



Newsletter of the
Twin City DX Association

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Dennis Johnson, KFØQR
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- KØIEA, KØJUH, & WØBV**



**ARRL Board of Directors names Glenn Johnson, WØGJ
winner of the 2004 ARRL International Humanitarian Award!**



ARRL CEO David Sumner, K1ZZ presented the International Humanitarian Award plaque to Glenn, WØGJ at the ARRL National Convention/ARRL EXPO 2005, during the Dayton Hamvention.

The award recognizes Glenn's contributions as a medical emissary to the Kingdom of Bhutan, and the numerous times he has practiced and taught Amateur Radio in that developing country.

HUGE congratulations to Glenn. His fellow TCDXA members are beaming with pride!

A Hearty Welcome to TCDXA's Newest Member!
Tom Rieff, KØPYK of North Mankato



Have You Ever Heard Your LDE?

by Roger Wilco

ed. - With the lowbands asleep for the summer months, and with the sunspots all but gone, we turn this month to a highly-unusual and unexplained propagation topic - Long Delayed Echos. Although well-documented by some radio amateurs and radio professionals, this propagation phenomenon occurs so infrequently and so randomly, that patterns of behavior have never been established. And so, LDEs remain unexplained. However, if you've ever experienced the apparent LDE of your own transmission, then you know that it's a mind-boggling event that you'll likely never forget..

Long delayed echos (LDE) have been a mysterious radio phenomena for over 76 years, and to date, defy all forwarded explanations.

In 1927, a radio engineer by the name of Jorgen Hals working near Oslo, Norway, observed an unexpected second radio echo with a significant time delay after the primary radio echo ended. Unable to account for this strange phenomena, he wrote a letter to Norweign physicist Carl Stormer, explaining the event...

"At the end of the summer of 1927, I repeatedly heard signals from the Dutch short-wave transmitting station PCJJ at Eindhoven. At the same time as I heard these, I also heard echoes. I heard the usual echo which goes round the Earth with an interval of about 1/7th of a second, as well as a weaker echo about three seconds after the principal echo had gone. When the principal signal was especially strong, I suppose the amplitude for the last echo three seconds later, lay between 1/10 and 1/20 of the principal signal in strength. From where this echo comes I cannot say for the present, I can only confirm that I really heard it."

Over the next several years (1928-1935), Hals, Stromer and Pysicist Van der Pol researched this strange phenomena, but failed to come to a conclusive explanation, although Stromer believed these peculiarly long echoes to be attributed to auroral events. Though not much else was accomplished than to confirm the existence of these LDEs, the work of Hals, Stromer, and Van der Pol still stands as the only serious long term study. Though research by others continued, it wasn't until the 1970s that an explanation was accepted. According to some sources, Anthony Lawson was the individual who proposed that the ionsphere or some other such natural phenomena was the cause of LDEs. As expected, study of LDEs slowed to almost nothing, although sporadic attempts at questioning the Lawson Law (as some have dubbed it) is still on going.

One problem with Lawson's explanation is the variance in the time delay. If the ionsphere were the culprit (or other natural phenomena with a fixed linear distance), then the time delay of the echo should be consistent with little variance, and this is not the case. Delays as short as 3 seconds and as long as 40 seconds have been observed over the decades in LDEs.

TCXDA Treasurer's Report - YTD January thru June, 2005

reported by Jim, KØJUH

Income

Balance Jan. 1, 2005	\$ 444.63
Annual dues collected-2005	2,064.00
Above/beyond the call of duty	175.00
Door prize raffle ticket sales	223.00
WØDXCC profits	102.38
TCDXA shirt order	<u>280.50</u>
Total income	\$ 3,289.51

Current balance - June 21, 2005:

\$ 1,765.56

Expenses to date

MWA donation	\$ -75.00
3YØX donation	-500.00
NCDXF donation	-250.00
K7C donation	-250.00
Materials - member certificates	-7.00
Postage/envelopes	-18.00
Check written/ deposit fee	-2.00
Monthly checks and service fee	-18.00
Check order	-19.95
Door prize - MFJ watch	- 32.00
TCDXA banner	-75.00
TCDXA Shirt Order	<u>-277.00</u>
Total 2005 expenses	\$ -1,523.95

Projected Expenses for 2005

ARRL Frequency Defense Fund	\$ 150.00
TCDXA website hosting	70.00
3 DXpeditions @ \$250/donation	750.00
Monthly check service fee	18.00
Unexpected expenses	<u>100.00</u>
Total projected expenses	\$1,088.00

Packet Cluster Escrow Account

Balance Jan. 1, 2004	\$1,070.56
ACØX node repairs	<u>-85.00</u>
Current escrow balance	\$ 985.56

TCDXA GOLF OUTING REMINDER

We're putting out another call for anyone interested in participating in the TCDXA golf outing on July 15th at 8:00am. Oak Glen Country Club is the site.

Format: "**Best ball/Scramble**" (in other words, everyone in the foursome hits their own ball. Then, you decide amongst the four of you which of the four balls you're going to play next). **EVERYONE IS WELCOME**, including "hackers." This will be a fun outing. There will be the usual prizes for the longest drive, longest putt, closest to the hole, and, of course, the best and worst team scores.



Please email me at: k0iea@minnmicro.com if you're interested.

73 de Dave, KØIEA

Jeff May, WØXV



Jeff proudly displays his VU4NRO QSL, which gives him #1 Honor Roll!

About 10 years ago, Jeff began seriously chasing his “short list” of remaining DXCC countries. And, during those 10 years, every entity on his list was activated: P5, 3CØ, VP8 S. Sandwich (Microlite DXpedition), 3YØ Bouvet (Chuck Brady), and finally VU4.

Most TCDXA members and Minnesota boat anchor aficionados remember Jeff as the big gun from Chanhassen. Jeff moved to MN in 1976, and lived here until May of 2002, when he and wife Pat retired to their beautiful 42 acre estate, located 5 minutes from Brookhaven, Mississippi.

Jeff was born in Wisconsin, but he was raised in the South, after age 4. Many of his years growing up were spent in Pensacola, Florida, but Jeff actually lived in Brookhaven, MS during the 4th and 5th grades.

Jeff was first licensed as **KN4RSD** in 1957 at the age of 14. His Elmer was Bill, W4HBK. A well-known local ham by the name of Eddie Collins, W4MS, administered Jeff’s Novice test. At that time, Eddie’s rig was the famous Collins “Gold Dust” Twins: KWS1 and 75A4. That station left an indelible impression on Jeff, as he has become a collector of high-end vintage radios in more recent years.

Jeff’s first receiver as the “average broke teenager” was a “poor performing” Hallicrafters S38D. He had to mow a whole lot of lawns to afford that \$50 radio. His first transmitter was a 1947 Hallicrafters HT-17. That rig ran 15 watts out on 40 meters, and he managed to work 42 states using it. As time went on, he upgraded his rig to a DX-35/S40B, and later to a Johnson Ranger/SX71. Jeff was very active in radio during high school, and even went on a DXpedition to FP as FP8BF (see DX Column in November, 1959 QST).



WØXV/5's beautiful home near Brookhaven, MS.

Jeff graduated from the University of Florida in 1964, and he entered the U.S. Air Force as a 2LT. His first assignment was at SAC HQ, where he signed **K4RSD/Ø**. He served in Viet Nam, followed by 3 years in Hawaii as **K4RSD/KH6**. In total, Jeff served 7 years in the USAF as an Intel Officer, followed by 7 years in the Air National Guard. Jeff received the callsign **WØONM** in 1973.

Then, Jeff began his 20-year career in the computer disk drive industry. He moved to Minneapolis in 1976, and then to Wales (**GW5CBK**) in 1977, where he worked for 2 years. After moves to Oklahoma, back to MN, then to Massachusetts, Jeff finally settled back in MN for 14 years. He finished his computer disk drive career as a Division VP.

Next, Jeff took an entrepreneurial career path by owning a company for 10 years which designed and manufactured home exercise equipment. And finally, Jeff finished his working career as VP of Operations & Product Management at Ontrack Data in Eden Prairie.



TH-11 at 75 feet

Jeff is well-known as a collector of vintage radios. He declined to list all of the radios he has owned, but if you can think of any vintage radio model (say, maybe, your first radio), he's probably owned one or more of them (in beautiful condition) over the last 20 years. Jeff has the uncanny ability to seek out exceptional specimens of old radios.

Jeff also buys and trades high-

end and esoteric vintage AM transmitters. His two current favorites are a 1955 Collins broadcast transmitter and a Navy SRT 14 transmitter (see photos). The Collins 20V2 has been beautifully refurbished by Robert, WØVMC. It uses a pair of 4-400s, modulated by another pair of 4-400s. It works from 20m to 160m and runs the legal limit in the low-power mode. It weighs 1500 pounds.

The 1948 SRT14 Navy transmitter was also rebuilt by Robert, WØVMC. It uses a single 4-400 modulated by a pair of 813s, and is driven with an outboard custom speech amp and modulator. It also runs the legal limit, tunes from 15m to 160m, and weighs 550 pounds. Jeff says that he's "competitive in putting out a quality AM signal".



Two of Jeff's vintage AM transmitters: 1955 Collins 20V2 broadcast transmitter (left) and 1948 SRT 14.

For his serious DXing, Jeff uses an IC-7800, and a (little-known) B&W PT2500 amp. His antennas are a TH-11 at 75 feet and wire antennas for the low bands. In addition to achieving #1 DXCC HR, Jeff's current DXCC totals are:

	RTTY	-	276
160m-	145	17m -	326
80m-	232	15m -	319
40m-	281	12m -	286
30m-	264	10m -	308
20m-	333	6m -	63

Jeff's current DX goals are to enhance his antennas for the lowbands, and to improve his country counts on 30 through 160m. Jeff says that "although I no longer reside in the Twin Cities, a part of my heart and being will always be there, and I maintain a strong interest in the TCDXA".



A visit to "Mount Frank"

by Mike Warren, WØWG

Two TCDXA members (WØZR and I) recently had an opportunity to visit Frank Miller's K9NS Northern Illinois Contest Station; and what a station it is!

The first thing you see when approaching Frank's 150 acre farm is towers -- lots of towers. Frank has four-squares on every band (160, 80, 40, 20, 15, 10), verticals on 160 and 80, and four separate 120' towers with multi-beam arrays for 40, 20, 15 and 10. All antennas are fed with hardline.

The station is in Frank's basement and consists of 11 operating positions; five pairs of run/mult stations and an eleventh monitor station. Eight of the stations are arranged side-by-side on two sides of a large room, and are all setup identically so operators can move from station to station without any 're-learning'. The run stations are FT-1000's with Henry 3K amps and the multiplier stations are FT-1000's with Ameritron amps. All stations also have computers for logging/spotting. There is even a "back room" with several sets of back-up equipment.

In addition to the operating positions, there is a bunk-room, a kitchenette, a bathroom with shower, and a lounge area with large-screen TV. Everything is first class!

On contest weekends, Frank's wife prepares lasagna for the operators on Friday night to get them started. Saturday night's meal is usually delivered pizza.

Results? K9NS is usually at the top of the list for multi-op, high-power.

Additional info is found at www.k9ns.com.



K9NS Super Contest Station - 150 acres of antennas!



Operating positions 1, 2 and 3.



Operating positions 4 through 11.



Just a few of the amps.



Some spare hardline.



One of the 4-square arrays.



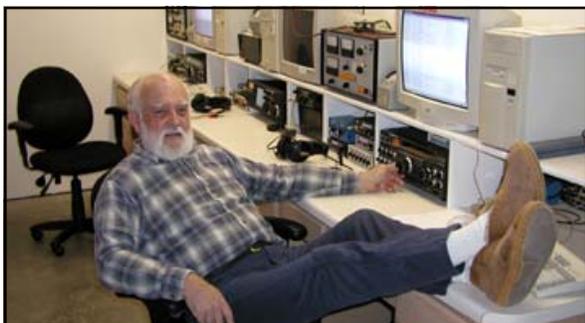
Hardline cable entrance.



The lounge area.



Spare equipment.



Frank in his favorite "position".

DX Quiz History of WW II

by Jim, KØJUH

First some history...

During WW II, many battles were fought against the Germans in Europe and North Africa by American and Allied forces. After fierce fighting, the Germans were ultimately defeated. The cost of victory, however, was high. Thousands of brave, young Americans sacrificed their lives to help bring history's bloodiest war to an end.

Now the challenge...

Each one of the events listed below took place in a country that is prominent on the ARRL DXCC List. See how many of these history-making campaigns you can match up to the correct DX entity. If you can score 100% without referring to a World Atlas, consider yourself an expert on WW II history!

Prefix/entity options:

5A, 7X, F, G, I, LX, LZ, ON, PA, SP, SU, & ZA

- 1) The Siege of Tobruk, April 1941
- 2) The Battle of El Alamein, June 1942
- 3) The Battle of Tripoli, January 1943
- 4) The Battle of Monte Cassino, Jan. 1944
- 5) The Battle of Anzio, February 1944
- 6) The D-Day Landings, June 1944
- 7) The Siegfried Line, September 1944
- 8) Operation Market Garden, Sept. 1944
- 9) The Battle of the Bulge, December 1944
- 10) The Liberation of Auschwitz, Jan. 1945

Answers: 1) 5A 2) SU 3) 5A 4) I 5) I 6) F 7) F 8) PA 9) ON 10) SP



Photo of Charlie in action, courtesy of Andrew, G1ØNWG

FT5X0!!

The Rest of the Story and a Trip to Remember!

by Charlie Hansen, NØTT

It was a lazy day almost a year ago, when the phone rang. It was James, 9V1YC, my friend in Singapore. He said he was getting a DXpedition team together and would I want to sign up! He outlined the details, I checked with the XYL to get her okay and some other minor details, like money, and all was well.

To go on a trip like this there is a lot of preparation. The biggest item on my list included the design and construction of a lowband trap antenna (similar to the famous Battle Creek Special) and a way to package it for economical transportation. I would call it the "Dakota Special", because most of the parts originally came from an antenna I built for a mini-DXpedition to South Dakota, several years ago.

Preparation includes getting a list together of stuff to take. Besides the usual equipment items, such as radios, headphones, keyers, etc., there is the question of what clothing to bring. After all, we were headed for a rather remote speck of land in the Southern Indian Ocean, and there were no stores around. There was some discussion about clothing on our email Penguins Net. We decided that we didn't need any special clothing for sub-zero weather, and settled on dressing for a "late Fall day in the windy city of Chicago". That turned out to be a good analogy. Other items would be waterproof boots, rain suit, and a warm coat with hood. We knew we had a modern washer and dryer aboard the Braveheart, and that helped us decide on the amount of other clothing we would need.



Our ship - The R.V. Braveheart

All of these overseas trips to remote areas involve health issues. We were fortunate to have an MD on our team. That was Lew, W7EW. He listed some precautionary shots we should get and prescription medication to take, since we were traveling through Africa and then on a long ocean voyage from Durban, South Africa. As it worked out, we later learned from the locals that Johannesburg and Durban are free of the dreaded Malaria-carrying mosquitoes, so it wasn't necessary to ingest all the chemicals in those little pink pills. We would later learn that the other "meds" for sea sickness was another matter!

Fast forward to late February, 2005. The time to leave town was here! The route I chose was to fly from Kansas City to Durban via Atlanta and Johannesburg. From the beginning, it was the plan to travel with one or more fellow team members. Doing so, was not only more fun, but it was helpful to have someone look after each other's baggage at the busy airports. Lew and I met in Atlanta, and were on our way to Durban via Johannesburg. In "Joberg" we were met by two local amateurs who helped us with the logistics of getting through the airport. It was necessary to go through

customs with all of our luggage. We were allowed two, 70-pound checked bags each. For myself, one bag was the "Dakota" antenna that was packed in a hard-side plastic golf club case and totaled almost the full 70 pounds. All the extra weight lifting I did for several months prior to the trip really paid off!

James had arranged for us to stay with members of the Highway Amateur Radio Club (HARC) while in Durban. Our hosts were Derek and Pam McGillewie. Lew and I were met at the Durban airport by Derek, ZS5VE who skillfully managed to fit all of our luggage, and us, into his compact car.



Our hosts in Durban: Derek, ZS5VE & XYL Pam.

Later that day, we went shopping for some sleeping bags and did some grocery shopping for those special treats we all like to eat. Sleeping bags? We would need those or a lot of blankets if a really bad storm came up, and we were trapped on the island for a few days. We both had sleeping bags at home that we could have brought with us, but the cost of paying for the extra luggage was far more than the cost of the brand new bags we purchased. At the end of the trip, I simply gave mine away to the cook.

That evening, we attended the HARC meeting, where our team members were the guests of honor. This would be the first time where most of our team would meet face-to-face. We all received honorary membership in HARC club and some nice souvenirs.

The next day, we were taken to the docks where the Braveheart was moored. The ship looked very seaworthy, and her six crew members looked very fit for their tasks.

The Braveheart is a "working ship", and as such, it doesn't provide the luxury items like one might find on a cruise ship. Being a guy that likes to shave with an electric razor, I noticed, right away, that there were very few mirrors aboard the ship. And, wherever there was a mirror, there wasn't a nearby electrical plug-in for a razor. Some of us then learned the "braille method" of shaving.

Getting aboard the Braveheart was, shall I say, "interesting". There was no gangplank, as one would see in movies. In fact, the aft deck of the ship was much lower than the dock, so a plank of some kind would have been too steep to use. A ladder might have worked, but it could end up being hazardous, if the ship started to move by wave action and wind. Anyway, entry was via some very large tires from some kind of construction machinery that were chained to the pier, so they would hang down and act as cushions between the pier and a ship's hull. To get on board, one would take a big step down on top of a tire, then another big step to the deck of the Braveheart. Like I said, this is a "working ship", and sometimes simple is best.

Seasickness was a big issue on the ocean. Most of us did get sick at least for a day, until our medication kicked in. Some of our team members couldn't take, or avoided taking, the "meds" for various reasons, so there was a degree of sickness and discomfort among them. It was a dreadful experience for some, to say the least. We all had these little red buckets at the ready next to our bunks. I used mine a couple of times.

There were two very clean restrooms (called "heads" on a ship) that were both outfitted with platforms on the floor, similar to wooden pallets. One of heads was equipped with a Japanese bathtub/shower. It soon became apparent the purpose of the platform in the head was to keep one's feet dry, because the water from the tub/shower first just drained out onto the floor beneath the platform, then ran across the floor into a drain. The head without the shower was equipped with a hose-sprayer, which made cleaning easier, especially if anyone got sick.

Most all of the hearty meals were prepared by our cook, but occasionally we each used the galley to prepare a simple, "customized" breakfast for ourselves. Meals were well-balanced, with plenty of fresh vegetables for the first week. The fresh leafy greens, bananas and other highly perishable foods gradually ran out, so we passengers found out what really seems to keep for a reasonable time, and that is pumpkins and cabbage. It's amazing how many recipes can be made with those!

On a long sea voyage, there is almost nothing for passengers to do but eat, sleep and watch videos to pass the time. It was good to keep in touch with family and friends via PACTOR, an Amateur Radio email service via HF Radio. We had a multiband trap vertical attached to the deck rails, and a dedicated TS-50 radio that gave us reliable communication. Some would enjoy making a late night trip to the radio to operate maritime mobile, using their own callsigns.

As we became more accustomed to life at sea, we would sit up in the wheel house and watch for whales, or just watch the waves and listen to some music on CD's. There was a pod of about 6 Pilot whales spotted frolicking in the surf on one sunny day. That was a rare treat! There were always a few sea birds flying about, even when we were hundreds of miles from land.

On stormy days, it was exciting to watch the "Clinometer" (a gauge for measuring the amount of roll in the ship), or watch some of the waves splash over the deck. In our bunks, below deck, there would be a loud THUMP, and we could feel the hull shudder as the powerful waves beat against the hull. The Braveheart is a tough ship, so we all felt secure. It began its journeys as a Japanese research vessel, and roamed the North Pacific ocean.

After many days at sea, we traveled about 2200 miles at an average cruising speed of 10 MPH. The two very powerful diesel engines could have pushed us a little faster, but doing so meant that fuel would be consumed at a more costly rate. The ocean currents move in a counterclockwise direction in the Southern Indian Ocean. By leaving from South Africa, the cur-

rents would help carry us along a little faster and offered a more gentle ride. The return trip with the currents would take us to the Southwestern Australia port of Fremantle, near the city of Perth.

We arrived at the "Port of France" in the afternoon of March 19. We checked in with the local French officials, then made our way to Port Jean d'Arc, an historical whaling station several hours distant. It was to be our base of operation for almost two weeks. We were delighted to see that there was a coat of fresh red and white paint on the building and there was a new roof that replaced the partly rusty one we saw in old photographs. It was too late in the day to make it to shore, so we all spent an anxious night aboard the Braveheart and made the first landing at dawn.



The barracks, which was to be our home for 2 weeks.

The long, narrow "barracks" turned out to be perfect for our task. We had separate rooms for CW, SSB, sleeping quarters (if needed), a room for our equipment cases and supplies, a kitchen, and a real bathroom with running water! Every room had a wonderful view of the bay and our antennas. The rooms were connected by a hallway at the back and there was a covered area at the end of the building for our 3 generators. Wiring was already in place for lighting the rooms and hallway. For the equipment loads, it was a simple matter to string cords via an attic, and drop them down into the two operating rooms. Heat was provided by a portable electric heater in each room. Those were "must have" items on our equipment list.

We located a hole in the floor of one room and that became the entry for all the coax cables. Coax from each radio also terminated at that location, and the leads marked with its station number. To

change an antenna on a radio, and/or to change a band-pass filter, it was only necessary to disconnect and reconnect connectors. None of the coax shields were grounded at that point, which we would later regret.



View from the barracks towards the bay and antennas

From the very beginning, the plan was to use simple vertical antennas for all the bands. The two lowest bands, 80 & 160m, would use trap inverted L's with radials laid on the ground. Those are commonly known as Battle Creek Special's or "BCS" antennas. The 30 and 40 meter antennas were verticals with two, above-ground radials, each. The remaining high band antennas were all single band vertical dipoles. They were fed at their centers, using some rather cleverly constructed 1:1 baluns from the workshop of John, VE3EJ. Even with the high winds, it was only necessary to guy the vertical for 40m with only 1 set of guy ropes. One of the ropes on a dipole would become a "messenger cable" to support its RG8X coax feedline.

Kerguelin is noted for some rather high winds that can come up in an instant. As expected, under the laws of the infamous "Edsel Murphy", when we began setting up the antennas, the wind blew even harder! But, there were no mishaps getting the antennas up, and all were ready to go in a very short time.

All of the antennas, with the exception of the BCS types and Lew's beam, were skillfully made by ZS4TX. I could see that there was a lot of time spent making the verticals. They were well machined and fitted, and included some professional looking cases for them.

Lew, W7EW, is an avid 6m moonbounce enthusiast. After we put FT5XO on the air, the off-duty ops helped assemble his 40-foot beam. From that night on, Lew spent many hours during his prearranged schedules "shooting the moon". Every 15 minutes, he would go outside and manually rotate his beam to keep the weak signals on track.

We had a large, flat area for our antenna field and it was just a few feet above sea level. That allowed plenty of separation of the antennas. Later we would move one of the antennas to another flat, elevated area behind the barracks to increase the separation even more.

The high bands were open when we finished with the antenna setup. Pileups were absolutely enormous! But we attempted to keep them more compact by avoiding answering calls on the "fringes" of the pileups. It was obvious from the beginning that the antennas were performing very well. There were no regrets about leaving the beams at home! Besides, being near the bottom of the world, where would we point the beams? We could work stations in every direction with the verticals.

Later on, during the opening night, there was an awful "buzz" on the lowbands. We surmised it was caused by an HF radar installation somewhere. Robert, SP5XVY, heard the noise and said "that is unacceptable" and made a few phone calls on Lew's satellite phone. Shortly thereafter, we were free of the interference. I don't know who he talked with, or what was said, but whatever it was, the result was wonderful!

Logging was done on laptop computers, using TR-Log. For DXpedition logging, it was something new for most of us. There were no glitches, but most of us felt that it was far too intelligent a program for our use. In the end, we felt that a more simple program might have been a better choice. Still, we had to try something new!

The QSOs were going in the log at an enormous rate, that is, until Easter weekend. Then the weather changed, with snow driven horizon-

tal by the winds. Along with the snow came very high levels of static! It wiped out most of the bands, and made reception very difficult. Bernie, HB9ASZ, needed to change antennas. When the antenna he was using was disconnected, an enormous spark jumped across the gap. At that very instant, his radio started to "smoke", and the external power supply also burned out. What a awful thing to have happen!

We analyzed the situation, and decided then not to change any antennas, until the snow storm had passed. In hindsight, it would have been a wise move to simply ground all of the coax shields, where they came into the building. Then, most all of the antennas would have been safely at DC ground. The "hot" side of the vertical dipoles would also have been at DC ground, via their baluns. The BCS antennas would be at DC ground for 80 and 160m, via their UN-UNs.

I like to operate 160 meters, and there were other operators in our group who shared that enthusiasm. The static was really getting to be unbearable on Topband. It was snowing, and the static wiped out the bands. Personally, I had enough of the static, so I gathered up all of the necessary stuff for a Beverage antenna. Yes, it was pitch dark and cold, and the wind made it feel even colder, but this was an emergency!

There was a spare length of coax already in place, so I rolled it out as far as it would go and drove in a ground rod. I connected the matching transformer, and started rolling out the wire, supporting it with anything I could find. I came to a stream several hundred feet later. At that point, it was time to call it quits for the night - at least for the outside work. I followed the wire back to the barracks; it was like a like a wintertime rope some farmers string between the barn and their house. To my delight, there were signals that I could copy better on the Beverage than on the transmit vertical. It was nice to put QSOs in the log again!

The day crew would find some better supports, and string out the remaining wire. The new Beverage antenna would turn out to be some 600 feet long, and about 3 feet high at the most. It was intentionally left unterminated to avoid a unidirectional pattern. When it was needed, the antenna could be switched in with the push of a button on Robert's FT-1000MP.

There were some good openings on 160 meters (called "Topband" by aficionados). I had been on Topband for several hours, calling CQ with very few takers. The day shift arrived and John took over my position. I told him that conditions seemed awful and wished him "good luck". Later, I learned that John had a spectacular opening, and was able to work into the East Coast USA at a rate of 140 Q's per hour! The propagation Gods were very kind that morning at Kerguelin. At sundown, West coast USA openings were almost as good, and there were many smiling faces at both ends of the QSOs. We were delighted to put a total of almost 1200 Topband QSOs in the log!

Did I mention the high winds? One night, there were some very strong winds - I would say hurricane strength - but I can't prove it. My Dakota Special may have had the 160m loading wire or guy ropes tensioned too tight, causing the antenna to fold over near its center. The off duty ops came to the rescue. The damage turned out to be not as serious as it first seemed. A call to the Braveheart crew brought a hack-saw and a willing hand to saw out a short section of tubing. There was some extra tubing stored in an "adjustment section" to make up the difference, and that was that. It was back in operation in about an hour, with no QSO time lost!



Old oil barrels from the whaling days.

We were lucky to not lose the BCS antenna, as well. We discovered that part of a set of guy ropes on the downwind side had slipped off its guy stake. All that was holding it up was one lower guy rope and the strong winds! With lessons learned, all the antenna guy ropes were then made fast with tape!

The guy stakes were various lengths of metal "T" fence posts without the blade at the bottom. They were hauled to shore in one enormous wooden box, then unloaded a few at a time into a huge homebrew wheelbarrow. The stakes, along with some other items, are normally carried on the Braveheart for various uses.

On another stormy night, Lew's 6m moon-bounce antenna was taken down by force. Once again, the team rallied, and managed to repair a few broken elements and put it up again. Lew made 6 really long-haul DX QSOs with his setup!

Our barracks was the scene of good leisure times in the present and past. The crew of the Braveheart couldn't let an old outdoor barbecue pit lay idle. I saw them up on a steep hillside "mining" a large wheelbarrow load of coal left over from the old whaling cookers. Soon there was a heap of fiery-red coals, and we all enjoyed a hearty feast that night with plenty of bottled refreshments to go around.



Party time!

Meals were brought to shore by the crew during the day, and they ferried operators to and from the ship. If a storm came up, there were stored rations on the kitchen shelves and a fully operational propane stove to cook them with. There were quite a

few cooking utensils hanging on the walls and in the cupboards which reminded me of a well-equipped Minnesota "fishing cabin".

Good times also meant time for exploring! There were no seals near our camp and very few penguins, so a few trips in a rubber boat called a Zodiac brought us closer to the wildlife. It was fun to see the enormous elephant seals basking in the warm sun. Some were laying on their backs, wallowing in shallow drainage areas. In another area there were a few small colonies of penguins, all grouped tightly together, keeping a curious, but watchful eye on us.



Elephant seals basking in the sun.

Black feral cats and rabbits occupy most of the lowlands of the island. All were very aware of our presence and kept their distance. I was lucky to see a pride of cats out for a walk near the shore, just before daybreak.

In one of the many bays we visited, we saw a remote group of prefabricated buildings and some water tanks. We looked in one of the buildings, which turned out to be a well-equipped barracks, and found a handwritten journal laying on the kitchen table. It was written in French, but Bernie, HB9ASZ, was fluent in several languages. Through his interpretation, we learned that the mysterious facility was once an active, but experimental, fish hatchery that specialized in salmon and trout.

Our fun on the island would come to a close after 11 days. We had to leave the island no later than noon to again stop at the Port of France, then catch the evening tide. Surprisingly, it didn't take long to pack everything up. We started at sunrise,

and were underway around 11am. As all good campers do, we left the area cleaner than we found it, barracks included.

The sea voyage to Australia was just as long. Sightseeing in the Fremantle and Perth areas was definitely on our list when we arrived, and so was the thought of ordering whatever food we wanted from the fine restaurants. I treated myself to the largest 2-pound hamburger on the menu with fries, and fine drink, (courtesy of Nigel Jolly, the owner of the Braveheart). We paired-off, and most of us went on separate side trips. I stopped in a local marine store, and came out with a bag of really nice stainless steel "antenna" hardware. We don't have stores like that in the Midwest USA!



The best 2-lb hamburger that I've ever eaten!

On one of the Fremantle mornings, I was casually watching the local TV station, and they were about to air the daily horoscopes. I'm not a follower of that lore, but mine was: "Recent expenditures have left a big hole in your savings!"

After a couple of fun days in Fremantle, it was time to head for home. All of us would remember this adventure, forever.

73 de Charlie, NØTT

ed. - The Gray Line staff sincerely appreciates Charlie's willingness and the big effort he made to share his personal reflections of the FT5XO experience with TCDXA members. Charlie's father is TCDXA member Charlie, WØHW.



The FT5XO Crew (left to right):

Back row: Paul, crewmember (black and white cap); Lew, **W7EW**; James, **9V1YC**; Ben, crewmember; Matt, ship captain, Mike, **N6MZ**; Andrew, **GIØNWG**

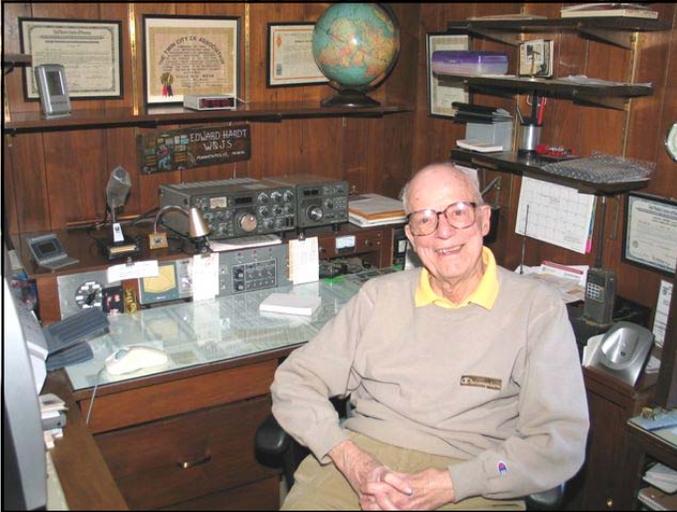
Middle row: Bernie, **HB9ASZ**; Mark, **AG9A**; John, **VE3EJ**; Wes, **W3WL**; Tui, cook

Front row: Robert, **SP5XVY**; Charlie, **NØTT**; Mirek, **VK6DXI**; Bro, crewmember; Gary, crewmember; Mark, **MØDXR**

A LOOK BACK

An interview with Ed Hardt, WØJS

by Dave Wester, KØIEA



First licensed in 1934 as W9RZU, Ed grew up on Chicago's Southside - a rough neighborhood. Two guys were shot to death in front on his house. Ed's house had bullet holes in it.

Ed's first contact was with W9ANR, a National Guard military station, 15 Nov. 1934. He got his



license, while in high school, at age 16. Back then, almost all the gear was homemade. His first RX was a regenerative receiver, using a 201A triode. The 201A had a 6V filament and a pair of 45v "B" batteries for B+. His first TX was a 210 oscillator, followed by a pair of 45s, using a TPTG (tuned plate, tuned grid). This was a popular circuit at the time. The antenna was a simple long wire, running out the window to the garage.

The bands used were 80m and 40m. Before VFOs, xtals were used for frequency control. Making QSOs back then required tuning the entire

band for a reply (not unlike our Novice days). Speaking of VFOs, I think the Miesner Signal Shifter was one of the first commercially-available VFOs sold to hams. It used an 807 tube. Some of the old timers can confirm this. Changing from TX to RX was done using a knife switch. Later, telegraph sounders were converted to antenna changeover relays.

Each night, Ed's mom would clear the kitchen table, so Ed could practice the code. The code machine was a wind-up contraption. Ed's dad located an all-caps typewriter. Ed soon progressed to 45 wpm. His dream was to become a shipboard operator, so he could travel the world. He studied and passed both the commercial radio-telephone and radio telegrapher's license. But times were tough in 1938, and the shipping lines were not hiring. Then, Ed saw that United and NWA were looking for radio operators. Ed passed the code test for NWA, and was hired in the spring of 1938, and he was sent to MSP. He retired in 1979, after 41 years with NWA.

After the war, many surplus tubes were available. When you see the VT, followed by a number, you can be pretty sure it is a WWII surplus tube. Pictured is Ed's VT-127 amplifier, using "link coupling" to a balanced load.



Ed's VT-127 link-coupled amplifier.



During the war, these tubes were used as radar amplifier tubes. They were very rugged and could take a beating. A pair of these triodes was good for a kilowatt input. I was once told by Bill Davies, **WØYCR**, (former member, now SK), that you could run them with the plates white hot (I thought I saw some holes in the plates of the tubes Bill was using). Ed also built a 10 meter amplifier using the VT-204 triodes



(also known as 3C24/24Gs). Ed's amplifier used one as a driver and two more in push-pull. These little beauties could put out 75 watts each (1,500V plate voltage, 67 ma plate current).

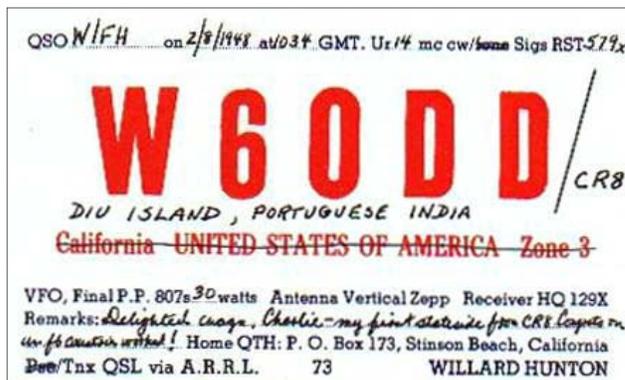
Recently, Ed received an award for 50 years as a member of ARRL, and he is also a member of the ARRL "Diamond Club." Ed will soon be moving to Brooklyn Park. His hamming days are over. His all-time DXCC total stands at 354. The only one he missed for #1 Honor Roll was BS7H, Scarborough Reef.

Thanks for the interview, Ed. It was great reminiscing about the old days.

73 de Dave, KØIEA



Rare QSLs by Jim, KØJUH



Thanks to Joe Reisert, W1JR, for supplying the following story about this very rare catch:

To the best of our knowledge, W6ODD/CR8 and his approximately 55 contacts in 5 hours of operation on August 2 and 3, 1948 was the only operation that took place from Diu/Damao. It was deleted from the DXCC list on December 31, 1961, when India took possession of the Portuguese colonies in and around India. One other operation claimed to be in Diu/Damao but it was later determined not to be located there.

There were other CR8 operations about this time frame but they took place from Goa. In 1961, W6CUQ (as I recall), discovered that Diu/Damao was over 75 miles from Goa, and separated by India. He brought it to the attention of the DXCC committee, and it was retroactively declared a separate entity and added to the DXCC list. However, no further operations took place from Diu/Damao before it was deleted, when India invaded the territory in December 1961.

Some other trivia. Charlie, W1FH, told me he called CQ on the morning of August 3, 1948, and W6ODD/CR8 answered him! It was the first contact with the USA. No other stations in the Northeast worked W6ODD/CR8. However, several others in the USA, especially in California, did make a contact.

The operation only lasted two days. W6AM received a telephone call to get on the air the morning W1FH worked him, but was busy at the time. Later, he found out that the operation had gone QRT that morning so he missed it!

Without a doubt, Diu/Damao is the rarest of the deleted DXCC entities.

73, Joe, W1JR

The HZ1IK Story *by Jim, KØJUH*

On April 25th, a spot hit my screen at 1745z for HZ1IK on 20m RTTY. It came up in DX4WIN as a needed country on RTTY, so I decided to see if I had any copy on him. HZ1IK was S3 to S5, and working S9+ EU, non-stop. So, I sat back and watched the action on my screen. Finally, he ran out of EU stations, and I dropped my call. I'm running 200 watts to a TH-11. To my surprise, he answered. KØJUH was printing on my screen, and HZ1IK was giving me a report. I sent his report and confirmed the QSO, and gave myself a pat on the back for working a new one.

Now, here is where it gets really interesting. A few days later, on May 1st, HZ1IK uploaded his files to LoTW – unbeknown to me. On May 3rd, I uploaded my logs. I do this every month, or so, to stay current. I checked to see if I had any new QSL's confirming a QSO, and first on the list was HZ1IK. Amazing! A few days after working a new mode country, thanks to LoTW, I had received credit. It was not necessary to make out a QSL, put it in the mail, and if I received one in return, submit it to the DXCC desk. LoTW had taken care of everything!

And there is still more to this story. A few weeks later, at Dayton, guess who shows up? I thought I was dreaming, when I looked up and saw HZ1IK, with his big smile, standing in front of me.

Manny's home call is DF1IK, and he works for the Saudi Department of Communications. He runs an R7 vertical and 100 watts, which may account for his S3 to S5 signal on the day I worked him. Manny is from Karlsrhue, an area I am familiar with, from my years stationed in Germany. We had much to visit about!



Manny, HZ1IK (left) and Jim, KØJUH have an eyeball QSO in the flea market at Dayton.

More Scenes from Dayton 2005

photos by KØIEA and KØJUH



Mark Obermann, AG9A - FT5XO op.



Roger, G3SXW, with Dave, KØIEA.



Bob Rylatt, G3VXJ.



**KØBUD
&
W8GAZ**

Dayton 2005



DX pileup buddies: Glen, **KØJGH** and Jim, **KØJUH**



The ARRL National Convention 2005 at Dayton.



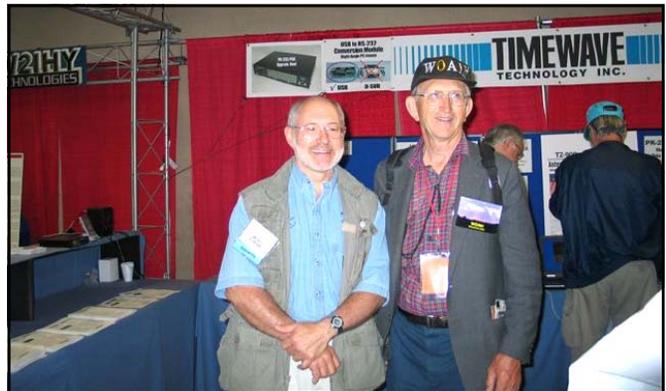
K9DX stops by to discuss 4-square systems with Chuck, **KØSQ** and Bob, **WØEK**.



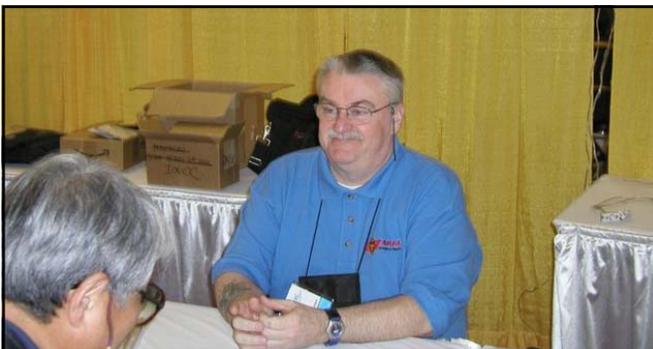
The TCDXA crew: Ray, **KGØDK**; Chuck, **KØSQ**; Gary, **KØGX**; and Vlad, **NØSTL**.



Charlie, **NØTT**, with his dad Charlie, **WØHW**.



Glenn, **WØGJ**, with Paul, **WØAIH**.



Bill Moore, **NC1L**, at the ARRL DXCC booth.



Dennis Sokol, **WØJX**.

