



# March 2008 *Longwire*



*An almost monthly newsletter for the Port City Amateur Radio Club*

PCARC can be found on the web at <http://www.w1wqm.org>  
Also at: [www.yahoo.com/group/pcarc](http://www.yahoo.com/group/pcarc)

## 2007/2008 OFFICERS

President: Mark Pride, K1RX, k1rx@arrl.net  
Vice President: Bob Casian, K1AX, bobken@yahoo.com  
Treasurer: Scott Fraser, K1IPT, k1ipt@arrl.net  
Secretary: W1CBT, Pete Corbett, vpciii@comcast.net

## 2006/2007 EXECUTIVE BOARD

Bill Clapp, KB1YJ, kb1yj@arrl.net  
Chris Sloane, K1YU, k1yu@arrl.net

## ALTERNATE BOARD MEMBERS

Neil Collesidis, AA1SB, aa1sb@arrl.net  
Roger Thompson, K1PV, k1pv@arrl.net

## Presidents QSO for March 2008

*By Mark – K1RX*

Hey folks, it's time for the famous Home Brew night at the club! This is the time when you can bring in your small and large joys from the work bench and brag to the world (well, our little world)! Even if you have been doing small steps with the project, bring it in, bring in pictures, or the finished product and plan to share some of the fun details of building that little beauty. I usually confine myself to outdoor projects like antennas (my favorite) and I plan to bring some pictures of my science project for the critics to judge.

These past couple of weekends have been spent on the air, playing two of the biggest operating events on the HF bands – the ARRL DX Competition both on SSB and CW. I just finished this weekend putting in a limited effort from home and by myself. Usually I have a small crew come and operate in a multi transmitter event. This year, with the low sunspots and past month's lousy conditions, thought it best to not torture any of my friends and just scale down the weekend. Put together a setup with 2 radios with selectable settings to listen to one or the other (tuned to different bands) or both – one in each ear to create some fun (madness?). I put in close to 24 hours of the possible 48 and made just over 1500 QSO's in what may have gone down as the worst weekend of propagation in several decades! Wow! And on a very interesting and club related note, our own club station was active with Jason, WA1NH at the controls making over 300 QSO's and working several far away locations with ease! Our triband antenna at 115 ft. really worked to overcome the lousy conditions and even our wires played pretty well too.

Plan to join us for the HB night on Wednesday at 6:30 PM to have some good eats and then sit back and enjoy the show of projects, gizmo radios, tuners or whatever from our very own master builders! Meeting starts at 7:30 PM. See you there!

73, Mark, K1RX

# Port City Amateur Radio Club Feb 6<sup>th</sup> Minutes

By Pete – W1CBT

**Pre-Meeting Dinner/Donations:** Discussion: Thanks to K1RX and XYL for dinner this evening.

**Call to Order/Introductions:** K1RX Discussion: 35 members present. New members: W1CCA (A returning Club Member from 1955), WA1QWV and KB1PXE

**On the Air Report:** NT1A Discussion: Bouver Island DX - Number 3 on the most wanted list. 425DXN Report and VOA Prop (propagation tool) were used to make a 20 meter connection. Call sign 3Y0E.

**NH QSO Party:** K1RX Discussion: W1WQM is a bonus station for the event this weekend. See K1YU for operation schedule. Event commences at 19:01 on 08 FEB 08 for 24 hours.

**Field Day 2008 – Update:** K1RX Discussion: Looking for a new Field Day Director - K1RX will be out of town for the weekend.

**Meeting Topic:** Tuners presented by K1AX and K1RX with a discussion: What's under the cover? A presentation of HF Tuners was given covering function and design, homebrewed efforts and Q&A. Technical explanation of the workings of tuners as impedance matching devices was given.

## Old Business

**Secretary's Report:** W1CBT Discussion: Minutes from the prior meeting were posted in the Longwire. Motion to accept, Seconded and passed.

**Treasurer's Report:** K1IPT Discussion: The prior months report did not make the monthly edition of the Longwire and was presented as follows:

Income & Expenses		
Income		
	Dinner Donations	\$95.00
	Dues	\$60.00
	Raffle	\$49.00
Total		\$204.00
Expenses		
	Meeting Facility	\$150.00
Total		\$150.00
	Income Less Expenses	\$54.00
	Current Balance, PCARC	\$4,079.00

**VE Program/Schedule:** K1YU Discussion: PCARC has scheduled VE Sessions for the following dates: 31 MAR 08, 31 MAY 08, 30 AUG 08 and 29 NOV 08.

**Repeater Status:** KA1GJU Discussion: Repeater is deaf. Possibly duplexers will not operate utilizing one antenna. The antennas will be split to test this issue. Wind generator is currently off line due to near lightning strike. (Update: SWR was 2:1 on the primary antenna. It was taken down, repaired, and reinstalled. -KA1GJU)

**ARES Update:** WA1NH Discussion: Latest report in the Longwire. WA1NH has accepted an ASEC position (logistics) with NH Section.

**New Business**

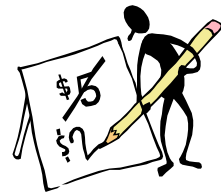
**Announcement:** Seabrook Drill: K1AX Discussion: The 2008 Seabrook Station Drill dates have been announced: Drill #1 on 27 AUG 08; Drill #2 on 08 OCT 08 with the Graded Ex on 05 NOV 08

**Additional Items:** K1RX Discussion: Donations to Piscataqua Fish and Game – PF&G had to replace the furnace for the cost of \$1200. WA1NH made a motion to donate \$600 to the PF&G. Historically, the PF&G has not asked for any additional funds above rent. Motion seconded by K1RX. It was established that there was a quorum present and the motion passed unanimously.

The Meeting adjourned at 21:45.

## Port City Amateur Radio Club Treasurer's Report for March 2008

*By Scott Fraser, K1IPT - PCARC Treasurer*



Summary of the club's cash flow for February 2008:

### Income and Expenses

#### Income

Dinner Donations	118.00
Hampton Seafood Fest	250.00
Dues	150.00
Raffle	20.00
<b>Total Income</b>	<b>538.00</b>

#### Expenses

Meeting Facility (Rent)	150.00
Meeting Facility (Furnace)	600.00
<b>Total Expenses</b>	<b>750.00</b>

**Income less Expenses (212.00)**

Current balance in the PCARC treasury is **\$4,618**

Scott Fraser, K1IPT  
Treasurer

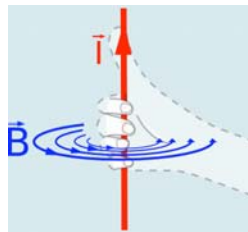
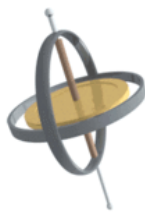
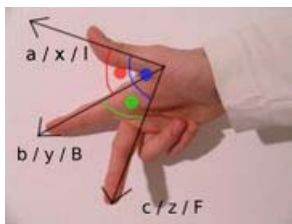


## What Happened to the Wind Generator?

*By Kriss-KA1GJU*

You may recall that about a week or two before the last meeting, I had removed the wind generator from the repeater site, due to its failure to generate any power what so ever. After climbing the 100-foot tower I found traces of arcing between the negative and ground lead where the generator head wires join the #6 down feed lines to the battery bank. The rotor wasn't turning freely either, so it had to come down anyway. When I pulled off the nose cone to remove the hub (which holds the three blades) I found two of the three blades were broken in-between the two blade retention bolts! How this happened might be explained by some of the strong windstorms we had with gusty winds. The carbon fiber blades once in motion are like the flywheel of a gyroscope, and will resist changes in the plane of

rotation. The 'sharks' fin behind the generator head is to keep the wind generator pointed into the prevailing winds.. Without going into Physics 501 and vector analysis there's a rule called the 'Right hand rule' for describing forces



affecting gyroscopes other wise known as gyroscopic precession.

You may recall the childhood toy that when a force is applied to a gyroscope, the reactionary force is 90 degrees from the applied force in the plane of rotation. Since the wind generator is mounted horizontally and free to move about in the horizontal plane (i.e. point any direction into the wind), when a gust hits the fin from slightly different direction, the result is a bending of the blades either in a pitch up moment or pitch down.

WWII single engine fighter pilots learned that slowly rotating the aircraft into the climb attitude on takeoff reduced the tendency of a sudden heading change when taking off. The massive 11' diameter aluminum propeller made powerful gyroscope, and had to be treated as such when launching off of narrow runways.

Motorcyclists experience the same forces, one little tug on the handlebars to the right makes the bike lay over to the left, which in turn makes the bike turn left. Just watch those motorcycle races on ESPN and you will see it.



Blade failure imminent ... just how strong are those bolts?

Been broken long enough for corrosion to form!

So, to answer your questions: I am replacing the blades and trying to upgrade the charging circuitry if possible to make it run quieter and with a smaller battery bank. The newer version doesn't require a minimum of 400 A-Hrs of battery storage since it continuously looks at the battery voltage and controls the rotor speed accordingly.

### Items for Sale

**Yaesu 990/AT** w/manual& mic... mint \$700.00

**Yaesu 890/AT** w/mic, just back from Belltronics, w/manual on CD. \$450.00

**Astron 35A** power supply near new 80.00

**Kenwood 711** 2m all mode and **Kenwood 811** 440 all mode, 25W/tone boards in both \$500 for the pair. One mobile mounting bracket included.

**Signalink USB** for Yaeasu or Kenwood, never used \$60.00

**Cushcraft R5** 5 Band Vertical antenna 10/12/15/17/20Mtrs \$75.00

**Hustler BTV-4** 4 Band Vertical antenna 10/15/20/40Mtrs \$65.00

**Hustler 80** resonator for the BTV-4 above \$25.00

**Behringer B-2 PRO Condenser Microphone** w/ power supply and wind sock 90.00

**Ameritron AL-80** HF amplifier w/manual, low drive 400-500w

For all the above items, please contact Dale -N0QKN, N0QKN@msn.com or cell phone 603-498-8223

**Wanted "10M4D" i.f. filter** (at 10.7-MHz) from a defunct CB radio, or the junker CB itself. Anyone in PCARC got one to sell/swap? Thank you. Contact AI2Q, Alex. 207-967-8812 or e-mail ai2q(at)arrl.net

## Nets Sponsored by PCARC

**East Rockingham ARES Net** – Each Thursday night at **8PM** on **145.150 MHz**, except the *first* Thursday of the month we meet on **147.57 Simplex**.

**Seacoast Net** – Each Sunday Morning at 10AM on **3895 kHz** in LSB.



**Are you verbose and do you have something to contribute to the Longwire?**

Please send lengthy material via E-mail to kliegle@verizon.net , so I won't have to **retype** it into the Longwire. I will take items for sale over the phone, providing the above is taken into consideration. My address is on the last page of the newsletter. Thank you, Kriss – KA1GJU editor.

Join the Port City ARC email reflector group at: Yahoogroups, all are welcome to join. Just go to [www.yahoogroups.com/group/pcarc](http://www.yahoogroups.com/group/pcarc) to join.

### Important Dates:

**March 5<sup>th</sup> PCARC monthly meeting** will be held at the Piscataqua Fish and Game Clubhouse at the end of Tuttle Lane in Greenland , New Hampshire ([map link](#)). Dinner starts at 6:30 PM . This is Home Brew night! Please bring that project you have been working on and present it to the club! Meeting starts at 7:30 PM.

**March 29<sup>th</sup> VE Test Session** at the Piscataqua Fish and Game Clubhouse at the end of Tuttle Lane in Greenland, New Hampshire ([map link](#)) at 2:30 PM. Contact Deuce, 603-231-1392 for more info. Pre-register **REQUIRED** at the following: <http://erockares.blogspot.com/w1wqmorg/files/NCVEC605.pdf>

**Kriss Kliegle - KA1GJU**  
**25 Muddy Pond Rd**  
**Kensington, NH 03833**

**March '08 Edition of PCARC's Longwire**



**First Place 5A  
Field Day '06 & '07**