYØ/NØTG

TCDXA DXpedition Funding Policy

The mission of the TCDXA is to support DXpeditions by providing funding. Annual donations from TCDXA members are the major source of funds for this mission.

A funding request from the organizers of a planned DXpedition is directed to the TCDXA Treasurer, who makes an initial evaluation of the request, and discusses the attributes with the TCDXA Board of Directors. The request will be judged by how well DXpedition plans meet several key considerations (see below). If the Board of Directors deems the DXpedition to be worthy of support, a recommended funding amount is presented to the membership for a vote of approval. The TCDXA Treasurer will communicate the outcome of this approval process to the requestor.

Key Considerations for a DXpedition Funding Request

DXpedition destination	Website with logos of contributing clubs
Ranking on <i>Most Wanted Survey</i>	QSLs with logos of contributing clubs
Most wanted ranking by TCDXA Members	On-line logs/pilot stations
Logistics and transportation costs	Up front cost to each operator
Number of operators and their credentials	Support by NCDXF & other clubs
Number of stations on the air	LoTW log submissions
Bands, modes and duration of operation	Success of previous operations by same group
Equipment: antennas, radios, amps, etc.	Valid license and DXCC approval
Stateside QSL mgr and/or foreign mgr	Funding mode: USA and/or foreign financial address

Guidelines for Level of Funding

\$600 - \$1000	A major operation in terms of operators, equipment, duration of stay, and transportation. Requires elaborate planning and a huge budget. Always ranks high on Most Wanted Survey. Examples: VKØIR, 3YØX.
\$400 - \$500	Major to modest operation in terms of operators and equipment. Ranking on Most Wanted Survey can vary from high to low. Examples: D68C, 3B9C
\$200 - \$300	Modest operation in terms of operators and equipment. Usually ranks low on Most Wanted Survey. Examples: T33C, K7C
\$ (open)	Special requests. Examples: CP6CW, XU7MWA



To join TCDXA, follow this link: <http://tcdxa.org/index.html#howtobecomeamember>

- end -