



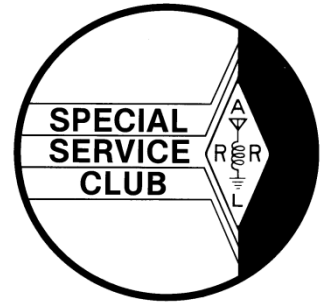
# The SPARC

Amateur Radio - Communicating Worldwide for A Century

Newsletter of the Boston Amateur Radio Club

August 2010 - VOLUME 22, NUMBER 8

www.barc.org - w1bos@arrl.net



## Message from the President

- Tom Bertolino, KB1P, President

The summer is almost over. It seems as if it was only a couple of weeks ago that I put my snow shovel away in that special place so I could get it when I need it. Of course I forgot which special place I put the shovel. I hope I can remember where I put it before I need it. I am not worried about finding it however, because I will probably stumble over it when looking for something else.

August is an important month for BARC because this is the month that your club officials start their planning for the upcoming year. It is when we start putting together the guest speakers and classes for the General Meetings; decide which public service events the club will support; and determine what special equipment the club needs to replace or buy. It is also the time you as members can make suggestions and recommendations on what you would like the club to offer during the General Meetings or recommend a public service event to support. It is also the time the club starts to look for guest speakers. So if you want to **present** a ham radio subject near and dear to you or if you know someone who would like to speak to the club on a ham radio related subject, now is the time to let us know. I would point out that if a person gives a class or is a guest speaker he or she will receive a complementary one year club membership.

This is your club. Now is your chance to let your club work for you. Let us (the club officials) know what you want from your club, and what your interests are by contacting one of the club officials. Contact information can be found in The SPARC.

Some of the new events already on the club's calendar are: Oct 2; Blue Hill Observatory's Fall Open House, Oct 14; and a General Meeting at the Clay Center Observatory. During the Blue Hill Observatory's Fall Open House we plan to set up an HF station and operate from 0900 to 1500. We will need hams to help to setup and operate the HF station. This should be a fun event with a lot of people asking questions about ham radio. If you are a club member and do not have a license to operate on the HF bands, and would like to do so, volunteer to help. You will be able to operate on the HF bands under supervision of a ham licensed for the bands.

On October 14 our General Meeting will be on the second Thursday of the month, not the usual third Thursday. This meeting will be held at the Clay Center. If you could only make one General Meeting this year

this is the one to attend. We are scheduled to be briefed on the Clay Center astronomy and Amateur Radio facilities and programs. If the weather cooperates we may have a chance to view the heavens through their telescope. If you are like me, I would not miss a chance to view the craters on the moon and maybe the rings of Saturn. Mark this date on your calendar. You don't want to miss this meeting.

I am looking forward to the upcoming year. I hope that the things I learn from the speakers that you, the club members recommend, will help me to improve my ham radio skills.

Of course, I hope to see all of you at the September General Meeting. dit dah dit dah dit (•-•-•)

## Boston Amateur Radio Club Elections Results

The BARC elections were held on June 17, 2010. The slate nominated by the Nomination Committee was unanimously elected. Officers for the 2010 – 2011 term are:

Tom Bertolino, KB1P	President
Linda Blair, NA1I	Vice President
Jim Bradley, KB1JKJ	Secretary
Jim Clogher, N1ICN	Treasurer

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Repeaters: 145.230 (-)CTCSS 88.5

Simplex: 147.420



## BARC Officers and Staff

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## I See the Future

**Note: Meetings and VE Exams are omitted in July and August**

15 Aug	MIT Flea (Cambridge)
22 Aug	NoBarc Flea (Adams)
27-29 Aug	NE Div Convention (Boxboro)
2 Sep	BARC Business Meeting
13 Sep	BARC VE Session (by reservation)
16 Sep	BARC General Meeting
19 Sep	MIT Flea (Cambridge)
2 Oct	Blue Hill Observatory Fall Open House
10 Oct	BAA Half Marathon <b>(Rp)</b>
14 Oct	BARC General Meeting <b>(Note change of date and location)</b>
15-16 Oct	NEAR-Fest VIII (Deerfield NH)
17 Oct	MIT Flea (Cambridge)
5 Nov	HCRA Auction (Feeding Hills)
6 Nov	IRS Flea (Londonderry NH)
8 Nov	BARC VE Session (by reservation)
13 Nov	FARA Flea (Bourne)

**(Rp)** = Repeater(s) may be used.

As you might expect, there are many more events (public service, hamfests, flea markets, etc.) taking place - some only peripheral to ham radio. For information on these, covering New England and some of New York, the "Ham - Electronic Flea Market" and the "PSLIST" lists tell the story. Of course, if you know of an event that would be of interest to the readers, please let the Editor know.

**The Boston Amateur Radio Club** is a non-commercial association of persons interested in the Amateur Radio Service. The Club is organized for the promotion of interest in Amateur Radio communication and education, for the establishment of emergency communications in the event of disasters or other emergencies, for the advancement of the radio art and the public welfare, for the representation of the radio amateur in legislative and regulatory matters, and for the maintenance of collegiality and a high standard of conduct.

The Club is open to all persons interested in Amateur Radio without regard to race, color, religion, creed, national origin, gender, disability, or sexual preference. Our General and Business meeting locations are handicap accessible. Other meeting and activity locations may be handicap accessible by arrangement.

The Club is an ARRL-affiliated Special Service Club, and is a member of the Council of Eastern Massachusetts Amateur Radio Clubs (CEMARC) and the New England Spectrum Management Council (NESMC). The Club is also an associate member of the Courage Handi-Hams system.

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## **FCC Approves Employee Participation in Emergency Drills**

-- *WorldRadio Online, 15 July 2010*

Moving with unaccustomed speed, the FCC adopted a Report and Order on 14 July, allowing hams who are employed by both government agencies and non-government agencies such as hospitals, to participate in emergency and disaster drills on behalf of their employers. The ruling was in response to petitions arising from a strict interpretation by the FCC's Enforcement Bureau of the prohibition on amateurs communicating on behalf of their employers.

The ruling adds a new paragraph to Section 97.113(a)(3) of the FCC Rules, which now reads as follows:

*(i) A station licensee or control station operator may participate on behalf of an employer in an emergency preparedness or disaster readiness test or drill, limited to the duration and scope of such test or drill, and operational testing immediately prior to such test or drill. Tests or drills that are not government-sponsored are limited to a total time of one hour per week; except that no more than twice in any calendar year, they may be conducted for a period not to exceed 72 hours.*

There is no specific effective date given, so it will presumably become effective upon publication in the Federal Register. The complete text of the report and order may be accessed online at [www.fcc.gov/daily\\_releases/daily\\_business/2010/db0714/fcc-10-124a1.pdf](http://www.fcc.gov/daily_releases/daily_business/2010/db0714/fcc-10-124a1.pdf).

## **FCC Clarifies Agency Ham Support in Disasters**

-- *Bob Salow, WA1IDA*

There has been recent discussion in the ARRL *ARES E-Letter* about emergency use of ham frequencies and the FCC interpretation of Part 97. For years we have promoted the concept of hams serving as communications support to agencies that have an overload of their usual communications functions during a disaster. It appears that the FCC's formal interpretation of the relevant Rule is that if a served agency has its own communication channels, regardless of how overloaded, ham radio could be utilized *only* if the specific traffic regards an immediate threat to life or property. All other traffic would have to wait until the overload subsides.

We must therefore be careful as to how we present ourselves to agencies such as the Police Departments, MEMA, the Red Cross and others.

## **How Durable is Your Watch... or Your Heart?**

A normal heart rate is about 60 beats per minute – approximately one beat per second.

Without doing the actual calculation, guess how long a million seconds is? Now try to guess the same for a billion seconds? The answer: A million seconds is less than 12 days. A billion seconds is almost 32 years!

## **Hurricane Hazards and Preparation**

-- *National Weather Service*

Hurricane hazards take many forms across southern New England and include storm surge, high winds and tornadoes, heavy rains, and freshwater flooding. Here are some thoughts to consider when planning for such conditions.

- *Minimize the distance you travel to escape flood waters. The more distance traveled increases the likelihood of encountering traffic congestion or other roadway problems. Also consider the nearest public shelter in your local area. Do not get on the road without a planned route or destination. Ensure your chosen route is still passable. Routes designated by local emergency management authorities are best.*
- *Before leaving fill your car with gasoline and withdraw extra money from your bank or an ATM. Take all medicines and special medical items such as diapers and glasses. You should have enough medicine to last for at least one week.*
- *Expect significantly longer travel times to reach your intended destination.*
- *Avoid driving into water of unknown depth. Moving water could quickly sweep your vehicle off the road. In addition, the water may harbor contaminants such as oil and sewage.*

There are two main source regions for New England hurricanes – the Cape Verde islands west of Africa and the Bahamas. The Cape Verde storms can become huge because they have a week or more to stroll across the Atlantic, and we know they are coming well in advance. Named tropical systems originating in the Bahamas have the potential to quickly become our threat in southern New England because they tend to be somewhat smaller, but can develop rapidly and impact New England very quickly.

Do not concentrate on when the hurricane eye is going to make landfall. This will be too late for your preparations. Storms accelerate up the coast and become very asymmetric. The important effects of the storm are thrust well ahead of the eye.

A rule of thumb for New England hurricanes is: run from the water and hide from the wind. The most significant threat from hurricanes is flooding, either due to coastal inundation or heavy rainfall. Along a coastline, the main threat is the storm surge. The storm surge is simply water from the ocean pushed toward shore by the wind.

### **SKYWARN Training Session at Boxboro Convention**

-- Rob Macedo, KD1CY

The New England Division ARRL Convention in Boxboro will feature a SKYWARN training session on Friday afternoon and it will be free and open to the public. The session will be taught by experienced Amateur Radio coordinators.

Friday, 27 August from 1:00 to 4:00 pm  
Holiday Inn Boxboro - Cotillion Room  
242 Adams Place  
Boxboro, MA

Further details on the location and other information are available on the NWS Taunton and WX1BOX web sites at these links:

<[www.wx1box.org/node/36](http://www.wx1box.org/node/36)>

<[www.erh.noaa.gov/box/officeprograms/skywarn/skywarntraining.shtml](http://www.erh.noaa.gov/box/officeprograms/skywarn/skywarntraining.shtml)>

Pre-registration is not required. The SKYWARN training session is produced in coordination with the ARRL New England Division Convention.

### **SKYWARN Refresher Training and Quiz System Now Available Online**

The online SKYWARN training class and quiz system is now available on the NWS Taunton Home Page. Those who have been trained in SKYWARN by a forecaster in the past can now take the online class and quiz and receive credit for taking the class upon successful completion of the class and a passing grade on the quiz. You can reach the refresher class and quiz via the following links:

<[www.erh.noaa.gov/box/officePrograms/SkyWarn.shtml](http://www.erh.noaa.gov/box/officePrograms/SkyWarn.shtml)>

<[www.wx1box.org](http://www.wx1box.org)>

Those who have not taken a live forecaster-driven class and don't have a SKYWARN Spotter ID number must take a forecaster-driven class before using the online refresher class system.

### **ICS-100: Introduction to Incident Command System (ICS) Course Offered at Boxboro**

As an introduction to the Incident Command System (ICS), this course provides the foundation for higher level ICS training. This course describes the history, features, principles, and organizational structure of the Incident Command System. It also explains the relationship between ICS and the National Incident Management System (NIMS).

ICS-100 Training to be offered at ARRL New England Division Convention in Boxboro on Friday, August 27th, 9:00 AM – 4:30 PM.

This 8 hour training session was organized by Tom Kinahan, N1CPE, and this will be taught by James Mcloughlin of MEMA.

Preregistration is required. Open to all. See the <[www.boxboro.org](http://www.boxboro.org)> web page for the registration form.

### **Wilderness Protocol**

-- Arthur Ashley, N1NHZ

A ham in a remote location may be able to relay emergency information through another wilderness ham who has better access to a repeater. The Wilderness Protocol (QST, August 1995, page 101) calls for wilderness hams to announce their presence on, and to monitor, the national calling frequencies for five minutes beginning at the top of the hour, every three hours from 0700 to 1900 while in the back country.

The calling frequencies are: 52.525, 146.520, 223.500, 446.000, 1294.500 MHz.

For additional information, go to

<[www.tcoe.trinity.k12.ca.us/~tcarc/tcproto.html](http://www.tcoe.trinity.k12.ca.us/~tcarc/tcproto.html)>.

Source: ARRL, *ARES® Field Manual*, page 76.

### **BARC Growth**

It's a rare month when we fail to add or upgrade a few members. Periodically we publish their names so that you can give them a special welcome. There may also be some upgrades and long lost members who rejoin, so greet them, too.

Richard Gaines

Lou Marcarelli W1XD

Please welcome new BARC members and congratulate the new upgrades. Make it a point to introduce yourself when you see them at a meeting. In addition, we would like to note here all call sign changes. If you fit any of these categories, please promptly notify the Keeper of the Database, Bob Salow, WA1IDA at: 508.650.9440 or email: [wa1ida@arrl.net](mailto:wa1ida@arrl.net).

### **Vanity Call Sign Fees Decrease**

-- *ARRL Bulletin 019, 22 July 2010*

The FCC has announced that the cost of an Amateur Radio vanity call sign will decrease 10 cents, from \$13.40 to \$13.30, effective 17 August.

The vanity call sign regulatory fee is payable not only when applying for a new vanity call sign, but also upon renewing a vanity call sign for a new 10 year term.

## **FCC Launches Consumer Help Center**

If you have any dealings with the FCC you will have a new tool that the FCC claims will put you “within one click of all the information you want” from the Commission. For a new, easy-to-use Consumer Help Center, just click <[www.fcc.gov/consumers](http://www.fcc.gov/consumers)>.

The Consumer Help Center includes:

- Everything consumers need to know about Bill Shock and Early Termination Fees - two common issues that affect wireless customers.
- Savvy Traveler tips - advice on making phone calls when travelling abroad.
- Broadband Speed Test - consumers can test the speed of their broadband service.
- Fact Sheet Library - more than 150 consumer Fact Sheets on telecom subjects.
- Links to additional resources on a range of issues, including privacy.
- Links to file a complaint to the FCC or comment on rulemakings.
- Blog posts about consumer issues - with consumer comments welcome.
- News releases, statements and FCC actions.

The site will be updated to include new FCC consumer initiatives as they are launched.

## **Question Pool Committee Withdraws Four Questions**

-- ARRL Bulletin 17, May 25, 2010

The Question Pool Committee (QPC) of the National Conference of Volunteer Examiner Coordinators (NCVEC) announced the withdrawal of two questions from the Technician class pool and two questions from the Extra class pool. Due to a rules change and pending action by the FCC, questions T2C02 and T2C03 from the July 2010 Technician Pool and questions E1C04 and E1C05 from the July 2008 Extra Pool may not be used in examinations after June 30.

The two Technician questions dealt with emergency communications and Section 97.113 of the FCC's rules governing Amateur Radio. In March, the Commission released a Notice of Proposed Rule Making (NPRM), that proposes to amend the rules to provide that, under certain limited conditions, Amateur Radio operators may transmit messages during emergency and disaster preparedness drills, regardless of whether the operators are employees of entities participating in the drill.

The two Extra questions dealt with third party restrictions as defined in 97.109(e); the FCC has since deleted this rule, so the information is no longer applicable to the Amateur Service.

## **ARRL Foundation Awards 66 Scholarships in 2010**

The ARRL Foundation Board of Directors is pleased to announce the scholarship recipients for 2010. Each year, the Foundation's directors have the honor and privilege of selecting Amateur Radio operators who will receive monetary assistance to further their undergraduate or graduate education. For 2010, the Foundation awarded 65 annual scholarships to young Amateur Radio operators valued at \$71,450, almost \$17,000 more than were awarded in 2009. Four new scholarships were added for 2010: The Ted, W4VHF, and Itice, W4LVV, Goldthorpe Scholarship; The Magnolia DX Association Scholarship and The Gwinnett Amateur Radio Society Scholarship. A second scholarship for the Bill, W2ONV, and Ann Salerno Memorial Scholarship was also added this year.

In addition, there are currently four holders of the William R. Goldfarb Memorial Scholarship for whom the awards vary based on the college or university they attend, other awards they receive and other financial factors. For 2010, the Foundation's directors selected Kyle Ebersold, KB1MNN, of Holland, MA, as the recipient of this prestigious four year scholarship. The seventh Goldfarb Scholarship winner, Kyle continues the tradition of prior recipients, demonstrating superior academic performance, outstanding leadership and extraordinary Amateur Radio and community service. The Goldfarb Scholarship is the result of a generous endowment from the late William Goldfarb, N2ITP. Before his death in 1997, Goldfarb set up a scholarship endowment of close to \$1 million in memory of his parents, Albert and Dorothy Goldfarb. Awarded to one high school senior each year, the Goldfarb Scholarship assists the recipient to receive a four-year undergraduate degree in engineering or science or in the medical or business-related fields. The terms of reference of the generous Goldfarb scholarship award require that recipients demonstrate financial need and significant involvement with Amateur Radio, in addition to high academic performance.

A local ARRL Foundation Scholarship Recipient for 2009:

Daniel Hechavarria, KB1TME, Boston, MA

**Where Are the Ham Radio Hackers?**

-- Dan Romanchik, KB6NU

On the Ten-Tec Omni VII Yahoo Group, <<http://groups.yahoo.com/group/ten-tec-omni-vii/>>, one ham wrote:

“If I was 17 years-old I would be hacking I-phones and other items like George Hotz, the 17 year-old from New Jersey who was able to unlock the Apple I-phone so that it could be used on other cell service networks.

“When I was his age, I was hacking dial telephones. Then one day the phone company showed up at my house. My parents were not impressed with my technical abilities.

“This morning there is a story that George has just hacked the ‘un-hackable’ Sony 3 Play Station. He says the hack was 95% software and 5% hardware.

“A quick check of the modifications site run by that guy over in Denmark, shows that there are NO MODS for the O7... interesting. I just wonder how many strange and wonderful things can be done with those 36 buttons/switches on the front panel. Can the O7 be made even better?”

In my reply, I asked, “Why stop at pressing some buttons on the front panel? Why doesn’t someone really hack the Omni VII and develop a completely new software package for it?” Rigs like the Omni VII and the Elecraft K3 would seem to be perfect candidates for this kind of hacking.

Sure, there is an order of magnitude difference between a \$300 iPod and a \$3,000 radio, but we’re big boys, aren’t we? Besides, aside from overdriving the finals, what real damage can you do to the radio? It seems to me that even if you manage to screw up the software in the rig, you can get back to square one by simply re-loading the manufacturer’s software.

Ham radio operators have a long history of modifying their radios. Page through any stack of QSTs or CQ Magazines from the 1950s, 60s, and 70s, and you’ll find many articles describing modifications to the popular radios of the day. About the only thing hams do to their rigs today is to clip a diode to allow it to operate out-of-band.

What does it say about the technical capabilities of today’s hams that we haven’t yet done with our gear what some 17-year-old kid has done with the iPhone and the PlayStation? Why don’t we have any third-party software for Omni VII or the K3? I think if a manufacturer actually encouraged third-party software development, they’d quickly gain a following and make their brand even stronger, don’t you?

**Bike-A-Thon Success**

-- Tom Bertolino, KB1P

The Bikes Not Bombs 23rd Annual Bike-A-Thon was a huge success on the rain postponed date of 20 June. There was a record number of riders and the 458 registered riders raised over \$125,000, exceeding the BNB goal.

Hams, among the many volunteers, received a shout-out with the Boston Amateur Radio Club specially noted.

**Public Service Spotlight**

**Bikes Not Bombs** mission is lasting peace and social justice require equitable and sustainable use of resources. BNB provides community-based education and assists development projects with recycled bicycles, related technologies and technical assistance, as concrete alternatives to the militarism, over-consumption & inequality that breed war and environmental destruction. Our organization is part of a worldwide movement for peace and responsible stewardship of the earth.

**Business Can Advertise Here**

The SPARC accepts commercial advertisements. BARC encourages monthly promotion of your products and services which would be of interest to hundreds of our members and others interested in the Amateur Radio Service.


The rates for display advertising are:

1 col x 2 in. (business card)	\$15 per issue
1 col x 2 in. (business card)	\$75 per 6 consecutive months
1 col x 2 in. (business card)	\$125 per 12 consecutive months
1 col x 4 in. (1/2 column)	\$30 per issue
1 col x 9.5 in. (full column)	\$60 per issue

Originals of ads must be presented to the Editor in MS Word or .jpg format to print 1:1. Other composition will be at extra cost. We will be glad to quote other ad sizes and durations.

Members are urged to seek prospective advertisers who are appropriate to our readers.

For additional information, contact Tom Bertolino, KB1P, at 781.608.6186 or <[kb1p@arrl.net](mailto:kb1p@arrl.net)>; or Bob Salow at <[wa1ida@arrl.net](mailto:wa1ida@arrl.net)> or 508.650.9440.



**The Clay Center Observatory  
Welcomes BARC members**

[www.claycenter.org](http://www.claycenter.org)

Public Astronomy Nights, Astronomy Day Events,  
Amateur Radio Classes, Amateur Radio Youth Club,  
Community and Adult Education, Weather Festival,  
Science Lecture Series, Educational Outreach

*20 Newton St., Brookline, near Larz Anderson Park*

### Your Personal Ad Could Have Been Here


Are you a depressed BARC member because you have a treasure you must turn to cash? Cheer up, Bunky! *The SPARC* will run your (non-business) ad for free. Of course, a 10% donation if you sell it will be cheerfully accepted. Just send your ad to Tom Bertolino, KB1P, at <[kb1p@arri.net](mailto:kb1p@arri.net)>.

### BARC Volunteer Exam Sessions

The Boston Amateur Radio Club holds monthly VE sessions on the second Monday of each month, **except in July and August**. The sessions would be held at 7:00 pm at Brookline Police Headquarters, 350 Washington St in the Community Room across from the information desk. Testing is by reservation only.

For further information, contact:  
Jim Clogher, N1ICN, 617.364.4658 [n1icn@arri.net](mailto:n1icn@arri.net)  
Tom Bertolino, KB1P, 781.395.5538 [kb1p@arri.net](mailto:kb1p@arri.net)

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### Looking Ahead At Public Service

- Bob Salow, WA1IDA

When hams engage in public service as mandated by the FCC Rules, the benefits go well beyond just following the rules. We can enjoy our hobby - have fun! We protect the health and safety of event participants. We support worthy charities. We learn to work within an organized effort. We experience the technical aspects of operating under adverse conditions. We practice communicating under emergency conditions. We can demonstrate these qualities to the communities we serve and thus promote our service for their acceptance.

Throughout the year BARC coordinates numerous public service events. Most of these are open to hams who are new to helping at such events as well as experienced hams. For 2010, we have already been tasked with several events, and more are expected. Feel free to contact Tom Bertolino, KB1P, at 781.608.6186 or <[kb1p@arri.net](mailto:kb1p@arri.net)>.

➤ *BAA Half Marathon – 10 October – (Boston)*

Other events may jump in on short notice. Among our skills is the ability to apply our technical, organizational and staffing quickly and proficiently. Join our team and join in the fun and learning.

If you are interested in other Public Service Volunteer Opportunities in the New England Division check out the PSLIST at <[www.n1nc.org/PSLIST/](http://www.n1nc.org/PSLIST/)>.



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### Greater Boston Net Directory

Daily 5:30 pm	Eastern Mass/Rhode Island Phone Net (NTS) 3.915
Daily 7 and 10 pm	Eastern Mass/Rhode Island CW Net (NTS) 3.658
Daily 8 pm	Eastern Mass 2M Traffic Net (NTS) 145.230 (PL 88.5)
Daily 8 pm	Slow Speed CW Net 28.160
Daily 10:00 pm	Heavy Hitters Traffic Net (NTS) MMRA-linked repeaters: 146.610, 146.670, 146.715, 146.820, and all 222 and 440 repeaters
First Mon 8:30 pm	EMA Section ARES Net 146.610 and all MMRA links
Mon 9 pm	BARC Club Net 145.230 (PL 88.5)
Tue 8 pm	MMRA Club Net 146.610 and all MMRA links
Wed 8 pm	Wellesley Amateur Radio Society Net 147.030; 444.600 (PL 88.5)
Wed 9 pm	HHTN Swap Net 146.640
Thu 8:30 pm	AMSAT Net 146.640
Sat 9 am	Northeast SATERN Net 7.265
Sun 9:30 am	Yankee SSB Net 50.275
Sun 8 pm	Algonquin Amateur Radio Club Net 446.675 (PL 88.5)
Sun 8:30 pm	NSRA Net (with Newsline) 145.470