



Newsletter of the
Twin City DX Association

Volume 1, Issue 3
October, 2004



Inside this issue:

Old Timer's Night 1

Propagation 2

Member Profile 4
WØDJC

CP6CW Contest 7
DXpedition

The Thunder 10
Dragon

WØNAR - SK 15

KØIEA's new 17
30m Beam

TCDXA Officers
President
Bill Dean, WØOR
Secretary
Dennis Johnson, KFØQR
Treasurer
Jim Junkert, KØJUH
Gray Line Staff
KØIEA, KØJUH, & WØBV



Old Timer's Night at the TCDXA September Meeting

It was OT's night at the September 21st meeting. TCDXA honored John Bravis, **WØEKS** and Charlie Hansen, **WØHW**. John and Charlie are both in their 80s, and both are going strong. They shared stories about their ham radio experiences over the years, and showed the group several photos and QSLs from their early years of DXing.



John, **WØEKS** (l) & Charlie, **WØHW** at OT's Night

Other club business included the announcement by Bill, **WØOR**, of the passing of long-time TCDXA member Wayne Holzer, **WØNAR**. TCXDA sent flowers to Wayne's funeral.



(l-r) **KØSQ**, **NØUR**, **KØGX**, and **WØEK** enjoy Charlie's reminiscence of DXing

Bill introduced new members Donn, **KØQC**; John, **WØSEI**; and Jim, **NØUR**, who were present at the meeting. Each gave a brief description of their ham radio interests. Jim was presented with his TCDXA certificate (see page 6). Credit for the great looking computer-generated certificates goes to Gary, **KCØSB**.

receive tax-deductible donations from members and from other sources.

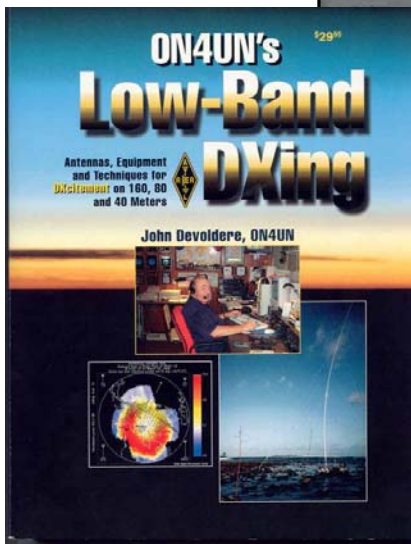
A motion was passed to donate \$100 to the ARRL Frequency Defense fund.

Bill, **WØOR** announced a contest DXpedition to Bolivia by TCDXA members. See page 7 for the full story.

Jim, **KØJUH** opened a discussion about the possibility of establishing non-profit status for the club. It would allow the club to



Lively discussions before the meeting.



Low Bands and the Gray Line

by John Devoldere, ON4UN

ed. - This month, John Devoldere, ON4UN, explains how geographic latitude affects the duration of gray line propagation, and how gray line propagation is different on the low bands than on the higher HF frequencies.

“When both ends of a path are in the twilight zone, one at sunrise and the other at sunset, then we have a gray line situation. The effect of advantageous propagation conditions at sunrise and sunset has been recognized since the early days of low-band DXing. Dale Hoppe, K6UA and Peter Dalton, W6NLZ, first called the zone in which the special propagation condition exists the “gray line”. The gray line is a zone centered around the geographical terminator.

In the past, some authors have shown that the gray line is a zone of equal width all along the terminator. This is incorrect, so far as the related radio propagation phenomenon is concerned.

The mechanism that determines the width of the gray line yields a narrow gray line near the equator, and a wider gray line near the poles. The time span during which we will benefit from typical gray line conditions will accordingly be shorter near the equator, and longer in the polar regions. This does not mean that there is less enhancement near the equator at sunrise or sunset; it just means that the duration of the enhanced period is shorter.

Some authors have stated that gray line propagation always occurs along the terminator. On the low bands, there has been only occasional proof of such propagation. Rather, propagation is through

the dark zone, on a path that (in most cases) is nearly perpendicular to the terminator. Gray line propagation on the low bands is a different affair from what is often called gray line propagation on the (higher) HF bands, where the propagation path does follow the direction of the gray line.

The VKØIR DXpedition was a living testimony to the fact that the width of the gray line depends on the latitude of the station involved. Many remember how VKØIR (located at 53 degrees south latitude) was worked almost every day on 160 meters more than 30 minutes after local sunrise, while 80 meter QSOs were made as late as 0050 UTC, 1.5 hours after sunrise on Heard Island. This is a remarkable circumstance, where significant signal enhancement occurred for a signal direction perpendicular to the terminator at both ends of the path.

To be fully correct, a QSO between the East Coast and Heard Island at 2345 was only a half gray line contact. However, stations a little further inland in the USA, who worked VKØIR just prior to that time, did so on a double-sided gray line path.”

Reprinted, with permission from the ARRL, from ON4UN's book “Low-Band DXing”, available at Radio City or directly from ARRL www.arrl.org/shop.

TCXDA Treasurer's Report - YTD Jan 1 thru Oct 1, 2004

reported by Jim, KØJUH

Income

Balance Jan. 1, 2004	\$ 604.56
Annual dues collected	2,001.00
Door prize raffle ticket sales	56.00
Special donation by NØXB	50.00
Miscellaneous	<u>12.00</u>
Total income	\$ 2,723.56

Expenses to date

MWA donation	\$ -75.00
KØWV funeral flowers	-101.18
3B9C donation	-300.00
T33C donation	-250.00
T32 Program expenses	-200.00
Dinner for guest speakers	-39.45
Materials - member certificates	-53.47
Postage/envelopes	-99.11
Service fee - checking acct.	-27.00
Checks and service fee	-5.25
ARRL Frequency Defense Fund	-150.00
TCDXA website hosting	-65.69
3YØX donation	-500.00
FK/C donation	-200.00
3B9C/D68C videos	-32.95
Old timer's night - Sept meeting	-29.42
WØNAR funeral flowers	-89.41
Total current expenses	-\$-2,217.93

Packet Cluster Escrow Account

Balance Jan. 1, 2004	\$1,498.35
Computer upgrade ACØX node	-100.00
Comet Vertical for ACØX node	-127.79
ACØX node maintenance/repair	-200.00
Balance May 31, 2004	\$1,070.56

Future planned expenses

NCDXF donation	\$ -250.00
Service fees - checking acct.	-9.00
Xmas meeting wine & food	<u>-100.00</u>
Total planned expenses	\$ -359.00

Current balance - October 1, 2004:

\$ 505.63

Projected year-end balance:

\$ 146.63

TCDXA Want Ads

For Sale: Two (2) Butternut HF-2V verticals. One has an add-on kit for 30 meters. **\$75.00 each.** All proceeds to be donated to the club treasury. (More Dollars for DX!) Jim, KØJUH (763) 413-9968. k0juh@comcast.net

Wanted: Rohn 25G and Alpha 77D/DX/SX parts or amplifier in any condition. **Bob, WØEK.** www.w0ek.com or (320) 746-2260

Call Don Overbye, WD9ISQ, for help with your fall tower projects!



WIRELESS BROADBAND SERVICES, INC.

Voice • Data • Video

Don Overbye

N7245 910th Street • River Falls, Wisconsin 54022

Office: 715-425-7465 • Fax: 715-425-7462

Cellular: 715-821-0250

TCDXA Member Profile

Don Currier, WØDJC



Former TCDXA president Don Currier, **WØDJC**, has been a serious Minnesota DXer since 1990. His current QTH is in Hermantown, MN, just outside of Duluth. Don was born and raised in Duluth, where he lived until 1979, when he took his first full-time job as a loan officer in Irvine, CA.

Don moved back to Minnesota in 1980, to work as a Regional Sales Manager for North States Industries, Inc. in Golden Valley, MN. Don soon advanced to Director of Operations at North States, and held that position until 1987, when he took over as President and CEO. He sold his interest in April of 2000. Except for occasional consulting work, Don has been retired, since then.

Don moved to Hermantown from Orono, MN in January of 2002, after building a beautiful new home on 5 acres (see aerial photo, at right).

Don has been married to Peggy for 24 years. They have 3 children: Max (17), Jon (16), and Shannon (11).

Peg is a CPA, who became a stay-at-home mom a few months after Max was born. She has volunteered countless hours at the kid's schools. A few years back, she managed a "Destination Imagination" team (at Orono) that won gold medals at the worldwide competition. During the summer, Peg loves gardening.

Max and Jon are both seniors at Hermantown High School, this year. Max plays football, runs on

the track team, plays trumpet in the band, and is a member of the National Honor Society. Max also enjoys photography as a hobby.

Jon was the lead in the last school play. He is also on the Academic Decathlon team, the Knowledge Bowl team, and is a member of the National Honor Society. Jon completed the University of Minnesota's UMTYUMP program by the tenth grade, which means he has taken and received college credit up through Calculus III. Jon is also the resident video gaming expert.

Shannon will be a member of the band, this year, playing the flute. She is the social butterfly of the bunch, spending much of her free time with her friends. Shannon enjoys and is doing very well in school.



Don's beautiful QTH, located in Hermantown, MN. (Don took this aerial shot from his airplane.)

Don first became interested in radio while in the Boy Scouts, where he earned his Morse code badge. The leader of his troop was Gary Hanson, WAØIEF, who convinced Don to get his license. Frank Leppa, then KØZXE (now KØII), administered Don's Novice test, and Don received the callsign WNØAMR in January, 1970. He soon was distracted by other facets of high school life, and let that license lapse.

Don re-took his Novice test in 1974, and received the callsign WNØMEJ. He soon upgraded to Advanced (WBØMEJ). In October of 1997, he took advantage of the vanity callsign program, and changed his call to WØDJC (his initials).

Don's parents were very supportive during his early radio days, allowing him to string wires all over their small city lot, and put holes in the roof for a TV tripod used to support his homebrew 2-element 15 meter yagi. Don's dad came home one day with a couple sheets of plywood, and the two of them built a console for his radio gear.



Don's first station mounted in a great-looking console that his dad helped him build.

His first radios were a Heathkit DX-60 transmitter and a Heathkit HR-10B receiver. He bought that gear used, plus a straight key, some coax, and wire for a multiband trap dipole, and was on the air for \$120! Gary and Frank were always there to help with antenna projects, and to troubleshoot the radio gear. They also taught Don operating etiquette. Don eventually swapped the HR-10B for a used SB-301 receiver, and later traded his Heathkit gear for a new Drake TR-4C. He sold the Drake in 1979 to help finance his move to Southern California.

In 1981, Don re-entered radio when he bought and built a Heathkit HW-101. That radio was replaced by various pieces of used Drake gear, including a TR-4C and a C-line. Don says he really enjoys trying out different radios, and comparing them to one another. Over the years, Don has owned the following radios:

- Icom: IC-751A, 746, 756Pro, 765ProII, 765, 706
- Yaesu: FT-757, 1000D, 1000MP MKV, 100D, 900
- Kenwood: TS-570S(G)
- Ten Tec: Omni VI, VI+, Orion
- Heathkit: SB-200 Drake: L-4B
- Alpha: 87A Acom: 1000.

His current station consists of a Yaesu FT-1000D, Icom IC-756ProII, Drake C-line, Alpha 87A, and Acom 1000 amp. He has a US Tower model TX-472MDP, with a Titanex DLP 15 log periodic on top, and a Force 12 EF240/230 (30 & 40m yagi) mounted on a Tic Ring, at about 50 feet. He also has an 80m delta loop hung from his tower, with the apex at about 50 feet.

Boating is another of Don's passions. Until last Fall, he owned a 31-foot Sea Ray Sundancer, which he and his family sailed on Lake Minnetonka and also on Lake Superior. He replaced the Sundancer with a 20-foot Boston Whaler for salmon/trout fishing on Lake Michigan and Lake Superior. He also uses a smaller tiller-steer fishing boat on some of the small area lakes. His favorite fishing partners are his three kids and his 91-year old father.

Don takes 2 or 3 trips with his family, each year. He also deer hunts with his son Max, and with other hunting partners. Don earned his private pilot license in April of 2001. He flies a Cessna 182, which he keeps at the Duluth airport. He's already logged about 300 hours of flight time.

Serious DXing started for Don in 1990, when he caught the DX "bug" (for reasons he can't explain). Since then, Don has amassed the following impressive DXCC totals:

	<u>Current</u>	<u>Total</u>
Mixed	334	338
Phone	331	333
CW	323	326
RTTY	188	189
Challenge	2177	2183

As you can see, Don really "made hay", during the last sunspot peak!

TCDXA Welcomes Jim Lageson, NØUR

When asked about his most memorable DX QSOs, Don said: *“On March 9, 1999, I was listening for the HK3JJH/ØM Malpelo DXpedition, and heard him call ‘QRZ’ on the frequency. I didn’t have the amp on, but shot my call out, and he came right back to me. He told me that he was testing his antenna, and that I was his first contact for the 1999 operation. I logged the Q, and then the horde rushed in. I was lucky to be in the right place at the right time.*

Also, one of the last few countries I needed was North Korea. We had only been in Duluth (ed. - Hermantown) for about a month. Fortunately, we had very little snow that winter, and I was able to get the tower up in February. We had friends over for dinner one night, and during a ‘happy hour’ tour of the house, we eventually made it to the shack. One of our guests wanted to know how many countries I had contacted. I told him ‘all but three: Juan de Nova, Andaman Islands, and North Korea.’

I began showing him how computers had become an integral part of the ham shack, when I noticed a spot of P5/4L4FN appear on the monitor. His son, who is an adopted Korean, wanted me to talk to Korea. I didn’t want to be impolite and abandon our guests to chase a rare one, but they egged me on, and I worked one of my last three. Nice guests!”

Don’s main DX goal is to work VU4, Andaman, for his last country. He’s also working toward a DXCC Challenge total of 2500, and is working hard on his 5BWAZ award. Good luck, Don - we’ll see you in the pileups!



Our newest member is Jim, NØUR, who received his TCDXA membership certificate at the September meeting. Jim, wife Nancy and family live in Brooklyn Park, MN.

Jim was first licensed as WAØRPI in 1967. He’s an avid contester, QRPer, and DXer. Jim is a fantastic CW op, who has placed in the top 10 of many contests (check out his award wall photo, below).

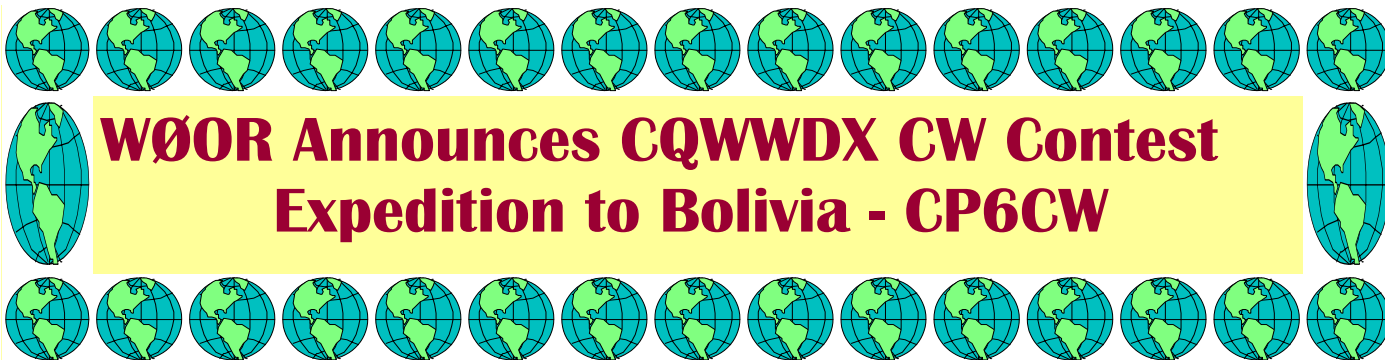
Jim has worked more than 300 countries, using 100 watts, or less, simple wire antennas and a TA33 at 40 feet. Jim proves every day that operating skill and persistence are the most important factors for contesting and DXing success!



Don’s back yard and 72 ft. crank-up with Titanex LPDA and Force-12 30/40 meter combo on a Tic Ring rotor.



Wow! These are a few of the contesting awards that Jim has earned over the years. We’re sure proud to have you as our newest member, Jim!



WØOR Announces CQWDX CW Contest Expedition to Bolivia - CP6CW



Radio Club Santa Cruz - site of the 2004 CQWW CW Contest operation by TCDXA members.

Bill Dean, WØOR, made the official announcement at the September membership meeting. He and TCDXA/MWA members Ron, NØAT; Vlad, NØSTL; and Tom, WØZR have airline tickets in hand for their trip to Santa Cruz, Bolivia. Also going with them is MWA member and super CW contest op Tony Wanschura, KMØO, from West St. Paul.

Their liason in Santa Cruz is MN native Ray, CP6RR (K4LWJ), who has graciously arranged for the TCDXA group to operate the CQWW CW contest from the Santa Cruz Radio Club station.



Towers with WARC band antenna in foreground and KLM tri-bander in the background.

The club station has several towers, with a 40m beam, KLM tri-bander, and 80m inverted V. There is also a separate tower with a WARC band antenna. Some of the antennas require maintenance and repair, which our boys will take care of for the club, in exchange for their operating privileges.

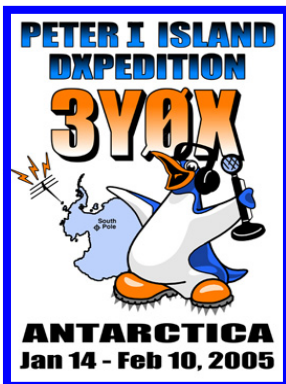
Bill says that an antenna for 160 meters is being discussed. They have a "few good ideas". They plan to operate on 160m before and after the contest. This will be a great opportunity to work this semi-rare country on topband. They will have their ears "tuned" for those Ø callsigns, as they listen intently between static crashes.

Modesto, CP6UH, is the current president of the Santa Cruz Radio Club. He used to be a CW operator with the local FAA, and will be a great addition to the TCDXA/MWA contest team.



Modesto, CP6UH, at the main operating position of the Santa Cruz Radio Club station.

Be sure to mark your calendars for the CQWW on November 27 - 28 (UTC), and work the TCDXA gang at CP6CW, on as many bands as you can!



TCDXA Funds Peter I DXpedition at the "Emperor Level"

10 July 2004

To: Wes Lamboley, W3WL

From Jim Junkert, KØJUH, TCDXA Treasurer

Hi Wes,

Per our phone conversation, the TCDXA, Twin City DX Association, based in Minnesota, will be funding the Peter I DXpedition at the \$1,000 (Emperor) Level.

The \$1,000 will be paid in two installments. The first \$500 will go in the mail, now, and the second \$500 will be paid in January, 2005. Due to tight budget, we appreciate being allowed to use the installment plan to make our donation. In addition to the TCDXA club dollars, many of our club members will be making individual donations.

We are proud and honored to have Ralph, KØIR, as a member of the TCDXA. As you know, over the years, he and his team members have put some very rare locations on the air. It goes without saying, that DXers throughout the world owe them a debt of gratitude. Many have chalked up a "rare new one", thanks to their efforts! Ralph is too humble to blow his own horn, so I thought I'd do it for him.

Tnx and Good Luck to everyone involved with the 3YØX operation.

73,

Jim, KØJUH, TCDXA Treasurer

10 July 2004

To: Jim Junkert, KØJUH

From: Ralph Fedor, KØIR

Hi Jim,

I would like to extend a personal "Thank You" to the TCDXA for the generous backing of our DXpedition to Peter I.

This is a major financial undertaking for us. Even with the team member's individual contributions meeting 70% of the total budget, we are dependent on the support of others to make this happen. The TCDXA's generous gift goes a long way toward making this DXpedition possible.

Thank you, too, for your kind words. Sometimes it's tough being a Minnesotan in an east coast and west coast personality world. It has been a pleasure giving something to the DX community. Comments like yours make it all worthwhile.

73,

Ralph - KØIR

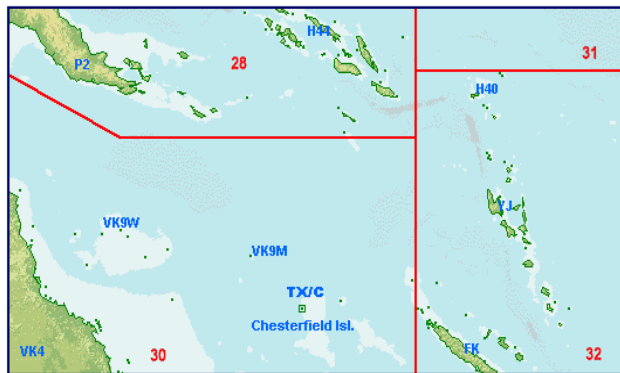
— • • — • • —

Please consider making an individual contribution to help fund Ralph's Peter I DXpedition. Send your contribution to :

Bob Allphin, K4UEE
4235 Blackland Drive
Marietta, GA 30067

— • — • — • — — • • — • • —

TCDXA Helps Fund October Chesterfield (TX/C) DXpedition October 16 - 24th (see: www.df3cb.com/chesterfield)



My FK/KM9D Saga

by Ron, NØAT

I needed FK for a new one 160m, and for a worked/not confirmed on 80m. I worked FK/KM9D a few weeks ago on 80m. An email on the Topband reflector said he was going to be on 160m.

Saturday morning, my mission was to reinstall my west beverage. I take the beverages down for the summer. My west beverage is located 10 feet above my pond, and is supported by an oak tree on each end. When I took it down last spring, I just lowered it into the pond. I did this because it is so difficult to get the wire across the pond. The theory is: all I have to do to reinstall it is to raise it back up.

I pulled on the beverage wire, but it was stuck in the pond bottom, about 3/4 of the way across. I tried my come-along to pull on the wire, but I couldn't free it. I was worried I might break the wire. Maybe it will work in that condition (?) One end is at 10 feet, sloping down into the water, then back up to 10 feet on the other side of the pond.

The next morning I listened for FK/KM9D, but could barely hear him. He was not loud enough to call.

The next day, Monday, after work, I decided I needed to free the beverage from being stuck in the pond. I figured the water is only a couple inches deep. I can go out there and free the wire. Being cheap, and not wanting to spend \$50 on a set of waders, I put on an old pair of boots and an old pair of jeans. On the way out to the stuck wire, I realized that the water is more than a couple of inches deep. I am now in waist-deep muck, and my boots are trying to come off my feet, with each step. I got to the wire, cut off some weeds that had grown up around it, and it came free! I was able to get back out of the pond, without the aid of a helicopter. What a mess!

The next morning I got up at 5am. FK/KM9D was on 160m, but no copy. He went to 80m, where he had a good signal. I went upstairs to get ready for work. 10 minutes later, when I came back to the shack, he was gone from 80m. I put the rig on 160m, and there he was - calling CQ! Two calls later, he was in the log!

Only someone who operates 160m knows what a person will go through to work a new one on topband! As an added bonus, the beverage is ready to go for the FK/C DXpedition, next month. No more wading through the muck, this time!

73 de Ron, NØAT



TCDXA Trivia Question

Who holds the TCDXA club record for playing golf on the most consecutive days?

This member played golf **27 days in a row**, while still working at Northwest Airlines, where he put in 41 years, before retiring at the age of 62. The fact that he worked an alternating schedule, (days, swings, and dog watch), made it even tougher to accomplish this amazing feat.

And to make it even more amazing, he took no short cuts playing the game. All of the rounds, with few exceptions, were regulation 18 holes. The rounds were played at Hiawatha Golf Course. He continued his love for golf well into retirement, playing as often as possible. Finally, his love for the game gave way to serious back problems, and he was forced to hang up his clubs.

Hint: This ardent golfer is 87 years young, and is a long-standing member of TCDXA.

Answer: Ed Hardt, WØJS



The Thunder Dragon



by Glenn Johnson, WØGJ

BHUTAN – even the name is cloaked with mystique. It is such a “forbidden” place, yet rumors of beauty, fiercely independent people, and a devoutly Buddhist fervor have made this Most Wanted country “off limits” for so many years. One of the first reported visitors wrote about his experiences in a National Geographic Magazine in the mid 1950s. Gus Browning was one of the first visitors in the 1960s. A51PN and A51TY were occasionally on the air in the 1970s. A51JS made 14,000 contacts in 1990, and A51/JH1AJT made 3000 contacts in 1995. The A5 prefix had slowly risen to near the very top of The Most Wanted List by the year 2000, second only to North Korea.

Flying into Bhutan’s only airport is a thrilling experience. Often, the pilot will announce that the passengers are about to see the mountains and trees closer than they have ever seen them in their lives. Only one airline, Druk Air, with a total of two small jets, is the only airline that serves the tiny airport hidden in the Paro valley in the Himalayan mountains. There is only one other way to enter Bhutan, through a town on the Indian border, but travel is slow, uncertain, and often dangerous.



The **SHORT** runway at Paro airport - VFR, only!

Stepping off of the plane, and walking into the beautiful terminal building, one almost feels guilty for invading a Shangri-La.....at least trespassing on holy ground. The feeling was probably not unlike Eve, about ready to bite into the forbidden fruit.

In 1997, King Jigme Singye Wangchuck, began to give the citizens of Bhutan more voice in their governmental affairs. Presently, about half of the legislature is elected, the other half is appointed by the king. This very popular king has steered his kingdom through almost 30 years of development into the 21st Century, with emphasis on preserving the rich religious and cultural heritage of Bhutan. Things change slowly in Bhutan, especially entirely new things, like amateur radio.

The Telecommunications Act of 1999 was passed in the fall of 1999, finally permitting amateur radio. Contract help from Asian PTT’s were used to draft the regulations. However, the details and processes for obtaining licensure were not finalized until March 29, 2000. I was asked to call on March 30th, and at that time the plan was laid for a group operation to commence a month later. The goal, then, was to activate A5 for about 10-12 days, and to be back in time for the Dayton Hamvention with QSLs.

As one can imagine, the logistics from March 30th to May 2nd was a nightmare! The overland India to Bhutan route was so slow and unpredictable, that it was not even considered. The only air link was via Druk Air, which has severe weight and size restrictions. The only courier into Bhutan is DHL, which contracts with Druk Air, hence the restrictions are the same. We found a shipper in Chicago, who had spent time with Thai Airways, and knew of a once or twice monthly cargo flight operated by Druk Air. The cargo flight for April would be on April 29th, one day before our planned entry into Bhutan. By working around the clock, even with full-time jobs, we were able to get 19 crates of gear to Bangkok in time for the April 29th cargo flight.

Most of us arrived in Bangkok April 28th. Druk Air flies every other day from a few Asian cities. We were unable to get onto the April 30th flight because of the April Festival in Bhutan. The short timing of our DXpedition made it difficult to plan details, especially since one cannot get reservations on Druk Air, without first obtaining a visa, and that

process took three weeks to complete. As it turned out, the delay from April 30th to May 2nd was a blessing in disguise, because two of the nineteen crates were not able to be loaded onto the cargo flight. Those crates had four of our seven ICOM 756Pro transceivers, and all of the power supplies and headsets, plus other equipment. We used those two extra days to re-crate things to accompany us on our May 2nd passenger flight. We really extend our thanks to the personnel of Druk Air for helping us out, and to make sure we arrived in Bhutan “complete.”

Two of our team arrived in Bhutan on May 1st from Delhi, India. Wes and Jari were able to assemble most of the antennas and masts, as well as pick up our licenses. The rest of us arrived May 2nd, and spent the afternoon erecting four antennas and assembling the stations. We were on the air just after dark on May 2nd. The following day, we were able to get the rest of the antennas up and a total of three CW, three SSB and one RTTY station operational.

We stayed at and operated from the Pine Wood Hotel, located on a mountain side overlooking Thimphu, the capital city. The staff was invaluable! Their kids helped assemble antennas. The food was so good, we all gained weight!

We had a perfect RF shot into Europe and North America. Asia and Japan were “behind the mountain.” Still, about 18% of our contacts were with

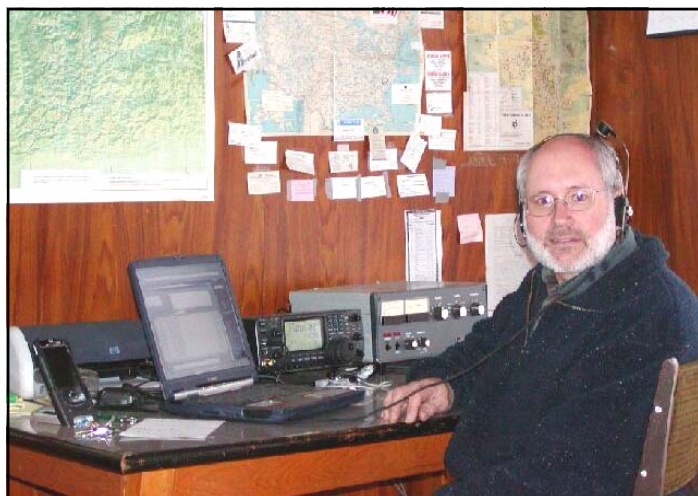


A51B 80m vertical: This is at A51AA’s QTH, where I was EVERY evening for gray line. This is a Gladiator top-loaded vertical on a mountainside, overlooking the Thimphu Dzong (the national capital building).

Asia! North and South America were another 18% while Europe accounted for 62% of our contacts.

Even though we were strictly limited to 120 watts of power, the ICOM 756Pros ran cool at 100 watts output. We had representatives from the MOC with us almost all of the time, watching (...and learning) our operation. They even helped with antennas and daily chores and even rotated some antennas for us! Two of these representatives later became hams themselves. One is now second in command of the Bhutan Telecommunications Authority and promotes ham radio!

After 10 days of operation, we managed to put 82,087 contacts into our log, an all-time record for a low power DXpedition. Only ZL9CI managed to log more QSO’s to lead the DXpedition Honor Roll for number of contacts. This low power number of contacts might quite possibly be in the record books forever!



A51B: My main “shack” in my home, where I did most of my operating.

After returning home, and talking to people at Dayton, and at meetings where I have given A52A presentations, I have been impressed with the fact that everyone says, “We could barely hear you, but you got us in the log!” Indeed, there was a lot of anxiety, especially in North America, that 100 watts from mountainous terrain at the edge of summer propagation would be a waste of time. (Remember the “waste of time” doomsayers for the VKØIR Heard Island operation at the BOTTOM of the sun spot cycle?) Well, the Thunder Dragon roared...with 82,000 Q’s!....but we also LISTENED

and used the rules in our Operations Manual to orderly work through our pileups. Most of our audience had to WORK a little to get us in their log. It took time to wait for the maybe short propagation peak, find the skew path, and to tweak that antenna system, but patience paid off! We have over 26,600 unique callsigns in our log, most working us for an all-time new one! My impression is that the A52A operation will be remembered a little longer than the average DXpedition because everyone, at least in North and South America, had to WORK a little harder and longer to get us into their log. That pleasure and satisfaction of hearing your callsign come back from a weak rare station brought back the JOY of DXing!

The other satisfaction from DXing is the prompt receipt of that rare QSL! My goal was to be back in time for Dayton, with QSLs. My son Mark and I arrived home from Bhutan on the Sunday before Dayton. The next day, we put several hundred cards in the mail, as a “test run” for Dayton. At Dayton, both at the QRZ DX booth and at the NCDXF table, after the DX Banquet, we processed about 3500 cards, all LESS THAN ONE WEEK AFTER GOING QRT! By the end of May, over 14,000 cards had gone out, and by the end of July, over 20,000. We had daily QSLing chores at home, until August, with 24-hour turnaround. Now, four years later, we still receive half a dozen QSL requests each week. Now, QSLing is caught up each month.

Actually, we came very close to even faster QSLing! We had worked hard on electronic (internet) QSL requesting, but simply ran out of time. If we’d had a couple more weeks, we could have had things arranged. The plan was to have hams request QSLs with a \$2 credit card charge (more if donating!). Then, the next day, the QSL card would be in the mail, taking time for only one-way mailing. We just about had all of the mechanics/details worked out, but there were some security issues that were taking too long to sort out, so we scrapped the project at literally the last minute. A couple of negative concerns were that not everyone would be able to participate, and some thought the perception

would be of “selling” QSL’s. However, for the price of \$2, one would have “instant” cards returning in the mail, without the expense and time of filling out QSL cards, envelopes, return envelopes, and postage for both ways. Now, with the expansion of LOTW (Logbook Of The World), electronic QSLing is on it’s way to maybe becoming a standard for DXpeditions. With the FAST QSLing of A52A, the fastest in history to date, we’ve come a long way in making a DXpedition a more memorable experience! The A52A card might not be the prettiest card in your collection, but it was probably the fastest ever received.



Without the support of the TCDXA, we never could have sent our equipment to Bhutan on such short notice, and given A52A to so many of the Deserving! Thank you all for working A52A!

In summary, within 6 weeks, a major DXpedition from the number two Most Wanted country of Bhutan was planned, executed and QSLing initiated. In 10 days, with only 100 watts of power, from an inland mountainous terrain, 82,087 contacts were made for an all-time number two position for the number of contacts ever made on a DXpedition. Within another 10 weeks, over 20,000 QSL requests had been honored, setting a new standard in major DXpedition QSLing.

The A52A website:
<http://www.qsl.net/bhutan2000>

For several years, I have been a member of Orthopedics Overseas, an organization that provides volunteer orthopedic services to a dozen third world countries, one being Bhutan. The Bhutan assignment is highly sought after, as a very desirable place to take families for the monthly rotations. I was scheduled to work in Bhutan in January of 2001 and 2003 and April of 2005.

After the May, 2000 A52A Bhutan DXpedition, my family returned to Bhutan 6 months later for my first working assignment with the hospital in the capital city of Thimphu. I had promised to return to teach a ham class. In the late afternoon, four days each week, my kids and I taught ham radio theory and Morse code. At the end of four weeks, 100% of the class passed the 5 wpm code and the equivalent of the U.S. Technician theory tests. Four of the seven hams remain active to this day. Three use the Bhutan Amateur Radio Club station in Thimphu, and one has his own station.



Paul, WØPJ, teaches code to Dorji, A51UD and Kesang, A51KC.

During our 6-week stay in Bhutan, our family operated daily from our little house near the hospital. Daughter Melissa (K1MJ) was the first YL licensed in Bhutan as A52YL. She operated the ARRL RTTY Roundup with low power and placed 9th place world! Vivien (KL7YL) my XYL, operated at A52VJ, Mark (NØMJ) operated at A52MJ, Paul (WØPJ) as A52PJ. Carrie (NØCMJ) didn't have a U.S. General Class license yet, and was unable to get a license. I operated as A52GJ. There were several from the Midwest who were able to get their WAJ (Worked All Johnsons) award!

In October 2001, just days after 9/11, seven hams from the U.S. traveled to operate in the CQWW SSB Contest. We initiated the callsign of the Bhutan Amateur Radio Club, A5ØA as a multi-multi entry. Four of us were from Minnesota: WØHT, KØEN, NØADQ and WØGJ. Astronaut

Chuck Brady, N4BQW; Dave Anderson, K4SV; and Ray Novak, N9JA head of ICOM America's amateur division, completed our team. After the contest, we were all "called down" to the Bhutan Telecommunications Office, for what I thought would be a little celebration ceremony. But, instead, the BTA had prepared a special lifetime Bhutan license for me, A51B, as a token of thanks for bringing ham radio into Bhutan and for teaching new hams.

During our transit to Bhutan, we stopped in Bangkok, and visited with Ray Gerrard, HSØZDZ/G3NOM. He wanted to visit Bhutan, and to make a long story short, I helped arrange his visit, so he could teach a second ham radio class. He taught 15 high school kids, and most of them became licensed.

One of these boys, Pema Rinchen (A51BB) lived with us for the 2003-4 school year, as an exchange student, here in Bemidji. Many of you met him at the WØDXCC convention, last fall. He is now KCØRZS.

The reason we don't hear too many of the Bhutanese hams is not just because of propagation, but because most of them use low power and simple wire antennas. The cost of a tower and better antennas are beyond reach of most. Owning even a simple radio of their own is usually impossible. That is why even the most active of the hams use one of the club stations.

We don't hear a lot of VUs, APs or S2s from here, but when in Bhutan, they are most numerous! They are the "locals" on 20 meters, most using low power and very simple antennas. We just never hear them from here, because they are well below our noise levels.

The callsign structure for Bhutan is as follows:

- A5Øx** Club stations. There are now five. A5ØA is the BTA headquarters.
- A51xx(x)** Bhutanese citizens. (A51B is the only exception.)
- A52xx(x)** Visitors

Phub Tshering, the chief engineer of the BTA became licensed as A51PT. He had so much fun that he *LENGTHENED* his callsign to A51YPT for “*YOUNG* Phub Tshering.” He felt “like a kid, again”, when on the air!

I returned in February, 2003 for my second Orthopedics Overseas assignment in Thimphu. I was alone, as none of my family was able to tag along. This time, I concentrated my efforts on the low bands, particularly 80 and 40 meters. The common gray line window to the Midwest was Bhutan evening, Minnesota morning. With the exception of only two days for the entire month, I was on 3503 or so every sunset. Some evenings I could only work Asia. About every 3 days, I could work North America....and the strongest signals were from the Midwest! K9DX had, by far, the strongest 80m signal into Bhutan, followed by KØIR! I really appreciated the patience of everyone. With the noise and QSB, the “throughput” was slow, but once a signal popped out of the noise, what a thrill to work “home!” At Bhutan sunrise, Midwest sunset, I would be on 40 & 30m CW. During the month, I made about 6000 contacts, only two were SSB. Most were CW, but several hundred were RTTY.

Many hams have now visited and operated from Bhutan. There will be another multi-multi effort for the CQWW SSB contest, this Fall, by the Clipperton DX Club.

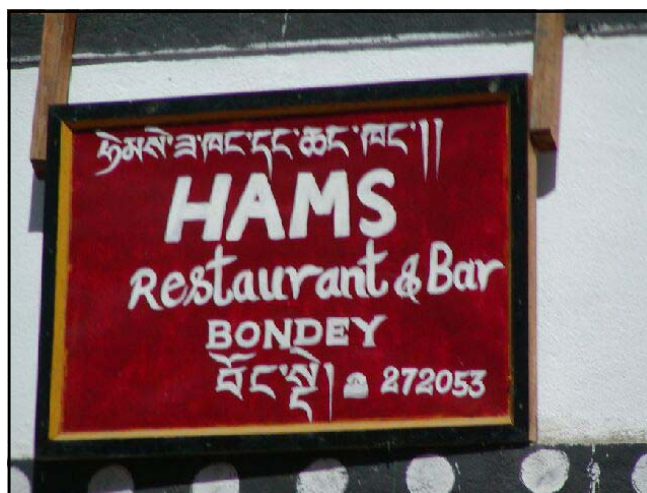
It is now easy to operate as a visitor to Bhutan....in fact, the Bhutanese will now bend over backwards to help one come and operate! Yeshey Dorji, A51AA, operates the Bhutan Ham Centre, and caters to hams! See: <http://www.proteustours.com.bt/> for details. A visa to visit Bhutan costs \$200/day, but this includes everything, all transportation within the country, all lodging and all meals. You can't be a visitor to Los Angeles or New York City for that price! A ham license costs \$200 for a 100 watt license and another \$200 for a 1000 watt license.

“Ho Hum. Just another A5. Got ‘em on 16-band modes, now. Boring. When is there going to be some *REAL DX*?”

Well, maybe it isn't quite *THAT* bad, but Bhutan has come a long way in four years! If you ever want to be *REAL DX*, in a most fascinating culture in a near-perfect Shangri-la, consider Bhutan. It's probably one of the safest and most crime-free areas left on earth. There are still pile-ups on A5 stations. After all, there is a lot of mystique in this remote mountain kingdom, land of **The Thunder Dragon!**

73 es best DX!

Glenn Johnson, WØGJ / A51B
Bemidji, MN



Ham's Bar - near the Paro airport



Dave, KØIEA, checks out the new Icom 7800, during his recent visit to the Johnson shack in Bemidji.

Wayne Holzer, WØNAR - SK

Reflections by Don Carlson, NDØM (ex - WAØONK)

Wayne and his wife Gael were neighbors and our friends while we lived in Minnetonka, one block from their home. We had a lot of fun together.

My first memory of Wayne was hearing my wife Norma telling me of this ham radio operator moving in down the street, and that he was very upset when he heard there was another ham only one block away. I went down and

introduced myself to Wayne. We became friends. He was always up early, trying to work more DX, while I was still sawing logs in bed. I was not a threat to his operating habits. He taught me a lot more about the great ham radio sport of DXing! Prior to meeting him, I did not have a respectable setup for DXing. He helped me construct my first tower and, was a good mentor.

In 1976, the Holzer's and the Carlson's decided to go to the Caribbean to run the ARRL DX contest. One evening, while reading the want ads in the Minneapolis paper, I noticed an ad for a rental home in Jamaica. I called, and the owner, described a nice place. After thinking, "this would be great", I reluctantly said, "We are ham radio operators. Would it be possible to string some wire antennas up on the property to run a ham radio from the house?" He said, "Well, sure, no problem, but why don't you use the beam antenna already there?". He was a ham! Things worked out well, and we enjoyed a nice two week vacation with our XYLs. Unfortunately, we did not get the highest one-weekend score for a DX station, only the second highest (there were two weekends at that time for both SSB and CW).

Wayne and I thought we should have done better. How can we get the highest DX station score for the one weekend in this contest? We researched and concluded that Montserrat would be the place to go. An ad in QST mentioned a home in Montserrat available, owned by Doc Beverstein of Toronto, Canada. We called, and were set up for the 1977 contest, and we had high hopes!

Our high hopes were dashed, when about 10 days before we were to leave, we received a phone call from Doc Beverstein. He said the 65 foot tower had collapsed, while doing some maintenance. The steel bolts at the bottom of the legs had not been painted, and, over many years in the salt spray air, had deteriorated to almost nothing, and they gave way. Well, there goes getting the highest score for the one weekend. Doc thought we would cancel, but we said, "No, we'll go".

We arrived in Montserrat, and found the aluminum tower laying on the ground, and the triband quad beam totally destroyed. There is hope!!! The tower was aluminum, and maybe we could reconstruct it. This we did by hammering, cutting, and straightening the bent sections. When finished, we found we had a 58-foot tall tower. That was a good start, but what about an antenna? We had hired some youths and young men to help us with the tower. They told us about a ham who headed the Montserrat Government's Veterinary Department. He was a veterinarian from Canada. We contacted him, and he lent us a portable 15 & 20 meter quad to use. We constructed wire antenna's for the other bands: 10, 40, 80 and 160 meters. We are all set. Well not so fast. During the contest, the 10 meter dipole yielded no contacts...the band seemed open, but no one answered our calls. What to do? Without 10 meters, we had no hope of a high score. Let's load up the 15/20 meter quad on 10 meters. Well it did not load well by looking at the SWR meter, but, **WOW**, one call, and we had pileups.

My biggest laugh was while Wayne was operating the contest, during heavy pileups, and heard a weak "Wyoming". Well, Wyoming was the only state we were lacking. Wayne **spent two minutes** trying to get the station's call, and finally succeeded, and then gave the Wyoming station a **59** report. I was taping that portion of the contest, and we delighted in listening to the tape, when we returned home, after a great two weeks. We later noted that we had the highest one-weekend score listed for the contest, from a DX station.

Our paths separated, when Wayne and Gael were divorced, and we moved to Crosslake, and then spent 16 years in Arizona. I'll always fondly remember him as a friend and a helpful ham, who helped kick my ham radio career into a more reasonable orbit. Thanks, Wayne. We will always have the memories of the years living close together, and our two DXpeditions. Maybe, who knows, you are able to listen-in on all the ham bands from where the E-layer scatters all our DX contacts. I hope so!

Don, NDØM

ed - Wayne was TCDXA President in 1974 and 1976.

DX Quiz for Old Timers

by Dave, KØIEA

Can you match the old prefix to each of these DXCC entities? Hint: Some entities have more than one old prefix. (Answers on p. 18)

<u>Current Prefix</u>	<u>Country</u>	<u>Old Prefix</u>
3V	Tunisia	
3XA	Guinea	
4S	Sri Lanka	
5V	Togo	
6W	Senegal	
7O	Yemen	
7Q	Malawi	
8P	Barbados	
9H	Malta	
9M6	East Malaysia	
C21	Nauru	
C31	Andorra	
HBØ	Liechtenstein	
JY	Jordan	
OX	Greenland	
T2	Tuvalu	
T5	Somalia	

Old Prefixes:

4 W 7G FD8 FF8 FT4 HE I5 KG1
 MS4 PX VK9 VP6 VR8 VS7 VS9A
 ZB1 ZC5 ZC7 ZD6

KØIEA, KFØQR, and WØEK Tour the WØGJ Radio Ranch in Bemidji



Two words come to mind: "Holy Crap!!"



Dennis, KFØQR, test drives Glenn's new IC-7800.



Just one of Glenn's many side-hobbies!

KØIEA Designs, Builds, and Installs a 30-meter Cannon!

Dave is **SERIOUS** about working DX on 30 meters. He'd had enough of the frustration, caused by competing in pileups, using verticals and wire antennas. Dave Zehner, KIØZ, steered him to the wisdom in Bill Orr, K6SAI's, *Beam Antenna Handbook*. There, Dave found a design for a "compact 30m beam".

Dave had kept parts from his KLM 20m monobander, which he took down in 1995. It provided most of the parts he needed for the 30m beam. The boom is 22 ft. 5 in. long. Bill Orr calls for a driven element 46 ft. 5 in. But, that dimension proved too short. Jim, KØJUH suggested lengthening each half of the driven element by 1 ft. Dave made that adjustment, and it worked, with resonance right at 10.1MHz.

Dave had Don Overbye, WD9ISQ, install the finished beam on an existing 58 ft. tower, which Dave used for a 10m monobander, until last summer. As Dave said, this job "was a piece of cake" for Don.

Bill Orr predicts 20 to 25 db f/b for this compact beam. Dave has been testing it on-air, the past few days, and has already worked a few "new ones". He A/Bs the beam against his 30m vertical, and notes that "signals just barely audible on the vertical are Q5 on the beam". Just look at this recent spot from the Packet Cluster: **A61Q 10.115.0 KØIEA tnx dave fer qso 0219 29 Sep 2004**



Dave and Dennis, KFØQR, make final adjustments.



Dave consults with installer Don Overbye, WD9ISQ



It was a gray day for tower work.



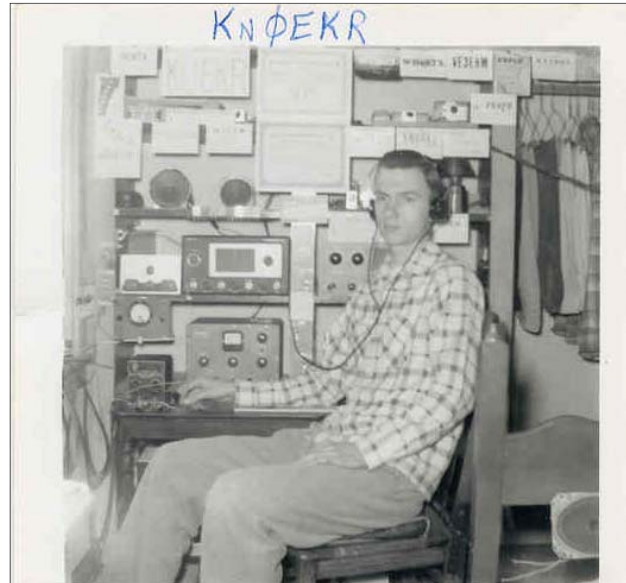
Here's the finished 30m beam, ready for DX action!

Several Cycles Ago.....

KNØEKR, Ted Kirst confirms his CW QSO with KNØIEA, Dave Wester, on 25 Feb 1957.

Note the comments on Ted's QSL. He had just upgraded to General, and his age was 16.

After spending his working years on the East Coast, Ted has returned to his roots in Minnesota as W1GL. He, XYL Barb, and pooch Toby are retired and living near Alexandria. Ted is a recent new member of TCDXA, and a serious DXer.



Ted, W1GL in 1957, as KNØEKR

MINNEAPOLIS T3, MINNESOTA

KNØIEA

Confirming QSO 2/25/57 1957 with Radio KNØEKR
 At 1850 C. S. T. Ur 3.746 MC CW phone sig
 RST 599 Xmtr DX-35 65 wts
 Rcvr NC-173 Ant long wire
 Remarks THX FOR A VY FB QSO TED, U HAD A NICE
SIG PWN UR, IF U HEAR ME ON AGN PSE
GIVE ME A SHORT THX. BENJA AGN E HPE.
 Pse QSL Tnx - 623 Taylor Street N. E.
 73 Dave Wester

"QSL! QSL!"

ALEXANDRIA, ROUTE 3, MINNESOTA, U. S. A.
 DX-WL7, 0E7, WH6. TED KIRST "CP-25"
 W. A. S.
KNØEKR ARRL
 AREC

Radio KNØIEA Confirming QSO of Feb. 25 1957
 At 6:50 pm C. S. T. UR 3.7465 MC CW-phone Sigs RST 5-9-9
 Xmtr Knight, 807 = 50 wts RCVR S-53A no Q-mult.
 Ant 30mtr doublet Remarks TKS alot for a SWELL QSO
on card, Dave. I received my Gen ticket Thurs, so now am KNØEKR
 Hpe to cu PSE (QSL) (TNX) 73 Ted Age-16



Skip Wins!

Skip Jackson, KSØJ, has won the race for Minnesota Section Manager! Skip assumes the responsibilities of Randy ("Max") Wendel, KMØD, who retired from duty on October 1st.

Skip says that he feels that "working for the ARRL in this capacity will allow (him) to partially pay back his debt to amateur radio". His amateur radio interests are primarily focused on emergency communications and public service. He has been very active in Dakota County ARES/RACES. More info on his interests and background may be found on his website at www.skipforhams.com.

The TCDXA membership extends hearty congratulations to Skip!

Answers to **DX Quiz** (on page 16):

3V = FT4	7Q = ZD6	HBØ = HE
3XA = 7G	8P = VP6	JY = ZC7
4S = VS7	9H = ZB1	OX = KG1
5V = FD8	9M6 = ZC5	T2 = VR8
6W = FF8	C21 = VK9	T5 = MS4, 15
7O = VS9A, 4W	C31 = PX	

