



See you at our next meeting!
 February 4, 2008, 7PM
 Nashua Public Library

FAR Scholarships for 2008-09

The Foundation for Amateur Radio, Inc. plans to administer fifty-five scholarships for the academic year 2008-2009 to assist licensed Radio Amateurs. Some of these scholarships are funded by the foundation itself, a non-profit organization composed of over seventy-five local area Amateur Radio Clubs. The rest are funded by other donors, and administered by the Foundation.

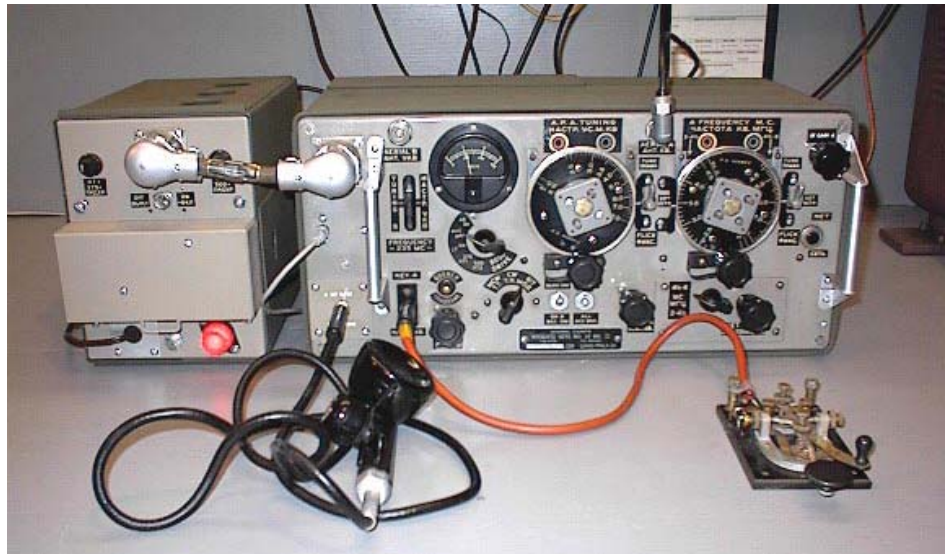
Licensed Radio Amateurs may compete for these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled in (or have been accepted for enrollment at) an accredited university, college or technical school.

FAR SCHOLARSHIPS | Page 6

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Wireless Set 19 – First Transceiver



At our February meeting, Mike Murphy, WU2D, will demonstrate one of the earliest transceivers available to hams, and compare it to one of the most recent. This will be an excellent opportunity to hear what a difference 70 years makes as Mike tries to contact local stations for on-air comparisons.

The first single control transceiver, the British Wireless Set 19 is regarded as the most forward looking pre-war design. It was the first mass produced mobile radio system. It certainly represented the first COTS radio program in military history. And it is the grandfather of all of those ICOMS.

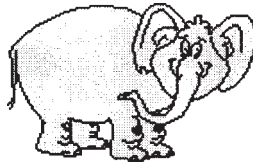
In 1940 the British needed a radio to go to war FAST - one which could be manufactured by many allied countries in mass quantities and one which used existing parts found in the commercial broadcast radio industry. Parts cost was a big design driver. The use of metal stampings and painted steel was encouraged. No one assembly was to cost more than a set amount. Further, the radio production should not require any retooling in a typical radio factory.

Add to these requirements the need to put usually separated functions in one integrated design: TANK INTERCOM, HF XCVR, and UHF XCVR, Group Broadcast, CrossBand Repeat and memory presets. The resulting radio design was complex and used many stages and low cost parts to give the maximum flexibility and function, but the overall cost, size weight and power consumption remained a fraction of that for any military design of the day. Does this sound a lot like the IC-7000?



Tiny Elephant's Contest Corner

The Latest Contest news -
A NARC Bulletin Exclusive
A monthly column by Ed Deichler, K2TE



Long Short Story

Last month I described a two-element 80-meter vertical array of modified half-wave, center-fed elements that I modeled. The effort was my attempt to explore alternatives to my venerable 80-meter quad that has graced my tower for almost 10 years now. The quad is a two-element design courtesy of N6BV that uses a series of relays to switch between a driven and a reflector element for gain in the forward or reverse direction. It also allows me to selectively short parts of an inductor in each loop to change from the CW to the SSB part of the band.

About this time last year I had noticed a problem during cold weather with one of the relays apparently not closing properly. Oh well, I thought, time to overhaul the thing. The junction box uses four 12VDC relays rated for at least 12A on the contacts with AWG14 wiring to handle the legal limit on transmit. The replacement relays I bought were physically smaller than the original set so that meant some careful, tongue-biting soldering would be necessary to make sure contacts stayed separate from one another.

I removed the junction box from the tower and set about unsoldering the wires from the relays. About half way through the process I noticed that one of the ground wires for the 12VDC lines was loose on one of the relays. Oh great, I sighed; there probably was nothing wrong with the relays after all. The ground wires probably shrank away from the relay contacts when it was very cold, preventing the relay from closing. I had already prepped the new relays and did not feel like re-soldering the original connections so I pressed on and removed the old ones.

I got the new relays installed without too many solder burns and checked the switching sequence to make sure I did not succumb to the left-handers curse when wiring the relays. Everything checked out fine for once. I installed the box back on the tower and fired up the rig and amplifier. The quad was back to its old self with a 2:1 SWR bandwidth of 100 kHz on each end of the 80-meter band. I was ready for contest nirvana – running pileups.

As the calendar rolled into October, the annual pilgrimage of devout contesters to rare QTHs started. These are hams with more money than common sense (neither of which I have) who journey to countries to set up a contest station for the CQ Worldwide SSB contest in late October that kicks off the contest season. They can be found testing antennas and station configurations a week or two before the contest on most of the usual ham bands. It was during one of these practice operations that I decided to fire up the amp and bust through the pileup to “shake out the cobwebs”. While tuning the amp on CW I noticed I had to turn the load control more than its normal setting. I switched the amp to standby and noticed the SWR was nearly 3:1. A switch to the opposite direction showed that the antenna still worked fine. I switched to the SSB part of the band and noticed the same behavior. I had that sinking feeling that I had just fried some relays.

I climbed up the tower hoping that I might find an obvious sign of failure. Upon opening the box I was greeted by the unmistakable aroma of burned insulation. I scanned the relays for a telltale, charred mark but found nothing. My nose (about the only thing that still works good) told me that the problem

was near one of the relays for the NE loop which correlates with where I observed the problem. I poked around the wires but did not find any signs of excessive current damage. I made a trip to the shack to grab my ohmmeter and back up to check continuity for the relays. Everything checked out fine. The next step was to check the switching sequence of the relays on the assumption that one of them was not closing. I had the XYL turn the selection switch in the shack while I watched the relays. You guessed it – they all worked fine.

Ok, Murphy, now what? The junction box was designed adhering to the KISS principle so the list of potential problem areas would be short. I turned my focus to the driven coil on the thought that I may have arced something and caused it to open. I scanned the coil with a magnifying glass and could not find any sign of a crack. The finger-poke test also did not reveal anything mechanically different with the coil. I made another trip to the shack to get my antenna analyzer to see if there was some electrical discontinuity in the circuit. A check with the analyzer showed the NE loop to be working normally, contrary to what I saw from the shack. Ah hah!

Back down the tower and into the shack once again to check things from inside. Feeding the analyzer into the coax inside the shack gave me the same result I had on the tower. I reconnected the coax and turned the rig on to see what happened. Yep, same high SWR problem. I popped in the tuner on the rig and found that it easily matched the loop. Murphy is still here.

My quandary persisted through the CQ WW SSB contest that found me trying to work European stations from the SW loop with the amp on and occasionally using the NE loop and running barefoot for strong stations in the Caribbean. I found I had to make as many calls with the SW loop and amp on as I did with the NE loop and barefoot. The NE loop continued to work as a reflector when transmitting on the SW loop. Small

comfort. My mind continued to focus on the driven coil as the culprit. I obtained a new coil from Jerry, KOTV to replace the old one so I could be at full strength for the CQ WW CW contest over Thanksgiving weekend.

I pulled the box down at the start of the Thanksgiving weekend to do the necessary surgery. I was still reluctant to mess with the coil since it meant a trial-and-error process to retune the taps for the SSB setting. This would be inviting the law of exponentially increasing problems versus monotonically decreasing time available for solution. I still had the old relays around and I knew they were still good. I grabbed them and started slinging solder to get the box reconfigured with the old relays. I examined the new relays again under the shack lights and on one of the relays I found the solder on the contacts inside appeared to be opaque compared to the others. I wondered if the relays were not quite beefy enough to handle the power I was pushing through it. Anyway, a quick check of the relay sequence in my reworked box showed that I had once again avoided the left-handers curse.

Back up the tower in a cold drizzle to reinstall the box. I had a good feeling this time since the weather was right for antenna work. I got things buttoned up and beat a hasty retreat to the shack for the moment of truth. I flipped on the rig and went key down and YESSS!! It works again!! The contest that weekend was much more enjoyable with the antenna back to normal.

Fast forward to a week before Christmas. The Caribbean island of Saint Barthelemy has just been granted quasi-autonomy from its parent island of St. Martin by the French. In the DXCC world this means a new country and PILE UP. Simultaneous with the announcement that the island was an official DXCC new one, FJ/OH2AM was on the air. I fired up the amp when they were spotted on 80 CW in the hope of a quick QSO before the pile became huge. I went through the normal tune-up procedure and again noticed more loading than normal. With a sense of alarm I switched to standby and noticed something wrong before I keyed the rig. Signals were down substantially from a moment ago. A tap of the key

confirmed my fears – the relays were blown again. This time the damage appeared to be worse than before based on the observed SWR and the fact that the tuner could not pull it back in. The next few nights were frustrating as I spent hours trying to work the new one on the opposite loop. I finally succeeded not long before the operation shut down.

I trudged out back and up the tower where I grimly opened the box. My nasal radar homed in on the same spot as before. This time my visual sensors noticed one of the wires that connect to the NE loop no longer had a shiny black jacket. I pushed it away from the relay and noticed a blackened contact at the relay ground wire. I twisted the charred wire and found a gaping hole in the jacket indicating a spectacular short had occurred. The wire to the loop had been against the relay ground contact of one of the relays. What had happened was the classic case of a capacitor breaking down. The 3300 volts on the output from my amp on key-down that was present in the wire to the loop, when combined with the abrupt edge of the ground contact, overcame the dielectric constant of the wire's insulation and equalized itself on the relay ground. I suspect the same problem occurred with the previous set of relays based on the burnt smell and the same proximity. The fact that the tuner was able to make the loop work could be due to the initial short being such that the insulation was not completely burned away so that only part of the energy at the 100-watt level of my rig was shorting to ground. The fact that the loop looked normal when I used the antenna analyzer could be attributed to its very low power level, further substantiating my hunch about the severity of the initial short.

I have replaced the relay yet again and again things are working fine. This time however I made sure there was at least a quarter-inch gap between all loop connections and relay contacts. There is a design adage for high-power equipment for HF that goes something like close together is bad. Short leads are fine for small signal work or VHF and above. The strong fields and high potentials involved are like the Patriots and Colts facing each other and waiting for the snap.

Well, that's the long story of my short problem.

73 & Happy New Year, everyone!

NARC Club Badge Order Form

Please print your First Name and Callsign as you would like it to appear on the badge:

Price: \$5.00 each

Send (or give) to: Treasurer, Nashua Area Radio Club
P. O. Box 248
Nashua, NH 03061

Please make checks payable to: Nashua Area Radio Club

Badges will be mailed.

WORLDWIDE DISTRIBUTION



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Chuck Wyrick, N1UC

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Minutes of the Board of Directors Meeting December 17, 2007

Attendees: Present were the President, Ed Deichler (K2TE); Vice President, Dave Murphy (W1SBX); Secretary, Jack Duffy (NF1L); Treasurer, Bill Bordy (NJ1H); Membership Director, Stuart Sherman (N1STY); Activities Director, Bill Hammond (KA1SSR).

Location: The December Board Meeting was held in the Hunt Room of the Nashua Library.

Program: January's meeting is Elections & Awards, Budget approval, and Project night. February's meeting will be the "Ugly Filter". March could be "APRS".

Field Day Results: We were Number one in our class, 8A, and eleventh overall.

Donation: Gate City Striders has donated \$300.00 to Amateur Radio for providing communications for the Applefest Half-Marathon. Motion was made to share the donation with ARES since a large contingent of volunteers were from that organization. Motion passed.

Technician Class: Red Cross has about five people for the class. Classes will be held last Saturday in January and first Saturday in February.

Membership: Out of 73 members on August 31st, 56 members have renewed and 17 have not.

Treasurer: Our current balance is \$4498.64 plus the \$300.00 donation and the renewals received tonight.

Activities: Pizza this week is at Zacharia's Pizzeria in Hollis.

Adjournment: Having no further business the Board Meeting adjourned at 8:15 PM. The next Board meeting is January 28th.

Treasurer's Report

December 3, 2007 to January 7, 2008

Beginning Balance: December 3, 2007 \$3,978.64

Receipts

Memberships \$115.00

Donations \$800.00

Total Receipts \$915.00

Disbursements

Newsletter Printing (Dec.) (\$43.50)

Treasurer Postage (\$2.73)

Total Disbursements: (\$46.23)

Ending Balance: January 7, 2008 \$4,847.41

Minutes of the NARC Club Meeting January 7, 2008

The President, Ed Deicher (K2TE), called the meeting to order at 7:08 PM in the Nashua Public Library, and began the meeting with the introduction of those present.

Elections: Current Board was reelected unanimously.

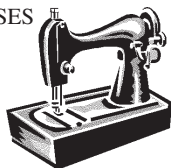
Audit Committee: Jack Warren (WB4MDC) and Dave Banks (N1SUE) have volunteered to act as the Audit Committee again this year.

Treasurer's Report: The Treasurer, Bill Bordy (NJ1H) presented the Treasurer's report. The December club balance is \$3978.64, the Year end balance is \$4827.41,

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and the current balance is \$4847.41. The Budget for 2008 was presented and approved by a majority of those present.

Awards:

- Applefest;
 - Jim Blaine, WD4JZO
 - “Fletch” Seagroves, N1MEO
 - Marc Slater, KB1DFE
- FD Climbing;
 - Mike Ryan, K1WVO
 - Bruce Jewett, W1GQ
 - Sterling Eanes, AK1K
 - Mike Zaharee, KE1EB
 - Linda Zaharee, N1ZBS
 - David Zaharee, KB1HDI
 - Rex Lint, K1HI
- FD Power Generation;
 - Don Grant, N1UDB
- FD Incident Commander, FD Climbing, Estate Coordinator;
 - Ed Deichler, K2TE

Program: Tonight is Project Night:

Jack Warren (WB4MDC) Power Supply Dummy Load – allows you to check your power supply under a controllable load.

Rich Carter (KE1EV) Repair and Restoration of Antique Radios – Rich brought in two radios that he has restored. Pointed out that replacement parts are available via third party manufacturers.

Jack Duffy (NF1L) Two projects, testing a Halter Monitor for Southern New Hampshire Medical Center, and a Foghorn sound effect using model railroad sound cards.

Bill Bordy (NJ1H) Home made QSL Cards, QSL Cards are made using Word, Excel, and DXLabs DXKeeper. He prints four cards at a time, one side and then the other, making allowances so that both sides of the card are for the same QSO.

Ed Deichler (K2TE) YCCC Six Band Bandpass Filter, 10 to 160 meters, to improve reception during contests.

Technician Class: Dave Murphy (W1SBX) class at the Red Cross will be January 26th and February 2nd, from 9 AM to 4 PM. There are eight signed up and Dave Anderson, a guest at tonight’s meeting, makes nine.

Secretary: Good to be back. Thanks to all for the cards.

Membership Report: The Membership Director, Stu Sherman (N1STY) reported that the club now has 57 paid members and 15 that have not renewed.

2007 Treasurer’s Report	
Beginning Balance, January 1, 2007	\$3,659.71
Receipts	
Advertising	225.00
Badges	\$5.00
Field Day Meals	\$400.00
Field Day Hat (2006)	\$10.00
Donations	\$1,225.00
Membership	\$930.00
Total Receipts	\$2,795.00
Disbursements	
Badges Fabrication	(\$3.00)
Donations:	
(ARRL Spectrum Defense Fund)	(\$200.00)
(Nashua Public Library)	(\$100.00)
Equipment (Come-along Wire Clamps)	(\$49.15)
Field Day Expenses	(\$29.12)
Field Day Meals	(\$400.00)
Insurance	(\$325.00)
Newsletter Postage	(\$69.82)
Newsletter Printing	(\$363.00)
P.O. Box Fee	(\$84.00)
Secretary Postage	(\$1.48)
Treasurer Postage	(\$2.73)
Total Disbursements:	(\$1,627.30)
Ending Balance, December 31, 2007	\$4,827.41

Activities Report: The Activities Director, Bill Hammond (KA1SSR) noted that pizza this week is at the Merrimack Pizza Hut.

Jim Blaine (WD4JZO): ARES meeting Wednesday in Milford Public Library. Check www.hcnh-ares.org for ARES information.

President: February 9/10 NH QSO party, sponsored by the Great Bay Radio Association, for 24 hours. For further info see W1FZ.org

Program: Next month could be WU2D, not locked in yet.

Bill Barber (NE1B): Will be contesting from the Bahamas with C6ANM for the next couple of months. Keep an eye out for me during the 160 meter CW and Phone contest, and the VHF contest.

Adjournment: Having no further business, the meeting adjourned at 8:30 PM.

**Deadline for the
March Bulletin
is Monday, February 11th, 2006**

Please contribute to the newsletter!

Your articles, letters, photos, and suggestions are always welcome and appreciated. You can email the editor at newsletter@n1fd.org

FAR Scholarships

CONTINUED FROM | Page 1

Some of the scholarships require the applicant to be pursuing a particular degree (including graduate degrees) or studying particular subjects. Some of them require applicants to reside in a particular geographical area, while others merely give preference to an area. A few require applicants to hold a particular license class or higher.

The Foundation encourages all qualified amateurs to apply for these awards. More information and an application are available at the FAR website, <http://www.amateurradio-far.org/> or may be requested by letter or QSL card to FAR Scholarships, P.O. Box 831, Riverdale, MD 20738.

The February KY1N Memorial Exam List

Scheduled VE exams through March 15, 2008, MA ME NH VT
Please check with contact person, as some dates are tentative

Date	Time	Contact	Location	Phone
02/02/08	10:30	Larry Houbre, AA1FS	Dartmouth MA	508-991-6055
02/08/08	18:30	Ralph T Stetson III, KD1R	Burlington VT	802-878-6454
02/09/08	09:00	Ben Fleck, K2LYE	Falmouth MA	508-540-2583
02/09/08	10:00	Bryce Rumery, K1GAX	Topsham ME	207-799-1116
02/10/08	12:00	Bob Quinn, WV1A	Gloucester MA	978-283-4660
02/11/08	19:00	Dick Doherty, KA1TUZ	Brookline MA	617-527-2968
02/13/08	19:30	Bruce Anderson, W1LUS	Chelmsford MA	978-851-2886
02/16/08	09:00	Bill Wade, K1IJ	Marlborough MA	617-699-3670
02/20/08	19:30	Nick Altenbernd, KA1MQX	Cambridge MA	617-253-3776
02/21/08	19:30	Louis Harris, N1UEC	Canton MA	508-668-0858
02/22/08	18:00	David Cote, WA1DC	Holyoke MA	413-575-2950
02/23/08	12:00 +	Daniel Lee, W1DFL	Danvers MA	978-352-4513
02/23/08	09:00	Mitch Stern, W1SJ	Milton VT	802-879-6589
02/27/08	19:00 *	Paul Upham, KD1YH	Shirley MA	978-597-6535
03/01/08	10:30	Larry Houbre, AA1FS	Dartmouth MA	508-991-6055
03/01/08	09:00	Jim Heedles, WW1Y	Nashua NH	603-673-7395
03/08/08	08:45	William J Needham, K1WN	Braintree MA	781-843-4400
03/08/08	09:00	Ben Fleck, K2LYE	Falmouth MA	508-540-2583
03/09/08	12:00	Bob Quinn, WV1A	Gloucester MA	978-283-4660
03/10/08	19:00	Dick Doherty, KA1TUZ	Brookline MA	617-527-2968
03/12/08	19:30	Bruce Anderson, W1LUS	Chelmsford MA	978-851-2886
03/14/08	18:30	Ralph T Stetson III, KD1R	Burlington VT	802-878-6454
03/15/08	09:00	Bill Wade, K1IJ	Marlborough MA	617-699-3670
03/15/08	09:00	Bryce Rumery, K1GAX	So. Portland ME	207-799-1116

NOTES: * = PREREGISTRATION MANDATORY T=Technician Exams only
+ = PLEASE CALL TO GUARANTEE SEATING Times are Local Times

Please remember to bring the following with you:

- Orig. & copy FCC license (if licensed)
- Original and copies of all CSCE's you are claiming
- One photo ID, or two non-photo ID's (one with address)
- The 2007 Test Session fee of \$14.00

For the latest update check <http://www.ky1n.net/ky1n.html>

Below is a summary of the scholarships available that do not **require** residence outside of New England.

Name of Scholarships	# avail	Amount each	Must pursue degree	License	Additional requirements
10-10 International Net	4	\$1500	Assoc+		Must be 10-10 member or provide member recommendation
K & K Perdue Memorial	1	\$2000	Bach		Must study liberal arts, humanities, or social sciences
L.E. & T.J. Norrie Mem'l	1	\$2500			Prefer Jr, Sr, or Grad student with GPA>3.0 in science/engineering
Old Old-Timers Club	1	\$600	Assoc+		Must be recommended by OOTC member
Qtr Cent Wireless Assoc	18 up to	\$1600	Assoc+		Must be recommended by QCWA member
Radio Club of America	3	\$1000	Bach	G	Prefer Jr or Sr in EE studying Wireless Communications
R.V. Anderson K0NL	1	\$1000	Bach	G	Prefer Journalism student
C. Reville K3FT Mem'l	1	\$1000	Bach		Must study engineering or physical sciences
R.E. Bills Memorial	1	\$2000	Bach	G	
D. Weller KB3LA Mem'l	1	\$1000	Bach		Must study engineering or physical sciences
YL Radio League Mem'l	2	\$1500	Bach+		Prefer female students of communications, electronics, etc.
R.G. Chichester Mem'l	1	\$2000	Bach	G	Must be ARRL member recommended by ARRL club. Prefer TX res.
Silent Key Memorial	3	\$3000	Bach		Prefer residents of DC, MD, Northern VA



was founded in Nashua, NH on October 3rd, 1979, in order to operate a non-profit corporation for educational and scientific purposes as follows:

- 1) To educate and increase the proficiency of its members in the science of radio communication.
- 2) To provide for the dissemination of information among its members concerning scientific advancement and progress in the field of radio communication.
- 3) To organize and train units of licensed radio amateurs capable of maintaining radio communication as a public service during periods of emergency.

Executive Board – 2008:

President **Ed Deichler, K2TE** (603)429-0221, pres@n1fd.org
 Vice President **Dave Murphy, W1SBX** (603)943-1512, vp@n1fd.org
 Secretary **Jack Duffy, NF1L** (603)882-2085, secy@n1fd.org
 Treasurer **Bill Bordy, NJ1H** (603)882-3789, tres@n1fd.org
 Activities **Bill Hammond, KA1SSR** (603-595-2403, activities@n1fd.org
 Membership **Stu Sherman, N1STY** (603)878-4808, membership@n1fd.org
 Programs --OPEN-- [programs@n1fd.org]

Activities & Committees – 2007-2008:

QSL Manager **Ed Deichler, K2TE** (603)429-0221
 Field Day **--OPEN--** **fdic@n1fd.org**
 Station Trustee **Ed Deichler, K2TE** (603)429-0221
 Club Property **Dave Bodman, KD4CLJ**
 Training **Dave Murphy, W1SBX** (603)883-5943
 Training Asst. **Rich Carter, KE1EV** (603)889-2459
 EC Liaison **Sterling Eanes, AK1K** (603)465-2277
 Audit Committee **Jack Warren, WB4MDC** (603)429-1137
Dave Banks, N1SUE (978)433-8104
 Volunteer Exams **Jim Heedles, WW1Y** (603)673-7395

Nashua Area Radio Club Internet Home Page: <http://www.n1fd.org>

WebMaster: **Bill Bordy, NJ1H**
webmaster@n1fd.org

NARC Board Mailing List: bod@n1fd.org

NARC General Members Mailing List : members@n1fd.org

ARES Emergency Coordinator for Hillsborough County:
Jim Blaine, WD4JZO, 603-889-4429, wd4jzo@arrl.net

ARRL: 1-800-32-NEWHAM or newham@arrl.org, www.hello-radio.org

Nashua Area Radio Club meetings are accessible for the physically challenged

NARC Calendar 2008

Board Meeting:

Monday, Feb. 25th, 7 PM - Nashua Public Library,
 Monday, Mar. 31st, 7 PM 2 Court St., Nashua

Club Meeting:

Monday, Feb. 4th, 7 PM - Nashua Public Library,
 Monday, Mar. 3rd, 7 PM 2 Court St., Nashua

February Program:

**WS-19, an Early (1937) Transceiver
 with Mike Murphy, WU2D**

Weekly Events:

Emergency Nets:

Tuesdays: 8:00 PM Hillsborough County 146.73 – PL88.5
Saturdays: 8:30 AM NH ARES 3943 KHz LSB

Pizza:

Thursdays: 6:15 PM - Various locations - check 147.045

Breakfast:

Saturdays: 8:15 AM - Nathaniel's Restaurant,
 537 Amherst Street (Rte 101A)

Nashua Area Radio Club Bulletin

Published by the Nashua Area Radio Club, Inc. just prior to its monthly meeting and distributed free to members and friends of Amateur Radio.

Bulletin Staff:

Editor: **Bill Noyce, AB1AV** (603)465-7396
newsletter@n1fd.org
 Advertising: Position Available
 Circulation: **Stu Sherman, N1STY** (603)878-4808

Deadline for submitting articles or photographs for the next issue is the Monday following the current month's Club meeting. Electronic submissions are preferred and should be sent via electronic mail to newsletter@n1fd.org. On-line images may also be sent electronically in any standard image file format. Material for publication can also be sent to Bill Noyce, 98 Pine Hill Rd., Hollis, NH 03049

Advertising enquiries should be addressed to P O Box 248, Nashua, NH 03061-0248 or by contacting any of our Board Members. Advertising matters must not be raised over the Amateur airwaves.

Nashua Area Radio Club Official Membership Application

<input type="checkbox"/> New Applicant:	<input type="checkbox"/> Regular <input type="checkbox"/> Sep-Nov \$20.00 <input type="checkbox"/> Dec-Feb \$15.00 <input type="checkbox"/> Mar-May \$10.00 <input type="checkbox"/> Jun-Aug \$ 5.00	<input type="checkbox"/> Student/Sr. (Over 65) <input type="checkbox"/> \$15.00 <input type="checkbox"/> \$11.25 <input type="checkbox"/> \$ 7.50 <input type="checkbox"/> \$ 3.75	<input type="checkbox"/> Family <input type="checkbox"/> \$30.00 <input type="checkbox"/> \$22.50 <input type="checkbox"/> \$15.00 <input type="checkbox"/> \$ 7.50	<input type="checkbox"/> Renewal:	<input type="checkbox"/> Regular <input type="checkbox"/> \$20.00 <input type="checkbox"/> Student/Sr. (Over 65) <input type="checkbox"/> \$15.00 <input type="checkbox"/> Family <input type="checkbox"/> \$30.00
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Annual Dues - due September 1st of each year.
 Membership year runs from September to August.

Name _____ Callsign _____ Class _____ Packet address _____
 Address _____ City _____ State _____ Zip _____
 Home Phone _____ Work Phone _____ Email address _____
 Monthly Newsletter Mailing Preference Electronic US Mail ARRL Member yes no Expiration date _____
 Additional Family members:
 Name/Callsign _____ ARRL Member yes no Exp. _____ Email address _____
 Name/Callsign _____ ARRL Member yes no Exp. _____ Email address _____

Make checks payable to: The Nashua Area Radio Club. Mail check and application to: Membership, Nashua Area Radio Club, PO Box 248, Nashua, NH 03061.
 In signing this application, I hereby apply for membership in the Nashua Area Radio Club, and agree to abide by its constitution and by-laws.

Signature _____ Date _____

*Tour the World with Amateur Radio
Next meeting February 4th, 2008, 7PM - Nashua Public Library*

**Nashua Area Radio Club
P. O. Box 248
Nashua, NH 03061-0248**