

ROCHESTER

DX

ASSOCIATION

rdxa.com



## Regular Meeting

March 20<sup>th</sup> 19:30 local

300 Jay Scutti Boulevard  
Gander Mountain  
Meeting Room

### March Program

*Remote Operation Primer - Remote station operation gives new meaning to the phrase, "Armchair Copy". Paul, K2DB (aka der Remotefunkmeister) will share an inside look at what it takes to operate a complete HF station remotely, via Internet linking.*

**Coming in April:**  
*PSK31 and other  
Sound Card Digital Radio Modes*

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

## Social after the Meeting

Scotch & Sirloin  
Winton Plaza

N2WK, N2ZN, K2DB, N1OKL, and N2KX; and the RTTY-Rangers White hots consisting of W1TY, W2RLK, N2OPW, W2LB, and myself. The results are in; the Red Hot team soundly spanked the White Hot team with a combined score of 130,237 points to 75,753 (and note this was without participation by Bob, N2KX who had other more pressing issues). As an aside, I did work a couple of folks from the Red Hots team – though I did not recognize the names Borat and Poopsie. Gotta be something in the rules about using your REAL name! Just kidding, of course.

Alan Masson - K6PSP recognized by  
The Academy of Motion Picture Arts and Sciences

## oscar night®

### WINNER: AWARD OF COMMENDATION

To loan Allen, J. Wayne Anderson, Mary Ann Anderson, Ted Costas, Paul R. Goldberg, Shawn Jones, Thomas Kuhn, **Dr. Alan Masson - K6PSP**, Colin Mossman, Martin Richards, Frank Ricotta and Richard C. Sehlin for their contributions to the environmentally responsible industry conversion from silver-based to cyan dye analog soundtracks.

Speaking of contests, I played a little in the ARRL DX SSB contest this past weekend. Trying to work one station, I was heard over N2ZN (sorry Ken), and trying to work another I lost out to a November Gulf Two Papa (nice signal Bob). As I was waiting in line to work another station, I heard them going back to W2LU. Once again, no JAs or Asia stations in the log – though I did not get on early in the morning to take advantage of greyline propagation. What can I say, the bed had too firm of a hold on my left ankle. Normally, I run contests barefoot. However, during this one I was forced to turn on the amp to work stations on 40 and 80 (well, forced is probably the wrong word – if I wanted to actually work some folks instead of building my frustration level, the amp was the obvious choice). Looking at my log, there were 2 different occasions when I worked 2 DX stations that were calling on the same frequency. However, they had different listening frequencies so they didn't interfere with each other at all! The big catch of the contest was stumbling across the Vatican on 20m. It took a half hour of calling, but he finally heard me (yes, the amp was used)! He was not working in the contest, but once I worked him my response was an automatic 59 NY. Time for a small rant; it still amazes me how DX stations endlessly work folks without pausing

### President's Soapbox

By Dave Wright - N2CK



Hello all,

Are you experiencing Spring Fever yet? I know I am. And, as a sure sign of Spring, the Newark hamfest will be April 14th. Though it's a small event, it's sure great to get out of the house, do some socializing and look for that bargain purchase your shack needs.

I would like to thank a new member, Ken N2ZN for his efforts in pulling together an

RDXA team competition for the North American RTTY QSO party. The two teams were RTTY-Rangers Red hots consisting of

to ID. I probably could have added a few more Qs to my log, had I chosen to wait for the non-ID-ing stations. However, I have adapted a rule that when operating search and pounce once I hear a station work 3 people without an ID, I move on. Sadly that happened more than a few times.

Just a reminder when you come to the March meeting, plan on bringing along some extra cash for your Banquet ticket(s). We've kept the price an affordable \$20. As mentioned before, it will be at the Pineview Restaurant in Spencerport on April 21st. The coveted KE2WK award will be given out this year, so plan on attending to recognize the recipient of the award this year. Speaking from experience as a past winner, to be recognized for this award is a very humbling experience – especially as past winners are the ones who vote. Do you have something you would like to donate for a door prize? Perhaps you have a gently used book, balun, some ladder line, or whatever you would like to offer up (high end HF rigs and amps – contact me ASAP). Please contact me to make arrangements and we'll see that you are recognized as the donor.

Thanks go out to Irv for the heads up email about someone we know appearing on the local morning new show this past Friday.. For those who missed it, Chris, K2CS was promoting the upcoming St. Patrick's Day events. Chris has been quite active planning this year's festivities. Also, some of you may not know that Chris had the honor of dropping the puck at the Amerks game on March 9th. As an aside, I wanted to do a quick test to see what mode made it through QRM better, voice or CW? As we waited in line at the Blue Cross Arena to get our tickets last Friday night, I saw Chris wearing a Randy Cunneynworth (coach for the Amerks) jersey. At the time I was about 20 feet away from him. I cupped my hands to my mouth and shouted K2CS. No response. I was then planning to issue a CQ in morse code to see if that got Chris' attention. However, as my shouting out Chris' call embarrassed my family too much, I didn't follow through with the second half of the test. My gut feeling is that Chris would have picked up on the CW CQ.

Just a reminder that we'll be back at Webster Park this year for our annual operating event. It was decided that if we want to make a serious effort towards achieving #1 in 3A, Webster Park provided a better opportunity given the available room for antenna separation, and tall trees – not to mention the flagpole! We'll need all hands on-board once again to make this happen. Think about area(s) where you want to help, and let us know. I hope to see you all there.

I'll close for now, as I need to get this zipped off to Mike. Oh, before I wrap up my mindless ramblings, once again Mike would like to step down as newsletter Editor. Mike's done a fantastic job with the bulletin, and I for one hate to see him relinquish his duties – but if you can help out it would be greatly appreciated. Mike's work will be hard to beat, but I'm positive there is someone in the Club who is up for the challenge.

### March Contests

ARRL Int'l. DX, SSB----- 3, 4 Mar  
 Open Ukraine RTTY low band, RTTY----- 3 Mar  
 Open Ukraine RTTY high band, RTTY----- 4 Mar  
 NAQP Sprint, RTTY----- 11 Mar  
 BARTG Spring RTTY, RTTY ----- 17-19 Mar  
 Russian DX, SSB, CW ----- 17, 18 Mar  
 CQ WW WPX, SSB ----- 24, 25 Mar

### More Contest Info

<http://www.sk3bg.se/contest/index.htm>

### April Contests

SP DX Contest, CW, SSB ----- 7, 8 Apr  
 EA RTTY Contest, RTTY----- 7, 8 Apr  
 Japan Int'l. DX Contest, CW----- 14, 15 Apr  
 Holyland DX Contest, CW, SSB ----- 21 Apr  
 TARA Skirmish Digital Prefix, PSK-31 ----- 21 Apr  
 ES Open HF Championship SSB, CW----- 21 Apr  
 SP DX RTTY Contest, RTTY ----- 28, 29 Apr  
 Helvetia Contest, CW, SSB, Digi----- 28, 29 Apr

### May Contests

ARI Int'l. DX Contest, All modes----- 5, 6 May  
 Alessandro Volta RTTY DX, RTTY----- 12, 13 May  
 EU PSK DX Contest, PSK31 ----- 19, 20 May  
 CQ WW WPX, CW ----- 26, 27 May

### Contest Commentary

**NAQP RTTY, RTTY Rangers** – For this year's February NAQP RTTY Contest, N2ZN pulled together a team competition among a group of the RDXA RTTY Rangers. The way this works is that individual stations pool their scores in a team, submitting their scores under a team name. It's a fun way to operate a contest, especially since it provides an opportunity for operators to compare their scores on a local basis. Plus, it creates a bit of friendly, intra-club rivalry. Paying homage to our favorite RDXA hamfest foods, Ken divided the participating RTTY Rangers into two teams: RTTY Ranger White Hots and Red Hots. Herewith, the team scores.



RTTY Rangers – Red Hots			
Call	QSOs	Sections	Score
N2WK	471	133	62643
N2ZN	342	120	41040
K2DB	184	82	15088
N10KL	147	78	11466
N2KX	–	–	–
<b>TOTAL</b>			<b>130237</b>

RTTY Rangers – White Hots			
Call	QSOs	Sections	Score
W1TY	448	115	51520
W2RLK	138	76	10488
N2CK	71	40	2840
N20PW	44	24	1056
W2LB	147	67	9849
<b>TOTAL</b>			<b>75753</b>

## Propagation

AD5Q's notes from Cycle 22  
March 1996

Solar Flux Range ----- 67 – 74

**General** – The equinox approaches, and nighttime MUFs are on the rise. With low levels of solar activity, we cannot expect nightpath conditions to return to 20M until April. This means we will continue to spend our evening hours DXing on the low bands. Propagation is still very good, but noise levels are up (at least here in the southern US.)

Conditions on 15m have been marginal, even on the path from the East Coast to Europe. This is reflected in the contests scores of the recent ARRL DX tests. The “money band” has been 20m, and even here reports from the western US showed mostly disappointment. For every day DXing, 20m is good for daytime work. The window to Europe has a peak of about 3 hours in the morning, and the opening to Asia closes about an hour after our sunset. EU sigs are stronger into the East Coast, and more of the weak stations are copyable. This makes the DX window much wider from there – a major factor in competitive events like contesting. Daytime noise levels are higher than a month ago.

Though nightpaths aren't going to open 20m to Russia for another month, the grey line is aligning itself over the pole. This should bring us some good (but narrow) pipelines to hard to reach areas in Asia on both 20m and 40m. The best European opening on 40m occurs before sunset here in W5. There are more signals coming through on this opening than at the EU sunrise peak around our midnight.

**VK9 DXpeditions** – The most interesting propagation story for this month concerns the recent lowband activity from VK9X and VK9C – both southwest of Indonesia on long haul paths. The crew for these operations did an excellent job of working both the short path and long path openings into North America. Contacts were readily available on 40m long path and on the 30m WARC band. The 80m openings were narrower and along the grey lines. They worked into the West Coast at their sunset and to the East Coast via long path at their sunrise. 160m contacts to North America were also made.

With low solar flux levels, the lowband season will be extended past the equinox. We can expect an increase in activity from the southern hemisphere during this period. Those with high performance antenna systems on 80m might try to exploit the difficult polar paths with the help of grey line propagation. The rest of us can look forward to improving conditions on 20m for the next several months.

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

## Forecast of Solar and Geomagnetic Activity NOAA 7 March – 2 April 2007

Solar activity is expected to be at very low levels.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to reach high levels during 08 – 09, 14 – 23, and 28 – 31 March.

The geomagnetic field is expected to be at quiet to unsettled levels during 07 – 11 March. Field activity is expected to increase to unsettled to minor storm levels during 12 – 13 March due to a

recurrent coronal hole high-speed stream. Quiet to unsettled conditions are expected during 14 – 25 March. Field activity is expected to increase to unsettled to minor storm levels during 26 - 27 March due to a recurrent coronal hole high-speed stream. Quiet to unsettled conditions are expected during 28 March – 01 April. Activity is expected to increase to unsettled to minor storm levels on 02 April due to a recurrent coronal hole high-speed stream.

More at: <http://www.sec.noaa.gov/radio/>

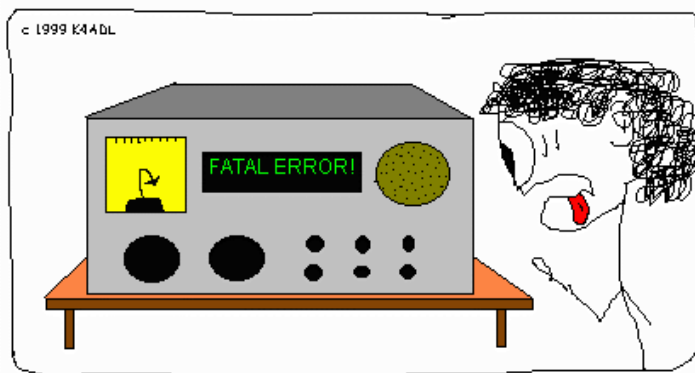
## Twenty-seven Day Space Weather Outlook Table

Issued 2007 March 13

US Dept. of Commerce NOAA

UT Date	10.7cm Radio Flux	Planetary A Index	Largest Kp Index
2007 Mar 14	75	15	3
2007 Mar 15	75	10	3
2007 Mar 16	75	8	3
2007 Mar 17	75	5	2
2007 Mar 18	75	5	2
2007 Mar 19	75	5	2
2007 Mar 20	75	5	2
2007 Mar 21	75	5	2
2007 Mar 22	75	5	2
2007 Mar 23	75	5	2
2007 Mar 24	75	5	2
2007 Mar 25	75	5	2
2007 Mar 26	75	15	3
2007 Mar 27	75	20	4
2007 Mar 28	75	10	3
2007 Mar 29	75	5	2
2007 Mar 30	75	5	2
2007 Mar 31	75	5	2
2007 Apr 01	75	8	3
2007 Apr 02	75	15	3
2007 Apr 03	75	10	3
2007 Apr 04	75	5	2
2007 Apr 05	75	5	2
2007 Apr 06	75	5	2
2007 Apr 07	75	10	3
2007 Apr 08	75	15	3
2007 Apr 09	75	20	4

For more see: <http://www.sec.noaa.gov/Data/index.html#reports>

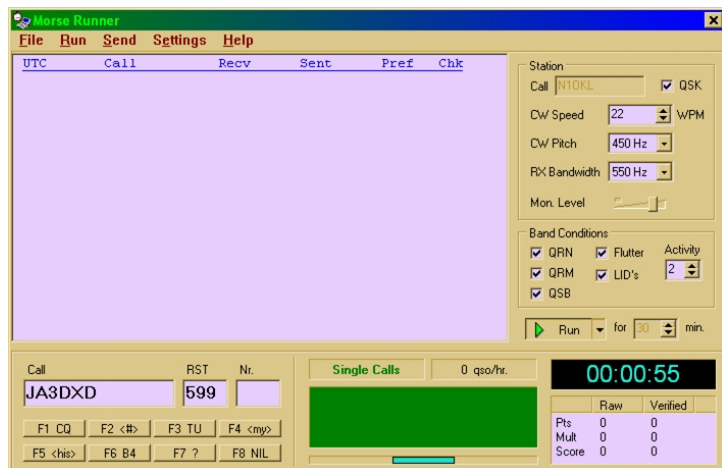


IF MICROSOFT MANUFACTURED HAM GEAR

Courtesy of K4ADL – <http://www.qsl.net/k4adl/>

In keeping with Mike's *Morse is Fun* theme from February, here's another interesting and fun piece of **free** CW software for your computer: Morse Runner. The program, by Alex Shovkopyas, VE3NEA, is a CW contest simulator – specifically, the WPX CW contest – and is available free for the download from: <http://www.dxatlas.com/MorseRunner/>

Like RufzXP, Morse Runner is not a Morse Code *teaching* program; it is Morse *training* software, in this case training for CW contest operating. It's a unique approach to improving contest operating proficiency, both in terms of speed and accuracy.



The main Morse Runner screen showing a simulated contest session in progress. The simulated effects of pileups, QRM, QRN, etc. are very realistic, and can be selected in all or part from the settings menu.

With Morse Runner you can configure your virtual station by adjusting CW speed, pitch, and receiver bandwidth. You also have an option to enable or disable QSK, full break-in keying. If you have never used this mode either because you weren't sure what it was or your equipment didn't have the capability, here's a chance to see why top CW contesters and DXers prefer QSK.

In addition to specifying conditions for your own station, Morse Runner also allows you to specify band conditions including: QRM, QRN, QSB, and polar flutter. Alex based his "atmospheric" effects on mathematical models of ionospheric propagation. The results are amazingly realistic; you'd swear you were listening to actual CW signals.

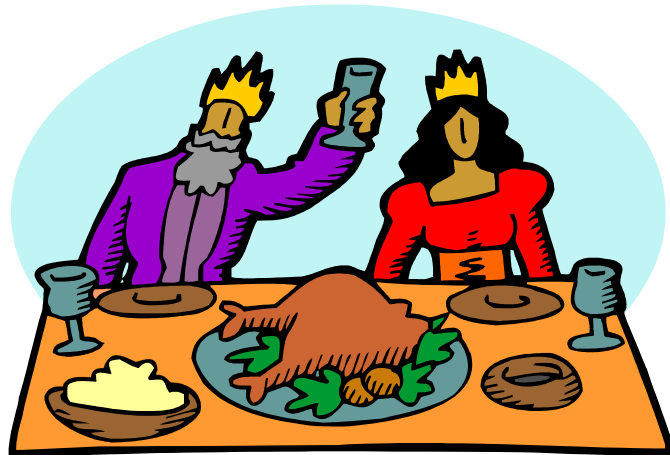
Finally, you can throw a couple of additional variables into the mix such as band activity and LIDS – stations who call you and have no clue what they are doing.

It's all great fun and there's even a web-based scoring sheet that keeps tabs on top Morse Runner scores. So download a copy of Morse Runner and install it on your work laptop, your home PC, everywhere you might find yourself with a few free minutes to kill. You'll be amazed at how quickly your Morse skills improve, as well as how easy it is to get hooked on CW fooling around with Morse Runner for a few minutes a day.

**Announced DX Operations** From NG3K Web Pages  
<http://www.ng3k.com/Misc/adxo.html>

*Looking for that rare one? Just want to try out that new antenna or amp? Here's a sample of the listings you will find for active and announced DX operations on the NG3K web archive. Point your browser to the URL above for up-to-date DXpedition info. Ed.*

## Rochester VHF Group And Rochester DX Association Annual Awards Banquet



Saturday, 21 April 2007

Pineview Family Restaurant  
 2139 N. Union Street  
 Barefoot Landing Plaza  
 Spencerport, NY

1 ½ miles North of Rte. 259/531 interchange.  
 Union St. is Rte. 259

18:00 local - Cash Bar  
 19:00 local - Buffet Dinner  
**Awesome Door Prizes Drawing!**

Tickets \$20 per person  
 Available from K2DH, AF2K, N2CK and N2OPW

### ARRL November Sweepstakes CW Results K2NNY Multiop CW Team Places in Top 10

Congratulations to the K2NNY 2007 Sweepstakes CW team (K2DB, W2LB, K2ZR, W2TB, W1TY) for a fine showing on behalf of RDXA—

- #9 overall in Multiop category
- #1 Atlantic Division Multiop Category. Looks like another plaque will be gracing the wall at the Hickory Lake shack.

And, here's another interesting statistic for the 2007 HLCC CW Gang: claimed score was 166,740 and corrected score was 159,840. That's an error rate of only 4.14%!

Claimed QSOs were 1042 and corrected QSOs were 999. If only W1TY had made one more CW QSO! Anyway, that's also an error rate of only 4.14%!

This beats the average error rate of 4.5% in the multiop category, and is only 2.9% off the best multiop error rate of 1.2%

All this and a **SWEEP** to boot!

**Well done guys!**

## Wintertime Radio

By Doug Stewart - N2BEG

Here's what's up at N2BEG

Once again I get though (almost) another winter without doing the planned antenna work last fall. Not that it mattered much since I have not been on the air much to speak of. My operating time has instead been split between work, home, sports, scouts and more recently assisting with the robot build at HF-L for the F.I.R.S.T. (For Inspiration and Recognition of Science and Technology) regional last weekend at RIT. At up to 4 nights a week plus Saturdays for the last 7 weeks it didn't leave much. The work by the kids paved their way to Atlanta for the nationals in April as they were selected outstanding Rookie team at RIT and get to advance. (they were very psyched) With only one other rookie team on the roster, who backed out in favor of another regional the kids thought they had a lock on the nationals. We were paid a visit by a judge who assured the team that there was no free ride and they met the stringent criteria to win the award. Now we plan for a last minute 50 person trip to Atlanta, fun! I promise not to bore the crowd on .79 with all the details...you'll have to yell at me if I don't shut up.

Anyway, back to radio! I'm building a new keyer so I can run my Alinco DX-70 mobile CW in the not too distant future, as well as have it for the radio merit badge I'm teaching also. Outside the 160 meter dipole is waiting to be assembled and the TH3MK3 or my C3S (once resurrected with a lot of new aluminum) will be hoisted up on a small tower against my back garage to give me some directivity and gain again. In the meantime the only real antenna I have at my disposal is the mystery antenna I hastily put up in December at a meager 22 feet. (My Butternut HF9 is having 'issues.') In February I managed to put the following calls in the log, all at 100w with a mystery antenna that is too low to work.

Stations	Bands
YW0DX	30, 20, 17, 15, 12 meters
J20MM, J28JA, 9A3A	20 meters
K9A/ANT, V51AS, EA9EU, YM0DX	40 meters
XF2K, GB0ANT, 9U0X	17 meters

See you all next week.

7Treez, Doug

## A QSK Detective Story

By Mike Rundle - N1OKL

A year or so ago, I sold my old Yaesu FL-7000 solid state amp and upgraded to an Icom PW-1. Like the Yaesu, the PW-1 is also a solid state linear. But unlike my previous amp, the PW-1 is capable of a full kW in all modes, including RTTY.

When I initially set up the PW-1, I enabled the mechanical TX relay inside my exciter...a Yaesu FT-1000D. I quickly found out with my first CW QSO using the new amp that I could no longer run full break-in keying. The mechanical relay was way too slow, even at my modest CW speeds of around 22 WPM.

At the time I thought this was no big deal. I set the exciter up for semi break-in using the VOX circuit, and this seemed to work

well. Occasionally though, in the heat of a rapid DX exchange, even semi-break in mode would clip characters. I was ready to resign myself to using manual keying, when I got to thinking that I should really do a bit of detective work and find out if the problem was with the PW-1 itself or the method I was using to key it.

The manual that came with the PW-1 is pretty non-specific about whether the amp is or is not capable of full break-in keying. In fact, the PW-1 manual is a pretty skimpy affair altogether. But a bit of research on the web revealed that indeed, when keyed with an Icom exciter, the PW-1 will do full break-in keying. So, now all I needed to do was figure out if there was another way of keying an amp from the FT-1000.

Thinking back to when I had the old Yaesu amp, I realized that it had not used the TX relay in the exciter for keying. Aside from the coax, the only connections between the amp and the rig were the ALC line and the band data line. Hmmm. There must have been a keying line in that band data cable.

Sure enough, a look at the FT-1000 manual revealed that pin 2 on the band data jack was a keying line. A look at the PW-1 manual revealed that grounding pin 3 on the ACC-2 jack would key the amp, sinking 200mA to ground in the process. Hey, maybe I was going to get lucky here. Maybe all I had to do was make up a new interface cable. But first, I needed to find out what was connected to pin 2 in the rig, and whether or not it was capable of sinking 200mA to ground.

The short answer was, No. The schematics showed that Pin 2 on the FT-1000 band data jack is connected to the collector of an FA1A4P. Say what? A Google search turned up the data sheet for this transistor, which revealed that the device is only capable of sinking 100mA to ground. So, I was going to need a buffer circuit of some sort, and a fast one at that for QSK.

With a bit of web research and a lot of help from N2OPW, I came up with a two transistor inverting switch circuit. I was all ready to break out the soldering iron when I found the web site of Mike Bryce, WB8VGE. On his site, theheathkitshop.com, Mike sells a variety of upgrades for Heathkit and Drake gear, as well as some other odds and ends...including the Universal Keying Interface. This circuit uses a 4N25 opto isolator on the exciter side that only sinks 10mA to ground. The opto isolator switches an IRF510 MOSFET on the amp side and this device is capable of sinking a whopping 100V at 5.6A to ground. All the components are through-hole and mount on a quality, plated-through PCB. Plus, there is even an LED indicator! Classy. Price: \$15 + \$3 postage.



WB8VGE Universal Keying Interface. The LED indicator is not visible. It's behind the electrolytic cap. <http://www.theheathkitshop.com/index.html>

---

## ROCHESTER DX ASSOCIATION

W2RDX rdxa.com

This Bulletin is 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 second 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 3<sup>rd</sup> Tuesday of each month, September through June.

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

**Vice President**----- Vic Gauvin – K1PY  
k1py@frontiernet.net

**Sec/Treasurer**----- Charles Kuhfuss – WB2HJV  
wb2hvj@rochester.rr.com

### Board of Directors

Irv Goodman – AF2K----- af2k@juno.com

Doug Stewart – N2BEG----- stewarts@rochester.rr.com

Alan Masson – K6PSP----- k6psp@arrl.net

Chris Shalvoy – K2CS----- chriss@globalhp.com

### 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: ng2p.ham-radio-op.net / Port 7300

### Newsletter Editor

Mike Rundle, N1OKL ----- [michael.rundle@kodak.com](mailto:michael.rundle@kodak.com)  
Alternate email: n1okl@pcilearn.com

### Dues (\$15 / year) and Correspondence to:

Charles Kuhfuss, WB2HJV  
55 Stoney Path Lane  
Rochester, NY 14626

### Professional Home Inspection



Paul Mackanos - K2DB  
20 Sumac Way  
Fairport, NY 14450



Paul - K2DB

[www.paulmackanos.com](http://www.paulmackanos.com)

800.822.7579  
585.223.4230