



Volume 29 Issue 4

March 2000

## President's Corner Clark Conti, N1NVK

The rules have changed. The voting is complete, and the decision of the judges is final. It is now possible to advance in amateur radio without being able to read Morse Code at 20 words per minute, or even 13 wpm. What does this mean to the hobby? Are we going to be swamped by uncouth appliance users? Will the hobby loose the pioneering spirit that helped bring about such inventions as FAX machines, Digital Packet & TCP/IP, and Data Compression to the point that video can be streamed over low bandwidth circuits?

I doubt it.

Under the new rules, nobody looses anything. You can keep your current class of license for as long as you wish. If you have the technical know-how to advance to the next level, go for it. You may advance to the next class, and begin developing the new skills associated with bands previously unavailable to you. Have fun, remember it is a hobby. If you learned the "hard way", be proud of it. You have earned the respect of those of us who stumble over Morse Code at any speed.

While the CW requirement has been relaxed to 5 wpm, it is still required. Also notice that the technical requirements have shifted. There is less emphasis on design considerations

(Continued on page 3)

How would you like to get your newsletter via email? If there is enough interest, we can send an Adobe Acrobat (.PDF) file to you, and save on printing costs.

Let us know if you would like to do that – just send an email to mmra@mmra.org

And let us know if you like the idea.

# MMRA Board Approves Interim Vice-President, And Other Actions

At the recent MMRA Board of Directors meeting, Kevin Paetzold, K1KWP, was appointed as interim Vice-President. In addition, he will serve as the MMRA's representative to ARES and RACES, assisting in the coordination of emergency communications activities.

As our Stoneham repeater site may be in jeopardy, the board agreed that if the 2M repeater must relocate we will endeavor to keep it within the same service area.

The Board also decided to seek new talent--volunteers to help develop a new MMRA brochure and contribute newsletter articles.

The MMRA domain name – MMRA.ORG, will be renewed.

Membership update... About a month ago we had approximately 95 non-renews. As a result of the news letter pleas and the letter written by Bill, WA1NLR, we have reduced that number by almost half to 49.

Controllers--We have begun working on reprogramming the controllers to make announcements less obtrusive. We will begin with the '61 machine. Brian, Andy and others will meet to develop strategy to reprogram the hub and the remaining

(Continued on page 2)

# March MEMBERSHIP MEETING

Wednesday, Mar 15, 2000 - 1930 Hrs Campion Center, Weston MA

**Program: Skywarn**Rob Macedo, KD1CY

Raffle Other Stuff

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## Board of Directors Meeting....

(Continued from page 1) repeaters.

Boxboro--Andy and Clark agreed to coordinate efforts to identify the contact person for ARRL Boxboro and to insure the MMRA participation in this event. At the next board meeting we will need to devote time to develop a plan to market the MMRA at the Boxboro Convention.

A Rhode Island repeater group has queried the MMRA about linking into our system. The matter was referred to committee for further investigation.

The MMRA has been asked to provide a repeater for use in one of the towns in our coverage area for emergency communications use. The town will provide a site and tower facilities. Meetings are being scheduled to finalize the arrangements. By the next Board meeting, we will be able to announce the details.

We will be investigating the possibility that there may be a significant number of members who would like to get their newsletters electronically – via email attachment, in the form of a .PDF file. These files are readable by Adobe Acrobat.

Phone lines-the Board agreed to remove the phone lines from Weston, Quincy, and Stoneham. Stoneham will stay up until March 1 to allow Bryan to perform some programming. The '61 repeater phone line will remain in service until further notice.

Another group in Sharon would like to establish linking with our system. Kevin, K1KWP, agreed to obtain additional

## Some Repeater Stuff.....

223.94, Hopkinton, is not really off the air, it just is not talking very loudly. It's amplifier has lost interest in further toil once again, but we have the solution in hand. Ed, N1NOM, has loaned us a 220 amplifier. It's a mobile amp, so we have to run it very conservatively and put a big fan on it, but we'll get 50 watts out of it easily. This should end our woes with the power amp; if we get flush again, we'll buy a full duty cycle amp.



### MMRA VE Sessions

3rd Saturday of Each Month Marlboro Public Library, 9AM Contact: Bill Wade, K1IJ

617 699.3670 Evenings 6 to 10 PM, Weekends 8 AM to 10 PM.

Accredited - ARRL VE Program

http://people.ne.mediaone.net/wades/exam.htm

## New Member - Welcome!

The following is a list of new members since last September. We extracted it from our database...and since to err is human, but to really screw up takes a computer, there is a good chance that we might have missed someone. If so, apologies.

At any rate, welcome to the MMRA!

KA1HDR **Gary Irving** Jerome Erickson KB1DDI KB1EDD Michael Yuoska N1BE **Robert Evans** N1MPF **Anne Vantine** Tom Thorndycraft N<sub>1</sub>QMD N1SWB **Cary Renault** Lou Harris N1UEC N1WSC Sean Carroll **Robert Bridges** N2KNJ **N3EVL Peter Thompson** W1DSD Frank Strazzere John Higgins WA1UU

We are re-vamping the repeater personalities; Bryan, W1BRI, and Andy, N1BHI, are going to be working on '61 first, to make its announcements less obtrusive. They will be working with repeater macro programs written by Walter, N1HBR. When Bryan began to get into the programs, to understand what had to be done, his comment was "...Walter must have spent years on this stuff. His compiler is really powerful, and some of the tricks he used are very sophisticated." The compiler Bryan referred to was written by Walter a year or so after we really got into SCOM controllers, and it was the first of its kind. The compiler allows us to have one program from which we generate the different programs for each of the repeaters. You just tell the compiler that you want to generate the loadable code for '61, for example. It does things like allow you to define variable names that represent strings of words that you want the repeater to say in voice...without that, you would have to give a long string of numeric codes, each one representing a word in the repeaters voice vocabulary. The compiler saves an awful lot of work.

The Stoneham site situation is still unresolved; since the hospital was sold to a real estate firm, our status there is potentially in jeopardy. Clark, N1NVK, and Chris, N1NVL, are working on it.

This spring we need to do some antenna work at Quincy, inspect the tower and antennas at Weston, and do some PM on the 53.81 power amplifier. We'll keep you posted as to when the work parties will be scheduled – we invite anyone to come out and help.

If you would like to get involved in the technical end of keeping the system up and running, we could sure use the help. Get in touch via email – mmra@mmra.org – and let us know.

## President's Corner

## Fox Hunting Still Alive and Well

(Continued from page 1)

like tube and transistor theory and more on things like PACKET and other digital modes.

I read through the entire "final finding". (who names these things?) As it turns out, all of the decisions can be explained by understanding the most basic question on the novice exam, (N1A05 - VE's feel free to check me on this) I quote:

- Q) WHAT ARE THE THREE REASONS THAT THE AMATEUR SERVICE EXISTS?
- A) TO RECOGNIZE THE VALUE OF EMERGENCY COMMUNICATIONS, ADVANCE THE RADIO ART, AND TO IMPROVE COMMUNICATION AND TECHNICAL SKILLS.

The new three class structure does exactly that. Many hams are very technically advanced, but have trouble with CW. By allowing greater advancement, the pool of available hams in an emergency gets bigger. However the hams will by design have the kind of skill which is more in tune with the current era. The greater number of more technical amateur operators will help to new ideas get introduced, and improved by people who might otherwise be excluded.

One more quote on the subject, this one is from Albert Einstein.

"THE FUTURE TO HIM (the scientist) IS EVERY WHIT AS NECESSARY AS THE PAST"

The Foxhunting crew is as active as ever...and boy, are they getting good at it. The fixed station participants are now able to put lines out, using their beam antennas, that part the Fox's tail fur.

In the hunt of March 5, two of the fixed stations put lines within 1/4 to 1/2 mile of the Fox, and the hunters zeroed in on that area, then relentlessly nailed the Fox within an hour.

It's a lot of fun – you've heard us say that before – and a great opportunity to learn something new, and to get to know your fellow members.

The hunts start at 1000 hours each Saturday morning, and last a couple of hours; the event is ended with a gathering for brunch at a conveniently close eatery. Come on out...join up – you can try it yourself, or ride with an experienced hunter to

Below: Fox Hunting is really a "manly" sport...take a look at the vehicles used by Foxhunters. When we started a few years ago, there was a motley collection of sedans that were used to drive around pursuing foxes. Only a couple of "real" SUV type vehicles were in use then... Ed's, N1NOM, was one of them, and it looked a lot newer then. Since the early days, about everyone has moved up to truly "manly vehicles. Of course, Paul, N1ZCB, has always used his pickup to get to places that required everyone else to have 4 wheel drive, when he was the fox. Note that all this talk about "manliness" is tempered by the fact that the ladies participate too...note the head sticking out of the top of one of the vehicles – that's Shelley, N1VJE, Bill's better half.

WA1NLR Photo



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# Website Update – Quincy Site

The website now has pictures and text describing the Quincy repeater site, thanks to W1BRI. Here are a few high-

Below: If you wonder about the quality of the Quincy site, take a look at the Boston skyline from the top of the tower.



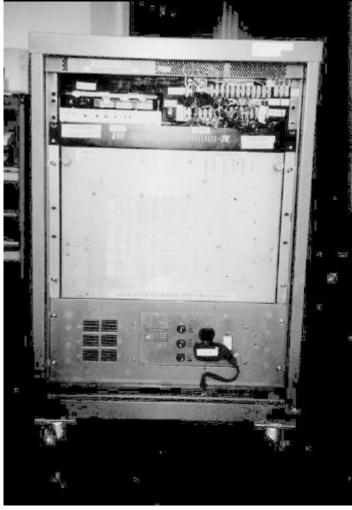
Below: We don't have a far shot of the tank available... but if you look at the parapet at the top, you might get the idea that the tower is like a big rook – a chess piece. It's a stone tower that housed a large water tank. In this picture, Bob, WA1ZJE, and Chris, N1NVL, are getting ready to erect the new DB224 antenna.

The tower at the left is used by WUMB – the radio station of U. Mass, Boston. They broadcast with about 2000 watts, using a transmitter with 3cx1500A7 tubes.

The tower is old, and there are a few hazards associated with getting to the top – you have to climb over the shelter build for WUMB before you can get to the spiral stairs that lead to the top. The "roof" has a few soft spots, so you have to be careful while up there.



Below: Andy, N1BHI, acquired yet another GE – a "lowboy" base that puts out 110 watts. Bryan, W1BRI, took it and integrated the 224.40 repeater into the cabinet. He built all the switching and audio mixing stuff, and got that in there too. It's a nice little package...and in that site, it has to be small.



Give the MMRA World Wide Web Home Page a try..... let us know what you think.... any ideas are welcome. There is a lot of new stuff there, so check it out!

WWW Address: http://www.mmra.org/~mmra Webmaster: Andy Morrison, N1BHI

# MMRA Information - Repeaters, Officers and Board Members

Marlboro	146.61	N1BHI/R	FTL	Р	PL – 146.2 out, none in
Marlboro	449.925	N1HBR/	FTL	Р	PL - 88.5 in and out
Quincy	146.67	K1ML/R	PTL	Р	PL - 146.2 out, none in.
Quincy	224.40	N1KUG/	FTL	L	PL - 103.5 in, none out
Weston	146.82	KA1AL/R	PTL	Р	PL - 146.2 out, none in
Weston	224.70	N1HBR/	FTL	L	
Hopkinton	223.94	N1BHI/R	FTL	L	PL – 103.5 in, out
Stoneham	146.715	N1NVL/R	PTL	Р	PL - 146.2 out, none in.
Stoneham	446.725	N1NVK/R	PTL	L	PL - 88.5 in, none out
Marlboro	449.575	N1NVL/R	FTL	L	PL - 88.5 in, none out
Marlboro	53.81	W1BRI/R	PTL	L	PL - 71.9 in. none out

# Minuteman Articles — Solicitation

If you have ever built anything, fixed something, or have an experience that you want to share, then you should submit an article to the MMRA Minuteman. Contact Andy Morrison, N1BHI, if you want to talk about it. We can scan artwork and schematics to make an article more interesting and useful. Give it a

#### **MMRA Officers:**

President:	Clark Conti, N1NVK		
Vice President:	Kevin Paetzold, K1KWP		
Secretary:	Bill Thorpe, WA1NLR		
Treasurer:	lan MacLennan, AF1R		
Clerk:	Ed Mulhern, N1NOM		
Director:	Bryan Cerqua, W1BRI		
Director:	Al Kunian, KA1AL		
Director:	Paul Cabral, N1ZCB		
Director:	Wayne Foley, N1XXI		
Director	Andy Morrison, N1BHI		
Newsletter Editor:	Andy Morrison, N1BHI		
Technical Directors	Chris Conti, N1NVL		

●Email: mmra@mmra.org

•Web Page:

www.ultranet.com/~mmra

Important MMRA Club Information:

Membership Meetings: 3rd Wed of Sept, Nov, Jan, Mar, May at Campion Center, Weston at 7:30 PM Meeting Dates for 1999-2000 Season: September 15, November 17, January 19, March 15, & May 10. Board Meetings: 3rd Wed of Oct, Dec, Feb, Apr. Meetings are open and members are welcome. If a visiting member wants to be on the agenda, please contact Clark Conti beforehand.

Newsletters are mailed one week before each meeting; article submissions are due one month before each meeting.

The MMRA is dedicated to Amateur Radio and the public service. The MMRA is a registered non-profit Massachusetts corporation. Membership is open to all amateurs. Annual dues are \$25.00 individual, \$35.00 family.

# Is There Anyone Out There Who Can Help.....

The MMRA is looking for someone to help with putting together a professional looking brochure. There must be one or more members who know how to do that kind of thing, and are equipped with the tools to do it. If you are one of those people, and are willing to give us a hand, get in touch via email (mmra@mmra.org).

We also need more submissions for the newsletter. There have to be a lot of people with knowledge about various aspects of the hobby who could put together articles that would be of general interest.

When we asked "Does anyone read this rag?" in the last newsletter, we got a good number of responses. Our thanks to those do answered up, and had positive things to say about "This Rag." If you want to submit an article, you will definitely have an interested audience!

# Minuteman Repeater Association, Inc. P. O. Box 1127 Berlin, MA 01503

A Non-Profit Communications Organization Serving the Public in Time of Emergency.

	-Application for Membership-						
<ul> <li>□ New or □ Renewal</li> <li>□ Individual Membership (Dues \$2</li> <li>□ Novice Membership (1st year due)</li> </ul>	5 per year)	5 per year)					
I hereby apply for Membership in the MINUTEMAN REPEATER ASSOCIATION, INC. I agree to abide by the rules and regulations of the Association as stated in the by-laws, and understand that acceptance of this application entitles me to all rights and privileges of membership as provided under the by-laws.							
Signature:	Date:						
Name:	Callsign:	Class of License:					
Home Address:							
E-Mail Address:							
Occupation:	Employer:						
Work Phone #:	Home Phone #:						
	ubs?						
I can and am willing to assist/serve t	he Association and/or help maintain the Repe	eaters in the following ways (check all appropriate					
□ Antennas □ Flea Market □ Receiver □ Publicity	☐ Shelters ☐ Medical Aid ☐ Equipment Construction ☐ Meeting Set-up	<ul> <li>□ Repeater Tech Committee</li> <li>□ Special Projects</li> <li>□ Repeater Control Operator</li> <li>□ Association Officer</li> </ul>					
☐ Transmitters ☐ Newsletter ☐ Logic ☐ Public Service	☐ Equipment Transportation ☐ Social Events ☐ Technical Documentation ☐ Refreshment	☐ Association Officer ☐ Board of Directors ☐ Field Day ☐ Emergency Communications ☐ CW Operation					
<ul><li>□ Telephone</li><li>□ Legal Aid</li><li>□ Education:</li><li>□ Technical Documentation</li></ul>	<ul><li>□ Schematic Drawing</li><li>□ Technical Library</li><li>□ Teach Code</li><li>□ Teach Theory</li></ul>	Other-Specify:					

Send this form with your Dues to: MMRA, P.O. Box 1127, Berlin, MA 01503

# **Items of Interest**

From the ARRL Letter

#### PHASE 3D COULD LAUNCH IN JULY!

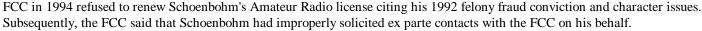
The Phase 3D next-generation Amateur Radio satellite has been tentatively scheduled to launch in late July. The information is included in the "Provisional Ariane Launch Manifest" for February through July of this year that appears in the February edition of the Arianespace newsletter. If the schedule holds, the Phase 3D satellite would be sent aloft on Ariane 507, flight V132. A specific date in July was not available.

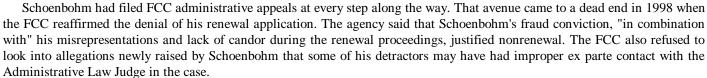
The Arianespace manifest identifies the other possible payloads aboard 507 as the PAS-1R or Europe\*Star packages and the STRV-1C/1D package. A launch contract accepting Phase 3D as a payload for the first suitable Ariane 5 launch vehicle was signed last October. The Phase 3D satellite now is at the European Spaceport in Kourou, French Guiana. Phase 3D will be stored in its shipping container, housed in an air-conditioned integration building at the launch complex until launch preparations commence. All systems have been shut down and the batteries left uncharged.

For more information about Phase 3D, visit the AMSAT-NA Web site, http://www.amsat.org/.



The US Court of Appeals has turned down an appeal from Herbert L. Schoenbohm, KV4FZ, of Kingshill, Virgin Islands, of an FCC decision to not renew his Amateur Radio license. The





Schoenbohm appealed the decision to the US Circuit Court for the District of Columbia, contending that the denials of both his renewal application and his petition for reconsideration were arbitrary and capricious agency actions. The case was argued by the FCC's and Schoenbohm's attorneys last October.

On February 29, the Court ruled in favor of the FCC. "We affirm the FCC's refusal to renew Schoenbohm's radio licenses and conclude that we are without jurisdiction to review the rejection of his petition for reconsideration," the ruling said.

"There is nothing unreasonable about the FCC's conclusion that Schoenbohm's felony conviction was relevant to his license renewal," the Court said. The Court asserted that a fraud conviction "plainly calls into question a licensee's ability to act in a manner consonant with FCC regulations."

The Court also agreed with the FCC that Schoenbohm "demonstrated an absence of rehabilitation by making deliberate misrepresentations and displaying a lack of candor during the renewal proceedings." The Court said misrepresentations during the FCC's hearings provided "a rationale for nonrenewal" that went beyond his felony conviction.

It's not known if Schoenbohm intends to appeal to the US Supreme Court. His call sign no longer is in the FCC database, but he's been allowed to continue operating until all appeals are exhausted.

### FCC THREATENS MICHIGAN HAM WITH REVOCATION HEARING

The FCC has told a Michigan ham he could face a revocation hearing if the Commission gets any more reports alleging malicious interference. A Warning Notice went out February 23 to Tech Plus licensee Allen J. Stap Sr, N8OKU, of Bangor, Michigan. In it, FCC Special Counsel for Amateur Radio Enforcement advised Stap that the FCC has received "numerous complaints regarding malicious interference and jamming, apparently originating from your station" to a 2-meter repeater. Hollingsworth said some of the interference to the Kalamazoo Amateur Radio Club's repeater consisted of "sound effects, unidentified transmissions and keying over ongoing communications." The FCC said there was further evidence that the licensee had been harassing repeater users.

Hollingsworth warned Stap that if "legitimate complaints or our monitoring reveal additional instances of this behavior," the



# **Items of Interest...Continued**

From the ARRL Letter

FCC intends to designate his station license for a revocation hearing and his operator license for suspension for the remainder of its term.

According to the FCC, Stap pled guilty in a Michigan district court to interfering with the transmission of public safety messages. He was sentenced to nine months probation and ordered to surrender his 2-meter gear for the duration.

Elsewhere, the FCC has requested that Jeffrey G. Guss, KF4MWT, of Palm Bay, Florida, retake the Technician class amateur examination elements by March 30 or lose his license. In 1997, Guss was cited for unlicensed operation on 154.6 MHz, for failing to permit FCC personnel to inspect his radio equipment, and for failing to reply to FCC correspondence. Early last year, the FCC upheld a \$2500 fine levied against Guss and denied a payment extension. It's not known if Guss ever paid the forfeiture.

In Salisbury, North Carolina, the FCC wrote Advanced licensees James W. Walls, NC4JW, and Jerry W. Cartner, K4JWC, and Tech Plus licensee James R. Christie, KF4QWR, on February 24, citing information that the licensees have been using ham gear on the Citizens Band and other frequencies. The FCC also alleged they had been selling transmitting equipment that does not meet FCC certification standards over the air on those frequencies and operating above authorized CB power limits. In separate letters,

Hollingsworth warned all three that such operation could jeopardize their amateur licenses. The FCC gave the three licensees 20 days to respond to the allegations.

### CLEARWIRE WITHDRAWS SPREAD SPECTRUM PETITION

Clearwire Technologies has withdrawn its Petition for Reconsideration asking the FCC to reconsider the revised spread spectrum rules it issued last summer. The new rules became effective November 1. But the company said it "expressly reserves" its position that Part 15 users such as Clearwire are "entitled to seek protection from an Amateur station that operates unlawfully."

Clearwire manufactures high-speed wireless Internet and network access devices operating at 2.4 GHz, where there's an amateur allocation. Fearing possible amateur interference with its Part 15 products, however, Clearwire had wanted the FCC to reconsider portions of its Report and Order.

Calling Clearwire's Petition "frivolous," the ARRL in January called on the FCC to dismiss it and to reaffirm its original Report and Order. The League said none of Clearwire's requests was reasonable and suggested the company had no standing to propose "new, burdensome restrictions" on amateur operation. The ARRL noted that FCC rules do not afford Part 15 devices any protections from interference from licensed services, such as Amateur Radio.

Disagreeing with the ARRL's stance, Clearwire pointed out in its withdrawal letter that while Part 15 devices must accept interference from "authorized" radio stations, "Clearwire does not waive its right to seek relief from unlawful Amateur operation in the future."

### ARRL SUPPORTS SWITCH TO CISPR STANDARDS

The ARRL says it supports an FCC proposal to adopt the slightly stricter International Special Committee on Radio Interference--or CISPR--standards for conducted emission limits for Part 15 and Part 18 devices. In comments filed in an FCC Notice of Proposed Rulemaking (ET Docket 98-80), the League said the proposed FCC standards will reduce both the potential for interference to Amateur Radio HF operation and manufacturers' costs for Part 15 and 18 devices.

Last fall, the FCC proposed to amend Parts 15 and 18 of its rules to revise the limits to which unlicensed Part 15 electronic devices and Part 18 Industrial, Scientific and Medical devices are permitted to conduct RF onto the ac power lines below 30 MHz. In comments filed January 31, the League called conducted RF energy into the power lines "a particularly significant concern in the high-frequency range" and called on the FCC to adopt the tighter standards.

In general, the current conducted emission limit for Part 15 devices between 450 kHz and 30 MHz is  $250 \,\mu\text{V}$ . Part 18 limits are device-specific. The League pointed out to the FCC that the CISPR standards "are slightly more stringent than the current Part 15 and 18 regulations, offering at least a few dB of additional protection for HF over the existing Part 15 standard."

ARRL Executive Vice President David Sumner, K1ZZ, says it's "no accident" that the CISPR standards are as tight as they are. The International Amateur Radio Union is a member of CISPR and has participated actively in its meetings since the late 1980s, he explained. Sumner credited two hams in particular--Tom Sprenger, PA3AVV, and Christian Verholt, OZ8CY--who have represented IARU at CISPR meetings--with being instrumental in making sure that CISPR standards take sensitive HF receivers into account.

The ARRL also recommended the FCC conduct empirical studies on the levels of noise in the HF spectrum caused by unlicensed devices as part of an effort to quantify the rate of increase in RF interference in urban and suburban environments. The

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## **Items of Interest.....**

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resulting data, the League said, could help the FCC in determining how to regulate conducted and radiated emission levels. It suggested that amateurs could contribute to such a study and offered the League's own services for the project.

The ARRL also said it could not accept any liberalization of broadband emission limits that may result from the use of Part 18 fluorescent lighting devices or RF light bulbs. The League said the present limits for such devices already are "extremely liberal." A copy of the League's comments is available.

### HAMS PROVIDE ASSISTANCE AT FATAL FIRE

Hams in the Boston area spent several days earlier this month helping firefighters, volunteers, and victims in the wake of a fire that claimed five lives. Coordinator Mike Koenemund, KB1CKF, of the Salvation Army Team Emergency Radio Network--or SATERN--said the fire broke out February 9 at an office building in Newton, Massachusetts. More than a half dozen hams participated on behalf of SATERN and the Boston Amateur Radio Club's Emergency Response Team by standing by at the scene or by being available to respond when needed. The volunteer effort continued until February 13.

"The tragedy was drawn out over four days while firefighters searched through the building looking for four of the victims," Koenemund said. Amateur Radio operators from SATERN and BARC were on the scene day and night to coordinate logistics and supplies coming into the disaster scene via the BARC 145.23 repeater, he said. BARC's Mike Ardai, N1IST, said the fire was in a commercial building that had stores on the first floor and offices on the others. Ardai said Amateur Radio filled the gap when cellular telephone circuits initially became overloaded.

The Salvation Army Disaster Services Unit mobile canteen was at the fire scene serving meals to approximately 150 individuals, and hams assisted with the feeding effort. Koenemund said the hams' assistance freed up Salvation Army volunteers and clergy

# Out of the mouths of babes...

A first grade teacher collected well known proverbs. She gave each child in her class the first half of a proverb and asked them To come up with the remainder of the proverb. Their insight may surprise you.

•	Better to be safe thanPunch a
	5th grader
•	Strike while theBug is close
•	It's always darkest beforeDaylight
	Savings Time
•	Never underestimate the power ofTermites
•	You can lead a horse to water buthow?
•	Don't bite the hand thatlooks dirty
•	No news isimpossible
•	A miss is as good as aMr.
•	You can't teach an old dog newmath
•	If you lie down with dogs, you'llstink in
	the morning

Love all, trust.....me
The pen is mightier than the.....pigs

way to relax Where there's smoke there's....pollution Happy is the bride who.....gets all the presents A penny saved is.....not much Two's company, three's.....the Musketeers Don't put off till tomorrow what.....you put on to go to bed Laugh and the whole world laughs with you, cry and.....you have to blow your nose Children should be seen and not.....spanked or grounded If at first you don't succeed.....get new You get out of something what you.....see pictured on the box When the blind leadeth the blind.....get out of the way And the favorite... Better late than.....pregnant

An idle mind is......The best





Volume 29 Issue 4

March 2000

## In this issue.....

- Board Meeting Notes
- Website Update Quincy
- Foxhunting
- Welcome to New Members
- Repeater Stuff
- Out of the Mouths of Babes

# Meeting Program: SkyWarn

# Bring in some new members!

We are betting that you know other hams who might like to join the MMRA. If so, bring them to a meeting, tell them about our foxhunts – get them interested.

We need new blood! Find a new member and help the MMRA stay healthy!

Return Address:

MMRA P.O. Box 1127 Berlin, MA 01503