ROCHESTER DX ASSOCIATION
rdxa.com

ROCHESTER DX ASSOCIATION NEWSLETTER OCTOBER 2005

Regular Meeting

October 18th 19:30 local

300 Jay Scutti Boulevard
Gander Mountain
Meeting Room

October Program

Come and meet Micro908, the Swiss army knife of hamradio. It is a handheld antenna swr meter that can log to a Palm or PC. With a few button presses, it becomes an audio DSP processor with the same capabilities as the DSP unit in the K2 kit. People are working on software to turn it into a portable PSK modem, keyboard based CW keyer and even a software defined radio. So what really is it? Come and see. If you like it, you too can build one using a kit from the American QRP Club. Raj, N2RD, will bring his unit for a show and tell and do a presentation describing the unit at the next meeting.

✖✖✖✖✖✖✖✖✖✖✖✖✖✖✖✖✖✖✖✖✖✖✖✖✖

Social after the Meeting

Scotch & Sirloin
Winton Plaza

President's Soapbox **By Dave Wright – N2CK**

Greetings all,

I hope by this time of the year your antenna projects are all wrapped up. As of this writing, I am waiting for my roof to be finished so I can get the Mosley back up there where it's supposed to be. I had a small crew (3 guys!) here at the house last Thursday, however when they saw the size of the job, plus the fact that rain was on the way, they figured they wouldn't have enough manpower to get the roof done before the rains came. As it was, they did do a small bay window, so that's out of the way. I have been promised a crew of 8 this week, possibly on Thursday. They tell me that this crew should be able to completely tear off 3 layers of shingles, and one layer of cedar shakes *and* lay fresh plywood and shingles in one day. I'm looking forward to seeing lots of activity on my rooftop.

In the meantime, I've been busy with installing a grounding system for my (meager) antenna farm. I mounted a ¼" copper plate (16" x 12") and have Polyphasers mounted…3 for antennas, and one for the rotor cable. Currently it's connected to one 8' ground rod via a #4 gauge wire. Additionally, it's bolted to a couple 1"" square metal bars driven ~15" down. Yes, I know it really should have been deeper, however as I only had 24" of clearance under the bay window, plus I needed *some* room to be able to swing the hammer, I cut the bars to 21", leaving 6" exposed to bolt to the plate. Initially when I tried driving the bars into the rock-hard soil, they would only penetrate an inch or so. Hmmm, what to do? I strung out the garden hose, and placed it near the area I wanted to mount the plate. I left the water running in a trickle for a little less than an hour. After that, I was able to drive the bars in quite nicely! I plan on driving another ground rod on the other side come springtime, as well as flattening out a section of 3/8" copper tubing, and laying that under the sod come spring when the ground is softer. Even with all this, I still think I'll be running to disconnect the coax when I hear the rumbles of thunder.

How many of you folks worked K7C? I really missed having a directional antenna on the roof! The only antenna I had was the Gap Vertical. The best I ever heard them was a 3-4 on 20m. Try as I could, I couldn't get them to hear me. I got up early a few mornings to see if I could catch them on 40 CW. Sadly, N2CK is not in their log. I know AF2K, WB2HJV, and K2MP worked them. It was very disheartening to hear just how many people do not know what operating split means! Top that off with the frequency police plus the LIDS who come on and ask "Who's the DX?". Hello! Just listen, check out a cluster, or do some research. I did catch a smile at one posting on the cluster asking them to work 20m sideband as that operator didn't know CW. Not the sort of thing I would expect someone to advertise.

Speaking of DXpeditions, I have to comment on the manager of CYØAA. *Awesome* job! I mailed my cards on Saturday, and received the card back on Thursday! Wow, that's an incredible turn-around. Also in the mail on Saturday was a card to S9SS's

manager for a 40m-sideband contact, with the card received one week later on Saturday.

Contest tip - I'm sure you all know this trick, but to set your computer clock precisely, set the seconds to zero. This has the effect of "freezing" the clock. While listening to WWV, set the minute to the next minute they will announce. When you hear the tone, hit apply followed by OK. Your PC clock is now set within a second or so,

We are still looking for a Contest and Membership Chairman. Both are fairly low pressure, but both are integral positions in the Club's functioning. Consider throwing your hat into the ring for a year. You might like it.

I am also going to throw a pitch out for folks to write up an article for the newsletter. Having been newsletter editor before, I realize it's a very rewarding task, especially when full newsletters are delivered each month. I also realize how easy I had it, with K2FR, and W2OMV filling my mailbox with informative, humorous, and timely articles. Those two guys made my job so easy, with the hardest task being what to cut to keep the newsletter under 12 pages (double sided). Perhaps, like me you've done a major antenna project, or invested in some new software. Consider sharing your experiences and/or frustrations with your fellow members. One does not have to write like an English teacher or librarian, to share your wisdom with your fellow members. In case you are wondering, I intend to write an article, once I get my antenna project completed.

If you have an idea for a program, or would like to volunteer to put one on – don't hesitate to contact myself, Kevin, N2VJB, or any Board member. We're always looking for meeting programs.

I'll close for now, as this column was supposed to be to Mike, N1OKL a couple of days ago (oops). Had I had started this earlier; I would have been more verbose! Guess I've been too wrapped up in my projects around the house.

73, and Good DX,

2005-06 BOD Meetings

RDXA Board of Directors meetings for 2005-06 will be held at the home QTH of Club officers and BOD members on a rotating basis. Meetings typically start at 19:30 local time and are **open to all RDXA members**. The meeting locations are somewhat flexible, so contact a Club officer or BOD member for further information.

Sept 2005	N2CK	**February**	N2VJB
October	W1TY	**March**	N2OPW
November	WB2HJV	**April**	W2LU
December	TBD	**May**	K1PY
January	K2DB	**June**	NG2P

October Contests

Oceania DX, SSB	1, 2 Oct
Oceania DX, CW	8, 9 Oct
JARTS WW RTTY	15, 16 Oct
QRP ARCI Fall QSO Party, CW	22, 23 Oct
CQ WW DX, SSB	29, 30 Oct
CQ WW RTTY DX	24, 25 Sept

More Contest Info http://www.sk3bg.se/contest/index.htm

November Contests

ARRL Sweepstakes, CW	5, 6 Nov
Worked All Europe DX, RTTY	12, 13 Nov
Japan Int'l DX, SSB	12, 13 Nov
ARRL Sweepstakes, SSB	19, 20 Nov
CQ WW DX, CW	26, 27 Nov

2005-06 Chairman Positions Open

In his column this month, Dave, N2CK has issued a call for volunteers to fill two positions in our Club organization. Here's more info on the responsibilities and duties of each job. Ed.

Contest Chairman—

The primary responsibility is to report to the membership by email (for time-sensitive issues), newsletter (for general postings) and general meetings report (upcoming events). Contesting is an important part of the members' interests and a timely review of contest related information, such as contest calendar, RDXA results, rules changes, etc. The position is basically what you make it. If you are an active contester you already have the skills. If not, here is a way to get involved. Contact Dave, N2CK or Kevin N2VJB, if interested.

Membership Chairman—

Membership levels at RDXA are up slightly this year. We need to do more however. The Membership Chairman post is a lot of work and is primarily a sales/marketing position. The product is RDXA! A plan to include some combination of contacting potential members would need to be developed and implemented. Some balance of email, hamfest booth and phone contacts would be required. For example, contacting past members that have "strayed from the flock." Also becoming a liaison with RARA, RVHFG, and other area clubs could be part of your plan. Reporting to the Board of Directors the results helps us to better serve our members. We need to know why members have left and what attracts new members. There is significant help available from the Board to help you succeed. Contact Dave, N2CK or Kevin N2VJB, if interested.

Either Chairmanship will need your commitment. But you will have fun in the process. Think about getting involved in one of these very visible positions. The pay is $0.00, the rewards are priceless.

Topic of the Month

This month's Topic of the Month column features members' fond (and not so fond) recollections of various rigs they have used over the years.

Dave, N2CK – During my short time having access to the HF bands, I've had only 3 radios, a Kenwood, TS-520, a Kenwood TS-430, and the current rig, an Icom IC-765.

As of this writing, the '765 is definitely my favorite. I like having the auto-tuner, plus the PC and the rig are interfaced so when I switch bands Writelog knows about it, and adjusts itself accordingly. Now that I've got the 250 Hz filters, and know to

crank in 30db of attenuation during a phone contest (instead of running the pre-amp!), it's really a pleasure to use.

However I fondly remember the TS-430. I worked a lot of contests and DX using that radio. At the time I did more sideband than CW contests. This was at the peak of the sunspot cycle, and stations could be worked on 10m all the way up to 29.6mhz. I don't know if my good feelings about the '430 were due to the ease with which stations could be worked during that part of the cycle, the rig, or operator skill (Yeah, right!).

One thing I still get a smile about, involves a minor repair problem I had with it. Vic, K1PY and I decided we wanted to get some CW practice. We decided to make use of 10m. (Actually in retrospect, maybe it was Vic trying to nudge me back into the CW mode, and he was using the "practice" term to give me a kick in the pants). Anyway, I noticed that occasionally the power output would drop from 100 watts to (from what I remember) under 20 watts! I brought the radio to Al, who ran a shop called CK electronics in Sodus. I don't remember Al's call at this time, but he primarily worked on commercial and marine radios. He determined the problem with my radio was in the plate through holes in the Power Amplifier board. He re-soldered all the plate-through holes he could reach, and gave it back to me. I ended up making it fail again, and returned it back to Al. Once Al redid all the holes, I decided to really put it through its paces. I connected it to a dummy load, and proceeded to send code as fast as could (and *much* faster than I ever would be able to receive!). After about 5 minutes or so of this abuse I noticed the wattmeter had stopped responding! Damn, broke it again! It was then I noticed that the face of the rig was dark. Now I really broke it! Upon further investigation, I determined that there was so much current flowing through the power leads; it melted the solder on the positive lead of the fuse holder! Actually, it was a poorly done connection as the wire was just tacked onto the terminal and held in place with solder. Once I made a proper mechanical connection and soldered it, I never had a problem with that radio again.

Mike, N1OKL – When I was 11 years old and living in South Alabama, I managed to save up enough money mowing lawns to buy my first "real" radio…a massive Hammarlund HQ-140-X general coverage receiver, used of course. Wow, what a radio! At 20 x 11 x 13 inches and 50 lbs., the HQ-140-X dwarfed my old Hallicrafters S-120, which I traded in with my hard-earned lawn mowing money, and some critical matching funds from my Dad.

The Hammarlund HQ-140-X general coverage receiver, with bandspread for 80-10m ham bands. Single conversion superheterodyne, 11 tubes, AM/CW.

I didn't have my ham ticket in those days, though I was studying for my Novice license. So my radio activities were shortwave listening, along with a bit of practice copying CW. The 11-tube circuit of the '140-X seemed to make a big difference over the 4-tubes in the old S-120 when trolling the bands for rare shortwave DX stations and copying maritime ship-to-shore CW traffic around the world. When I did finally get my ticket a few years later, the old rig served me well on the Novice bands, coupled with a new Hallicrafters HT-40 transmitter.

I have fond memories of sitting in my upstairs bedroom late at night listening to far away hams, maritime CW traffic from banana boats in the Caribbean, and shortwave stations on the '140-X. There was just something about that big rig with it's hefty Bakelite knobs and softly glowing dials that seemed almost magical. I knew the frequencies of all the major shortwave stations by heart. Radio Moscow, BBC, HCJB, Deutsche Welle, and more were at my fingertips…heady stuff for an 11 year old kid living in rural South Alabama in the mid 1960s.

Propagation *AD5Q's notes from Cycle 22, Oct 1994*

Solar Flux Range----------74 – 98

General – Conditions have changed substantially from a month ago. 15m has opened up, and on good days there is plenty of activity. We still have that coronal hole on the sun disrupting the bands on a monthly basis. This will certainly effect some major contests in the coming fall season.

High Bands – We are now past the equinox and into the peak of the high band season. October conditions will be better than in November, because polar regions get more exposure to the sun. Due to the lower fluxes this year, we cannot expect daily propagation to all of the European continent on 15m. The 17m band opens earlier, and often has more activity than 15m. East-to-west paths are fine, so 15m remains a good band to watch for African contacts. On days when conditions are disturbed, very little will be coming through from Europe (only the western portions). With so little activity to tune through, the African DX is easy to find. This is little consolation to the DX contester, who does not have the option of moving to 17m, and needs the rates of a European opening to get the adrenalin flowing. Mister Coronal Hole may clobber the CQWW this year (both SSB & CW).

Conditions on 20m are starting to suffer from plummeting nighttime MUFs. 20m operators should watch for marginal daytime openings to Europe, and work the grey line paths to remote parts of the world. After dark, the band remains open into the southern hemisphere, and to Africa and the Pacific. Most activity will be on other bands, since they will have better propagation. The best daytime bands are higher in frequency, while the best nighttime bands are lower.

Low Bands – Early band closings in the evening are moving DX activity to lower frequencies. 40m is very active, and plenty of good DX is workable in the evening. Since we are still near the equinox, conditions are also good in the southern hemisphere. With the low solar flux, this means we have worldwide propagation on low bands. African contacts can usually be made with wire antennas (and a kilowatt). Effective penetration into Europe requires something higher and bigger, since most European stations cannot be heard with wires. 30m should be in good shape for a couple of months, then it too will close in the early evening.

73, de Roy - AD5Q / Houston
http://www.qth.com/ad5q/

Twenty-seven Day Space Weather Outlook Table

Issued 2005 Oct 110 *US Dept. of Commerce NOAA*

UT Date	10.7cm Radio Flux	Planetary A Index	Largest Kp Index
2005 Oct 12	80	5	2
2005 Oct 13	85	5	2
2005 Oct 14	85	8	3
2005 Oct 15	85	15	3
2005 Oct 16	85	8	3
2005 Oct 17	85	5	2
2005 Oct 18	85	5	2
2005 Oct 19	85	8	3
2005 Oct 20	85	8	3
2005 Oct 21	85	5	2
2005 Oct 22	85	5	2
2005 Oct 23	85	12	3
2005 Oct 24	85	12	3
2005 Oct 25	85	12	3
2005 Oct 26	85	8	3
2005 Oct 27	80	10	3
2005 Oct 28	75	12	3
2005 Oct 29	75	12	3
2005 Oct 30	75	8	3
2005 Oct 31	75	5	2
2005 Nov 01	75	5	2
2005 Nov 02	75	5	2
2005 Nov 03	75	10	3
2005 Nov 04	75	20	4
2005 Nov 05	75	10	3
2005 Nov 06	75	10	3
2005 Nov 07	75	10	3

From the Ground Up — By Charlie Kuhfuss – WB2HJV

The Summer of 2005

Making changes – In October 2000 Tim WB2KAO convinced me to attend an RDXA meeting. Having been a DX enthusiast since my early days of radio, and with 163 entities confirmed after 37 years, I thought perhaps there might be something to learn about catching a few new ones. I had hopes since it had been a "slow go" to say the least for the previous ten years. I had actually convinced myself back in the mid-nineties that I probably wouldn't be able to work many more new countries and add to my total. I forget the program that October evening, but not to be forgotten was the evening's DX report by K2CS. "Wow, all that DX is out there?" "How come I'm missing it?" "What's a DX cluster?" I went directly home and got on the air. "No time to waste, I've got to learn how to operate split." Gradually over the following four years my antenna farm grew to a series of six, single-band dipoles, and three multi-band verticals. Cycle 23 was in full swing and DXCC totals skyrocketed. All is well in radio-land right? Well, not for long. In the summer of 2004 I learned that the land behind my QTH had been sold. Grrrh! "This can't be." I had permission to erect antennas on that land, so four of them were installed and life was good. I now sensed that changes were on the horizon. Let the sleepless nights begin. "The times they are a changin."

Dilemma – How does one squeeze nine HF antennas into an eighty by eighty-foot back yard with two fifty-foot maple trees located in the center? And, how does one do it to cover 160 meters?
Planning – Well it's good bye to my GAP Voyager and GAP Eagle verticals. Thanks to WY2Z and N2KKB they remain within the RDXA membership. Next down came the single band dipoles for 10, 15 and 20 meters. Throughout the last winter season plans were then drafted to erect a TA-53 five-band beam at 38 feet using ROHN 45G tower sections purchased from W2RW. In addition, thoughts were given to extending my permanent thirty-five foot black iron gin pole, supporting my 40 meter inverted VEE, upwards to the 53-foot level making room for additional SPIRO inverted VEEs on 80 meters and 160 meters. The old algebra told me that they would all fit and I could keep the apex-angles at least ninety degrees.

Digging – My QTH is all on sand like an ancient, Lake Ontario beach or sand bar perhaps. A four by four by four - foot hole was a piece of cake to dig. Only one stone was found. "Oh no, water." And, "more water". "How can this be?" "The sides are collapsing." "I'm only half way down and I'm already six feet wide." "Help!" A close friend Tony Palermo was called who has significant cement pouring experience. After quick examination a trip was made to Home Depot for plywood and miscellaneous lumber. Soon a wooden frame was constructed down inside the hole.

"Water, water everywhere." WB2HJV's tower hole becomes a water well.

Then as I kept digging the wooden frame was pounded into the "quicksand". Finally at the depth of four-feet, now sixteen inches below the water table, we stopped. Using a submersible pump we kept the hole free of water and dumped in six inches of crushed stone, followed by the first two sections of ROHN 45G.

The hole, now dry, with the first sections of ROHN 45G installed and plumb.

The upper ten-foot section was loosely bolted to my shed with a ROHN Universal mount. These two sections were then plumbed and wired to re-rod stakes driven into the stone/quicksand. A temporary wooden support was then made to keep the two 45G sections from sinking into the sludge at the bottom. All shed bracket support bolts were then tightened in preparation for the cement. Yes it had to be done on Field Day weekend. Water off of its leash is not a good thing. The hole quickly refilled with sixteen inches of water.

WB2HJV and friends erect the first two sections of tower and secure to the shed in preparation for the concrete pour.

Concrete at 92° F – Selecting one of the hottest days of the year to pour cement seems only appropriate. And that was done. On June 25th, under the command of mason Tony P., with the help of a few beer-loving neighbors and a rented "Power Buggy", 2.5 yards of the ready mix was dumped into the hole. Tony put the finishing touches to the pad. The drying process was then monitored for several hours while a cooler full of 807's were tested.

The "power buggy" and concrete pour.

A switch to the low bands – The focus in July temporarily shifted to 80 and 160 meters. My existing thirty-five foot permanent gin pole needed to be made taller. Not wanting to disrupt my super performer on 40m that exhibited an impedance of 52 + j0, it was decided to leave that inverted VEE antenna at the same height and install the other two inverted VEES for 80m and 160m at apex heights of 43 and 51 feet respectively. A 21-foot aluminum mast, with 1/8-inch wall thickness, was purchased. Stainless steel eyebolts, appropriate pulleys and DACRON cord were installed for each new antenna. On July 26th a hydraulic lift with articulated boom was rented for the day to take me to the thirty-five foot level. A good friend John Kula ran the controls while Tim WB2KAO stood by with his cell phone for emergency communication should we need it. It's just amazing how heavy a twenty-one foot aluminum mast can be when stood vertical at a thirty-five foot elevation, especially when there's only the bottom eighteen inches to hang on to. After all it was light as a feather when laid horizontal on the ground. In the air, vertical, it weighed a "proverbial" ton. No pictures exist of this exercise as it was performed while the home government was out of town. Just as well, what with a steady breeze, the thirty-five foot gin pole swaying, the boom lift swaying and the twenty-one foot aluminum mast with pulleys and DACRON cords also swaying, and all three of the above out of sync, thought's crossed my buddy John's mind of "scrapping the mission". I told him that wasn't an option. After three unsuccessful attempts the installation of the additional mast which was set three feet inside the upper end of the existing black iron gin pole was completed. Whew. A few stressful moments that ended with both of us having blood dripping from our knuckles, however that happened. Subsequently the new VEES were pulled up that afternoon into position without a problem. On 40 the sweet spot (SS) remained at 7020 (1.0 SWR). No change to the original impedance of 52 + j0 was noted. With some length adjustments the sweet spot on 80 arrived at 3515 (1.2 SWR) and on 160 at 1828 (1.7 SWR). The bandwidth of 2.0 to 1 SWR covers all of 40m, 55kHz on 80m and about 18kHz on 160m. Minor interaction exists between the 80m and 160m VEES. Bring on winter, I'm ready for low-band DX.

The finishing touch. No concrete pour is complete without a name and a date etched into the curing mass. WB2HJV does the honors.

Back to HF – While the concrete cured the TA-53 was assembled. I then selected a tower completion date compatible for everyone on my tower raising team. I also decided to send my Ham II rotator to Norm's Rotor Service for reconditioning. The rotor was a gift from W2RW but I thought it would be best to have it checked over since it had a few years under its belt (housing). Norm replaced the starter cap in the control box, the potentiometer, eight-position terminal strip, performed lubrication and included stainless mounting hardware. He even repainted the housing! So on August 20th the tower team consisting of WB2KAO, WB2IHM, four non-ham buddies, myself, and captain W2RW assembled at my QTH to raise the remaining tower sections and install the TA-53, five-band, four-element beam weighing fifty-seven pounds. It was a smooth operation. Thank you Rick for sharing your talents and

time. The project would not have come together so nicely without your expertise. Thanks also to AF2K for loaning me the climbing belts/pouch, W2FU for the 45G gin pole/pulleys and AB2OV for the MFJ SWR Analyzer. The antenna tunes well on all five bands with sweet spots as follows: 20m 14240, 17m 18070, 15m 21260, 12m 24920 and 10m 28580. It's a little bit skewed towards the phone bands but not bad. The 2.0 to 1bandwidth covers more than each band 20m through 12m. The only disappointment is on the low end of 10 where the SWR creeps upwards of 2.7 to 1 at 28000. It's no problem though for the TS-870 tuner.

Ready to climb. Ropes, hard hat, belt with gorilla hook…yep, it's a tower raising party. WB2HJV decked out as the Wichita Lineman.

Grounding…grrrh! – First came the tower grounding with #2 copper wire running to a couple of eight-foot rods off of each tower leg. No problems found and no change in SWR occurred. N1OKL provided valuable insight and K1PY seemed to have the right POLYPHASER surge suppressors, copper plate, connectors and weatherproof box. This hardware is mounted on the shed wall near the tower base. Now the tower installation has its own ground rods, the fifty-plus foot gin pole has its own ground rod, my ham station has its own ground rod and the house electrical service has its own ground. After hours of research this past summer, discussions with the ARRL grounding guru, POLYPHASER reps, NEC Handbook references, etc. I decided to try making the bonding connection from the shack ground to the house service-grounding electrode. All grounds must be at the same potential right, for safety? Well, I spent another $100.00 on materials, hours digging because I had to start in the shack, go outdoors, and run the #4 copper around the deck, patio and along the north side of the house. Every ten feet and then after crossing under each of six separate buried coax runs the SWR was checked on all antennas. All was fine. Then after four evenings and one eight hour day I reached the point of connecting these two grounds together. Yes, everything was messed up. "This can't be!" "Oh no, the tuning has changed on every antenna." "Hours of work are down the drain." "The sweet spots on the beam are now outside the band on 10, 15 and 20." Well I fixed it folks. Off came the connection to the house ground rod. "Whew, all tuning is back to normal." So either some weird things are happening with my Alpha Delta coax switches in the shack such as some unwanted ground loops, the 130 feet of #4 copper that I just buried is a poor choice of lengths, or it's some other combo of phenomena known only to Murphy. I cut off twenty feet and left the rest buried. So there are one hundred and ten feet of buried #4 copper going nowhere from my shack.

Bolting the top section of tower in place. The low band mast and VEEs are visible to the left of the tower.

A thing of beauty. The Mosley TA-53 installed, tuned and ready for rare DX.

The first new ones – Well it only took a few days to work a new one. It was Ross 9M2AX from Western Malaysia. He was an easy target on seventeen-meter CW. The second new one came soon after, PY0S/PS7JN Joca from St. Peter and Paul Rock's on twenty-meter CW. The third was with super CW op Nigel on 17 CW,

G3TXF out on Nauru operating as C21XF. The fourth #294 was Ann WA1S an excellent YL op at the 20 meter SSB controls for the K7C Kure Atoll DXpedition. This will be fun chasing and catching the last entities needed for the Honor Roll. Months of hard work are now paying dividends. The next few years of solar minimum **will be fun!**

The complete installation at WB2HJV; a new yagi and effective low band inverted VEEs. Watch out for this guy in the pileups this winter!

Atlantic Division Candidates

N3LLR and W3TOM are running for Director and Vice-Director, respectively, of the ARRL Atlantic Division. Here is a reprint of their campaign statements. This is not an endorsement of these candidates, and is presented only in the interest of providing information for RDXA members. Ed.

Walking the Walk

The Atlantic Division should have a Director and Vice Director team with a proven record of service to the League and to you, the members. It has been my privilege to serve as Atlantic Division Vice Director for the past five years, building the experience needed to represent you effectively on the ARRL Board as the Atlantic Division Director. I am familiar with the other ARRL Board members and am comfortable in working with them and my experience gives me unique qualifications to hit the ground running as your director without a learning curve.

My teammate, Vice Director candidate Tom Abernethy W3TOM, is the Maryland/DC Section Manager for over four years.

We feel that teamwork is the essence of successful leadership, which is why we are running as a team. We both have solid, proven leadership background and we are committed to quality service to our members.

Check the endorsements on our website http://www.bestvote.org - our track record stands high. We would sincerely appreciate your votes for our team.

Bill Edgar N3LLR - Director Candidate

I strongly believe that our Director must have experience in the ARRL's Field Organization and other volunteer programs. I have served as the Western Pennsylvania Section Manager, Section Emergency Coordinator, District Emergency Coordinator, Emergency Coordinator, Official Observer, and Public Information Officer.

I am a Volunteer Examiner, an ARRL Registered Instructor and an ARRL Emergency Communications Mentor/Instructor. As a Volunteer Examiner, I have participated in over thirty ARRL VE testing sessions from 2000 to current. You can check my VE participation statistics by going to following public ARRL URL address: http://www.arrl.org/arrlvec/veparti.php?state=PA and searching for my call sign N3LLR. (In fact, you can verify the ARRL VE participation of any of the candidates claiming VE experience by selecting their state in the selection bar and searching for their call sign.)

I have taught licensing classes since 1993, instructed emergency communications classes, and served as a mentor for 49 students in the three levels of the ARRL ARECC emergency communications courses.

While serving as the Atlantic Division Vice Director, I have served on four ARRL Committees: Public Relations Committee, Volunteer Resources Committee, Member Services Committee and the Ad-Hoc Scouting Committee.

While Section Emergency Coordinator and then Section Manager, the section became ***radio-active***. We instituted regular training sessions, meetings and drills. The Simulated Emergency Test results for the section were in the top ten sections reported for activity and more than half of the time, the section was in the top five sections reporting activity.

My amateur radio memberships include: McKean County Amateur Radio Club, Gateway FM Repeater Association, Western Pennsylvania Repeater Association, Western New York Southern Ontario Repeater Association and the 10-10 Club.

I have leadership experience in other membership organizations, which rely on volunteers. I have been a ten-year board member, three-term Chapter Chair for my local Red Cross Chapter and I am in my eleventh year as the Disaster Chairman for the Red Cross Chapter. I have taught Red Cross Disaster courses for over eight years.

I am currently serving as an Executive Board member and a District Chairman for the Allegheny Highlands Boy Scout Council. I have served as a Merit Badge Counselor for the same council for seven years.

Because I believe it is essential for ARRL officials to stay in personal touch with the membership, I have traveled throughout the Division to club meetings, hamfests, and conventions. We will increase the contact with the Atlantic Division Section Mangers, key-leaders and members.

Keeping the League financially sound is a key Board responsibility. I am a finance executive at an international company and have served on local and national trade group committees and boards.

I hold the Amateur Extra license and enjoy contesting, DXing, and public service communications.

The Director's job is not to push a personal agenda, but to listen to what you think and represent your views to the ARRL Board. I will represent all our Division's members, not just a few special-interest groups.

Tom Abernethy W3TOM - Vice Director Candidate

It has been my pleasure to serve as the Maryland/DC Section Manager since July 2001. During this time the Maryland/DC Section leadership provided an exceptional Amateur Radio response to the attack on the Pentagon, two devastating tornados, plus several successful BPL and antenna regulation challenges.

My wife and son are both licensed Radio Amateurs. My 30 years plus as an active Amateur include several facets of the hobby such as contesting, chasing DX, emergency communications, digital radio operation, CW-QRP and antenna design. I have served in various capacities for the League including the ARRL Mexico City Earthquake Blue Ribbon Committee, Emergency Coordinator, Section Emergency Coordinator and currently Maryland/DC Section Manager.

Besides being a life member of the ARRL, AMSAT and QCWA, other memberships include Potomac Valley Radio Club (PVRC), Maryland Emergency Phone Net, Mid-Atlantic Repeater Council, several local clubs and provide active support for the Foundation for Amateur Radio.

I am a former law enforcement officer. As the former President of the Mid-Eastern Chapter of the Association of Public-Safety Communications Officials (APCO), I served on the Executive Council of APCO International, the Public-Safety Homeland Defense Taskforce and the Public-Safety Technician Certification Taskforce.

As the Radio Services Manager for Prince William County, Virginia my responsibilities encompass the technical integrity of the County's critical Police/Fire and Microwave Backbone Communications Systems.

I feel my leadership experiences have uniquely qualified me to serve as the next Vice Director of the Atlantic Division.

As Vice Director I will provide an important link between our members and the ARRL Board of Directors. I will enthusiastically seek your views and opinions to help chart the future of the ARRL and the Amateur Radio Service. I ask for your vote to provide the technical and volunteer-oriented leadership for our national organization.

See our team's website: http://www.bestvote.org.

Low Band DXing **By Gerry Hohn – VE6LB**

Reprinted by permission of the author.

As we head into winter and the sunspot minimum, the low bands are the place to be. While searching the web for some pointers on how best to operate on these bands, I came across this fine article by VE6LB and thought it would be useful to others. Ed.

"VE6LB, you're 58 on Norfolk Island, over." "VK9NS, thanks Jim you're 59 here in Calgary, 73s". Sounds like a typical 20 meter exchange doesn't it? The exchange is typical, the DX is semi-rare, but the band is 80 meters.

I was surprised at the number of amateurs who have commented that they have never heard DX on 80 meters, much less worked any. The purpose of this article is to dispel some of the myths of working DX on the low bands.

As the sunspot cycle declines and propagation on the higher frequencies diminishes, there will be more of an operating focus on the less solar-affected low bands (40, 80 and 160 meters). The prospects for working DX on these bands will increase due to the increased activity, as the higher bands will be closed more often, and the lower atmospheric noise because of lower levels of solar activity. My examples will refer to 80 meters although the same basics apply to the other low bands.

There are a number of common myths about low band DXing that I hope to dispel. These are:

1. There is no (or little) DX on the low bands!
2. You need a big antenna and high power (it's only for the big guns) to work DX on the low bands!
3. DX is so scarce that you need to spend many hours (mostly late at night) to find DX on the low bands!
4. Any DX to be found on the low bands is on CW!
5. There is no low band DX during the summer!
6. The low bands are too noisy to work DX!

Before attacking these myths, I'd like to relate my success in working DX on 80 meters with modest means.

Over the last three years, I've worked over 100, 80 meter countries over all continents – split about 40% SSB and 60% CW. The first 50 countries were worked with a garage-roof-mounted GAP DX VI and 100 watts.

The balance were worked using an inverted L wire antenna stapled to our two-story wood frame house with a wooden pole twelve feet long above the roof to get the antenna apex up to 35 feet. The balance of the antenna length, 30 feet, was tied back to the far end of the house at a slight downward angle. The power was also increased to 500 watts for the second (and tougher) 50 countries.

Now, to dispel the myths, point by point, and then provide some tips on low band DXing, then to get on with successful low band DXing.

1. There is a surprising amount of DX on the low bands, the secret is to know when and where to listen for it (this also applies to the high bands). During the hour of darkness the low bands are often open to various parts of the world depending on the time and season. More on this in the following tips.
2. Simple vertically polarized wire or tubing antennas, with a good ground, will do a surprisingly good job. The vertical polarization will provide a low angle of radiation and minimize the path losses to the DX station. These types of antennas will not be star performers for short hop work.
3. You don't have spend your life in front of the rig to work low band DX (this applies equally to high band DXing). The secret is to make effective use of your time by being in front of your rig when there is a high probability of the DX also being there. By understanding propagation characteristics and the operating habits of your target DX you can be in the shack at the time when you have the best chance to work DX. It is true that to be wildly successful at low band DXing you will have to give up some sleep late at night and early in the morning to be at the rig. I had the good fortune to have a dog who understood my need to catch a few new ones and scratched at the door to go out in the wee hours. She became known locally as "the DX dog" as more often than not there was a new one on the air during her nocturnal trips.
4. There is lots of DX on both SSB and CW but you have to know where on the band to find them. On the low bands the DX frequents specific areas of the bands, sometimes by convention and in some countries, by regulation. More on this in the following tips.
5. There is considerable and unique DX on the low bands during the summer. Although the low bands are noisier due to summer static and electrical storms, there are still excellent openings especially in the morning hours when the bands quiet down. Also, there is a different selection of DX opportunities in the summer due to the unique alignment of the Gray Line, and therefore the Global darkness pattern, compared to winter propagation patterns. Don't forget, Summer in North America is Winter in Australia.
6. Yes, the low bands are generally noisier than the higher bands but that noise comes from two sources. One being atmospheric noise, storms, static, etc. and the other being local man-made noise. The good news is you can often reduce the man-made noise with a bit of detective and corrective work. Much of the "noise" is man-made and is likely within or near your home. In my case the major source of noise was a couple of older light dimmers that put out significant (S9 on 80) interference.

Tips for Successful Low Band DXing

When to Listen – Openings to South America and the Caribbean start at our sunset and continue until our or DX local sunrise. Openings to the Pacific start after our sunset and after sunset at the DX's location. The most valuable tool to predict when the band

may be open is a computerized (DX Edge, Geoclock, Miniprop Plus, etc.) or paper (DX Edge) tool that shows the Gray Line. The Gray Line is the period of semi-darkness that is created as the Earth rotates from night to day and day to night. This Gray Line, or "terminator," changes with the seasons as the tilted axis Earth rotates around the Sun. This change in Gray Line patterns with the seasons has a major effect on what DX can be worked when.

Coincident Gray Line Openings – The optimum time to work East/West (including N/E, S/E, N/W and S/W) DX is when both ends of the path are in near darkness, which is when they are both in their respective Gray Lines. This is due to a refraction effect in the Ionosphere that "ducts" the signals between the coincident Gray Lines. This includes the long path when, as an example, fall and early winter offers some great long path openings to Europe around our sunrise (their sunset).

Contests and DXpeditions – Many times the low bands are open to some exotic location but due to their time of day, nobody is on the air. During contest and DXpeditions there are good opportunities to increase your low band country count as these operations are on the air at all hours and on all bands that are open. I've worked at least 50% of my low band DX during contests. These operators know when it is sunset/sunrise in North America and specifically look for us. "QRZ North America only." can be often heard from the DXpedition.

Low Band Openings – The opening on the low bands can be very localized. I have experienced many occasions when rare DX (e.g. 6W6 or AH5) will be calling CQ and few or no stations coming back to them. In these cases, working them was quite easy.

Information Sources – There are many good sources of information on DX. DX Packet Clusters, packet DX bulletins (LS DX), various general amateur publications (QST, CQ, etc.), DX bulletins and magazines (QRZ DX, DX Bulletin, DX Magazine, Canadx, etc.), DX Nets (INDEXA 14.236 @23:30Z daily) and on air discussions with other low banders.

Intelligence – One sure way to improve your success in low band DXing is to gather as much intelligence about DX stations operating the low bands as possible. >From various sources of information as discussed previously, determine the operating habits of the target DX, when and where they have been heard in your area, and plan your operating plans accordingly.

WWV – Understand how the propagation information broadcast on WWV, at 18 minutes after the hour, affects the low bands. Basically a low K index (0-2) and quiet or better solar forecast improves your chances of hearing low band DX.

Where to Find DX – Low band DX can be found in very specific places on the bands, more specifically than the higher bands.

On CW – Most DX frequent the very low end of the bands, usually the bottom 10 kHz. The exception to this is contests, where up to 30 kHz may be occupied and DXpeditions, which will specify specific frequencies.

On SSB – Most of the SSB DX operates in a specific frequency "window" in the low bands.

40 Meters – 7050 to 7100 but mostly nearer 7050 with the DX listening on their frequency and/or a declared split in the US phone band.

80 Meters – The DX window is 3790 to 3800 and this is where most of the activity happens. Many countries do not allow Amateur operation above 3800 KHz although some DX such as South America and some Pacific can be found above 3800 and down as low as 3775. The area of activity expands during contests.

160 Meters – 1800 to 1850 for both CW and SSB as many countries only allow amateur operation in this narrow window.

Noise – As mentioned earlier, noise can be a problem on the low bands. There are several ways to reduce the noise component of the wanted signal such as noise blankers, external (audio) band bass/noise filters, adjustment of tone and IF shift controls. One trick is to run your AGC off or fast and turn back your RF gain. Also, the use of your highband antenna for receive can often improve the signal to noise ratio.

There is not a lot of information published about subjects related to low band DXing. The following are a few publications that I have found useful, all of which are available from RAC:

- Low Band DXing by ON4UN
- All About Vertical Antenna Handbook by W6SAI/W2LX
- The Complete DXer by W9KNI
- Radio Frequency Interference: how to find it and fix it by the ARRL

Similar operating strategies apply to the high bands. In the last 3 years, I have been successful in working over 300 countries and 5BDXCC using simple wire and vertical antennas such as the R5/GAP and conservative power of 100 and 500 watts.

One of the greatest feelings, even for an old high band DX hound, is to work even a semi-rare one on 80 meters. It can be done and it doesn't take a big antenna, high power or living in your shack. It does take working smart.

Happy and effective low band DXing. (Originally published in CQ, TCA and Key Klix in 1993/1994)

Update: November 1997

Since this article was written in 1993, I have been focusing on 160m DXCC for the last 2 winters using an unmodified Cushcraft HF-2V with their 160m base load kit plus an AL80A linear. This antenna is commonly referred to by the Top Band community as an inefficient dummy load. To date I've managed 65 countries with the HF-2V plus 7 more since I've modified this antenna by adding a small "top hat" and an 8-foot section with a large loading coil near the top. The improvement has been dramatic in that I went from waiting in a pile-up until I was amongst the last to call and thereby had a clear frequency to being able to break European pile-ups in the first few calls. The good news is that this modest 160 antenna works much better than expected, I suspect largely due to the 20 32-foot radials around its base. The bad news is that "DX Dog" doesn't have a clue about 160m propagation. On the odd occasion she does get me up in the middle of the night, 160m is barren. Must have been a single band dog.

The methods used on 160m are certainly the ones outlined above plus a few new ones learned such as timing your call to help the DX hear at least part of your call with a minimum of competition and calling a couple of hundred cycles high or low from the DX's frequency.

N1OKL/NAØ55…Again — By Mike Rundle – N1OKL

This past September, the XYL and I again headed out to the Maine coast for 10 days of R&R on Islesboro Island, aka North America Ø55, in Penobscot Bay. This would be our third time vacationing on Islesboro, and we've grown quite fond of the Island. Plus, we know our way around quite well by now…which of the two grocery stores are open when, and most importantly, where to go for freshly-caught lobster. This year I made a major discovery: the Pendleton Yacht Yard right on the Island has a pretty complete

hardware selection for those antenna and wiring items I might have forgotten to pack.

We decided this year that we wanted to rent a more modern house than in years past, and we found just what we were seeking near the place we rented last year. In fact, we had driven right by this house many times in 2004.

The N1OKL/NAØ55 QTH on Islesboro Island, Maine with the military surplus HF whip vertical and SGC autotuner antenna system in the foreground.

The drive up from Danbury takes the better part of a day. We managed to make the 3:00 PM ferry crossing, and moved in on the afternoon of Saturday, 8 September. After an early dinner we called it a day.

I was up early the next morning, and with a mug of steaming coffee in hand, I surveyed the antenna and shack location situation from the front deck. There was plenty of level ground on which to locate the vertical whip, and my only dilemma was where to put the temporary shack. Susan soon appeared in the kitchen and asked what I was doing. "Looking for a spot for the shack," I replied. "Well, why don't you put it out here on the screened porch," she suggested. Why not indeed, I thought. It'll be a little bit like Field Day. The weather was still quite warm, and the porch was perfect, with a view Penobscot Bay beyond the front lawn.

By noon I had everything set up and was on the air again from Islesboro. 20 meters was open and I had several nice runs with plenty of European and East Coast stations calling.

Over the weekend and early into the following week, I worked about 50 DXCC countries and made numerous stateside contacts as well. But on Tuesday the bands folded. Completely. I could not even copy WWV. As the week progressed, the radio blackout persisted. I tried CW on the low bands and managed a few QSOs, but the bands never fully recovered and I never managed to generate a pileup again.

Thursday brought a change in the terrestial weather as well. A low pressure system passed off the coast to the south and a strong Northeast flow brought rain and fog to the island. I relocated the shack indoors and we buttoned up the house. Time to light a fire and settle back with a good book and a cup of tea.

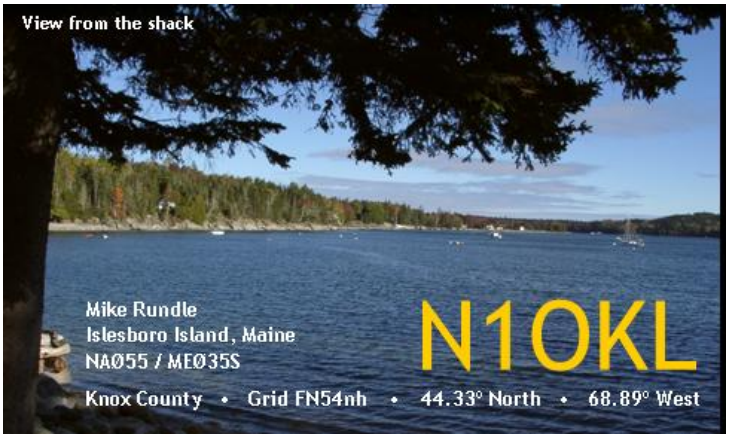
The rain let up just enough on Friday for me to take down the antenna system, but almost as soon as I had carried the last pieces indoors, it started again. What timing.

We treated ourselves to a farewell lobster dinner that evening and loaded the car for an early getaway the next morning.

The OM at work in the indoor shack.

We left Islesboro on the 8:00 AM ferry the following morning, and when I checked the mailbox at home, I found a stack of QSLs already waiting…including a handful direct from DX stations. These IOTA chasers are a persistent bunch of hams.

I put together a new QSL for this year's operation, using a photo I had taken last year. After all, who wants to look at a picture of rain and fog. When QSLing from IOTA islands, IOTA guidelines state that the cards must have the island name and number *printed* on the card. Handwritten island locations are not accepted for IOTA credit. For good measure, I always include the U. S. island number as well as the Maidenhead grid locator and lat/lon from my GPS.



The 2005 N1OKL/NAØ55 QSL.

I've had great fun with these mini IOTA expeditions over the past few years and would recommend the experience to all. There are plenty of islands just off the East Coast of the U. S. with IOTA status, and if you go just after the peak of the vacation season, the rental fees are quite reasonable.

Next year though, we are thinking about something a little different. Susan and I have always wanted to visit Newfoundland. When I worked a Newfoundland station on this year's vacation, it really got me thinking about a trip there. I had a nice rag chew QSO with Dave, V01VCE at Cape Race Newfoundland. Dave is a former commercial operator and his local club helps maintain the museum station at Cape Race. Dave's descriptions of the scenery in Newfoundland really peaked my interest in visiting this remote corner of North America. When Susan overheard me working Dave, she grabbed the spare headphones and listened in. Hmmm.

So maybe next year, it will be N1OKL/NAØ27. After all, Newfoundland *is* an island!

Rochester DX Association

W2RDX rdxa.com

This Bulletin is a the official organ of the Rochester DX Association and is published monthly, September through June. Email your articles, tidbits, ham ads, etc. to Mike, N1OKL at the addresses below by the first Tuesday of the month for inclusion in that month's issue.

All those with an interest in amateur radio and DXing and contesting are cordially invited to any meeting and to join RDXA. Meetings are held at 19:30 local time on the 3rd Tuesday of each month, September through June.

President ---------- Dave Wright – N2CK
n2ck@arrl.net

Vice President ---------- Kevin Poppelwell. – N2VJB
n2vjb@frontiernet.net

Sec/Treasurer ---------- Charles Kuhfuss – WB2HJV
wb2hjv@frontiernet.net

Board Of Directors

Paul Meyers – N2OPW ---------- n2opw@qsl.net
Gene Fuller – W2LU ---------- w2lu@worldnet.att.net
Paul Mackanos – K2DB ---------- paul@prohomeinspector.net
Rick Mintz – W1TY ---------- w1ty@arrl.net

Appointed Positions

DX Chairman ---------- Chris Shalvoy, K2CS
Packet Cluster Sys Op ---------- Bob Hunter, NG2P
Webmaster ---------- Scott Hoag, K2ZS

NG2P Packet Cluster ---------- 144.910 MHz
Telnet: 66.67.220.251 / Port 7300

Newsletter Editor

Mike Rundle, N1OKL ---------- rundlem@kpgraphics.com
Alternate email: n1okl@pcilearn.com

Dues ($15 / year) and Correspondence to:
Charles Kuhfuss, WB2HJV
55 Stoney Path Lane
Rochester, NY 14626