TCDXA
TWIN CITY DX ASSOCIATION
Minnesota

Newsletter of the
Twin City DX Association

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Inside this issue:



**Gray Line Staff**

KØIEA, KØJUH, & WØBV



**3YØX** co-leaders **K4UEE** (l) and **KØIR**.

# 3YØX
## Peter I DXpedition a HUGE Success!!

After 6 weeks of intense travel, several years of extensive planning, plus two foiled starts, Ralph Fedor, **KØIR** is now back home.

Ralph took precious time from his swamped professional and personal backlog to share his reflections and insights, following his superbly orchestrated and highly successful, historic 2006 DXpedition to Peter I.

See page 18 for Ralph's very interesting retrospective story!

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## Glenn Johnson, WØGJ, is Packing his Radio Gear for The Andamans - VU4!

Glenn, **WØGJ**, is packing his tropical clothes and radio gear for a trip to VU4! He's headed to "**HAMFEST (VU4) INDIA - 2006**" to be held in Port Blair, April 18 -20.

Glenn has received permission to operate from VU4, after the hamfest. And, he has installed his **W/K/NØ** passband filter between his ears. See the full details on page 28.


# Thoughts on Propagation From a Non-professional

*by Jim Junkert, KØJUH*

IN this issue, we are going to take a break from what we normally do, and try something different. In past issues, we have always featured material written by professionals: engineers, scientists, and others. Along the way, we hope we have provided the reader with interesting and educational information.

Hang on to your hats folks, this time a non-professional is going to take a crack at writing the column. He happens to be a member of the Grayline staff. Don't look for anything fancy, complicated, or technical. Instead, look for some very basic stuff on propagation, and a few tips on some of the tools that are available to all of us, that will help us understand and even predict propagation.

But first…….

When I was still in high school, back in the early 50's, I heard my first DX radio signal. I was amazed! It was a strong signal, and the voice belonged to a ham on the other side of the Atlantic. Back in the 50s, this was a big deal! It was a station in Germany which my friend Ernie, **WØYNZ**, was talking to. Little did I know at the time, my experience at Ernie's would be the beginning of a long career in amateur radio and DXing.

Do you remember that special occasion, when you heard your first DX signal? If you're a "young gun" in DXing, you won't have to go back that far, so it probably won't be that difficult. If you've piled up the birthdays, and you belong to the old farts club, memories become hazy and it may be more of a challenge. But try and remember.

After I became hooked on DXing, it was easy to become interested in propagation. The more time I spent on the bands, the more fascinated I became with radio wave propagation and some of its mysteries. Even though I wanted a better understanding of how it worked, I knew deep down I would never become an expert in the science and physics of radio wave propagation.

And then I discovered something. I could forget about becoming an expert – it was not necessary. If I was willing to learn the basics of propagation, and use the tools available to me, I would get along just fine in the world of DXing.

Let's take a look at some of these tools……..

***Propagation Prediction Software***

With the help of modern computers and software, we can ALMOST predict what's going to happen over any given path. Is this an exact science? Not really. But, the information will at least get you in the ball park. The software will predict the MUF and UTC when we can expect to hear the strongest signal on a given path. Some of these programs are available free-of-charge.

***Solar-terrestrial Indices and the Geophysical Alert***

This report is better known to most of us as the A and K numbers. The Solar flux measures the intensity of solar radio emissions, and the A and K

measure the behavior of the magnetic field in and around the earth. This report is broadcast on WWV at 18 minutes after the hour, and is updated every three hours. As propagation tools go, DXers probably use this information more than any other that is available to us.

***The Grayline***

We can't talk about propagation without mentioning the grayline. You will not need computers and software to predict when this will take place. Just make sure you're at the rig during sunrise and sunset times. Some incredible propagation can take place during these periods, especially on the low bands. There is no price tag on this tool. It will only cost you time behind the rig!

***The DX Packet Cluster***

Though not considered a prediction tool, some use the DX packet cluster as a barometer for what's going on with conditions. The spots are in real time, and indicate DX activity on the bands. And to a degree, DX spots can reveal what is going on with propagation – at least in that part of the world where the spotter resides. Thanks to the people who maintain the packet cluster nodes, this information is available to DXers, worldwide.

You may learn more about these tools by going on line, and putting Google to work. Any subject you Google related to propagation will produce a wealth of information.

***Log Data***

Sometimes we can use information from our logs to predict band openings. On 11Feb2006, **3YØX** was spotted on 12 meter CW at 16:00Z. Their signal was very weak and barely audible. I knew I had worked Peter I back in 1994, so I checked my log and found a 12 meter contact with **3YØPI** also on 11Feb, and noted that I had worked them at 1725Z – over an hour later.

If history was going to repeat itself, I had an hour to wait before I would work 3YØX, assuming I had worked 3YØPI when he peaked, back in 1994. Strange as it may seem, history did repeat itself. At 1720Z, the 3YØX signal peaked at S5, and I was able to log the contact. Other locals worked him also. The zero's had the skip!

Rather amazing, I thought. I had two contacts in my log with Peter I on 12 meters – 12 years apart, and within 5 minutes of each other. I'm going to chalk it up to lady luck and a coincidence in propagation.

***Favorite Tools***

Here are some of my favorite propagation tools and resources:

**W6ELProp** available at:
www.qsl.net/w6elprop/ (freeware)

**DX Atlas**, **Ham Cap**, and **IonoProbe** available at: www.dxatlas.com (shareware)

Several DXers maintain websites loaded with links to "other" propagation sites. One of these can be found at:
http://home.teleport.com/~nb6z/solar.htm

This site is devoted exclusively to HF propagation and has links to real-time solar information, i.e. the WWV report.

Good luck, good DXing, and enjoy that signal in your headphones – it's brought to you by the phenomenon we call propagation.

73, Jim, KØJUH

## Shack in the Sky

***This is WØEK's new shack. Someone told him he should be at least one wavelength above ground, In the future, he plans on doing the same thing with his antennas. :-)***

TCDXA Member Profile

# Larry Groom, WØFLY


Larry, **WØFLY**, has known about **FLY**ing all of his life. He was born on Wright-Patterson Air Force Base in 1957. His father began his Air Force career in a communications squadron, erecting radio towers. His father then made his way into aircraft maintenance, and spent the last 13 years of his career as a Flight Engineer for the C-121 Super Constellation and the C-141 Starlifter.

Growing up, Larry followed his father to his various assignments in Oklahoma, Texas and Massachusetts. He started **FLY**ing at age 16. Larry says, "My father owned and flew aircraft as long as I can remember, and I spent a lot of time as a kid hanging around airports. When I decided to learn to **FLY**, my dad took me to the Aero Club at Norton Air Force Base, and signed me up for lessons. I thought that was kind of odd, because my dad has his Flight Instructor Certificate. When I asked him why he wasn't going to teach me to fly, he said 'Son, you'll never listen to me - I'm your father!' We flew together a lot, after I got my license. And, it was quite the feeling, when, at age 17, he gave me the keys to his airplane and said 'Go have fun.'"

At age 19, Larry went on a two-year church mission to Brazil. Upon return, he earned his Instrument, Commercial, and Flight Instructor ratings on the side, while attending Brigham Young University. He did flight instruction at Embry-Riddle Aeronautical University in Prescott, Arizona. That's where he met his wife Dawn. Then, they moved to Salt Lake City, where Larry did flight instruction and corporate flying. Next, they moved to St. George, Utah, where Larry flew for Skywest Airlines. In 1985, they moved to Minnesota when he was hired by Republic Airlines (subsequently Northwest), and has piloted the DC-9, Boeing 727 and Airbus A-320. He is currently a Captain on the Boeing 757.

Captain Larry Groom at the controls of the Boeing 757.

Dawn is NØVOD. She got her Technician Class license about 12 years ago, before cell phones became popular, as a comforting means of calling for help from her car, if ever needed. It paid off one time, when Larry, NØXB, helped her out of trouble when her car overheated.

Larry's 22-year old daughter, Dayna, is currently in Australia finishing her early elementary teaching degree, by completing her teaching requirements, there. She at-

Larry and his family own two acres in a "skypark" near Jordan, MN. Notice that, in addition to his great-looking tower and 7-band Sommer beam, he has his own aircraft hanger right in his back yard!

tended the University of Minnesota, Duluth, and was the catcher for the Bulldogs softball team. She ended her senior year by being named to the All-Conference Team, the All-Region Team, and the All-American Third Team.

20-year old son Matt is **KCØFLY**. Matt is currently in northern Germany, serving a two-year mission for their church. He was also active in sports, especially baseball. Matt has also been bitten by the **FLY**ing bug. His father was his flight instructor, and has now worked his way up to Commercial Multi-engine pilot and Certified Flight Instructor. Matt attended St. Cloud State University, and he plans on studying Business, when he returns to Minnesota this coming September. Both kids are also certified scuba divers.

Larry said "My first introduction to radio was when my father was stationed in Thailand for a year, and we received a phone call from an Amateur Radio operator in Seattle, who was doing phone patches for Air Force MARS. I thought it was 'too cool' to be able to talk to my dad via radio and the phone lines from our house in California to Seattle, and then on to Thailand. I remember it took me a few transmissions to say 'Over,' so the Amateur in Seattle could switch from RX to TX.

Later, I noticed that the guy across the street had this funny-looking antenna on a tower in his back yard, and I soon discovered that it was a ham antenna. I was able to talk to him, and he showed me his 'shack.' (I now realize he had all Collins S-line equipment.) He gave me his Morse code practice tapes, which I have to this day. I learned Morse code in Boy Scouts, as part of my Radio merit badge.

I didn't go for a radio license at this time, as I was learning to scuba dive, **FLY** airplanes, and ride dirt bikes. But, I did take an electronics class in High School.

The radio bug bit after I got married, and we were living in St. George, Utah. I started off by buying a Sony shortwave portable, and listening to SW broadcast stations."

After being hired by Republic Airlines and moving to Minnesota in 1985, Larry met fellow pilot John Post, **KE7AX**, while riding in John's jump seat from Minneapolis to Detroit. John discovered that Larry was studying for his Novice license, and they became good friends. John showed Larry the ropes, and introduced Larry to other hams and Hamfests. (*ed.- John's current callsign is **K7SKI**, and he's an avid **SKI**er. I think I'm seeing a pattern, here.)*

Another of Larry's Elmers was Walt Feezer, **K4CVG** (SK). Walt was one of Larry's neighbors, when he was living in Prior Lake. Walt was from North Carolina, and with his southern accent, used to tell Larry "Boy, you better practice your CW before you get on 20 meters. Them boys will tear you up!" Walt was an exceptional CW op. Larry recalls, "He could be carrying on a CW QSO at 35 wpm and talk to me, while laughing at the jokes from the guy at the other end of the QSO at the same time!"

Larry was first licensed in 1986 as **KBØBIX**. He quickly progressed to Technician, General,

and Advanced within about a year, and became **KEØVZ**. Larry obtained **WØFLY** in 2002.

Larry's first rig was a Heath HW-101, which he had for a few months. He then upgraded to a Kenwood TS-520. He has since progressed through a TS-940, TS-850, IC-756, FT-1000D and an FT-1000MP Mark V. He currently has come back to a Kenwood TS-940S, plus a Ten-Tec Titan amplifier (see photo on page 5). He also has a 55-foot Hygain crankup tower, with a Sommer 7-band yagi on top, plus an 80 meter dipole.

For the past 7 1/2 years, Larry and his family have lived in a "skypark" near Jordan, MN (see photo on page 6). They own 2 acres next to a 5000-foot turf runway that is shared with 14 other neighbors. He has his own hanger in the back yard. It's a very ham-friendly environment. His neighbors helped him erect his tower, and the skypark Association President even did the finishing work on the concrete tower base!

Larry's hobbies outside of radio include scuba diving, computers, astronomy and, of course, **FLY**ing. This photo shows him at play in his Citabria aerobatic aircraft, which he parks at home.

Larry says that DXing is his favorite part of ham radio. His DX Elmers are TCDXA members **WØSX**, **WØZR**, **WØWG** and **NØXB**. They all talk in a daily roundtable, together with fellow boatanchor enthusiasts, on 75 meters. They often talk "DX," and keep Larry informed and inspired to chase the new and rare ones.

Here are two of Larry's DX radio Elmers - **WØSX** (l) and **WØZR** (r) helping with tower work.

To date, Larry has worked 311 DXCC entities. He especially likes chasing new ones on RTTY. He said, "I don't consider myself a hard core DXer because of all of the other things that distract me, including my family, work, and my other hobbies. But, I hope to devote more time to DXing in the future, as it sure is fun to work that new one. I did work 3YØX *nine times*!"

A ***BIG*** welcome to our newest TCDXA members:

| | | |
|---|---|---|
| **WB9OKQ** | Lyle Miller | Star Prairie, WI |
| **WØJAR** | John Ross | Alexandria, MN |
| **KØIVO** | Erv Grossman | Minneapolis |

# HQ9H

## 2006 ARRL DX CW Contest

*by Ron Dohmen, NØAT*

I started planning this trip last spring. I looked for a location where licensing is easy and where it is easy to get to, with no customs or antenna hassles. Rich, **NØHJZ,** had been to Roatan, but he had the misfortune of losing his antenna en route. Brent, **W5WW,** operated from Roatan a few years ago. Utila is a small island near Roatan, but without all the high tourist activity. The Slumberland Villas on Utila are listed as being "ham friendly."

When Vlad, **NØSTL,** joined in, the operation became a multi-single, so we decided to bring an amplifier. Vlad's son, Eugene - **KØIEX**, is into diving, so we added him to the list. Our wives made it a group of five. This allowed us to check ten pieces of luggage.

Since Rich had his bad experience with luggage on the local airline, I decided to set up the itinerary to minimize the possibility of losing luggage. The inbound trip did not include the local airline, but the return trip did.

We flew from MPLS to Chicago to Miami, and then on to San Pedro Sula, Honduras. Because the flight arrived in San Pedro at 7pm, we had to stay overnight in San Pedro. Our hotel, the Microtel, caters to foreign travelers, and the attendants speak English. Before arriving, we had the Microtel contract a local driver/van to take us from the airport to the hotel, and then return in the morning for the trip from the hotel to La Ceiba.

At 5am the next morning, we left the hotel for La Ceiba. By hiring the local driver/van, we were able to keep tabs on our luggage and get a free tour of the coastline. The drive to La Ceiba takes about two hours. On the way, we saw all the beautiful palm trees (for palm oil), pineapple fields, and factories (some of the locals are not very fond of the US-run factories).


Departing from the pier at La Ceiba.
(L-R) Ron, Faith, Valentina and Vlad. (photo by Eugene)

We arrived at the pier in La Ceiba at 8am, time enough to get our tickets for the 9:30 ferry boat to Utila. We were a little out of place. We had 15 pieces of luggage. Most of the other passengers had just a backpack. The ferry boat also loaded parcels and perishables for business on the island. An hour and a half later, we were on the pier in Utila.

**The Villa**

Kurt Halverson, originally from Minnesota, was our host at the Slumberland Villas. He met us at on the pier and arranged for our baggage to be transported to the Villa. Since we were leaving one week later and we did not have transportation arranged for our departure, I asked Kurt to help make arrangements.

The Villa was very nice, with two air conditioned bedrooms, a spacious kitchen, and a dining room/living room (ham shack). Water and electricity are scarce commodities on the island. City water is pumped to the residents for 2 hours, 3 times per week. Each villa has two large tanks to hold the water. I had to check the tanks to make sure they didn't run dry; we didn't want to burn out the pump. The electricity is pre-paid and costs 50 cents per KWH. During the trip, I monitored the meter to make sure we didn't run out.

The Slumberland Villas are located about a 20 minute walk from town. Bicycles are provided free and a golf cart can be rented. Luckily, all five us like to walk, so we walked to town two or three times a day. It is a very pleasant walk, on a small road along the water.

Our QTH at Slumberland Villas on Utila.

Kurt was very accommodating with our equipment and antennas. He didn't ask how much electricity the rigs take. But, since we didn't run the air conditioners, we felt we were ok. Every time I started to ask about putting up antennas, Kurt interrupted me; he said we could do whatever we wanted.

**Antennas**

We positioned our Butternut antennas to allow us to phase them on 40 and 80 meters. But, we ran out of time, and were not able to set up the phasing network. The HF6V was used on 20-17-15-10 meters, and the HF2V was used on 80-40 meters. Both of these antennas were placed directly in the water on the beach. We used them Wednesday night to run Europe and US, with the rig barefoot. We didn't have any radials attached to the antennas for the first day or so. At one time the tide went out, so we decided to install a few radials. I don't think the radials were needed, as the tuning didn't change when we added them.

Our Butternut antenna party.

The Butternuts needed guy wires. Vlad installed a top hat to the HF2V, which became part of the guy system. A couple of times it got very windy, maybe 40 mph, so the guys were definitely needed.

The HF2Vs needed guys.

An inverted L was used for the 160 meter antenna. It was about 70 feet vertical and 60 feet horizontal. During the installation, the fiberglass fishing pole broke about 10 feet from the top. Vlad spliced it with a piece of solid fiberglass he found. It was quite windy on

Friday (before the start of the contest). We had to decide whether to take the antenna down and rebuild it, or leave it alone. We decided to leave it alone, and that we would fix it if it came down. The antenna survived the entire week.

The base of the 160 L was about 15 feet from the ocean. We used four radials; one went directly into the water. The L tuned with some reactance. We tried to cancel it out with some series capacitance, but we just couldn't get it to tune. So we decided to try some parallel inductance. What do we use for a form? A beer bottle floated in from the ocean just in time to become our form for the 160 meter inductor. With the addition of a ferrite balun, the 160 antenna loaded up perfectly.

**Rigs**

We brought two IC756PROIIs and an ACOM 1010 amplifier. The 1010 in a Gemstar case weighed in at 50 lbs, the new baggage weight limit. We were permitted 70 lbs for this trip, because we bought our tickets before the end of October, so we had some weight allowance to spare.

The ACOM 1010 amplifier worked great. It put out a cool 700 watts, all week. I had to change out the line voltage selection from 110 volts to 120 volts. We were told the villa had 110 volts, but it actually has the same 240/120 volt system we have at home. The island folks are proud of their electricity; it has been in operation for over a year. When I powered up the amplifier on the second day, it worked fine. But after keying it up, there was a strange smell in the air. It was like someone was burning trash. The smell was not outside, and was not coming from the tube vent. After investigating, we found the 120 volt receptacle plate was trying to go into melt-down. The wiring inside the receptacle was loose, and extremely corroded. We then ran an extension cord to the other side of the room to power the equipment.

The protection circuit in the ACOM only tripped out once, when the 15 meter insulator on the HF6V burnt up. During the night after the contest, the power went off for about 10 minutes. The amp shut down when it sensed the line voltage was decreasing.

**Band-by-Band Breakdown**

Noise on 160 meters was non-existent. We decided we did not need to erect the receive antenna. Signals were typically S9, and the noise was S0. I've never seen anything like it. From working the pileups, it was obvious we could hear better than the stations we were working. During the contest, we had some Europe and JAs calling in. Even though we didn't get contest credit for these contacts, we logged them, and moved on.

The top hat on the HF2V made it play better than expected on 80 meters. We could tell we were loud, as it was easy to control the pileup.

40 meters was open most of the time. We had to stay low in the band, because the top hat on the HF2V made the antenna long. With the 40 meter coil completely shorted out, the antenna resonated right at the bottom of the band. At times, it was hard to squeeze in between all the East Coast CQ machines.

20 meters played well, during the late afternoon.

15 meters was better in the early afternoon. The 15 meter insulator on the HF6V burnt up Sunday afternoon. After it burned completely open, we retuned the amp, and kept going.

10 meters was in bad shape. I was concerned the antenna was not working, but the 3YØX station was over S9, as well as the LUs. We worked one US station Saturday. Every time we CQd on 10, all we worked were LUs.

Eugene, **KØIEX**, runnin' 'em on 20 meter SSB.

**The ARRL Contest**

Our XYLs were very understanding, staying out of our way, and letting us do our thing. Without them, our trip would not have been possible. They scheduled a sailing trip for Saturday, during the contest. After my shift ended at 10am, I walked with them into town to send them off on their sailing trip. The tour operator said the sailboat would be back in port between 5 and 5:30pm; they can't sail at night, and have to be back before dark.

I ended my 2 to 6pm shift an hour early, so I could meet the wives for dinner after their sailing trip. Vlad manned the pileup.

Vlad, **NØSTL**, handles the contest pileup.

Eugene and I arrived at the dock at 5:15, and no sign of a sailboat. We went to the bar, had a few beers, and still no sign of the sailboat. We asked at the tour office, they said the boat would be in between 6 and 6:30. So we waited for them on the dock. At 6:45 we got tired of waiting for them and thought they must have come in at some other pier. The tour office is now closed. As it turned out, they came back at 7:45, in the dark. Such is island life.

Upon returning from the sailing trip, our wives thoughtfully picked up a bottle of champagne to celebrate the end of the contest.

After the first 24 hours of the contest, it looked as though we were going to make over 5K QSOs. Our rates were consistently over 100/hour. But the QSO rates tapered off, and we missed making 5K QSOs.

Sunday morning was the most difficult time for us. The rate was low, and we knew the importance of multipliers in this contest. We had to make something happen on 10 meters. Our Sunday strategy was to run on 15 meters, and check 10 meters every 5 or 10 minutes. During these checks, we listened to the LUs and southern Caribbean stations running the US, but couldn't hear the stateside stations. We went up to 10 meters every 20 minutes or so to try to CQ the band open. Stations kept dropping in on our 15 meter run frequency, telling us 10 meters was open. On one of our excursions to 10 meters, we worked **WØAIH**, who helped open the band for us. Ten meters opened for very short bursts of QSOs. Sometimes we worked 2 or three stations; sometimes it opened for 15 minutes or so. This allowed us to put some much needed multipliers into the log. Maybe some of the 6 meter ops can tell us what kind of propagation we experienced.

**Outside the Contest**

Before and after the contest, we took turns casually operating the bands. I concentrated on 160, 30 and 17 meters. Eugene operated 20 SSB. And Vlad operated on all the bands. The night before packing up the equipment, Vlad handled a European pile up on topband, until the European sunrise. I woke up at 4am to work some Japan stations on top band, but either the band wasn't open, or no one was listening. I went to 80 meters and worked about 100 JA stations. We finished off with a little RTTY in the middle of the day. It took about an hour to take down the antennas.

Eugene, **KØIEX**, gets in several good dives.

**Departure**

We decided to return to the mainland via air. Taking the ferry boat to La Ceiba, and then a bus or taxi to San Pedro might not be reliable, and we didn't want to miss our flight to Miami. If our luggage got misplaced, it might eventually catch up with us.

We were not able to visit the travel agency until noon, the day before we were to leave. We handed her $500 in cash. She gave us no receipt and said she would deliver the tickets to us at our villa at 1pm. She showed up at 5pm with the tickets. She arranged for a taxi to pick us up at 5am for a 6am flight to La Ceiba, and then a 7am flight to San Pedro.

We woke up at 4am, got packed, and waited for the taxi to arrive at 5am. The taxi arrived at 6:15am. Did we miss our flight? Did it leave at 6am, on schedule? We got to the airport at 6:30; the plane hadn't even arrived yet from Roatan.

The airport manager is the son of a silent key, Frank Morgan, **HR6FM**. Rumor has it, this family, last name Morgan, at one time owned majority of the land on Utila. Since all transactions are in cash, and the largest denomination of Lempira is 100 (18 Lempira = $1), he would go to Jamaica with suitcases full of cash. The local bank wouldn't/couldn't handle all the money. Mr. Morgan is the grandson of Captain Morgan, the pirate.

We finally got off the island at 7:30, over an hour late. We landed at La Ceiba airport, paid our departure tax, and arrived at the terminal at 8am. Did we miss our 7:00 flight? The monitor said the flight was on time, leaving at 7:30. As it turned out, we got back on the same plane, and had a nice flight to San Pedro.

Because of the long layover in San Pedro, we were able to take a cab to a nice restaurant, where we had an enjoyable lunch. We basked in the warm sun for the last time, before leaving Honduras.

We then flew to Miami, and on to MPLS. Miami was quite a zoo - it was overwhelming at times. But, we made our flight to MPLS. My wife said four flights in one day are just too many. We woke up in Utila at 4am, and arrived home at midnight. Our luggage made it back with us. Just a couple of problems. My laptop (with the logs) was dropped to the floor by the security guards in San Pedro. And somewhere between San Pedro and Miami, Vlad's hard-shell golf case had its wheels broken off.

**Contest Statistics**

Multipliers missed:
All bands: LB NU NWT YT
160 meters: ID DC ND SD
80 meters: DC SK
40 meters:
20 meters: MB
15 meters: MB SK
10 meters: VT DC KY SC LA MS OK MT WV KS MO ND SD NB NF PE QC ON MB SK AB BC

| | Valid QSOs | W/VE Multipliers |
|---|---|---|
| 160 | 412 | 55 |
| 80 | 700 | 57 |
| 40 | 1049 | 59 |
| 20 | 1152 | 58 |
| 15 | 1063 | 57 |
| 10 | 153 | 37 |
| Total | 4529 | 323 |
| | | = **4,388,601** points |

We want to thank all the TCDXAers and MWAers for their great support throughout the contest and casual operation. It was very motivational to keep the rates up, handle pileups, and to hear weak ones. QSL via **WØJAR**.

Ron, NØAT and Vlad, NØSTL

# REPORT FROM THE ARRL BOARD OF DIRECTORS MEETING

*by Jay Bellows, KØQB, Dakota Division Director*

The ARRL Board of Directors held the first of two annual meetings on January 19 and 20, 2006 in Windsor Locks, CT - near ARRL Headquarters. The main topics for discussion were election of officers, Amateur Emergency Services post, 9/11 and Hurricane Katrina, HF band planning, Spectrum Protection, Education and the nuts and bolts of Amateur Radio Clubs, Field Organization and Operating Activities.

After six years as ARRL President, Jim Haynie, **W5JBP**, chose to "retire." In recognition of Jim's excellent efforts as a spokesman for ARRL and Amateur Radio, the Board elected Jim "President Emeritus."

The New ARRL President is Joel Harrison, **W5ZN** of Judsonia, AR. In his professional life, Joel is an engineer and is Director of Non-Destructive Testing of Nuclear Power Systems for Washington Group, International. Joel has a long and distinguished career as an ARRL official, starting with appointment as Arkansas SEC at age 23, and progressing through positions as Section Manager, Division Director, ARRL VP and now ARRL President. On the operating side, Joel has kept equally busy earning 9-band DXCC, and VUCC awards through 23 GHz. Jim Haynie may have retired, but ARRL is in the good hands of its new, energetic and very capable 47-year old President.

With the election out of the way, the Board addressed a number of the substantive issues facing Amateur Radio. The response of Amateurs and ARES to the Gulf Coast hurricanes was high on the list of those issues. By and large, Amateurs and ARES worked well, but problems can and do occur when the disaster is spread over several States or Sections. The Board recognized we needed to review what we did well, what needs to be improved and how best to utilize Volunteer Emergency Communicators. As a start, staff has already met with the Mississippi and Louisiana Section Managers to debrief and review their experiences.

Looking toward the future, the Board established an *ad hoc* ARRL National Emergency Response Planning Committee. The Committee is tasked "to appropriately prepare for future large-scale disasters." The panel will develop a comprehensive recommendation for ARRL responses to national, regional and international disasters. The panel will present its recommendations to the Board at its 2007 annual meeting, next January.

BPL is still alive and kicking in several places. The two most troublesome are Briarcliff Manor, NY and Manassas, VA. Both systems are first-generation, and continue to radiate harmful interference. ARRL has repeatedly made FCC aware that these systems are not complying with FCC rules. To date, FCC has not resolved the issue. The Board is considering possible legal action. On a brighter note, some of the newer systems appear to present substantially reduced interference. For example, the Cinergy system in Cincinnati, OH and the Motorola LV show some promise of being able to co-exist with Amateur Radio, as do the Wi-Fi systems.

The Board also discussed the need and importance to develop a sound process for HF band planning, to coincide with the Petition pending before FCC to allocate sub-bands by bandwidth, and the ARRL President was directed to appoint a Band-Plan Committee to work with broad participation by the amateur community in proposing an HF Bandplan. Selection of that committee is already in process.

Spectrum Protection remains an area of prime concern. In addition to our ongoing Defense of Frequencies effort, the Board recognized the need to emphasize direct contact with lawmakers in members' home districts. As part of that process, we should be generating legislative support for Amateur Radio-related legislation. We can do this through letter writing by members. A sample letter is on the web, and can be access by clicking on the *ARRL Government Relations* button on the ARRL web page. That web page contains all the information you need, including how to contact your US Representative or Senator, and his or her address.

*- ARRL Board of Directors Meeting, continued*

The Educational Task Group reported on its activities. They are working on improved instructional materials, including a substantially-revised ***Now Your Talking***. The Group is making strong effort to relate materials to the New Technician Question Pool.

Several other member-oriented projects were reviewed, including a Club e-newsletter, to provide additional information and resources to clubs, and a Mentoring Program with emphasis on developing mentors for new hams in clubs. Of interest to DXers, is a possible change in the DXCC definitions of "political entities" that could result in several new DXCC entities.

Finally, the Rule regarding Field Day bonus points for Get On The Air (GOTA) stations has been changed. The new point structure provides that up to five GOTA operators can each earn an addition 100 bonus points for making GOTA QSOs, *and* if the GOTA station has a Mentor/Coach present whenever the GOTA is on the air, the bonus points can be doubled. TCFMC could add up 1000 bonus points to its Field Day 2006 score! Check the ARRL Webpage for full details.

Let me know if you have any questions regarding the Board Meeting or any other ARRL issue. I can be reached at k0qb@arrl.org or (651) 238-4444.

73, Jay Bellows, KØQB,
ARRL Dakota Division Director

## Who Owns this Shack ? (Answer on page 29)

Hint: Lots of CQ Contest awards.

Hint: Think outside the club.

## DX Quiz The Islands and Oceans of the DXCC and a Short Lesson on Oceanography.


Some of our rarest DX entities are islands located throughout the oceans of Planet Earth. A satellite view reminds us of the tremendous amount of water that covers the surface of the planet. To be exact, salt and fresh water make up 71% of the earth's surface area.

For many years, only four oceans were officially recognized. And then, in the spring of 2000, the International Hydrographic Organization established the Southern Ocean, and determined its limits. Those limits include all water below 60 degrees South latitude, and some of it is frozen.

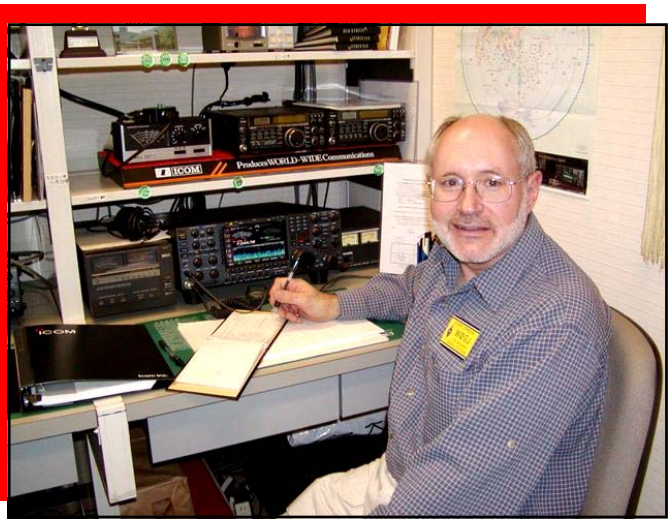
Our five oceans: the Arctic, Atlantic, Indian, Pacific, and Southern make up approximately 66% of earth's surface area, and are host to thousands of islands, some of which appear on the DXCC list. The popular IOTA program recognizes over 1200 island groups.

We've provided you with a short lesson in oceanography, and now its time to get on with the quiz. You will find, listed below, some of the islands that appear on the DXCC Entities list. Next to each island we've listed two oceans. One of them is the host ocean for that particular island. See if you can select the correct one. Careful – it's a bit tricky! If you score 100% without referring to the World Atlas, consider yourself an *Expert on World Geography*. Good Luck!

| Prefix | DXCC Entity | Ocean - Select One |
|---|---|---|
| 3YØX | Peter I Island | Pacific or Southern |
| 9MØ | Spratly Islands | Indian or Pacific |
| CEØZ | Juan Fernandez Is | Atlantic or Pacific |
| VP8 | Falkland Islands | Atlantic or Southern |
| JW | Svalbard Island | Arctic or Atlantic |
| JX | Jan Mayen Island | Arctic or Atlantic |
| TF | Iceland | Arctic or Atlantic |
| VK9X | Christmas Island | Pacific or Indian |
| VKØ | Macquarie Island | Atlantic or Southern |
| ZS8 | Marion Island | Atlantic or Indian |

Answers on page 29

# The Asia Pacific DX Convention




*by Glenn Johnson, WØGJ*

My youngest daughter, Carrie, NØCMJ, and I were fortunate enough to attend the 1st ever Asia Pacific DX Convention held just before Thanksgiving, last fall.

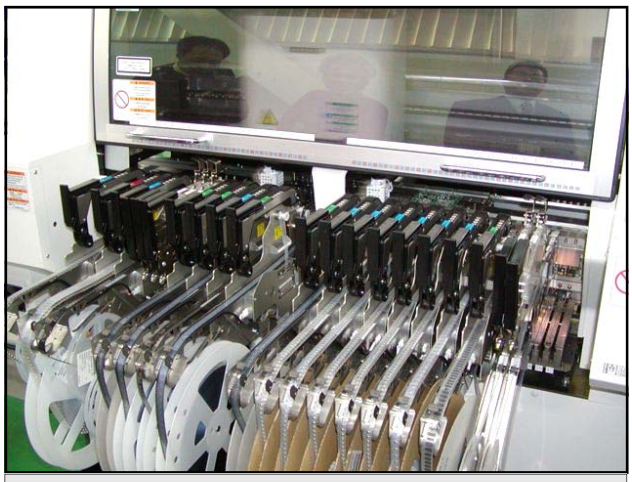
The convention was headquartered in the Osaka International House Hotel, which has a fully equipped HF station for use by guests (see photo, above). An ICOM 7800 is just one of the HF radios for use. Many large antennas are on the roof of the hotel.

A handful of non-Japanese delegates were the honored guests of Mr. Tokuzo Inoue, JA3FA, and president of ICOM. We were privileged to tour the ICOM factory in Wakayama, Japan, about an hour south of Osaka.

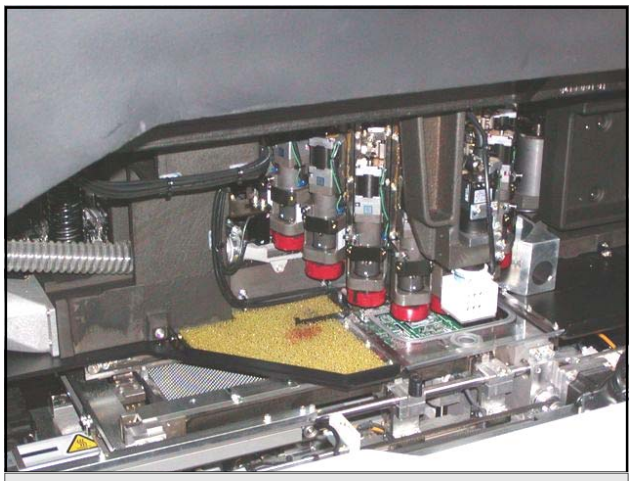
Our tour group outside of the Wakayama ICOM factory. You might recognize **K4UEE**, **VR2BG**, **9V1YC**, **ON4UN**, **WØGJ** and maybe **NØCMJ**.

ICOM has the most modern and efficient radio production facility in the world. The Wakayama facility has over 280,000 square feet. Overall, ICOM Japan employs 950 people, of which 304 are engineers.

At the Wakayama facility, there are 9 automated PCB/SMD (printed circuit board/surface mount device) lines that work 22 hours/day, installing 90 million components/month. This is 10 components per second! There are 5 automated PCB checkers for the 220,000 circuit boards made per month.



Reels of surface mount components feeding into the pick-and-place machine.



Inside a pick-and-place machine, which populates PC boards at the rate of 10 components per second.

Automated robots roam the factory delivering components to every part of the factory. When they approach a human, a little jingling sound is heard, just like the little ice cream truck that roams the streets in the summer, as if to say, “I’m coming through!”

Robots, like cars, drive on the left in Japan.

There are 8 assembly lines staffed by real people that assemble all of the subcomponents into a real radio. They produce a total of 110,000 radios per month. Of these, 70,000 are handhelds, 36,000 are “mobile” and 4,000 are “base station” radios.


One of eight assembly lines - today assembling IC-7000s.

The assembly line can put out about 165 IC-7000s per day, and about 36 IC-7800s per day. We did not have the opportunity to see the 7800s in production the day we were there, but they were gearing up for a very large production run of over 2000 7800s! These had been ordered by various military and state departments around the world.

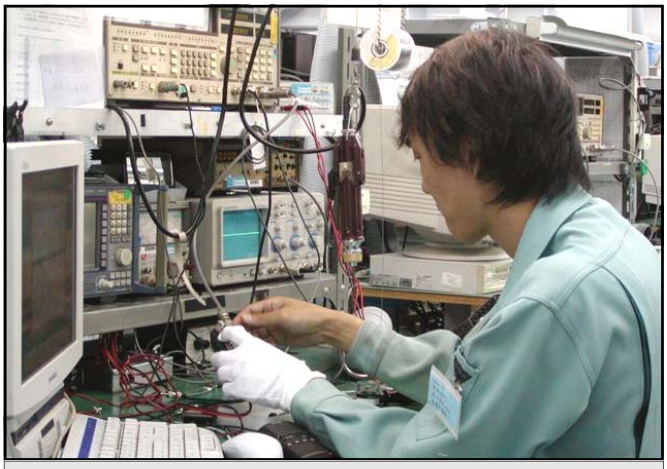
Carrie behind batch of IC-7000s hot off assembly line.

Everywhere I went in Japan, I took notice of handhelds used by police, security and transportation personnel. With rare exception, the handhelds were all ICOM.

I was interested in the accuracy of the final product. As you can see on the chart, there is nearly 100% perfect checkout fresh off the assembly line. If there is any defect, the remaining fraction of percent is essentially 100% perfect after going through the “fix it” line. These guys are literally like the old Maytag washing machine repairman, nothing to do!

| 保証検査合格率 | 管理値 100% | | (%) |
|---|---|---|---|
| | 昨日 合格率 | 当月 累計合格率 | 今期 累計合格率 |
| 1ライン | 100.00 | 98.36 | 99.50 |
| 2ライン | 100.00 | 100.00 | 99.86 |
| 3ライン | 100.00 | 100.00 | 99.47 |
| 4-1ライン | 100.00 | 100.00 | 99.59 |
| 4-2ライン | 100.00 | 100.00 | 99.68 |
| 5ライン | 100.00 | 100.00 | 98.99 |
| 6-1ライン | 100.00 | 100.00 | 99.34 |
| 6-2ライン | 100.00 | 100.00 | 99.68 |
| 外注 | 100.00 | 100.00 | 99.58 |
| その他 | 100.00 | 100.00 | 98.98 |
| 全ライン | 100.00 | 99.76 | 99.48 |
| 受入検査 | 100.00 | 100.00 | 99.70 |
| 出荷検査 | 100.00 | 99.45 | 99.42 |

Monitoring final product quality.



The "Maytag man" finally finds a radio off of the assembly line that needs a tune-up to meet specs.

My favorite part of the IC-7000 assembly line was the girl who beat the radio with a rubber mallet for several minutes while a computer tested and retested all of the function of the radio. I never saw a glitch. I bought an IC-7000 after I got home to install for mobile HF. If it can take the beating on the assembly line, it will survive in my car! All of the radios on the assembly line go through this "burning" in!!! I call it "beating in!"

The "beating test" in final assembly of an IC-7000!

After the tour, our group traveled back to ICOM's Osaka headquarters to meet with Mr. Inoue, the ICOM chief HF engineer and the chief engineer who designed the IC-7800, for a question and answer session. ICOM was all ears to our comments and I have the distinct feeling that they want to build radios to do what we want them to do. They crave our input. They are "conservative" and want to do things right the first time. There are some exciting things in the design stages as well as some nice firmware upgrades coming for the 7800's.

Mr. Tokuzo, **JA3FA** - "Mr. ICOM."

Chief HF Engineer.

"Mr. 7800."

The current ICOM product line at Osaka HQ.

The ICOM museum was a trip down memory lane. Even though limited to ICOM radios, every model ever produced by ICOM for any service was present, neatly organized by decade. It was fascinating to see the progression over the past 40+ years. There were several working HF and VHF/UHF stations, connected to nothing less than huge arrays on top of the building.


Part of the ICOM museum.

ICOM Osaka headquarters...Nice antennas!

I don't think I've seen a day go by so fast in a long time. The engineering, quality and function of ICOM radios were really impressed upon me. No wonder ICOM is in the equivalent of the "Fortune 500 companies" traded on the Tokyo Stock Exchange. If you ever get a chance to be in the Osaka, Japan, area, any ham has a standing invitation to ICOM headquarters and museum. 73! Glenn

## KØPC Replaces KØPA

### as Dakota Division DXAC Representative

TCDXA member Pat Cain, **KØPC**, has accepted nomination by Jay Bellows, **KØQB** to represent our Dakota Division on the DXCC Advisory Committee (DXAC). Pat replaces Paul Larson, **KØPA**, who has held the post for many years.

Originally from Iowa, Pat and his wife Marlyn currently live in Chanhassen. He is employed as a software engineer. Pat has been licensed since 1969, and has been DXing from his current QTH since 1995.

Please direct your DXCC suggestions and concerns to Pat at k0pc@arrl.net. And be sure to congratulate Pat on his new post the next time you see him or hear him on the air!


A surprise discovery in the restroom at the ICOM factory!

# The 3YØX DXpedition to Peter I – An Overview

*Reflections and Insights by co-Team Leader Ralph Fedor – **KØIR***


In 1994, I stood on the rear deck of the Academik Fedorov, as it sailed away from the island of Peter I. I tried to burn the image of the island into my mind, being quite sure that I would never see that place again.

A few weeks ago, I stood on the rear deck of the DAP Mares, once again watching Peter I fade into the fog of the Bellingshausen Sea, as we sailed away from the island. I had returned, and once again survived a stay at Peter I; a stay again punctuated by howling winds, blowing snow, cold temperatures, fog, and rare days of sun. The return trip was spawned three years earlier, while sailing home from a South Sandwich / South Georgia DXpedition. The predictable question, "Where do we go next?" arose. The logical answer seemed to be, Peter I. My partner, **K4UEE**, and I began working on the project.

Getting to Peter I a second time was not an easy journey. In the last three years, three ships had assured us that they were up to the task. Each failed to be as represented. We had gotten as far as mustering the team in Ushuaia, Argentina last year, only to be again disappointed in our transportation. Thousands of man-hours had been spent in obtaining permits, acquiring and configuring equipment, logistical planning, packing and shipping equipment, and recruiting funds and people to complete the task. After last year's disappointment the temptation to "forget it" was very real.

Then, one evening in Punta Arenas, Chile on my way home last year, I met with four men. Their company had been providing air support to Antarctica for 23 years. They had just purchased a ship, the DAP Mares, and wanted to talk about the possibility of using it and one of their helicopters to land our team on Peter I. We turned the corner that night and the Peter I DXpedition became "possible."

Zodiac ride to the DAP Mares.

I say "possible," because there were still hurdles. Several team members chose not to continue with us, all permit applications had to be re-written, and the costs of this capable ship and helicopter pegged this as the most expensive DXpedition in history.

Then, there was the human factor. We needed at least 20 men, each contributing heavily towards the cost of the DXpedition. Each of the 20 would have to be away from home for six weeks. Each had to be

screened and interviewed so that we could be reasonably certain that they could live together in close quarters in a stressful situation for a long period of time. We needed men who could shovel snow, tolerate harsh weather, tie knots, improvise, and remain calm when disaster threatened. Everyone had to understand that their strength would stem from the team and that the strength of the team would stem from each one of them. There could be no Prima Donnas.

DXpedition teamwork - it's not just about the radio.

Then, after all this, everyone had to possess reasonable radio skills: pile-up management, an understanding of propagation, and general savvy with equipment and antennas. And, if the radio skills weren't quite there, humility and a willingness to learn went a very long way toward acceptability. An excellent operator without a willingness to work hard on non-radio projects, show regard for fellow team members, or who would choose only to sleep, eat, and operate; would not make the cut for a DXpedition to Peter I.

When all was said and done, it was difficult to find 20 men on the planet with the right attributes and attitudes. But now that I can look back on the experience, I can breathe a sigh of relief and say, "We found them." Some were naturals, others were willing to learn and be molded. The molding and team building occurred during a fall meeting in Atlanta, and over the course of our sail from King George Island to Peter I. In the end, all our team members did their job, some helping to prove that experience is one of the more inflated commodities in the market place.

Those jobs were doing whatever was necessary to maximize the number of QSOs from 3YØX. They may have been refueling generators, repairing generators, clearing snow away from the shelters and generators, preparing a meal, washing dishes, managing our waste, repairing shelters and antennas, ferrying fuel and supplies between camps, or changing propane tanks. Less often, it meant actually getting on the air to hand out the QSOs. The visible or audible part of 3YØX represented a fraction of the total effort involved.

Initially, the QSOs were made with a "wall of sound" emanating from the receivers. At times, I think there were 10 stations per Hz. On CW, calls had to be separated by speed, cadence, and timing. The density of the signals made it difficult to maintain a rate of 150 per hour. On SSB, signal strength and audio punch ruled. With time, the pile-ups thinned, but there were stations to work until the end.

I probably spent 95% of my time on CW, and


"Those jobs were doing whatever was necessary to maximize the number of QSOs from 3YØX."

The action inside Operating Shelter "A."

I seem to attract Europeans. I don't mind that, since I look at it as payback for the contest QSOs they have given me. But, I do recall a few great runs into North America, and working TCDXA and MWA members. Hearing those familiar calls come through was a real thrill. These were my most memorable moments during the DXpedition.

My operational responsibility was operator scheduling – the man, the mode, the band, and the geographical area to be worked. Initially, the schedules were based on predictions. Later, I used actual, observed openings and patterns to assign operators to their positions. We made an effort to be there when openings occurred. Ten and twelve meter openings were not expected, but when they did occur, I think we were there. I really don't think we missed any.

Ralph analyzes QSO data to update operator scheduling.

We divided ourselves into a number of work teams. I was a member of the antenna team. This group assembled and maintained the antennas. The CW stations used vertical dipoles (SVDAs) for 20 to 10 meters, and conventional verticals on the other bands The SSB stations had 2-element SteppIR beams for 20 – 10, and verticals on the other bands. The SteppIRs seemed to outperform the verticals, and held up very well. We once again constructed a 3-element 160 meter wire beam, which was suspended a few feet above the ice. It, and the Battle Creek Special, served us on 160.

The 2-element SteppIR beams for 20 through 10 m.

Other teams among us included: shelter construction and maintenance, generator maintenance, power distribution, kitchen assignments, waste management, environmental monitoring, medical and safety, computers and networking, and log updating.

EME added a new dimension to 3YØX. We made roughly 120 EME QSOs on 2 meters. We were not successful with EME on 6 meters or 432 mHz.

2 meter EME antennas go up.

Other side adventures included traveling with the world's most traveled man, hosting a German research team while they placed a weather station on the island, rendezvousing with a small Russian sailboat circumnavigating Antarctica, a stop at Deception Island, and operating from the **R1ANF** shack in the South Shetlands.

Main camp - looking toward North America.

Weather prevented us from getting everything on line as fast as we had hoped. We also began our tear-down a little early, when we learned of approaching bad weather. Still, we managed about 87,000 QSOs, and distributed them pretty much in line with the world's ham population.

Our inflatable penguin at the weather station.

If I were to join the ranks of the Monday morning quarterbacks and ask, "What would I do differently?" I'd probably try to decrease the complexity of our infrastructure. But, this a tough call. In a place like Peter I, you need a solid infrastructure of support. There are no second chances, and Mother Nature, not you, is the one in charge.

I'd also think about alternatives to the SVDA's. While they are light weight, go up quickly, and have little wind resistance; the StepIR's always held the band longer. The SVDA's gained their reputation by being immediately adjacent to salt water. We were at least 400 feet above the ocean and at least a quarter mile from it.

Almost everything else was out of our control: the wind, sea swells, fog, ceiling, precipitation, and intestinal fortitude of our helicopter pilot. We tried to control what we could, and accept what we could not.

Despite having to crawl out of a sleeping bag with snow drifted across it, put on boots whose inside temperature was below freezing, wonder if the wind would ever stop blowing, and having a primal fear of having to go the bathroom, it was a good trip. Would I do it again? Absolutely!

Grayline at 3YØX.

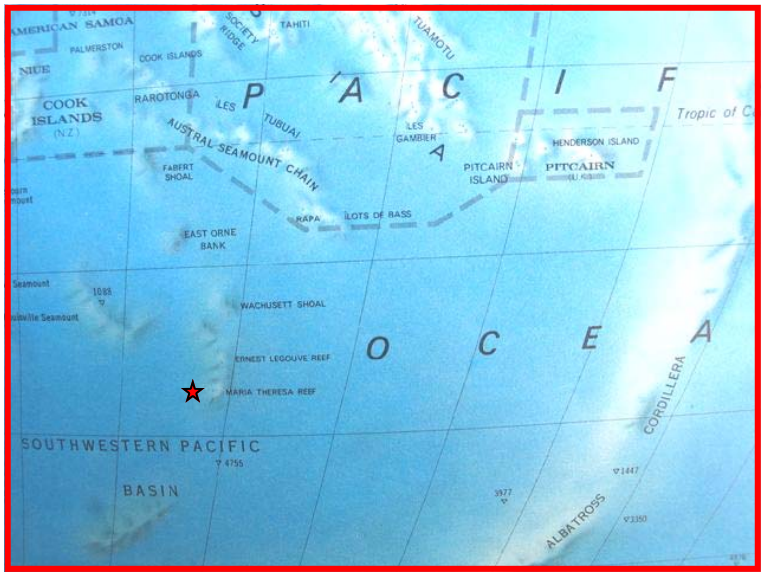
There are many stories to tell and they will unfold at meetings and conventions, where DXers gather in the coming months. To all of you who contacted us, thank you for the QSO, and for sharing the adventure with us.

Vy 73 - Ralph, KØIR

*ed. - If you have not already done so, PLEASE consider a personal donation to the 3YØX operation. See* www.peterone.com *for details on ways to donate.*

# MARIA THERESA REEF – THE PHANTHOM ISLAND?

*by Dave Wester, KØIEA*




During the 1960s, there were two prominent DXers that put a lot of rare DX on the air: Gus Browning, **W4BPD** (SK), and Don Miller, **W9WNV**. Most of these operations counted, but some did not. One such "disallowed" operation was **FO8M** by Don Miller in April 1966.

I was first made aware of this operation when Paul Larson, **KØPA**, and I visited Joe, **WØSUU** (sk) in the late 60s. We were talking about DX and DX QSLing, when Joe said, "Here's one you two don't have." He showed us his FO8M card. For some reason, I was fascinated by this card, and always had it in my mind to do some research to satisfy my curiosity about this operation. Because of the recent interest in QSL card collecting, now seemed like a good time to revisit this story.

In April 1966, Don Miller, W9WNV, went on the air signing FO8M, ostensibly from **Maria Theresa Reef**. I have four atlases, but I only found the reef in my Rand McNally International Atlas. The location shown is 37.00 degrees South and 151.15 West. If you have an atlas of the South Pacific, I invite you take a look at that location. Talk about remote and isolated, Maria Theresa Reef would have been a long way from any human inhabitation. But, at a time when some DX egos were overly inflated, there apparently was a big push to put "new ones" on the air.

From the internet sources I checked, Maria Theresa Reef did appear on old mariner nautical charts. But, a search for the reef in the 1970s by a New Zealand ship found nothing. Miller reportedly saw the reef still listed on nautical charts some 150 years after it first appeared on English oceanographer's charts. This was Don's "proof" that it was legit. As further proof, even some National Geographic maps showed the reef.

My Rand McNally atlas, which does show the reef, was copyrighted in 1977. If you find it on a map copyrighted after 1983, you will see that they "moved" Maria Theresa Reef from 151.13 degrees west to 136.39 west. It's a good thing Don made it there in 1966, before they moved the reef.

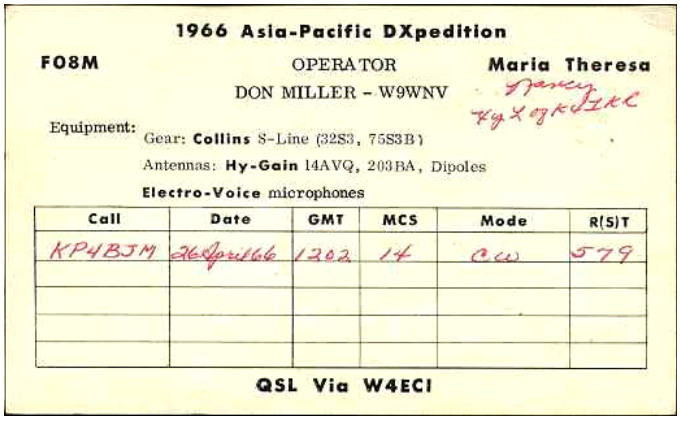
According to the late, Hugh Cassidy, **WA6AUD**, "Don Miller had a picture of himself setting up to operate on Maria Theresa. He was standing on a coral reef, gear under his arms, and with the surf up to his knees. Don said he used a card table on which to mount his gear, and could not leave his chair for fear of being swept away."

If any TCDXA members have an FO8M qsl card, I'd be interested in knowing if it shows a date other than 26 April 1966. In other words, I'd like to know if the operation lasted more than one day.

Finally, I put in a call to Bill Moore, **NC1L**, from the ARRL DXCC desk. He referred me to the quote from September 1972 QST, page 106 regarding Maria Theresa: "Effective as of October 1, 1972, the Maria Theresa listing which has appeared on the ARRL Countries List is removed, and all DXCC credits which have been given for that listing will be annulled. Information which has been gathered leaves no question but that no island, reef, or shoal exists in the area between 36 degrees 50 minutes South to 37 degrees 15 minutes South and 150 degrees 45 minutes West to 151 degrees 37 minutes West - the area in which Maria Theresa was alleged to be located. Official government charts of numerous soundings made in this area show no depths of less than 2850 fathoms."

There you have it. Real or not, Maria Theresa certainly deserves a place in our DXCC history and lore.

73 de Dave, KØIEA



1966 Asia-Pacific DXpedition

FO8M OPERATOR Maria Theresa

DON MILLER – W9WNV

Equipment: Gear: Collins S-Line (32S3, 75S3B)

Antennas: Hy-Gain 14AVQ, 203BA, Dipoles

Electro-Voice microphones

| Call | Date | GMT | MCS | Mode | R(S)T |
|---|---|---|---|---|---|
| KP4BJM | 26 April 66 | 1202 | 14 | CW | 579 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

QSL Via W4ECI

# WØDJC Achieves DXCC #1 Honor Roll!

**Don Currier, WØDJC, of Hermantown, MN proudly displays his #1 Honor Roll plaque.**

**The award is a result of Don working the VU4 Andaman and Nicobar Islands operation in December of 2004 for his "last one."**

**Congratulations, Don, on your *outstanding* DXing achievement!**

. . . — . —  . . . — . —  . — . — .

## TCXDA Treasurer's Report
## YTD Jan 1 thru March 20, 2006

**Assets and Income**

| | |
|---|---|
| Balance Jan. 1, 2006 | $ 2,722.40 |
| Annual dues collected-2006 | 1,416.00 |
| Donations | 264.00 |
| "Pass the hat" contributions | 53.00 |
| Miscellaneous | 0.38 |
| Total 2006 assets | $ 4,455.78 |

**Expenses - YTD**

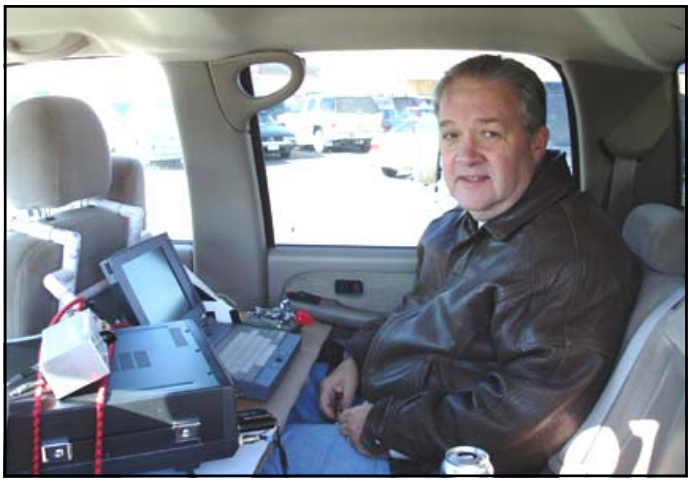
| | |
|---|---|
| MWA donation | $ -75.00 |
| Glorioso donation | -250.00 |
| Funeral flowers | -191.99 |
| Bank fees | -13.25 |
| Total 2006 expenses | $ -530.24 |

**Current balance, March 20, 2006:**

**$ 3,925.54**

# Reflections on 2006 Minnesota QSO Party

*de Al, KØAD*



Jim (**KØJUH**) asked if I would write something up for the *Gray Line* on this year's **Minnesota QSO Party**. I'm always a little hesitant to do that because the official results are still being compiled by Mark, **WAØMHJ**. Mark does a tremendous job of pulling together all the logs, checking them, and issuing a great report on this increasingly popular event. So maybe I'll just put down a few reflections I had about this year's event.

I have to admit that when I first heard about the concept of driving around as a mobile during a State QSO party, I thought it would just be a novelty. I had no idea that the level of activity for mobiles would be so intense. Some of the top rovers in the Minnesota QSO Party are approaching 1000 QSOs in a 10 hour period. I can't think of any other contest that I operate from home during the entire contest season in which I am able to sustain a rate like this for ten hours. Add to this the challenges of operating in cramped conditions in a car / truck and this turned out to be a real test of operating skill.

Having operated as a rover in MNQP for three years now, I submit that the following <u>three</u> things are the key to success:

Planning the route

Pre-flight check

Learning to work the pileup

### *Planning the Route*

Planning a route is extremely important. I am fortunate to work with Dan, **NØPI**, who takes care of this every year. Dan pours over the road atlas for months before the event, looking for routes that will make sure we can spend just the right amount of time in each county. There are 87 counties in Minnesota. We have found that 20 counties is about the limit that we can cover in 10 hours. Since we usually stop for at least a 30 minute lunch, that gives us 28 minutes per county. It's important that the route be planned so that you don't spend *too much* or *too little* time in any one county. If you do need to shortchange a county, it's best to do it with some of the most common counties (e.g. - Hennepin, Ramsey, etc.).

Dan set up a couple very simple props that helped us manage this. One is a simple flip chart that tells what county we were in. When things are going hot and heavy, you would be surprised how easy it is to forget what county you are in. The other prop is a simple oven timer. Dan would set it to 28 minutes, each time we entered a new county. He would then give me a "five minute" warning, when we were about to leave the county. In some cases, we would pull over for a few minutes if the rate was still strong, as we neared the county line. Most of our operation was on 40 CW and 20 CW, with a little 80 CW later in the afternoon. The timer also allowed me to pace myself, to make sure I spent enough time on each band.

### *Pre-Flight Check*

Needless to say, it's important to make sure that everything is working well, before leaving. There are all kind of things that can go wrong. Simple things, like making sure the SWR is OK on all bands and that you can quickly shift bands.

The **NØPI** Rover-mobile passes the pre-flight check.

Checking for ignition noise is important, as this can really slow you down. One of the rovers, this year, discovered he had bad ignition noise early in the day, and was unable to copy scores of stations that were calling him. Just like your home station, RF glitches in the computer can easily happen, and should be checked out ahead of time. Dan and I usually accomplish this by taking a drive at noon time on Friday, to make sure that everything is working under real driving conditions.

There are a lot of ways you can do the logging. Some software, like ***Writelog***, are set up for county-to-county operations. Since you can work the same station multiple times as you go from county to county, you have to be sure your software does not log the multiple contacts as dupes. Dan found an older DOS laptop that seemed bullet proof, and worked off of 12Vdc. For this reason, I chose ***NA*** (i.e. - a DOS program). I set up a separate log for each county. The F key messages had to be programmed, individually, for each county. I then set up a .BAT file, using the name of the county. As we left one county and entered another, I simply exited NA, and typed the 3 letter name of the new county. I was up and going for the next county. Of course, setting this all up ahead of time (and checking it out) saved a lot of time during the QSO party.

***Working the Pileup***

As I alluded to earlier, I had no idea that I would be worrying about pileups in a QSO party – especially from a mobile. As it turned out, however, all the rovers faced HUGE pileups, as they entered each new county. The pileups were intense, but relatively short-lived. If your first CQ from a new county resulted in a pileup, where you simply weren't able to pick out a call, the best thing seemed to be to try and send at least a letter or two from the call you hear the best, followed by a "?". Even though that didn't guarantee that just one guy would come back, I was usually able to get the full call the second time. Another thing you could do is nothing, and wait for the second wave of callers. Although I would sometimes do this, I found that it slowed things down. Some of the rovers admitted that they sometimes just sent a call of someone who they thought was probably in the pileup (e.g., **NØAT**, **KØSR**, **K9NW**,etc.). It was surprising how often

With "Captain" Dan, **NØPI**, in the driver's seat, the **KØAD** MNQP rover is ready for action!

that resulted in a Q. Certain stations had an uncanny knack of knowing when you were going to cross the county line. One that comes to mind is K9NW. Many of the rovers said that K9NW was usually one of the first three stations they worked when they entered a new county. It's not surprising that he has managed to work all 87 of Minnesota's counties during the last two MNQPs.

***Final Comments***

Our ten (actually 9 ½) hour effort resulted in 741 QSOs in 58 sections, for a score of 87,522. Although Dan and I have improved each year, we still find ourselves in the middle of the pack of the 10 mobiles that participated this year. This shows you how competitive the rover category is in MNQP! Interest continues to grow, nationally, in this event. One of the things that is consistently pointed out by the out of state participants is the effort made by the rovers in MNQP. In fact, we probably need to balance this out a little, by encouraging more fixed station operation from Minnesota stations.

Finally, I would like to again thank the Twin City DX Association for their continued sponsorship of this event. Specifically, TCDXA sponsors the popular W/VE plaque. Clubs like TCDXA, TCFMC, Northern Minnesota DX Association, and the St. Paul Radio Club, in addition to a number of individual sponsors, make it possible to put on and grow the Minnesota QSO Party, each year.

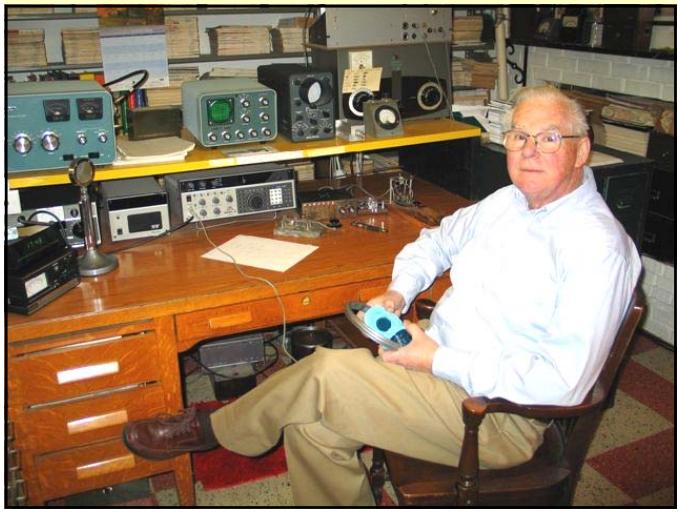
Stay tuned for the detailed Minnesota QSO Party report, which will be out shortly from Mark, WAØMHJ.

Vy 73 de Al, KØAD

# A LOOK BACK

**An interview with Dick George, WØTRF**

*by Dave Wester, KØIEA*



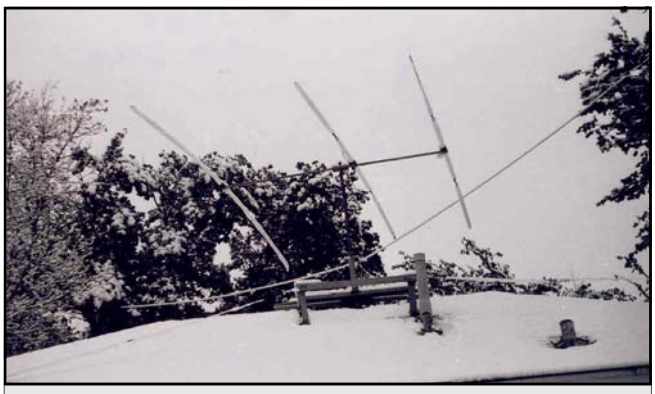
Dick George was born in 1929 in Winona, Minnesota. In 1940, Dick saw a book at the library entitled, "*Radio Simplified -What Is It And How To Operate The Apparatus*." There was magic in there. There were crystal sets and tube sets - things you could build yourself. He built his first crystal set and listened to the local radio station, KWNO in Winona. Dick said, with the crystal set by his bedside, he had to wait until KWNO went off the air at midnight to hear WGN in Chicago doing a remote at the Trianon Ballroom with, Louie Prima .

In junior high, Dick built his first one tube regenerative receiver using a 30 triode. In those days, 4-pin tube bases were used for homebrew grid and tickler coils. Then, he progressed to a 19-tube, which was a twin triode (detector/audio amp). In 1946, he built his "ultimate" regenerative receiver, using a 57 plus a 2A5. This receiver was used to listen in on the 75 meter AM phone band. On Sunday mornings, he would hear locals like **WØPPZ**(sk) and **WØDEI**(sk), and several other stations in a "round table."

With the help of Larry Dahline, **WØGHO**(sk), who sent code practice during his lunch hour at work, Dick got his ham license in 1954 and received the call, **WØTRF**. Not a bad call to get after actually building "**T**uned-**R**adio-**F**requency" receivers.

Dick's first transmitter was a crystal-controlled, 6L6/807, paired with a BC348 receiver. Using an indoor, random length, long wire for an antenna, he called CQ on 3520kHz. After many CQs with no answers, he went to 40 meters, and heard someone calling him on 7040. He was doubling into the 40 meter band. (I've been there and done that, Dick. I recall, in 1957, we operated field day with the Minneapolis Radio Club, **WØCKF**. On 15 meters AM, using a random length wire, we doubled into the 40mHz band, and interfered with the Minnesota Highway Patrol).

Dick moved to Hopkins, and was hired by Honeywell in 1952. He installed dipole antennas, and worked his final WAC contact, **JA7AD**. In 1956, he built a 15 meter converter for his BC348 receiver. His homebrew 15 meter beam was rotated with a rope. After that, he had an NSP power pole installed. A 20 foot 4 x 4 was hinged half way up the pole to raise and lower his new Hornet beam with "carpet beaters" on the element ends.



Dick's homebrew 15m beam with Armstrong rotor.


WØTRF circa 1958.

Dick's homebrew amp - a pair of 3-400s.

During Dick's high school years, his uncle ran a "second-hand" store. Many items passed through the store, including many antique radios. That's when Dick got the bug to collect old radios and tubes. His first catch was a large superhet dubbed the "9-Inline Superhetrodyne" (nine tubes, all in a straight line). That was the beginning of 60 years of collecting. Most of his collection was sold at an auction out East in 2004. Dick said, "A big truck with two guys backed up to the house, followed by 3 more men in a car. They brought with them a large roll of bubble wrap. It took them all day to pack everything. Besides all the radio gear, there were thousands of tubes to wrap."

A portion of Dick's Antique radio collection.

In 1986, Dick retired from Honeywell after 34 years. His last 20 years were served as an SEM – scanning electron microscope operator. With the SEM, he checked for contamination in chips and other components, as part of a failure analysis group.

During my interview with Dick, we got to talking about the TCDXA and Dick asked, "Do you know how the club was started?" Dick proceeded to tell me that back in September 1970, Don Tyrrell, **W8AD** (Alpha-Delta), ex-WØMYK, ex-W7AZG, was driving on Highway 7, and noticed a beam and tower. He stopped and introduced himself to Dennis Luther, **KØWWX**. Don asked if there were any DX clubs in town, and when Denny said "No," Don suggested they start one. That was the beginning of the TCDXA. The original 13 charter members met in September 1970 at Howard Wong's in Bloomington. As Dick put it, "Don Tyrrell was the spark and Bill Higgins was the fuel." Bill designed the TCDXA certificate and wrote most of the club's charter and by-laws, while serving as President the first two years.

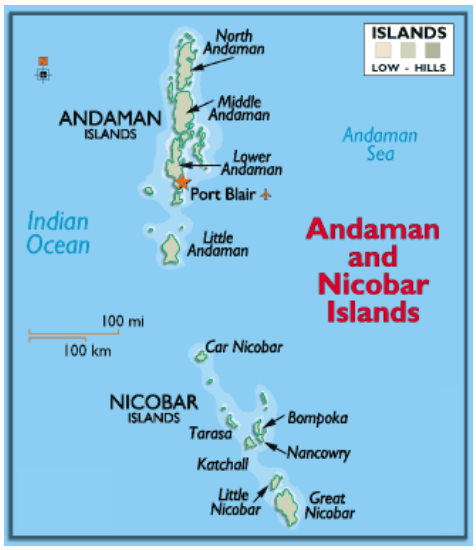
For those of you that don't have the TCDXA personal DX guide, the 13 charter members are as follows: Fred Diezel, **WØHP**; Dick George, **WØTRF**; Bill Higgins, **WØYDB**; Don Johnson, **WØKHI**(sk); Ted Kirst, **W1GL**, ex-KØEKR, ex-W1GMF; Nick Laub, **WØCA**, ex-WØIIC; Dennis Luther, **KØWWX**; Ed Martinson, **WØGYH**; Hal Newall, **WAØKDI**(sk); Clyde Norton, **WØELA**(sk); Bob Parlin, **WØSFU**(sk); Larry Shima, **WØPAN**; and Don Tyrrell, **W8AD**.

As for the ARRL, Number 1 Honor Roll award, Dick still needs P5, North Korea (he was in Europe at the time), and BS7H, Scarborough. You're not the only one that needs those two.

With the help of Ted Kirst, **W1GL**, Dick's aluminum crank-up, and 8el Tennadyne LPDA were erected last Labor Day, but blew down on November 9th - the same day that **WØEK**'s verticals came down. A plan is coming together for repairs to be made to Dick's antennas this spring.

73 de Dave, KØIEA

# "QRZ North American Zeros"
## WØGJ Heading to VU4!!




TCDXA member Glenn Johnson, **WØGJ**, will be leaving Friday, April 14th, for the Andaman Islands. "You can't get there from here!" says Glenn. Leaving early Friday morning, travel will proceed to Minneapolis to Amsterdam to Mumbai (Bombay) to Kolkata (Calcutta) to arrive in Port Blair in the Andamans about noon on Monday, April 17th.

Glenn was invited by Bharathi, **VU2RBI**, to the VU4 Andaman Hamfest to speak and to operate ham radio for the ten days following the Hamfest. Bharathi led the December, 2004 DXpedition to the Andamans that was cut short by the great earthquake/tsunami. Bharathi's team was the only communication the Andaman and Nicobar Islands had for many days, afterwards. This most unfortunate disaster was a real plus for the amateur radio situation in India. The government is now encouraging amateur operations, everywhere. (….When will we see Lakshadweep, VU7??)

Imagine, going from the top of the Most Wanted List to having a full-fledged hamfest 16 months later! There will be about 30 to 40 licensed operations following the April 18-20 Hamfest. There will be some group operations, and some solo operations. Glenn has rented a cottage on top of a hill, which should provide as good a place as possible for 10 days of DXing! Most of the operations will be limited to less than 150 watts, to help prevent inter-station interference……what a problem to have from such a rare place!

The following operating frequencies are allowed in VU and VU4. Maximum power allowed is 150 watts, with the exception of some 400 watt windows. However, power might be restricted to 150 watts on all frequencies for this operation.

1820 to 1860 kHz
3500 to 3700 (3520 to 3540 - 400 watts)
3890 to 3900
7000 to 7100 (7050 to 7100 - 400 watts)
14000 to 14350 (14220 to 14320 - 400 watts)
18068 to 18168 kHz
21000 to 21450 (21100to 21400 - 400 watts)
24890 to 24990
28000 to 29700

NOTE: There is **NO** 30m or 6m operation allowed at this time. (see www.niar.org/rules.html.)

Glenn will be taking an ICOM IC-7000, (see article on page 14), and many vertical and dipole antennas; again, from the top of a hill. Logistics just won't allow more directive arrays at this time. He hopes to spend most of the openings to North America in the CW and RTTY modes.

Assuming not much will change with the sunspots, (a very safe assumption at the bottom of the cycle!), there will be short path openings on 20m from 0000 to 0130Z and from 1430 to 1730Z. Short path on 15m is doubtful, with less than a 25% chance of propagation at the same times. There might be a small window on 40m after Minnesota sunrise, 1200 to 1300Z. Short path is a few degrees west of north, but basically north.

Long path openings on 20M are expected from 0100 to 0200Z and from 1200 to 1330Z, which are just after and just before the short path openings. Keep those rotors turning!

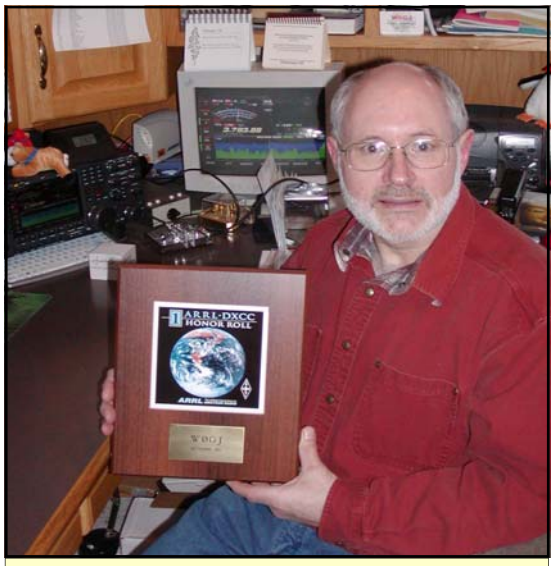
So, it looks like there might be long path openings before working hours in Minnesota, and a good excuse to come home for an early lunch to work the short path! Hopefully there will be a couple hours of opening in the evenings, too.

Remember, Glenn likes the low bands, and he tells us that there will be a very short common grayline to Minnesota in the mornings from about 1130 to 1200Z. There is no common Minnesota evening grayline. Because of the number of stations operating, hopefully things will be spread out enough to eliminate "congestion" and interference on the low bands. There should be enough active stations from April 20 to 27 to adequately test the propagation on all of the bands.

Glenn will try to be on 80m for the common grayline. He will try to operate on the "even" frequencies of 3510, 3520, 3530, etc., listening up. Hint….transmit on the high side of the pileup, say 2-3 up instead of 1-2 up. Glenn points out that from his previous operations in that part of the world, he's found that the local evening atmospheric noise can be horrendous.

Glenn says that he heartily subscribes to the motto of the Kansas City DX Club: "***Nihiles ante unum***!" ("Zeros before ones!") So, if you have lots of dashes in your call, you just might be heard in VU4!

QSL to WØGJ's home address:
207 Bear Creek Lane NW
Bemidji, MN 56601




Glenn, **WØGJ**, is holding his brand new DXCC #1 Honor Roll Award plaque. Glenn says, "After 41 years of hard work, VU4 was my 'last one,' and now it's time for payback, by helping others work VU4."

## Who Owns this Shack ?

(Here's the answer to the mystery posed on page 13.)


Of course - it's Martti, **OH2BH**!

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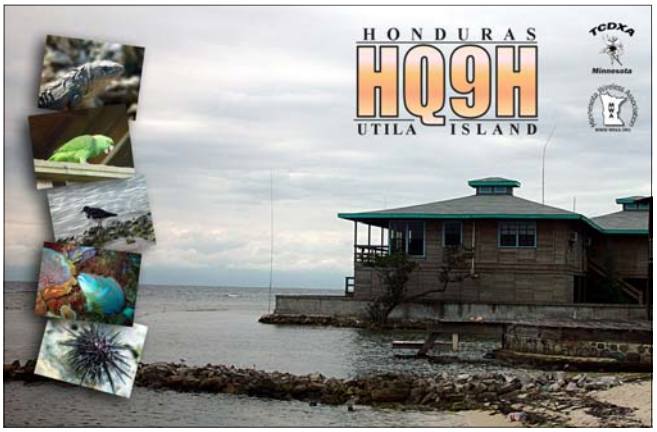
Answers to the

## DX Quiz

**The Islands and Oceans of the DXCC and a Short Lesson on Oceanography.**
(from page 13)

| | |
|---|---|
| **Arctic Ocean** | **JW** |
| **Atlantic Ocean** | **VP8, JX, TF** |
| **Indian Ocean** | **VK9X, ZS8** |
| **Pacific Ocean** | **9MØ, CEØZ** |
| **Southern Ocean** | **3YØX, VKØ** |

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