

Newsletter of the  
Twin City DX Association  
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**Gray Line Staff**

**KØAD  
KØIEA  
KØJUH  
WØBV**



# AHØ/NØAT

## 2012 CQ Worldwide SSB Contest



*by Ron, NØAT*

Matt, **KØBBC** and I were looking for somewhere to go for the 2012 CQWW SSB contest. Matt got a taste of operating on the DX side of a contest during his 2011 trips to KP2. I hadn't been on an SSB contest expedition for a while, and was ready to travel after my successful 2011 CW and RTTY contest expedition to VP2M Montserrat.

Our first choice was FP, Miquelon. Matt was zeroing in on the rental shack. We were ready to commit, but that QTH fell through. The hotel was closed due to a lack of mainland French construction workers booking rooms for the summer. Patricia, the owner, purchased a house across the street, and is converting it into a ham-friendly B&B (maybe next year?).

Then, Matt discovered the rental shack on Saipan was available for the CQWW contest weekend. This was a good fit for our needs. The shack was ready to go. All equipment and antennas were on site and available. There were no licensing issues, since Saipan is a Commonwealth of the United States. Matt had been to Saipan for previous work responsibilities, and has contacts on the island.

The flights to Saipan were rather long and disorienting because of the time change. We left Minneapolis on Sunday at 9am, flew to Portland, from Portland to Narita, Japan, and from Narita to Saipan; arriving 1am Tuesday morning. We made it to the hotel room by 2am, local time. Since it is the middle in the af-

ternoon Minnesota time, we decided to set up and get on the air. All the equipment was stored in a cabinet under the operating desk. We unpacked the equipment, connected the coax jumpers to the antenna connector box and we were on the air.

The supplied equipment was a Yaesu FT-1000MP and FT-920 transceivers, with an FL-7000 amplifier and antenna tuner. Antennas installed on the roof are a 4-element 6 meter Yagi, a 4-element 20/15/10 Yagi, a 2-element 17/12 Yagi, a vertical for 40/30/17/12 and an 80 meter V RDP.



20/15/10m Yagi and 6m Yagi.



80m V, 17/12 Yagi, and 440 beam.

We had no idea if the previous renters left the equipment in working order, so I brought my Icom IC-7600 and Acom 1010 amp; Matt brought his IC-7000. We brought our own mics, paddle, laptops and interface equipment. We also brought a wireless router, and connected it into the hotel's internet system.

When we first arrived, the conditions were a bit punk. I was on 40 CW, while Matt tried 20 meter

SSB. After the sun rose, I switched to 12 meters, and Matt moved up to 10 meter SSB. Now we were off to the races. The bands opened up for us. This follows the normal propagation for the area. The bands open to the States just after sunrise. Then, the sun sets in the States and the bands go weak. Next, the sun rises in Europe and the bands open to Europe to the Northwest.

We had a request from Rémi, **FK8CP** to operate on 6 meters. We set up a beacon when time permitted. We didn't work Rémi, but we did work KH6, JA, HL and BY. It was a nice opening.

After a few days of settling in, we were ready for the contest. But, before the contest, we needed to help with international relations. We met the BBQ contest club (**AHØBT**) members for lunch at a restaurant near their hotel. They are a great bunch of JA ops, and have lots of enthusiasm for the hobby. They have an excellent location at a luxury hotel near the beach. They have access to the roof for all their antennas, about 150 ft in the air.



Lunch with the **AHØBT** BBQ Contest Club. l-r: Moto, JE1NDE; Ron, NØAT; Matt, KØBBC; Kuny, 7L1FPU; Nao, JK1FNL and Harry, JG7PSJ (aka JD1BMH).

The night before the contest, we attended a BBQ at William's QTH. William is a friend of the BBQers, and stores their equipment for them. William used to manage the hotel the BBQ Club operates from year after year. After a great meal and a bunch of Bud Lights, we went over to the BBQ's QTH, so I could operate on 160 meters.

I fired up on 160 meters just as the sun rose on the U. S. East Coast. I was using an FT-1000 MP and a KW amp. Just as I got on the air, I heard a few stations calling but I couldn't pull out any calls.



It took me some time to get the filters on the rig set up (must have been the Bud Lights). After a few minutes, I started listening down and worked 25 JA stations.

The CQWW contest starts at 10am local Saipan time. I took the first two hour shift, and went to work on 10 meters working stateside. After 1 ½ hours, I switched to 15 meters. At the 2-hour point, Matt took over, but the rate had been dropping off sharply. The SWR meter on the amp was going crazy. This didn't look good.



Ron, NØAT working down the pile-ups.

As it turned out, the 15/20 meter trap was burned out. We emailed the owner of the rental shack. He said that happens often, and we should use the tuner to allow us to keep operating. The tuner did load on 15 meters, but did not load up on 20 meters; we couldn't work anyone.

We weren't allowed up on the roof, so our options were limited. We tried a 20-meter dipole out the window, but that didn't work very well. Only a few Japanese and Filipino stations could hear us. For 20 and 15 meters, we used anything that would



Matt, KØBBC working 'em on 10 meters.

load. The 40 meter vertical worked the best, but we couldn't run stations; we had to S&P to work stations.

Ten meters saved the day for us. We ended up working over 2,000 stations on ten meters and over 2 million total points. Rates were high when 10 meters was open, but otherwise slow.

We explored the island, and enjoyed its warm weather. We spent some time with Jun, WHØV. Jun is president of the Saipan radio club. You might have worked Jun as WHØAAV. Jun just moved into a new house on the south end of the island. He looks to be almost entirely off-grid, using solar collectors and former submarine batteries. He plans to put up a 160 meter inverted-L.



Jun, WHØV receives his CP6CW QSL card from Ron, NØAT.

We visited the widow of Len Kaufer, KHØAC. Len became a SK about two years ago. You might remember him as KG6SW, uncle Len. His QTH is on the east side of Saipan, overlooking Forbidden Island. All the equipment is still in his shack. Jun, WHØV, is going to move the equipment to the club station, as time permits.



KHØAC's shack.





**KG6SW's WAZ award.**

The night before we left, I worked some 30 meter CW and Matt worked some SSB. We had to leave for the airport at 3am, so Matt stayed up all night, while I had managed a few hours of sleep. The trip back was Saipan to Narita, to Seattle, to Minneapolis. The flights were all full because hurricane Sandy had shut down the New York airports. It was nice to be back, but we always think about what we could have been done differently.

73 de Ron, NØAT



Gary Grivna **KØGX**

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6028 Candlewood Drive      763-561-2836  
 Brooklyn Park, MN. 55443-2019      grivn001@umn.edu

## TCDXA Welcomes our Newest Members!

**Anna Sica  
KØANA  
St. Paul, MN**



**James Schnaidt  
KJØM  
Menno, SD**



**Max Hendrickson  
KØDPT  
Forest Lake, MN**



**Dennis  
Clemenson  
NTØV  
Devils Lake, ND**



**Dave Hanson  
K9QC  
Eau Claire, WI**



**Phil Lefever KBØNES Burnsville, MN**





by Al Dewey, KØAD

# The MWA Contest Corner

## Double Your Number of Yagis (Without More Aluminum!)



### Background

As an active contester, I learned years ago that operating with two radios during a contest is almost a necessity if you are going to compete, especially in the low power category. Single Operator / Two Radio (or SO2R) operation is pretty common these days. Using SO2R operation, you can be calling CQ (i.e. - running) on one band at the same time you are searching for more QSOs or multipliers on the second radio (S&P). Or, you can alternate calling CQs on two bands (i.e. - dual CQing). As long as you are not transmitting on different bands at the same time, you are still considered a Single Operator.

In order to do this well, you need the necessary switching and contest software in your station to control the two radios. You also need a reasonably good set of antennas that do not interfere with each other. Like many “city lot” type guys, I have a single tower at 50 feet, with a single Yagi (a Force 12 C4SXL). This particular Yagi is fed with one coax for 10 through 20 and a separate coax for 40. Hanging off the tower is an 80 meter Inverted V, one 160 meter Inverted L and another 15-20 meter dipole. Rounding off things is a ground-mounted R4 vertical for 10 through 20.

Until recently, my normal practice during a contest was to run with the Yagi and search & pounce with the dipole or vertical. That sort of worked, but sometimes I was not strong enough on the dipole / vertical to make the QSO on the first call – particularly in a DX Contest with low power. If there was a pileup on the second radio Q, I didn’t stand much of a chance. Sometimes, in those cases, I would quickly switch the beam to the S&P radio and hold the run frequency with the dipole. What I really needed was a beam on both bands!

### Enter The Triplexer

In 2009, **K9LA** submitted an article to *NCJ* describing how a diplexer could allow two rigs to use a tri-bander on two different bands at the same time. The idea fascinated me. Additional articles appeared in *QST* on how a triplexer could be built. I thought about building one, but then noticed that both Dunestar and INRAD had pre-built, low power triplexers already on the market. The INRAD was a little more money (about \$325), compared to \$195 for the Dunestar, but it seemed to have marginally better specs. It also came highly recommended by **WØYK**, who does a lot of RTTY SO2R operation.



So, I ordered the INRAD unit, and it arrived a week later. When using a triplexer, it is mandatory that band-pass filters be used on both radios to protect the radio’s front end. I already had switchable Dunestar Bandpass filters on both my radios, so I was all set there. The final configuration of my station, with the newly installed INRAD Tri-plexer, is shown in Figure 1 (next page). Adding the triplexer effectively gave me three separate Yagis for 10, 15, and 20, which I could use on either radio as the situation required. One drawback is that I outgrew my WXØB SIXPACK Antenna Switch, and had to move a few of my wires and vertical antenna to a manual switch off the 160 meter position. In this configuration, the Dunestar is automatically switched to the correct band, using a home-built band decoder (described in the Sep/Oct, 2011 issue of *NCJ*). Ultimately, I will switch the antennas automatically, as well.



Other than making up a few coax jumpers, the triplexer was simple to install and use. I first used it in the CQWW Phone and the ARRL CW Sweepstakes contest. I was really happy with the way it performed. It was amazing to me that I could call CQ on CW using 150 watts on 20 meters and listen on 15 meters on the other radio using the same beam. There was virtually no interference. In the past, I had used a 15/20 meter dipole tied to the tower for the second radio, but the interference was much worse than using the same yagi through the triplexer. It's not perfect. However, you will hear some interference when listening on the harmonic band (i.e. transmitting on 20 and listening on 10), especially near the harmonic frequency.

### A Word About Bandpass Filters

Unless you want to continually have **KØGX** fix the front end of your radios, don't even think about using the triplexer without bandpass filters on both radios. As indicated earlier, I already had switchable Dunestar filters, so I was all set there. Another approach is to purchase single-band bandpass filters for 10, 15, and 20 and simply connect them to the input

of the triplexer. In fact, Dunestar Systems has a special deal which includes the Triplexer and three single band bandpass filters for 10, 15, and 20. You simply insert the three bandpass filters in line with the input of the triplexer.

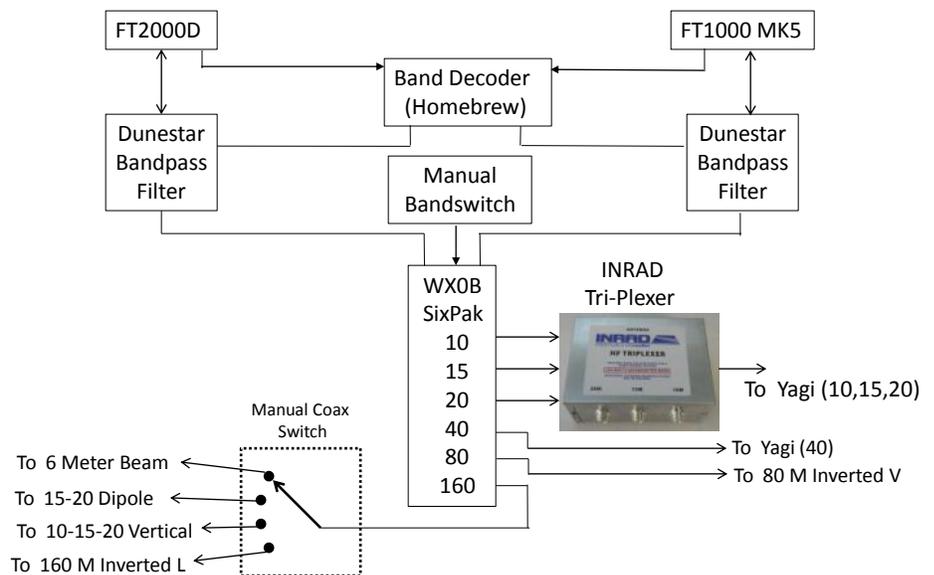
Also, be aware that bandpass filters are sensitive to SWR. **KØTO** recently had a good posting about this on the MWA reflector.



This Triplexer / Bandpass Filter combination is available from Dunestar for \$399.

If the SWR is greater than 1.5 to 1 on any of the three bands supported by the Triplexer, be sure to solve

**Figure 1**  
**Triplexer Installation at KØAD**



that problem before installing the Triplexer / Bandpass Filter combination. A common practice by many (including myself in the past) is to try and make up for that high SWR by simply pushing the antenna tuner switch on the radio. More often than not, the capacitors in your bandpass filters will eventually blow. Believe me, I've been there.

### Field Day Application

Another great application for a triplexer, such as that described above, is Field Day. For the last few years, I have been doing Field Day with a small group of MWAers on a lake in Northwest Minnesota. We operate 2A, meaning that we want to have two HF stations going at the same time. We have always put up two completed towers and Yagis to accommodate this. This is a big job, especially if the weather is hot.

With the triplexer, it should be possible to put up only one tower and Yagi, and achieve the same results. The only compromise will be that the "two" Yagis will have to both be pointing in the same direction at the same time. I am looking forward to trying out the new triplexer on Field Day next summer.



73 de AI, KØAD



**Lee Jennings  
ZL2AL**

**What** is it with ham radio that grabs some of us for a lifetime, while the rest of the population fails to grasp what we do? Talk to a ham, and he will tell you about his wives, careers, houses, locations and cars. They all come and go during our lifetime, but this ham radio hobby of ours is sometimes the most constant thing in our lives. Some would claim that we require professional help. Others say it is a wonderful thing to be able to throw a switch and have a place to go to. That place for us DXers is all around the world. That place gives us friends.



We all have similar stories of how we got started in ham radio. The 25+ biographies in this magazine (newsletter member profiles) will attest to that. They are wonderful stories of how imaginations were captured by our first stations with meager equipment and learning the skills from our fellow hams who often become lifelong friends. We hams are often anti-social away from our hobby, but very social within the hobby. I often wonder about that, and am sure a psychologist could do a thesis on it. It's been a long haul for those of us who have been lucky enough to witness the demise of valve technology and the rise of solid state devices. If I had been born 25 years either side of when I was, my story would be much different.

**Canada**

I was born in Toronto, and grew up there. A quest for a Signalman's Badge in the Boy Scouts taught me semaphore and the disciplines of Morse code. My first radio was a homebrew, one tube, super-regen shortwave receiver from *Popular Mechanics* magazine, using a Type 49 tube. Little did I know that I was living in a part of Toronto that had six 1KW AM ham stations within one mile of me. One of them, Fred, **VE3TC** became my mentor, and encouraged me to get my code speed up to 10 wpm and do some study for the Canadian exam. Another local ham, Val Sharpe, **VE3LJ** had a six-foot rack kilowatt transmitter beside a desk and an Eddystone 750 receiver. It was 1951, and I was 14. Val was talking to the other side of the world on 10 meters, and was I impressed! I was bitten by the ham radio bug, and have never recovered.

My junior high school Science teacher, George Kingston, **VE3ARE** was a ham and allowed me to use the school's station early in the morning on 40m. I passed my general class license in 1953, became **VE3DIL**, and managed to work all Canadian provinces and all 48 US States on 40m CW, using a Canadian military WW2 19 set with Russian markings! A year later, I passed the code again at 15 WPM and the advanced theory to gain my advanced class ticket.



I worked mostly CW, and the furthest part of the planet was down under in ZL/VK land. It always sounded a bit exotic to me, and I was bitten by the DX bug. When you become a rabid DXer, you have no money, as it always goes to improving antennas and radio gear. It doesn't help being a teenager, either, as there are lots of other ways to spend money.

War surplus radio equipment was plentiful around Toronto in the early 50s. Bendix TA12s, BC348Qs, R1155s sold for under \$25.00 and ARC5 Command sets were \$5.00 for any model in the pile. By 1955, SSB and RTTY surfaced. It was the era of converting whatever possible to end up on SSB. Controversy and hard feelings raged on the air across North America. Some old timers gave up the hobby, because they couldn't cope with product detectors, demodulators and lack of suitable carriers to hang one's sidebands on.

It was a magic time for me, building ever larger antennas and experimenting with RTTY and SSB. At that time, one either built a resistor phasing unit or ground down war surplus 455 kHz crystals to generate an SSB signal. The ultimate was a Central Electronics 20A exciter and an NC300 receiver.

I have fond memories of reading about a linear amplifier in QST magazine that used a pair of 6AG7 tubes, and gave one the astounding output of nearly 40 watts PEP with 600V on them. Since war surplus metal 6AG7s were selling at 25 cents each, I thought that perhaps if I ran eight of them in parallel the output would double. It did, but they got quite hot. Then, I had the brilliant idea of turning them upside down and submersing the metal envelopes in a pan of water. I found that then I could run up the voltage to nearly 1000V, before the tubes got hot, and the water started to boil. The obvious solution was to run some cold running water through a tube into the pan and out the other side continuously. This worked very well for a while, until either terminal flashover occurred, or the heat inside melted the cathodes. The spectacular result was usually the same; I had to purchase 8 or 10 more 6AG7s from the surplus store. On the other hand, the 6AG7s were cheap. My parents despaired of me every time I keyed the tubes and the lights went out in our house!

Two meters in Canada was all local AM phone or CW. If you wanted to work the USA to the south, it meant big power and even bigger antennas. When

the Aurora Borealis was on, you pointed your antenna north and bounced signals off the aurora to head south into the USA. The clear CW note went into the aurora and was unbelievably modulated with a raspy, raw AC buzz, which precluded other AM modes. One local in Toronto worked 46 states, using this method. Exciting stuff for us in the middle 1950s!

My Advanced Class license in 1954 turned me loose on the DX bands. 20 meters quickly became my band! It still is today. By the late 1950s, I was hooked on DXing. My station at that time consisted of a Collins KWS-1 and 75A4 receiver for 80 and 40, with a Collins S Line and a 30L1 KW linear into a TH6DXX Yagi. Several super-high power linears consumed my time during that period. One rather large 4-1000 linear operating at 4 KV, with peaks of just over an ampere, was particularly successful in helping me get close to the 300 countries I wanted. The 872 mercury vapor rectifiers would pulse in time with the SSB peaks and when the lights were out in the shack, the eerie glow was happiness for me, but a sure sign of madness to the many visitors to my shack.

During the 50s and 60s, I was an engineer for IBM Canada, and also worked for Motorola, before I trained as a technical teacher in the late 1960s. Amateur radio mobile in the 50s was all AM, dynamotors and big 75 meter "bug catcher" 8-ft whip antennas. Slowly, that scene waned, as the 2 meter repeaters became more popular around Toronto. Changing technology is the constant theme of our hobby.

During the early 1960s, I was eligible for a coveted "two letter call," and was duly issued **VE3OE**, which I used effectively until 1967. When my early mentor Val passed away, his wife wanted me to have **VE3LJ** as the suffix were my initials. I became **VE3LJ**, until I left Canada in 1969 for New Zealand. I was issued **ZL1BET**, and lived in the middle of the north island, but did little operating, until I moved to the west coast a few years later. My wife and I acquired a property in a valley looking out to the sea. I erected a **W8JK** array across the valley (six half waves in phase) on 80 and 40 meters, which



**VE3OE in 1959.**



proved to be an excellent performer. It was only up 18 months, when my job as a technical teacher took me to the east coast, where I live today.

## New Zealand

Living in Hawkes Bay for the past 37 years has allowed me to erect antennas, build a good station and work a lot of DX. I didn't really get interested in DXing again until 1991, when the first **WJ2O** logging program showed me that I already had DXCC from ZL. It was just a matter of sending out cards with pleading letters and my totals quickly ran up to 150. Chasing DX becomes an obsession for many of us, until we hit the "wall" at 300. Then, it becomes hard work to log those last few. I was lucky enough to make Honor Roll a few years ago, and am still looking for the last 4 to work them all. I am still chasing the last 3 Zones for all 200, and still attempting Challenge 2500. That is the DXers DNA. The challenge is always there of reaching that peak, and along the way making lifelong friends.

## DXpeditions

In 1993, a group of us ZLs decided to do a DXpedition to Chatham Island. It is an easy 3 hours of flying from the mainland, and always in the top 100 most wanted. **ZL7AA** was a great success, and I immediately looked 1,500 km north to Raoul Island in the Kermadec Island group to activate ZL8, which was in the top 20. Coincidentally, a mate of mine Ken, **ZL4HU** was also looking there, and over the next few years we organized the **ZL8RI** DXpedition <http://www.zl2al.com/blog/zl8ri/> in 1996, with five ZLs, **JH4RHF** and **K3VN**. We had a great time over a few weeks, and achieved just under 40K QSOs. I returned to Chatham Island again in 1997 as **ZM7A** for a few weeks, and then looked south to Campbell Island in the great southern ocean. Campbell Island is very rare and was in the top 15 at that time, with no major DXpeditions ever having taken place. Another few years of planning saw us activate **ZL9CI** <http://www.zl2al.com/blog/zl9ci/> for 3 weeks in 1999, with an international team of 13 operators. We achieved 96,000 QSOs, setting a new all time QSO DXpedition record.

Around this time, I began to think that it would be nice to give something back to the hobby which has given so much to me over a lifetime. An ideal project would be to introduce a group of hams to show how a



Meeting one of the "locals" on Campbell Island.

DXpedition works. I organized a third trip to Chatham in 2009 as **ZL7T**. The team was amazing, and they remarked how they had learned so much about how it sounds from the other side of the fence. I am sure that the experience improved their skills to no end when they returned to ZL. You can see what **ZL7T** was like at [www.zl7t.com](http://www.zl7t.com).

## Contesting

In 2005, I began to get serious about contesting, and planned setting up a competitive contest team to do the Oceania and CQWW contests. A local farmer had a magnificent site about 20 miles north of Napier; about a mile in from the Pacific and on a 200-foot hillside, with sweeping views into all parts of the world. He agreed to

allow us to set up a permanent antenna farm, and use his shed to operate from on the weekends. The East Coast Contesters Team was born, and we were granted **ZM2M**. Lately, we have been using **ZM4T** on a permanent basis, as the **ZM2M** callsign is too much of a



Antenna work at **ZM4T**.

mouthful. Our scores have increased yearly, our equipment and skills keep improving and the team has grown to 10 members. We often have quality guest operators from other parts of ZL, who want to spend the weekend with us.





### Contesting at ZM4T.

We usually rank #1 or #2 in ZL and Oceania for each contest. A contesting team is a fantastic way to bond with other hams and achieve lasting friendships, while improving operating skills. You can see the team in action at [www.zm4t.com](http://www.zm4t.com).

In keeping with my goal of giving back to ham radio, I am the local radio license examiner (I suppose that is the USA equivalent of a VE), and became an ARRL DXCC Card Checker 5 years ago. In fact, I am the only one in the whole of Oceania, with 7,000 plus cards checked over the past 5 years.

### ZL2AL 2012

The equipment at ZL2AL currently consists of two Icom 756 Pro IIIs, FT1000 MK V Field, Yaesu Quadra, Tokyo High Power HL 1.2fx, Kenwood TL-922 and the usual VHF/UHF equipment for the ZL FM repeater networks. Antennas include a Hexbeam for HF, Loop, Verticals and Dipoles for LF.



ZL2AL 2012.

### Operating Activity

Awards include DXCC Honor Roll Mixed (342/336), DXCC CW (324/321), DXCC Phone (332/328), DXCC Challenge 1500, 8BDXCC, 5BWAZ, 5BWAS, WAE-TOP, IOTA, WAVE, WAA, WAJA, and DUF-4.

I work both SSB and CW (CW about 70%), and am happy to sked anyone, anytime. QSL 100% either direct, bureau or LoTW.

Memberships include ARRL, RAC, TCDXA, NCDXF, NZART, A1-OP, FISTS and FOC.

### Family

My wife Sherril of 36 years was a teacher before we both retired in 2005. We have two sons, Ryan and William, both in their early 30s, and both successful in the I.T. and electrical fields. Hawkes Bay is located on the East coast of the North Island. Napier has a population of around 65,000, and is by the sea on the Pacific Ocean.

A few years ago, Ralph Fedor, **KØIR** and his wife stayed with us for a few days, and it was a pleasure meeting them. The area is one of the best fruit and wine growing regions in the world, and the climate is temperate with no snow, ever! Mild winters are over in a few months with temperatures rarely freezing. You can see where I live at <http://www.hawkesbaynz.com/>. It is a wonderful lifestyle, and a great place to operate ham radio from, as New Zealand has 5 separate DXCC entities, and is fairly rare on the air. I can usually start a pileup with my ZL call in just a few minutes. It's quite a different experience from operating in NA.

After 42 years of nearly continuous ham radio, 26 logbooks of contacts (80,000), plus all the unlogged ones, the hobby still fascinates me. Recently, I had the pleasure operating with a great bunch of guys on the **ZL7AA** DXpedition. Coming home on the plane made me realize what a great hobby it is. Eight guys and eight days of madness, and we all want to do it again!

I now realize that the rest of the world is mad, and hams are quite normal, healthy, reasonable people to associate with. Ham radio is the king of hobbies.

73, Lee, ZL2AL

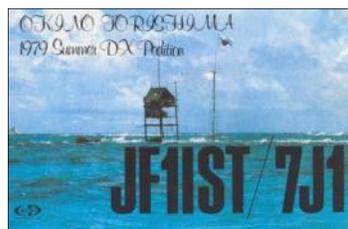


# BS7, Scarborough Reef & 7J1, Okino Tori-Shima

by Jim, KØJUH and Dave, KØIEA

Did you know that Scarborough Reef is not the first entity to have DXCC status and to use scaffold platforms built on top of small rock reefs barely protruding above sea level to accommodate operators and equipment? For a few years back in the late 70s, the long-since deleted Okino Tori-Shima also held DXCC status, and used scaffold platforms. Read on for a closer look at both of these entities located in the South China Sea

**7J1, Okino Tori-Shima** is a deleted entity that was active back in the mid 70s. It used scaffolding to keep the stations above rising sea levels at high tide. There were just two operations from the reef, 7J1RL in May 1976, and JF1ST/7J1 in June of 1979. Here's the story behind the story about how this entity gained DXCC status.



Jim Maxwell <SK>, W6CF created a compendium of every reference to the DXCC made in *QST* from the beginning to about 1985. From that source, Wayne Mills, N7NG shares with us the Okino Tori-Shima DXCC status explanation that appeared in the October 1982 issue of *QST*. It was written by George Hart, W1NJM and published by ARRL headquarters staffer Ellen White, W1YL. The following is a direct quote from *QST*:

**“1976: Communications Manager W1NJM wrote a very readable February Operating News lead titled ‘Countries’ Criteria and How Applied’ - one of the best pieces of the time dealing with the process of handling DXCC items at Headquarters.**

**Our May journal dropped what proved to be a rather long-lasting bombshell on the DX fraternity, adding Okino Torishima to the DXCC List.**

**Even though it did not ‘quite’ meet the specified mileage, an exception was made for it as part of the year-long celebration of the Japan Amateur Radio League’s 50th anniversary.**

**The superbly-managed DXpedition of 7J1RL commenced May 30 that year, and would ‘stay on the books’ until December 1, 1980, when JD1/7J1 became deleted.”**

Contacts with Okino Torishima between 30-May-1976 to 30-November-1980 counted for DXCC credit. After the deletion, contacts on December 1 and after count as JD1 Ogasawara.

On the current DXCC entities list is **BS7, Scarborough Reef**, a coral reef located in the South China Sea. It currently ranks #8 on the *DX Magazine Most Wanted Countries List*.

The location has qualified as a DXCC entity because, at the time it was approved, it met the criteria then in effect. Only contacts made January 1, 1995 and after count for this entity.



**Bob Vallio, W6RGG operating from Scarborough Reef in 2007**

At their January, 1996 meeting, the ARRL Board of Directors *approved* the recommendation of the Membership Services Committee to add Scarborough Reef (Huang Yan Dao) to the DXCC Countries List! For details, see [ARRL DX Bulletin 5](#) and [ARRL DX Bulletin 6](#).

*ed: The current DXCC rules -- implemented at 2359Z on March 31, 1998 -- DO include a minimum size rule that would probably preclude “another Scarborough reef” from becoming a DXCC entity.*



On the DXCC Century Club website, <http://www.arrl.org/dxcc-rules>, you can download a PDF document that covers the basic DXCC rules, DXCC list criteria, accreditation criteria, and field checking of QSL Cards.

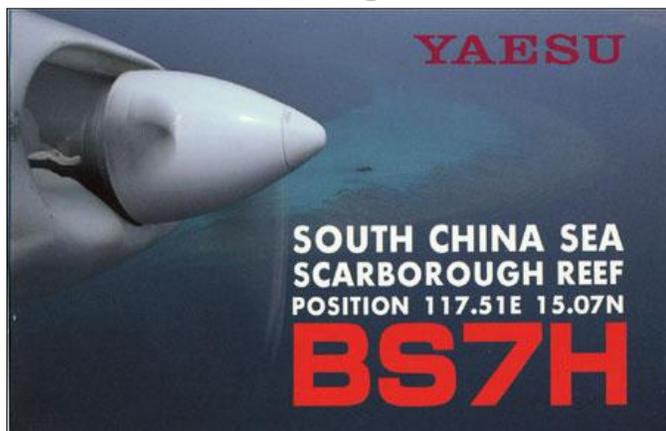
Today, much of the original discontent over “Scaffold Reef” becoming a new one has died down, and is mainly voiced by DXers who still need a contact with Scarborough.

If you need Scarborough for a new one, don’t give up hope. They may return sooner than you think. One of the obstacles to returning is political. The entity is disputed territory claimed by China, Taiwan, and the Philippines. Developing plans for the return won’t be easy.

*ed: A special thanks to Wayne Mills, N7NG for his assistance in preparing this story. Wayne is an internationally-recognized DXer and an authority on the DXCC. Wayne previously served as the Membership Services Department Manager of the American Radio Relay League (ARRL). At the League, he supervised Awards, Contests, DXCC, QSL Bureau and WIAW.*



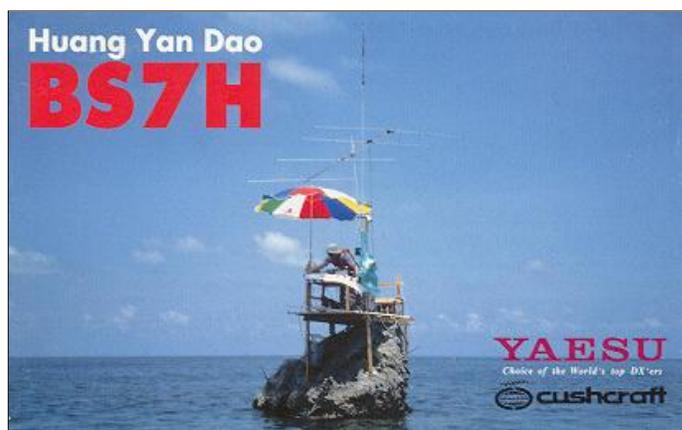
## Scarborough Reef DXpeditions In Chronological Order



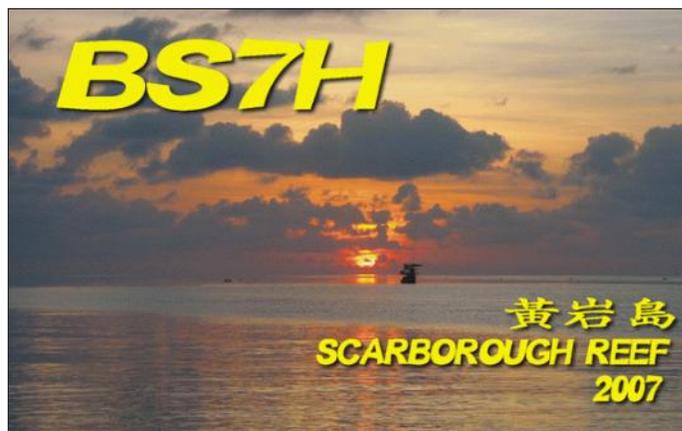
The first operation in June of 1994 didn’t count for DXCC, but the possibility that it would in the future was the beginning of some lively controversy in the DX community.



The second operation in April of 1995 didn’t count at the time it took place, but was later added to the DXCC Entities list.



The third operation in April of 1997 shut down after only three days, due to political tensions between China and the Philippines over possession rights to Scarborough Reef.

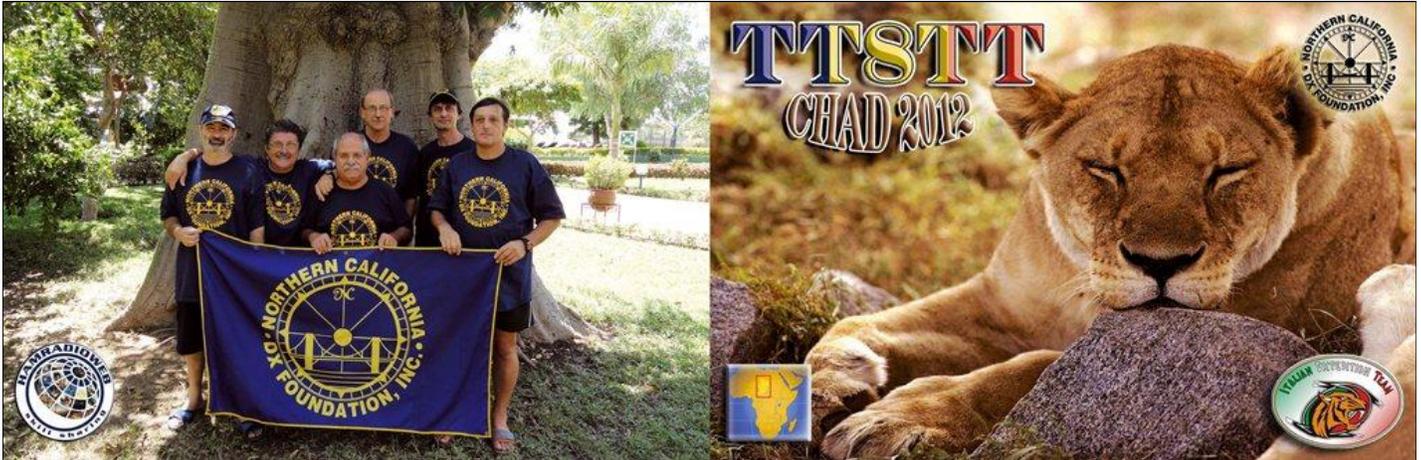


The last operation from Scarborough Reef took place in May of 2007, and in seven days of operating generated 45,830 QSOs.



# Thank You TCDXA!

*DX Donation Manager Ron Dohmen, NØAT received the following letter of thanks from the recently-sponsored TT8TT DXpedition. They are also sending us a video of the operation, which will be shown at a future meeting.*



“Our thanks to our sponsors and the many foundations: in the first place to NCDXF, who trusted us, and to GDXF, UKSMG, LA-DX-GROUP, CLIPPERTON DX CLUB, NIPPON DX, MDXC, CDXC, TCDXA and FUNK AMTEUR, to the Sezioni ARI and to all the amateurs who, by voluntary individual contributions, helped us in meeting the relevant expenses of the DXpedition.

All of you are part of our team, and we hope for your continuing commitment will support us in the future. Thanks, and...see you soon.”



## Saturday Morning DX Breakfast



TCDXA members have met (almost) every Saturday morning at 8:00am for many years at Perkins in Forest Lake, MN. Stop in some Saturday!  
From left to right: Gary, **KCØSB**, Max, **KØDPT**, Jim, **KØJUH**, Dave, **KØIEA**, Dennis, **KFØQR**, Harold, **NØACH**, Mike, **NØODK** and Gary, **WØAW**.



# Antenna Upgrades at KØMD

by Dr. Scott Wright, KØMD

We had a busy year at KØMD working on antennas. Paul Bittner, **WØAIH** and Ernie Vielhaber spent 2.5 days here, and Tom Schiller, **N6BT** spent 3 days here working on the project.

Our initial installation of the new and second C49XR and the new Magnum 240 40 meter 2-element Yagi (see photo at right) was met with an SWR that was not satisfactory. So, I asked Tom Schiller, the designer of the Force 12 antennas, to come out and troubleshoot the problem. He agreed to help out. It was a very productive time, as he also repaired the 160 and redesigned the 4-square vertical dipoles to one of his new designs.

In addition, Matt Strelow, **KC1XX**, and Richard Bennett, **KØXG**, came at different times to work on the project. Matt installed a new KØXG ring rotor. Richard could not troubleshoot an issue with the potentiometer, so he was kind enough to make a house call in late September to resolve the issue.

The previously non-functioning Force12 Magnum XV2 160 meter vertical is now working, and has coverage from 1800-1880 kHz with a low SWR. Not bad for an electrically-shortened antenna. I look forward to being back on Top Band.

N6BT modified the 80 meter 4-square by removing the top T-Bars, and replacing the bottom T-Bars with more efficient radials. We've also installed a new phasing box built by Array Solutions. The result is a system with a lower take-off angle.

We also have the first ever built, newly designed Array Solutions Eight Pak dual antenna switch. It's featured on their website this month. It's a military spec antenna switch that lets you switch 8 antennas between 2 radios. It was an upgrade to my Six Pak, and is a quantum leap forward. If you are looking for a multi-antenna switch, I highly recommend it. Array Solutions is a real innovator. <http://www.arrayolutions.com/>

The 40 meter Yagi is now resonant throughout the entire 40 meter band, with the SWR ranging from 1.6 at 7.0 mHz to 1.2 at 7.3 mHz. For a 2-element Yagi, we think it will perform very well. The stack of Force 12 C49XRs is a thing of beauty, and is



The C49XR is the "grand daddy" of all 20-15-10 meter Yagis. It has a 49' boom with 24 elements and a single feed line, convertible to separate feed lines at your convenience. To accomplish the high threshold of performance for the C49XR, new techniques had to be developed. This antenna is designed to meet the needs and dreams of having a stack of large mono-banders without having the vertical stacking issues. The antenna is rated at 100 mph with a 3" boom and 120 mph with a 4" boom.

Force 12 C49XR specifications :

<http://www.texasantennas.com/>

Details on the XG ring rotor can be found on the KØXG Tower and Antenna Rotation website:

<http://www.k0xg.com/products/product4.html>



now tuned. It's amazing how two 49-foot booms make a hundred feet of Rohn 55 look small.

"Big Stack" SWR					
SWR	mHz	SWR	mHz	SWR	mHz
1.60	14.000	1.65	21.000	1.10	28.000
1.67	14.100	1.45	21.200	1.40	28.400
1.29	14.200	1.18	21.350	1.10	28.686
1.27	14.260	1.31	21.450	1.10	29.000
1.50	14.300			2.10	29.310
2.00	14.350			1.40	29.463
				3.50	29.810

Faithful friend Paul Bittner came over from his superstation several times to work on these antennas, and to help me troubleshoot installation and mounting issues. He also took the TIC ring rotor home to modify it, so it will work again some day, if I put another antenna on the tower."



Rare photo of climbers W0AIH and N6BT on the ground.

### 2012 CQ World Wide SSB Contest at K0MD

This would be the first test under "live fire" for the new antenna system. Joining me for this multi-single effort were: Fred Regenitter, **K4IU**, Tom Vinson, **NY0V**, and Grant Kesselring, **K1KD**.

Band conditions were good, but did not seem as good as 2011. I noticed more politeness on the bands, with many stations thanking the other stations

and wishing them good luck. The new C49XR stack played very well, as did the Magnum 240N.

The lack of a working 4-square (a visit from Murphy) hurt our low band performance. We substituted a dipole at 50 feet for 75 meters. 160 conditions were not that great. We could not work all the DX we heard.



W0AIH behind the XG rotor.

The multi-single effort was with one rig, because we didn't get the computers networked for a spot rig. I heard **K0KX**, **N0IJ**, **W0AIH**, **K0BUD** and **K0AD** in the pileups all weekend.

### Box Score for K0MD 2012 CQWW DX SSB Contest

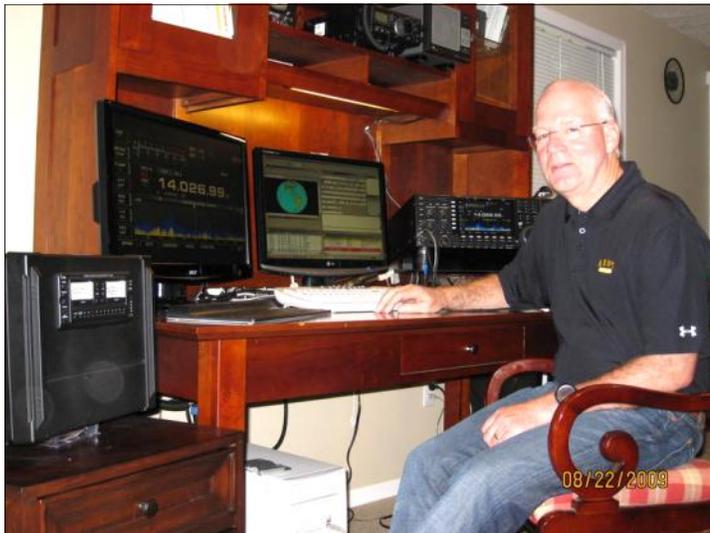
Call: K0MD  
Operator(s): K0MD, K4IU, K1KD, NY0V  
Class: M/S HP QTH: MN  
Operating Time: 48 hours  
Club: Minnesota Wireless Assn.  
**Total Score = 2,544,192**

#### Summary

Band	QSOs	Zones	Countries
160	8	3	3
80	37	14	24
40	298	30	80
20	294	35	106
15	435	33	112
10	575	30	107
Totals	1647	145	431

It was great to work so many MWA members, along with my friends in Chile, Argentina and the Caribbean. MWA multi stations **K0IR**, **N0IJ**, and





Fred, K4IU

### KØMD Station Profile

Radios & Amps:  
IC-7800, IC-7600, IC-7000, ALPHA 78, ACOM 1010

HF Antenna System:  
Force 12 antennas on a 100-ft Rohn 55G tower.  
One (1) 240N 2-el 40m Yagi at 110 ft, and two (2) C49XR  
20-15-10m Yagis at 100 ft and 40 ft, respectively.

The top Yagi uses an Orion 2800 rotor,  
and the bottom one is on an XG ring rotor.

Low Band Antennas:  
Force 12 Magnum 160XV2 vertical on 160 meters,  
and a Force 12 4-square vertical system on 75/80 meters



Grant, K1KD

WØAIH do a great job from the Black Hole. We have a long way to go before we match the totals they consistently put up. Hats off to WØAIH, N6BT, KC1XX and KØXG who worked on the antenna project this summer and fall.

Warmest regards,  
Scott Wright, M.D., KØMD

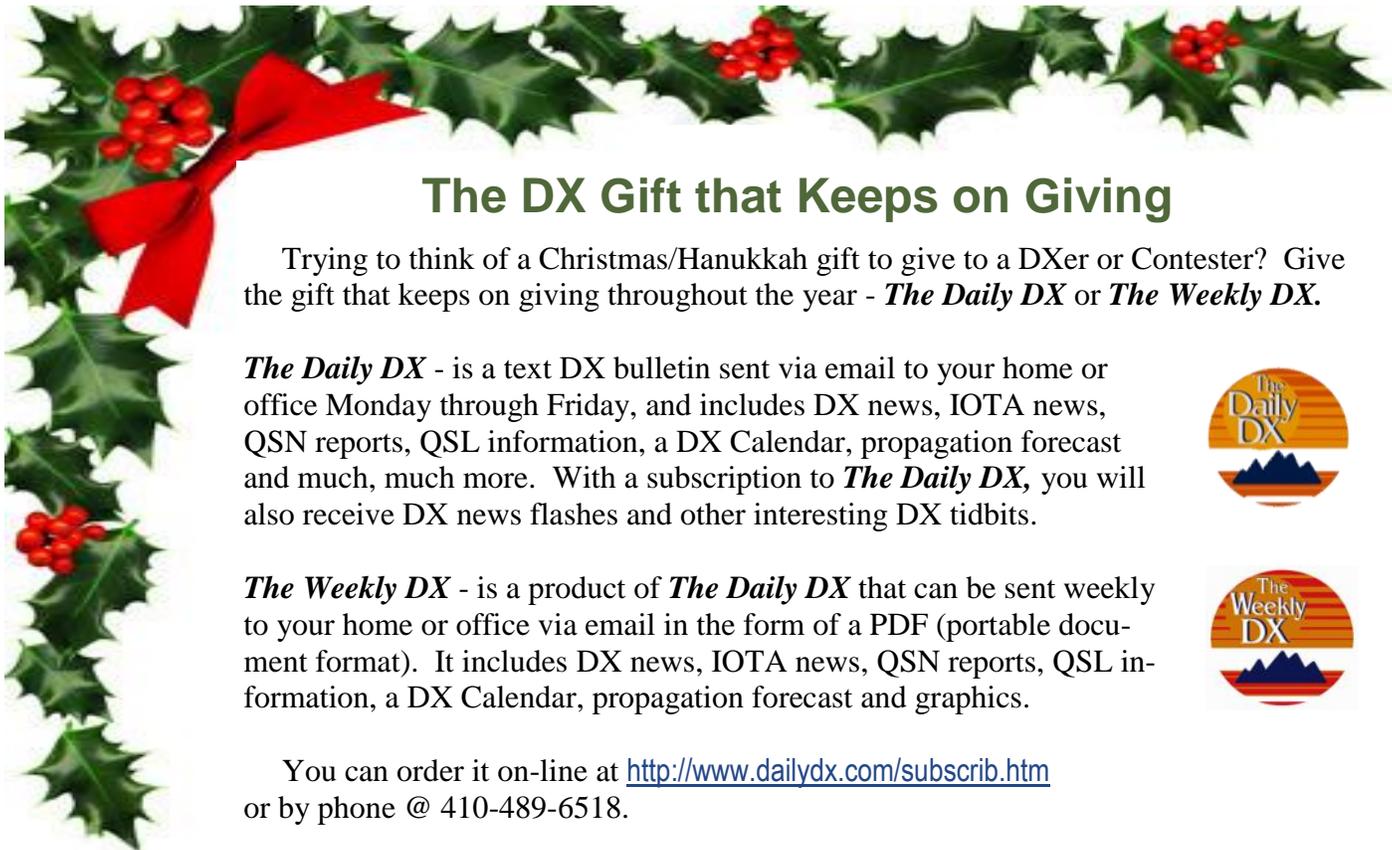


Tom, NYØV




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## The DX Gift that Keeps on Giving

Trying to think of a Christmas/Hanukkah gift to give to a DXer or Contester? Give the gift that keeps on giving throughout the year - *The Daily DX* or *The Weekly DX*.

*The Daily DX* - is a text DX bulletin sent via email 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.



*The Weekly DX* - is a product of *The Daily DX* that can be sent weekly to your home or office via email 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.



You can order it on-line at <http://www.dailydx.com/subscrib.htm> or by phone @ 410-489-6518.

## TCDXA Treasury Report

December 10, 2012

Submitted by TCDXA Secretary-Treasurer Mike, KØCOM

### Income:

Carryover from 2011	2,157.31
2012 dues and donations	3,974.42
Door prize ticket sales	705.00
Dinner Ticket Sales, Malpelo program	980.00
Refunds and reversals	49.95
<b>Total YTD income</b>	<b>\$ 7,866.68</b>

### Expenses YTD:

Bank service fees	(9.95)
Website	(67.69)
Office supplies, guest dinners and misc.	(280.62)
Memorial for Gary Strong to Mayo	(200.00)
MWA Plaque	(75.00)
Food Expense, Malpelo program	(1,010.90)
DX Hall of Fame Reception for WØGJ	(261.00)
WRTC Tent Donation	(325.00)
DXpedition Donation, 3CØE	(250.00)
DXpedition Donation, 7O6T	(250.00)
DXpedition Donation, NH8S	(500.00)
DXpedition Donation, PTØS	(250.00)
DXpedition Donation, 3D2C	(250.00)
DXpedition Donation, TT8TT	(251.25)
<b>Total YTD expenses\$</b>	<b>(\$ 3,981.41)</b>

Current Checking Balance (11/13/12)	3,885.27
PayPal balance	97.20
Cash on hand	80.00
<b>Total current funds</b>	<b>\$ 4,062.47</b>

## Join TCDXA

**Our mission is to raise *Dollars for DX*, used to help fund qualified DXpeditions.**

**Our funds come from annual member contributions (dues) and other donations.**

**TCDXA is a non-profit organization, as described in Section 501 (c) (3) of the Internal Revenue Code. All contributions from U.S. residents are tax-deductible.**

**Becoming a member is easy. Go to <http://tcdxa.org/> and follow the instructions on the home page.**

**All contributions (including annual dues) may now be paid on our secure site, using PayPal or credit card.**



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

K5D  
VK9DWX  
FT5GA  
3D2ØCR  
E4X  
CYØ/NØTG  
VP8ORK  
VU4PB  
STØR  
3D2R  
3CØE  
TT8TT



K4M  
TX3A  
KMØO/9M6  
YS4U  
YI9PSE  
ZL8X  
4W6A  
T32C  
HKØNA  
7Ø6T  
NH8S  
PTØS

XU7MWA  
S21EA  
J2ØRR  
J2ØMM  
BS7H  
N8S  
3B7SP  
3B7C  
5JØA  
VP6DX  
TX5C  
9XØR

## TCDXA DX DONATION POLICY

The mission of TCDXA is to support DXing and major DXpeditions by providing funding. Annual contributions (dues) from members are the major source of funding.

A funding request from the organizers of a planned DXpedition should be directed to the DX Donation Manager, Ron, NØAT, [TCDXA@n0at.net](mailto:TCDXA@n0at.net). He and the TCDXA Board of Directors will judge how well the DXpedition plans meet 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 their vote. If approved, the TCDXA Treasurer will process the funding..

### Key Considerations for a DXpedition Funding Request

DXpedition destination  
Ranking on *Most Wanted Survey*  
Most wanted ranking by TCDXA Members  
Logistics and transportation costs  
Number of operators and their credentials  
Number of stations on the air  
Bands, modes and duration of operation  
Equipment: antennas, radios, amps, etc.  
Stateside and/or foreign QSL manager

Website with logos of club sponsors  
QSLs with logos of club sponsors  
Online logs and pilot stations  
Up front cost to each operator  
Support by NCDXF & other clubs  
LoTW log submissions  
Previous operations by same group  
Valid license and DXCC approval  
Donation address: USA and/or foreign

To join TCDXA, go to <http://tcdxa.org/>.



- end -