TCDXA
TWIN CITY DX ASSOCIATION

DXing from Minnesota
Land of 10,000 Lakes

Newsletter of the
Twin City DX Association

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From the President's Desk

Bill Dean, WØOR

I believe a major turning point for TCDXA came last Spring, when members voted to invest significant dollars from the club treasury to sponsor the second annual WØDXCC Convention. It attracted about 125 DXers from around the Upper Midwest. Attendees enjoyed what turned out to be a terrific program. Thanks primarily to Lou Sica, ACØX, and a handful of others, this event seemed to symbolize the start of a new era for our club.

So what's happened since? I have sensed a new spirit and dynamism among TCDXA members that hasn't existed for a long time. It has manifested itself with:

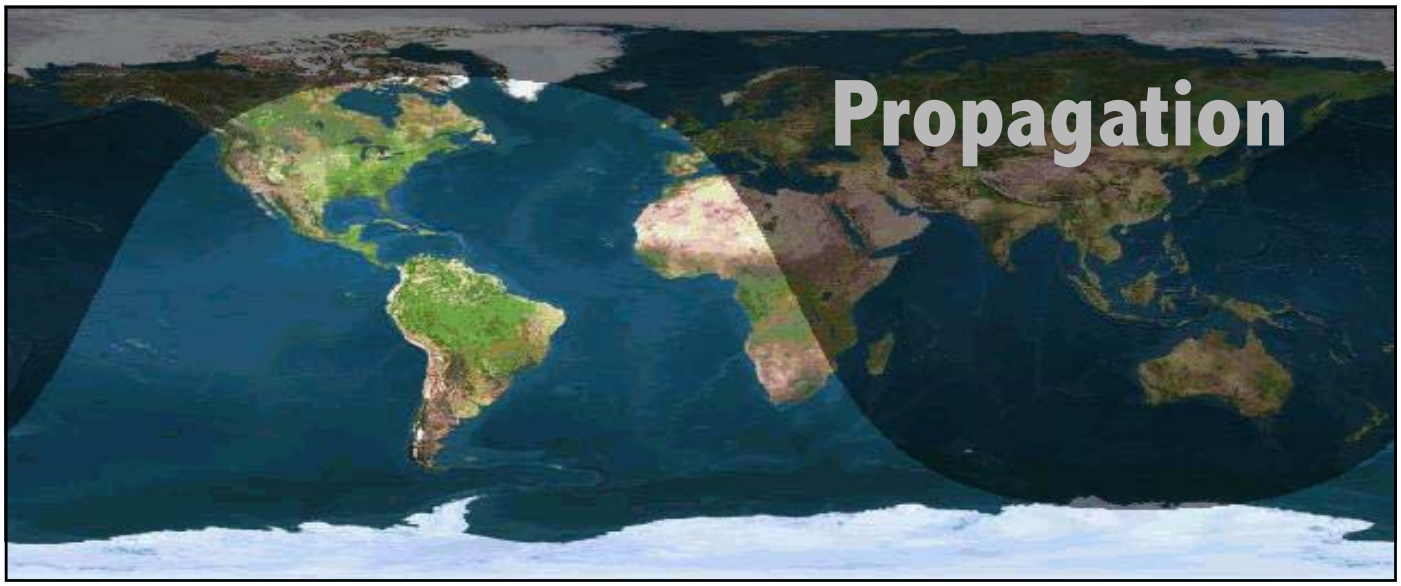
- A membership drive that has swelled our once dwindling ranks by more than twenty new DXers, including both veterans and newcomers.
- A colorful and attractive newsletter, being unveiled here, that promises to become a regular online feature of TCDXA, and that will enhance our club's image and reputation.
- The acceptance by members of a new policy: supporting selected DXpeditions with our dollars, as a prime responsibility of the club.

As always in any organization, the few lead the many. **Kudos go especially to Jim Junkert, KØJUH**, who has been the force behind much of this new activity. Thanks, also, to Dave Wester, Tom Lutz and Bob Garwood for the many hours they have put towards club restructuring.

Let me close by extending a hearty welcome to the new members who are listed, below. I hope you, too, will catch the new spirit of TCDXA. We will need your input, your energy and your ideas, as we continue to transform and energize our club!

Welcome to the Newest Members of TCDXA

Ralph Fedor, KØIR
John Spencer, KØIUC
Keith Gilbertson, KØKG
Donn Taylor, KØQC
Chuck Munce, KØSQ
John Desmond, KØTG
Jeff Strandberg, KØUU
Ray Voss, KGØDK
Harold Strangeland, NØACH
Brian McInerney, NØBM
Rich Westerberg, NØHJZ
John Baumgarten, NØIJ
Mike Paskeuric, NØODK
Vlad Michtchenko, NØSTL
Ted Kirst, W1GL
Tim Blank, NØTB
Ron Stordahl, N5IN
Don Currier, WØDJC
Glenn Johnson, WØGJ
Curt Risvold, WØHYY
John Voxland, WØSEI
Bob Milbert, WØZT



Working the Gray Line

by Paul Harden, NA5N

ed. - It seems fitting that the premier issue of the "TCDXA Gray Line" include some explanation of the significance of a gray line radio event. The following discussion is from an email, posted by Paul, NA5N, to the "Low Power Amateur Radio Discussion Email List", dated December 30, 1998.

This posting was in response to a QRPer's basic question about the differences between daytime and nighttime propagation on the higher bands (10 and 15 meters). In this response, Paul attempts to explain why the QRPer should pay close attention to the dawn/dusk terminator, or gray line. Note that this discussion focuses on gray line propagation on the higher bands. Gray line effects on the lower bands is worthy of many future discussions in this column.

Here's what happens:

During the day, solar radiation collides with the molecules in our ionosphere, ripping off electrons. These electrons are called "free electrons", because they are not attached to an atom or molecule. All of these free electrons cause the density of the ionosphere to increase. The more dense the ionosphere, the higher the frequency that is reflected back to earth. Our electron density is what determines the maximum usable frequency (MUF), and the action of solar radiation separating electrons from the molecules is called *ionization*.

During the day, solar radiation causes ionization to stratify - that is, to form distinct layers. The layer closest to the earth is called the D-layer. It generally does not reflect signals, but does absorb some of the energy, and hence the D-Layer is often called the "absorption layer." Higher up in our ionosphere, we find the E- and F-layers. These layers *do* reflect the signals back to earth, if they are below the MUF, and is exactly what causes "skip propagation." So, during the day, the sun is ionizing the D-, E- and F-layers (there are actually two F-layers, called F1 and F2). Your 10m signal must travel through the D-Layer, getting attenuated, then bounces back from the E or F layer to some exotic DX spot, passing through the D-layer for more absorption. But since solar radiation has to travel the farthest to get the D-layer, absorption is usually fairly minimal. So far, during the middle of the day, we have moderate absorption, and good skip propagation.

AT SUNDOWN ... solar radiation no longer strikes our ionosphere right above our heads, and ionization stops. This means there is no solar radiation to form free electrons. In fact, without this solar radiation, these free electrons tend to get attracted back to recombine with their host molecules. This is called "recombination" (gee, how original!). Recombination, when it starts to get dark, causes the electron density to go down, forcing the MUF to go down as well, which is why by

total darkness, 10m (and a bit later 15m) are completely dead. The MUF is far below 28 MHz.

The D-layer is the *first* layer where ionization stops, since the sunlight no longer reaches near the surface of the earth, but is still illuminating (and ionizing) the ionosphere far above our heads. (For the same reason, we can see satellites pass overhead in the early evening ... it's dark on the ground, but the satellites are still being illuminated.) As the D-layer goes into recombination, the electron density goes down, and the absorption does down. This is why signals appear stronger at night, because there is less absorption by the D-layer at night.

BUT DURING TWILIGHT ... OR IN THE "GRAY LINE" ... the D-layer suddenly causes little absorption to signals passing through it, while the E and F layers are still being ionized by sunlight. This makes for about 45-60 minutes of interesting operating, *especially for QRPers* . There is almost no signal attenuation, but the MUF is still very high, so long-distance skip is still possible. However, when the sun quits illuminating the E- and F-layers, the MUF can drop, dramatically ... sometimes with only a few minutes of warning, sometimes between heartbeats. So when you establish a contact, get the QSL info, fast!

One other advantage of gray line DX, is that your signals tend to reflect off the *edge* of the ionized portion of the upper layers. This means propagation will often be in a southerly direction, bouncing along the shadow, or terminator, between sunlight and darkness. This is good for working into South America and the South Pacific. Your signals can also bounce northward along the terminator, bending around the pole, and down the *morning terminator* across eastern Europe, the Middle East, and into Africa (depending on the time of year). So gray line DX also affords an opportunity to work portions of the world not usually accessible during the day, where propagation tends to be along more east-west circuits.

The same principles apply at sunrise. The upper ionosphere begins to become ionized, while the D-Layer is still dark and offers low absorption, although, the MUF in the morning generally does not support propagation on 10m, so most people enjoy gray line work on 20m or 15m (if open). Morning gray line can even be eventful on 80m and 40m, due to the low absorption before the sun starts heating the D-Layer.

And remember, 10m and 15m (and often down to 30m) are *not* generally bothered by a geomagnetic storm (*ed. – bear in mind that a W5 is writing this*). So even during major geomagnetic storms, the higher bands may be open and fairly quiet. And even if a bit noisy, the short period of gray line operating can still produce a couple of good QSO's.

Hope this helps to explain the "gray line" phenomenon, and hope it helps you snag a few new ones.

73, Paul, NA5N

DX Quiz

How many old Soviet Republic prefixes can you match to their current countries? (Answers on p. 12)

Current Prefix	Country	Old Prefix
4J, 4K	Azerbaijan	
4L	Georgia	
EK	Armenia	
ER	Moldova	
ES	Estonia	
EU, EV, EW	Belarus	
EX	Kyrgystan	
EY	Tajikistan	
EZ	Turkmenistan	
LY	Lithuania	
UJ - UM	Uzbekistan	
UN - UQ	Kazakhstan	
UR - UZ, EM - EO	Ukraine	
YL	Latvia	

Old Soviet Prefixes:

UB UC UD UF UG UH UI
UJ UL UM UO UP UQ UR

TCDXA Member Profile

Tim Blank, NØTB

TCDXA welcomes Tim, NØTB, as one of our new members. Tim's call is unfamiliar to many Minnesota DXers. That's because Tim rarely chases any band country that he already has confirmed. So, when you hear NØTB in a pileup, you know he's probably chasing a new "counter".

Tim's QTH is on a 2-acre lot, in a rural subdivision, located 7 miles west of Rochester and 3 miles north of Byron, MN. His lot is bordered to the north by crop land (see aerial photo), and power lines are scarce in his neighborhood. He's lived at this location, since 1988.

Tim works, just down the road, for Big Blue (IBM), where he's been employed since 1980, after graduating from UW-Madison, with an Electrical Engineering degree. Tim's first job at IBM was designing test equipment and drive control systems. About 1985, he switched to software engineering, and has worked on several high-level projects. He is currently developing Websphere infrastructure software.

Between Tim's career and his super-busy family life, you have to wonder how he finds any time, at all, for DXing. Tim and his wonderful XYL Ramona have 3 harmonics. Jaclyn is 15 years old, and is a competitive swimmer. Harmonics 2 and 3 (twins) are Michael and Nicholas, who are currently 13 years old. They're active in several school sports, including basketball, baseball, and football. All 3 kids are "A" students, too!

Tim got hooked on ham radio, when he was in the 8th Grade. His Math teacher was W9KRP, who had a Hammarlund receiver set up in his classroom. Tim was fascinated by the fact that he could hear "all of those distant radio stations".

Tim was first licensed, in 1969, as WN9GYU. At that time, he lived with his family in a rented apartment, above a funeral home, in Janesville, WI. They later moved to Afton, WI.

Tim's first rig was a homebrew 15 meter (single-band) transmitter, using a 6146 final. The receiver he used as a Novice was a Heathkit HR-10. Next, he upgraded his transmitter to a Heathkit DX60A, and replaced his HR-10 with an Allied A2516. As a Novice, Tim was off to a roaring start as a DXer, working 70 countries on his 15 meter xtal-controlled frequency, using an inverted-V antenna. Tim also earned his WAS, while still a Novice.

After his Heathkit years, Tim upgraded to General Class, and purchased a Henry Radio Tempo/One. He very quickly passed the 100-country mark, in 1971. He later added a Henry 2K amplifier, and a Mosley CL-33. But, he had to sell his equipment, at one point, to raise funds for college tuition. So, he was QRT from 1978, until 1982, when he bought a Kenwood TS-930, which is his current radio.

For several years, Tim operated as WB9GYU from a SE Rochester apartment, using a single 40 meter dipole, and 100 watts. In 1988, the Blanks built their current house, "out in the country". Soon after moving in, Tim put up his first, and current, 80-foot tower, with a KT34XA on top. He also added his Henry 3K-D amplifier. The KT34XA was subsequently de-

stroyed in an ice storm, and was replaced with the Mosley Pro-96 (40 thru 10m) yagi, shown in the photo.

Tim's brother, Dean, N9DL, is also an active DXer. Dean was first licensed in 1971, when he was in the 6th grade. And, Dean got his Extra ticket by 10th grade! Dean still resides in Janesville, WI. Tim shortened his call in 1996 to NØTB. However, although he's established himself as a "Ø", he remains a loyal Packer backer (Note: Ramona and Jaclyn are Viking fans).

Tim bought his current QTH, knowing that it was really "quiet", and would be great for weak-signal lowband operation. His activity on 80 and 160 meters began in 1989, with simple inverted-V wire antennas. After a couple of frustrating seasons on 160, he replaced the 160 meter inverted-V with the inverse-fed tower design of N4KG. Tim continues to use an inverted-V, plus a ¼-wave wire vertical for 80m. He has NO lowband listening antennas.

Here are Tim's major DX accomplishments, to date:

Awards:	Country totals:
5BDXCC	Mixed – 334/353*
DXCC Honor Roll:	Phone – 334/353*
Mixed, SSB, and CW	CW – 332/338
160m DXCC	40m – 333
5BWAZ	80m – 300
160m WAZ (37 zones)	160m – 220

*Needs only VU4

Tim's quest for more lowband "counters" continues. This season, he worked these "new ones" on 80 meters: 9M6, A4, EY, and FR/E. And, on 160, he recently worked A61AJ. While most of us can only dream of working Zone 21 on topband, Tim has also landed A71CW and A92ZE! Tim maintains his current lowband needs lists on his radio website:

http://www.qsl.net/n0tb

Click on "**N0TB_Needed_Countries.html**". This will take you to the main page. You will also find scans of QSLs and audio clips from Tim's most memorable Qs.

A demanding career, an active family, a dedicated DXer – whew! – makes a guy tired, just thinking about all of that activity. But wait! There's more! Tim has always been interested in aviation. He received his private pilot's license in 1977. And, he has an intense interest in the Space Program. Lately he's been very closely monitoring the discoveries of the Mars rovers.

Here's what Tim says:

"My interest in the Space Program, and the study of cosmology and physics, has been going on for quite a long time. With the advent of computer-controlled telescopes and CCD cameras, (a fairly recent thing), I decided to buy a 10-inch Schmitt-Cassegrain telescope, and look at things, myself. I quickly realized that most of the interesting stuff to see is beyond the range of human eye sensitivity, so I picked up a computer-controlled CCD AstroCamera, and started imaging. I'm still learning this aspect of the hobby."

Tim has found that his QTH is not only quiet for radio reception, but that it's also "quiet" for stargazing. If you have even a casual interest in the images he's already captured, take a look at his astrophotography website at:

http://webpages.charter.net/djstewart/Astronomy/

You're bound to be really impressed! If you think patience, persistence, and dedication are needed to work that rare one you've been stalking, then you can appreciate waiting for exactly the right sky conditions, and staying up all night, outside in the cold MN air, with the telescope precisely positioned, to capture the perfect image!

Tim recently hit the 300 confirmed country mark on 80m – a new Minnesota record. Tim's DXing skills have netted several Minnesota lowband DX records.

Welcome to TCDXA, Tim. We're proud to now have you among our ranks!

ROUGHING IT IN TG LAND

The TGØAA Story

by Bill Dean, WØOR

I suppose every DXer worth his salt has dreamed of one day being on the receiving end of a pileup. Isn't that why the folks, who can afford it, often spend thousands to travel to the far corners of the earth to experience the special thrill of being the one everyone else wants to work?

Well, I'm no different. But, I've never been able to afford the time or the money to be part of a team putting a really rare one on the air. So, something less would have to do. As an avid contester, it has occurred to me from time to time that maybe it might be just as much fun to find a spot that isn't often activated during major DX contests. With that thought only a germ in the back of my mind, my family and I left on a visit to Guatemala, in January of 2002, to visit some friends, who were serving a two-year stint in the Peace Corps.

Royce and Diane Smith were from Fargo, ND. Royce, who was only 56 at the time, was offered a retirement package that was too good to turn down. Royce was not ready to quit working, so he and his wife decided to apply for an assignment in the Peace Corps. After several months of language training and cultural orientation, they were assigned to live and work in Sansare, a small town in the rural Guatemalan province of Progreso, about 50 miles northeast of Guatemala City.

View from the TGØAA QTH, looking towards JA.

Among the people they met in the course of their work, was Don Francisco Carrera. This very special individual once owned a successful tire business in "Guate." (This is how natives often reference their capital, Guatemala City). But after a series of near misses in his cardiovascular system, Don Francisco was warned by his physician that he had better reduce the stress in his life, or there wouldn't be a life at all for much longer. So Don Francisco, a devoutly religious man, sold his business, and decided to devote the bulk of his earnings and the remainder of his life to good works for the Church. What he did next, was to purchase some land, high in the mountains, with the aim to establish a retreat, where both clerics and lay people could assemble for religious studies, conferences, and meditation.

Our Peace Corps friends quickly formed a fast friendship with Don Francisco. And so, when my family and I arrived in Sansare, one of our first stops was to see the retreat he developed. To get there requires climbing a winding dirt road in a four-wheel-drive vehicle, that, at times, seems like it is putting you on the edge of the world. But when you reach Don Francisco's property, one look at the panorama tells you it was well worth the trip.

And that's how the long stagnant germ of an idea about doing a DX contest from someplace semi-rare began to grow. I looked out and saw that there was a clear shot from this wonderful spot to North America, JA, and Europe. At the time, Don Francisco was in the process of trying to raise money for a much-needed health clinic to serve the very poor villagers in the area. My thought was this: If I could round up a team who would contribute something toward equipping the clinic, would we be allowed to set up a station and operate from this wonderful spot? It never hurts to ask, so I did. And I was met with a very enthusiastic nod.

So that's how it all started.

Fast forward a year or so. At a TCDXA meeting, I briefly described the location and the idea. I think some people thought I was nuts. But a couple of folks seemed to be at least mildly interested. And Ron, NØAT, also an avid contester who had been to Guatemala only a few months earlier, said he would be game to go. But everybody else I asked was either too busy, not interested, or thought the politics in Guatemala were a bit too risky. Someone suggested I try raising a trial balloon on the MWA web site. I did that, and picked up a second operator. Vlad Mischenko, NØSTL, from Alexandria, called me one night on the landline, and said he'd like to investigate being a part of the team. Vlad is a native of the Ukraine, and has lived in America for 12 years. An accomplished DXer, as well as a very competent contester, Vlad seemed like a good fit for the group.

Now we had three. The idea was to try to go during the CQWW CW weekend in November. Could three people to work a 48-hour contest and be competitive? That might be a bit tough. So, we figured that we needed one more. As luck would have it, my job as Executive Director of the Metropolitan Radio Board put me in almost daily touch with Motorola's chief representative on our project, Dave Raymond, WØFLS - also a DXer and contester. Dave plays the organ, professionally, in one of the large Des Moines, Iowa churches. As such, he is tied up every weekend. For nearly 40 years, he had never missed more than one Sunday. But the lure of being part of *Team-TG* got to him, and he made arrangements to join us.

Most people probably don't realize how much preparation is required to mount an operation like this. Most contest DXers fly into some beautiful Caribbean island, where towers and stacked beams are all in place. Operating positions are already set, with top-grade equipment ready to go. Ample electric power makes running a gallon, or more, easy. Accommodations are modern, and refrigerators are well stocked. Not so in Guatemala. We were heading for the unknown - to operate in a place where no radio amateur had tread before.

The four of us got together for an initial organizational meeting around my kitchen table. Basic decisions were made: We would take three radios: a run station, a mult station, and a spotting station. CQWW rules allow for a second "mult" transmitter to be scanning the bands for multipliers, while the main station is running contacts. The rules are very restrictive. If you deviate, you end up being classified as a multi-multi. But it's worth doing, if you want to score well. Top contesters also use a third operator to spot needed multipliers on packet clusters or on the internet.

We also decided to use Write Log as our contest software. Both Ron and Dave were familiar with Write Log. I have always used TR. Vlad was more familiar with CT. Ron and Dave prevailed, each having more experience with CQWW. It turned out to be an excellent choice. From now on, I'm a Write Log fan. It worked great - almost flawlessly - but, not without a good deal of preparation.

Getting three different laptops, each with a different version of Windows, to network together, to work with the radios, and to send cw, turned out to be the most difficult task. We must have met on four different evenings, during the summer and early fall of 2003, trying to get all the computers to talk to each other and for Write Log to work properly. Thanks, finally, to Vlad, we got them to work. The last hurdle was getting all the machines to send cw. Vlad was able to accomplish what even a professional network engineer from Motorola was unable to do!

It turned out that the four of us made an unusually good team. Every member was a good, experienced cw contest operator. There really wasn't a weak link.

But, each of us also had differing skills and complemented one another in other ways. Ron Dohmen was the strategist. He figured out an operating schedule, both in terms of people and in terms of band hopping. Putting together a plan and sticking to it, turned out, in my judgment, to be the right thing to do. Everything was mapped out. Everybody knew when it was his turn to be at each post. Ron also handled the licensing. His friend Juan Carlos Munoz, TG9AJR, was an immense help. Guatemala has a reciprocal agreement with the United States, but there is still a bit of red tape involved. Licensing has been delegated by the government to the Radio Club of Guatemala. Some amateurs have had trouble, in the past, getting permission, as some members of the Club are opposed to letting "gringos" come down to operate. Some apparently think people do it for the money! Our solution was to print the QSLs, but let them have them, do the QSLing, and receive the "green stamps." Our guess was that there wouldn't be that much profit. Maybe they'll learn.

Antenna planning was a group effort. We had to use what we collectively had and could scrounge. We ended up with a Hy-Gain TH3 and TH3 Jr. for 20, 15, and 10. For 40 and 80, we used a Butternut. And for 160, we put up an inverted-L, using #18 wire. We also strung a longwire for listening, and to use, with a tuner, as a backup antenna.

Dave and Vlad were the beam builders. Vlad was our network manager. Ron and I did the Butternut and the wire antennas. Having been to Guatemala before, I was the travel agent. Believe it or not, I found round trip air tickets on Delta for $507, each, through a consolidator. The best price on most web sites was about $650. My Peace Corps friends recommended and booked a hotel for us in Guatemala City, for the first three nights. It was right next door to the American Embassy, it was reasonably priced, and turned out to be well located. I rented a mini-van, which turned out to be just fine, except when we tried to climb that mountain road. We made it, but not without a couple of passengers getting out and walking in a place or two. No four wheel drive!

Since two of the guys had never been to Central America before, we left time for some sightseeing. After making sure our licenses were in order, we drove to the colonial capital city of Antigua, visiting the 15th century Spanish architecture, and browsing for souvenirs in the interesting and varied markets. The next day we arranged to fly to Tikal in the northern jungle area of Guatemala. Tikal is perhaps the most famous of the Mayan sites, and is a "must see" for any student of ancient Meso-American history.

Vlad snaps a photo of one of the ancient Mayan temples at Tikal.

On our third day, we headed for the operating site. As Ron pointed out in a short piece he posted on the MWA reflector (see page 10), this was like a field day operation. All of our gear was packed into the mini-van, had to be unloaded, and carried up a very steep hill. For the first couple of hours we debated about where to put the "shack." Don Francisco, at first, wanted to put us outside on a porch that was part of one of the dormitory buildings. It didn't take long to figure out that wouldn't work. We ultimately settled on a smaller dorm building that really worked out quite well. It was, in fact, the proverbial "shack" of your imagination. Next to it was the big dorm building, situated a bit lower in elevation, featuring a corrugated tin roof. A perfect spot, as it turned out, for the Butternut vertical.

Electric power was stable. But, there wasn't a lot of it. One, 30-amp circuit supplied the entire complex. Wiring was primitive. The line leading into the shack was actually shorting from time to time on the tin roof! Fortunately we discovered that, before the contest started, and with a little electrical tape, fixed the potential problem.

Dave and Vlad busy building the two TH3s.

That's me, carefully inspecting the Butternut HF-2V installation.

It took us all of two days to get everything built and put in place. We started on Wednesday; and, by Friday morning, we were putting the finishing touches together, and were almost ready to go. Everybody got on the air with his own call, for awhile, before the contest started, and things checked out OK.

Room and board were provided by Don Francisco. Unfortunately nobody told us to bring blankets. We had sheets and towels, but nothing to keep us warm. Most of ended up sleeping in our clothes or with jackets and whatever we could find draped over us. It did get cold up there in the middle of the night. Board was fine. We were provided one hot meal a day. The other meals we made ourselves from bread, cereal, milk, sandwich fillings, etc. Shopping for that stuff in the local market was an experience in itself.

We were off the air for one 20-minute period, during the first hour of the contest. It seems that a church group was arriving, and, while coming up to their dormitory rooms, all the lights were turned on. The single 30-amp circuit couldn't handle it. Don Francisco threw the breaker, got us back on the air, and went around unscrewing bulbs. All of us were on "bulb" watch at certain times in the evening, during the rest of the contest. The power never went out, again.

The preparation and the operating skill of the team ultimately paid off. By the end of the contest,we had logged more than 6,000 contacts - an all-time record for any Central American nation in the CQWW multi-single category. And, this was done with no amplifier - running barefoot, on all bands. The Butternut antenna worked like a charm. Using the tin roof as a ground seemed to be the ticket. We were told we had an excellent signal into Europe, NA, and JA on both 40 and 80. The beams worked well, too, but the Butternut was just fantastic. The 160 antenna worked marginally well. Conditions were not great, but we managed to work nearly 50 stations on topband. After the contest, when conditions were better, Ron made more than 200 contacts on 160 meters.

Each of us worked several hundred contacts, with our own calls, before and after the test. The pileups were especially intense on 40 and 80 cw. Evidently, not too many TG stations work cw on those bands.

No, it wasn't a luxury Caribbean vacation. And, it wasn't a tropical paradise. But, it was an adventure that none of us will ever forget. And, we all realized that dream of being on the receiving end of huge pileups. I can't wait to do it again!

73 de Bill, WØOR

TGØAA in action: Vlad in the back on the **Run** station, Ron in the middle on the **Mult** station, & Dave at the **Spot** station.

2003 CQWW DX CW Contest from TGØAA

Contest Results and Reflections by Ron, NØAT

TGØAA Score Summary

QSOs	QSOs	Points	Zones	Countries
160m:	47	101	7	13
80m:	524	1165	18	55
40m:	1544	3727	29	89
20m:	959	2120	30	99
15m:	1461	3229	27	99
10m:	1499	3756	32	100
Total:	6034	14098	143	455

Score: **8,430,604**
Station: IC-756 PRO II, IC-746, IC706MK2
Antenna(s): TH3MK4, TH3JR, HF-2V, Inv.-L
Software: Writelog X 3
Packet/Internet: None
Operators: NØSTL, WØFLS, WØOR, NØAT
QSL Via: TG9AXF

This was truly a field day style operation. We carried all the rigs and antennas with us. International bags on airlines are allowed to weigh up to 70 pounds. I remember us checking one bag at 69.7 pounds, one at 69.4 pounds, one at 68 pounds. My transit case, with my rig, was the lightest at 47 pounds. We each checked two bags, plus each had one carry-on, plus laptops.

Bill rented a diesel van to take us to the operating site. We had to drive up a dirt mountain road. The road was quite rutted from rain water, and narrow in places. The road was steep, had no guardrails, and was wide enough for two vehicles to pass, only in some places. It seemed like it took an hour to get up the road, but it probably was more like 20 minutes or so. The view from up there was amazing. There were two cities in the valley below, and mountains in the distance. If you squinted, you could see Europe and Japan.

Vlad brought fiberglass mast sections to mount the antennas. We divided them up between the two beams and the 160 meter L. One of the beams didn't tune quite right, probably because it was close to a metal roof. The other beam had trouble turning because the elements didn't quite clear a banana tree.

The HF-2V Butternut antenna on 40 meters was our best performer. We mounted it on the metal roof of our dorm building. The roof was approximately the required size for a 40 meter ground plane. Additionally, we added 12 radials for 80 meters. 40 meters played well all night long, we ran Europe until the middle of the night, then the propagation switched to Japan. We could have run Japan well past our sunrise, but the Europeans were waiting on 15 and 10 meters.

The contest started out great - 10 meters was open to Japan. Everything was operating as expected. The Writelog network was working great, no noise, etc. Then the power went out (see p. 9). We got back on the air by going around and unscrewing light bulbs. Vlad made sure enough bulbs were unscrewed to keep us on the air.

We operated low power. At times the pile-ups were difficult to control, but most of the time we felt an amplifier was not necessary. We always tried to be on the band where we could work the maximum number of 3 point QSOs. But, not being able to get away from US stations, we had to work numerous 2 point QSOs. I felt the lack of multipliers hurt our score. There were about 100 multipliers out there that we missed. Another antenna for 40/80 would have helped. And I sure missed the 'ol packet connection.

Our goal was 4K QSOs, and 3 Meg score. We beat that easily with 6K QSOs, and 8.4 Meg score.

73 de Ron , TG9/NØAT

Several Cycles Ago.....

On August 3, 1957, Dave, KØIEA, worked Jim, DL4WN, on 15 meter CW. Dave was using his NC-173, DX-35, and 2-element homebrew yagi. Jim said that Dave had a "huge signal" (with 35 watts).

This was the beginning of a life-long friendship. Jim was stationed, at the time, in Herzogenaurach. He was with the US Army Security Agency, as a direction finding and CW intercept operator.

They met face-to-face, when Jim returned home. Jim's stateside call is **KØJUH**!

Jim, **DL4WN**, with his good buddy, Cora, in 1957.

Dave, **KØIEA**, seen here chillin' in Mexico, in 1964.

OM **WØZR** — Before

Secrets of Eternal Youth

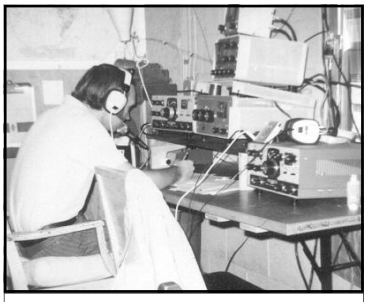
-or-

The Real Reason that WØZR Shaved-off his Mustache

While visiting, last summer, Tom's **OLDER** brother, (who **DOES NOT** wear a mustache), was told that he looked much younger than Tom.

The next morning, Tom's mustache was history, and two days later, he joined a health club. Way to go, Tommy. You now look ***much*** younger!

YM **WØZR** — After



1974 - Tom, WAØENP

The Antenna Man

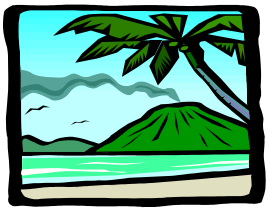
The following appeared in the November, 1974 TCDXA meeting notice: ***"Heard WAØENP on 7003, working a European pileup with his new yagi."***

This guy now resides in California, and runs a well-known antenna manufacturing business. Take a guess…..

If you guessed **Tom Schiller, N6BT**, of Force 12 fame, you hit the nail on the head. When Tom was one of us, he always had a BIG interest in building and experimenting with antennas.

It's probably no big surprise to see Tom end up with his own antenna business.

2004 - Tom, N6BT



DXpeditions

Dates	Entity	Callsign	QSL via	Sponsorship
March 12 to 22	Swaziland	3DAØ(various)	Home calls	
March 17 to 25	FJL	R1FJ	DL6ZFG	
March 18 to April 4	Rodrigues	3B9C	(see 3B9C website)	
April 4 to 16	Banaba	T33C	F5CWU	
April 18 to May 1	Malawi	7Q7?? (TBA)	G3LQP	

DXCC Info:

The rules on the ARRL website for RTTY DXCC state the following:
"d) RTTY: Contacts must be made using radioteletype since November 15, 1945 (Baudot, ASCII, AMTOR and packet count as RTTY)."

When Bill Moore, NC1L, at the DXCC desk was recently asked about whether or not PSK mode QSOs count towards RTTY DXCC, he responded:
"Yes, all the other digital modes also count towards RTTY DXCC."

Maybe it's time to call the award "Digital DXCC"(?)

Answers to **DX Quiz** (on page 3):

UD = Azerbaijan	UJ = Tajikistan
UF = Georgia	UH = Turkmenistan
UG = Armenia	UP = Lithuania
UO = Moldova	UI = Uzbekistan
UR = Estonia	UL = Kazakhstan
UC = Belarus	UB = Ukraine
UM = Kyrgyzstan	UQ = Latvia