The Minuteman

Volume 27 Issue 5 May 1998

President's Corner

Andy Morrison, N1BHI

Well, I got lucky again....I found another GE Master II base station. It's the one they call the "lowboy" - it's in a rack about 2 feet tall, nice and compact. It has a 110 watt continuous duty amplifier. Bryan, W1BRI, has the unit and will make it ready for service. Since the only 2 meter system that is not GE is down in Quincy, that's where we plan to put it. It will solve a couple of problems that have plagued Quincy, the worst of which is the tendency of the amplifier to lose interest in further toil.

Our experience so far with these GE units is that they are very reliable, have hot receivers and are easy to work on when they need it....which is not very often.

So, soon we'll be all GE on 2 meters...another milestone. Other things that are going to happen this summer include a new antenna for Stoneham. We plan to replace the existing antennas with a Decibel Products dual band array, configured like the DB225's we have in Quincy and Weston. This one will have 440 elements interspersed with the 2 meter elements, and should improve the performance on both bands.

There are a lot of you out there who have connections with people or organizations who have hardware that could be useful to the MMRA. So try to be alert to opportunities to scrounge some good stuff for the club. If you know of something that we might use, let us know....call the hotline or send email to mmra@mmra.org.

We have that 70 feet of tower donated by Paul, N1ZCB. Bryan plans to use some of that up at '61 to bolster the 6 meter transmit performance. There will be a work party for that job, so keep your ears peeled.

Bryan (W1BRI) is also working on a 6 meter remote receiver that will be placed at a real good site, and significantly improve the ability of the machine to hear users to the north and west. Bill (WA1NLR) is helping by providing the site. He's been getting more involved as a rabid fox hunter. We can sure use his help...he's been in the radio business for years.

Chris (N1NVL) is closing in on re-siting the Taunton 440 repeater. Once that is done, our network will extend to the south nicely.

There's a lot happening, and the folks that are doing these things deserve a lot of credit, as usual.

The meeting this month is the annual election meeting; the slate of officers and board members is on the last page. We'll be talking about the things we want to do over the summer, and looking for ideas and help. So come and participate...it's your MMRA, so get in your 2 cents worth.

Hope to see you there.

You Want Gain? Here's Some Gain!

Andy Morrison, N1BHI

In an earlier edition I promised a description of the ultimate gain antenna. Of course people will have different opinions of what ultimate gain is...but for the sake of argument, how's 27 decibels strike you? How does a half-power beamwidth of 5 degrees sound? Remember that the average 3 element Yagi antenna sports a half-power beamwidth of about 60 degrees.

Before we get into the dual overlayed rhombic, let's take a look at the plain old wire rhombic. Often referred to as the "diamond" antenna, it has the shape of one if you look down on it. An elongated diamond, the rhombic's characteristics are determined by the angles between the straight wire legs that form the diamond. As these "tilt angles" are varied, the angle of signal takeoff changes. If you make the thing big enough and terminate the far end of the diamond - the end away from the feed point - with a big resistor, usually about 800 ohms, it is a "non-resonant terminated" rhombic. This antenna can be used on any frequency below that where each straight wire leg is 3 wavelengths or more.

These antennas have been used for years by the military at listening posts and communications centers where great gain and front-to-back ratio is needed. On the next page is a chart that shows the radiation pattern of a 28 MHz design that was used by the U. S. Army Signal Corp. The information is the result of antenna range tests, not cow-dung advertising estimates like those of antenna manufacturers.

You can see from the pattern that there is very little radiation

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MAY MEMBERSHIP MEETING

WEDNESDAY, MAY 13, 1998 - 1930 HRS

CAMPION CENTER, WESTON MA

PROGRAM:

General Business

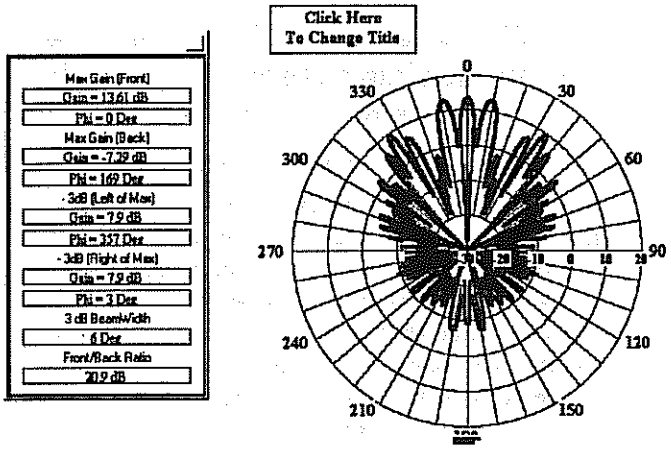
Elections

HT Clinic

Raffle

Other Stuff

to the sides, and the half-power beamwidth is 6 degrees. With a real honest 20.9 dB front to back ratio, this would perform really well. Of course one then might ask "What if we phased multiple rhombics?" The military did this, stacking as many as three



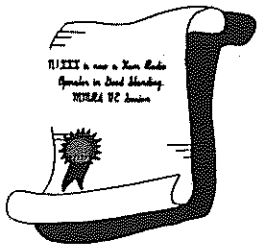
antennas, in three layers. The results were impressive.

You can make one of these for 2 meters and up....the ultimate is the dual overlayed version, shown to the right. So you look at the dimensions and wonder if it would be worth the aggravation to build it. For most of us, the answer is nope. But if you are a serious 2 meter SSB or CW buff, and you want to really be able to take advantage of an opening, this is the antenna for you.

The height over ground is not that great...a couple of trees and and/or added support poles could hang the thing. The main thing to think about is that to get similar performance from stuff you would buy might cost a whole lot of money. You can make one of these for a few bucks worth of wire and some sweat.

The terminating resistors are probably the hardest part. They have to be resistive - no inductance or capacitance. For low power applications, you could make a bundle of 10 watt carbon resistors that would do the job pretty well. You could even make a bundle that would dissipate 100 watts - and think of what the effective radiated power will be feeding 200 watts to a 27 dB gain antenna! Well, 30 dB of gain would yield a multiplying factor of 1,000...so you are looking at a ridiculous number. Just in round numbers, 200 watts into a dual overlayed rhombic becomes an ERP of somewhat less (but not much less) than 200,000 watts.

On the receiving side, that gain, and the narrow beamwidth makes for the elimination of a lot of noise that would otherwise get into the receiver front end and compete with weak signals that you are trying to hear.



MMRA VE Sessions

2nd Saturday of Each Month
Marlboro Public Library, 9AM
Contact: Bill Wade, K1IJ
617-891-9079 Evenings 6 to 10 PM,
Weekends 8 AM to 10 PM.
Accredited - ARRL VE Program

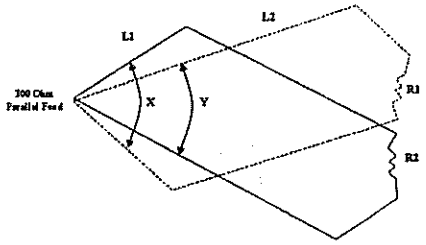
More information about this antenna is available, including construction details, on the World-Wide-Web. Go to:

http://users.neca.com/cummings/rhombic.html

There you will find more information and links to other sites that have rhombic antenna information. You can also find a considerable number of sites with the Altavista Advanced Search engine....look for "rhombic antenna" (in quotes just as shown).

I built one of these once with a friend just for the fun of it. While we never had the time to optimize it, we did check its performance on various repeaters with milliwatt power levels. We reached machines with full quieting that could not be worked with a Yagi at all. Give one a try...it'll surprise you.

Dual Overlayed Rhombic - 144 MHz



Antenna dimensions and angles:

L1: 29.5 feet
L2: 50.67 feet
X: 52.2 degrees
Y: 37.7 degrees

R1 and R2: 660 ohms - disapation wattage should equal half the output power of the transmitter.

Hieght above ground: 12.29 feet

Elevation angle: 7.5 degrees

Vertical beamwidth: 5.5 degrees

Horizontal beamwidth: 2.5 degrees

Items of Interest From the ARRL Letter

HAMS HELP IN SECOND TENNESSEE TORNADO

While an April 16 tornado in downtown Nashville, Tennessee, got most of the media attention that day, a second potent storm struck some 70 miles to the south in Lawrence County. Hams mustered to help in storm spotting, rescue and recovery, and damage assessment.

Ron Mott, W4RDM, of Lawrenceburg says SKYWARN spotters saw the tornado as it approached and tracked its path across the county. Mott owns and maintains the 2-meter repeaters used for weather spotting.

Bill Phillips, WD4KQV, says the SKYWARN Net was activated on 2 meters the afternoon of April 16 and ham weather spotters were "among the first to report the tornado entering the county from the west." Phillips says the SKYWARN Net operates in cooperation with the local Emergency Management Agency, and net control operations reside at the Lawrence County Emergency Operations Center. SKYWARN reports were relayed to the National Weather Service office in Nashville and to media outlets in Lawrenceburg and in Huntsville, Alabama.

Mott says that, at one point, a tornado picked up a one-ton truck and dropped it some 15 miles away.

Phillips says the SKYWARN activity helped speed up the official response to the emergency. "Because the group is well known in the community, local fire departments and other county agencies monitor the SKYWARN repeater and were able to start emergency service personnel into the stricken areas almost immediately," he reports. SKYWARN members began damage assessment once the tornado had cleared the county. During this phase, hams discovered at least two injured people and summoned help via ham radio.

The next day, hams helped to complete the damage assessment, which eventually led to Lawrence County's being designated a federal disaster area. Based on damage reports, the storm was officially upgraded from an F4 to an F5.

In ceremonies April 21, SKYWARN members were officially recognized for helping to save lives in northern Lawrence County by providing early warning of the approaching storm. County officials commended the group's efforts and presented citations to those who had helped in the storm-spotting activities.

Pictures of the storm are on the Lawrence County SKYWARN page at **http://www.usit.com/mottrd/swarn.htm**

US TEAM TO TAKE ON WORLD-CLASS FOXHUNTERS

For the first time ever, a team of US hidden transmitter hunters--or "fox hunters"--plans to compete at the ninth ARDF World Championships. The US team will represent the ARRL at the event, to be held September 1-6 in Nyiregyhaza, Hungary (250 km east of Budapest). More than two dozen countries are expected to send their best on-foot foxhunters to this world competition, being organized by the Varosi Radio Club in Nyiregyhaza. The eighth ARDF World Championships were held last September in Sankt Englmar, Germany.

The ARDF World Championships follow established IARU foxhunting rules, using standard orienteering maps, punches, cards, and control flags. During separate events on 2 meters and 80 meters, five low-power "fox" transmitters are concealed in a large woods. The VHF and HF events are held on separate days. Each competitor, working independently, uses direction-finding techniques to find as many foxes as possible within two hours. Competitors and awards are separated into divisions on the basis of age and sex.

The ARRL's ARDF Coordinator Joe Moell, K0OV, says there's still room on Team USA for more foxhunters. Each competitor must be responsible for his or her own transportation, food, lodging and incidentals. For more information on how you can participate, contact Moell at Box 2508, Fullerton, CA 92633; e-mail **homingin@aol.com**. "Time is of essence, because diplomatic and travel arrangements must be made well in advance," Moell says. Canadian amateurs should contact RAC National ARDF Coordinator Perry Creighton, VE7WWP, 4011 Hollyridge Place, Victoria, BC V8N 5Z8.

For more information on ARDF, visit the K0OV Web site, **http://members.aol.com/homingin/**.

RED CROSS HONORS NEW YORK ARES/ RACES

The American Red Cross chapter of Northeastern New York has formally recognized Amateur Radio's role during the January 1998 ice storm by presenting New York State RACES with its 1998 Good Neighbor Award. The award also acknowledged the hobby's continued support for the disaster relief agency.

At an April 28 ceremony in Albany, New York, former SEC Anthony Pazzola, WB2BEJ, and former DEC April Stack, K2ZCZ, accepted the award on behalf of all New York State ARES/RACES members who supported the ice storm operations. The Good Neighbor Award goes each year to an individual or organization outside of the American Red Cross that makes a significant humanitarian contribution to the local, national, or international community.

Pazzola and Stack, both communications officers for the chapter and members of the Northeastern New York Disaster Services Committee, received individual award certificates.

Pazzola and Stack will convey the award to New York State RACES Officer Ken Goetz, N2SQW, of Greene County at a ceremony this month. In addition to seeing North Country duty from the New York State Emergency Management Office, Goetz also advised amateur coordinators during the ice storm operation. The award will be on display in the New York State Emergency Management Office radio room--known to New

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Items of Interest....From the ARRL Letter

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York amateurs as "The Bunker." *--April Stack, K2ZCZ*

AMATEUR SATELLITE DEMONSTRATION A HIT

Ham radio--and especially satellite operation--was the focus during the recent Space Fair '98 at the Riverside Applied Learning center in the Fort Worth, Texas, area. AMSAT-NA Vice President of Operations Keith Pugh, W5IU, called that the amateur radio satellite demonstration during the week of April 20 a huge success.

Riverside, an elementary school for special kids, this year has placed emphasis on learning about outer space. Among other activities, some 200 students and parents from the school attended a *Mir* visual sighting party and were treated to a "perfect 60-degree elevation *Mir* pass," Pugh said.

Satellite demonstrations took place on April 24, with W5IU, WB5QLD and KG5OA participating from Riverside. Satellites used for the on-air demonstrations included FO-20, FO-29, AO-27, AO-16, LO-19, UO-22, KO-23, KO-25 and *Mir*. Contacts were made on the analog (voice) satellites and messages were also received on the digital satellites from the US, Canada, the United Kingdom, and Austria. W5IU and crew also uploaded several digital messages.

In addition to satellite operation, HF contacts included one with *QST* Managing Editor Steve Ford, WB8IMY, at W1AW. Others notable contacts included one with W0WR, the Kansas Cosmosphere Station in Hutchinson, Kansas (with KI0MN as op), and another with former astronaut Ron Parise, WA4SIR, operating WA3NAN, the Goddard Space Flight Center Radio Club in Greenbelt, Maryland. Pugh said Parise displayed "patience and grace" answering many questions from the students about his experiences as an astronaut. The school also participated in the *Mir* school test on April 27.

"For those of us who worked at the school, the enthusiasm displayed by these young children was the best reward we could possibly receive," Pugh said.*--AMSAT News Service*

LEAGUE SUPPORTS LOWER VANITY FEE SCHEDULE

The ARRL says it supports the proposed lower fee to obtain a vanity call sign. The FCC proposed recently in its fiscal year 1998 fee schedule that vanity filers would pay just $12.90 for the ten year term, once the new schedule goes into effect later this year. That's the lowest fee in the history of the vanity program. Originally, vanity applicants paid $30 for the privilege of selecting a specific call sign. The fee jumped to $50 in September of 1997, just in time for Gate 3 filers but not in time for Gate 4 filers to take advantage of the $30 fee.

In comments filed April 22 with the FCC, the League called the wide variation in fees over the life of the vanity program "clearly inequitable" and said the FCC should have handled the matter differently. The League called the proposed $12.90 fee "reasonable" and urged its adoption "as soon as possible."

PREPARATIONS CONTINUE FOR NEXT WRC

With WRC-97 behind us, preparations already are under way for the next World Radiocommunication Conference. In fact, WRC-97 was barely over before the first Conference Preparatory Meeting for WRC-99 was held last fall. While it's not entirely clear right now if the next WRC will be held in 1999 or 2000, it's still being referred to as WRC-99. The ITU Council may decide the question of when WRC-99 will be held when it meets May 20-29 in Geneva. The decision could even be deferred until the 1998 ITU Plenipotentiary Conference in Minneapolis October 12-November 6. At least for now, planning will continue on the assumption that the next conference will be held in the fall of 1999.

The FCC WRC-99 Advisory Committee held its initial meeting in February. It will meet again on April 27. FCC informal working groups have been meeting over the past few weeks.

Earlier this year, ARRL Technical Relations Manager Paul Rinaldo, W4RI, represented the League on US delegations to several ITU Radiocommunication Sector (ITU-R) meetings in Geneva, Switzerland. Working Party 7C met in late February. This committee is responsible for studies relating to the Earth Exploration Satellite Service that has been eyeing the 430 to 440 MHz band for use by synthetic aperture radars (SARs). These systems are capable of penetrating the upper canopy of a rain forest to monitor ecological changes. Ken Pulfer, VE3PU, who represented the International Amateur Radio Union, introduced an IARU paper expressing concerns with respect to the 420 to 450 MHz band. An ARRL-authored paper also was

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Give the MMRA World Wide Web Home Page a try..... let us know what you think.... any ideas are welcome. We are looking into things like an MMRA list server. We now have our own domain name - mmra.org. The Web Page keeps getting better.....

WWW Address:

http://www.mmra.org/~mmra/mmrainfo.html

MMRA Information - Repeaters, Officers and Board Members

MMRA Repeaters:

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

[FTL = Full Time Linked PTL = Part Time Linked]
[L = Patch available via link] P = Local Autopatch]

MMRA Officers:

President: Andy Morrison, N1BHI
Vice President: Clark Conti, N1NVK
Secretary: David Croll, KT1X
Lynne Ausman, KA1NLD
Treasurer: Ian MacLennon, AF1R
Clerk: Ed Mulhern, N1NOM
Directors: Tom Qualtieri, WB1GMA
Al Kunian, KA1AL
Chris Conti, N1NVL
Bob Feltmate, WA1ZJE
Newsletter Editor: Andy Morrison, N1BHI

To Contact Officers or Board Members

Call MMRA Voice Mail Line:

508 - 489 - 2282
Toll Free from 508 and 617 Areas

MMRA E-Mail
mmra@mmra.org

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 try!

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 1997-98 Season: September 17, November 19, January 21, March 18, & May 20.
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 Andy Morrison beforehand.
MMRA Voice Mailbox (508) 489-2282. -- This is a local call from any 508 exchange phone, and is a free call from both 617 and 508 areas.

Newsletter Information	September issue	November issue	January Issue	March Issue	May issue
Mailing Date	Sept 11, 1997	Nov 13, 1997	Jan 8, 1998	Mar 12, 1998	May 14, 1998
Submission Deadline	Sept 1, 1997	Oct 26, 1997	Dec 28,1997	Feb 22, 1998	Apr 26, 1998

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.

New England Area Ham - Electronic Flea Market * DATES *** 1998 P 1 of 2**
All events are Ham Radio/ Electronic related except ~____~

1998	Town-State	Sponsor	Location	Contact Source
2 May	Smithfield RI	CtySlkrs	RO rt44+5 nrBK $5/sp@9	Frank KE1FJ 401 231 3993 F+
2 May	Barnstable MA	BARC	Auction @Am Legion $.99@10	Don Haaker 508 760 1571 F
3 May	Yonkers NY	Metro70	@LincolnHS $25/T@7 $6@9	Otto WB2SLQ 914 969 1053 F
9 May	Goshen NY	OCARC	@BurkeHS $5@8 $10/T	Edward N2XJI 914 534 3492 F+
8,9 May	Rochester NH	Hoss Traders	@FG x13 rt16	Joe K1RQG 207 469 3492 F
9 May	Montreal PQ	WIARC	@StSuzanneCh $15/T@8 $5@9	Sam VE2LJV 514 684 5810 F+
11 May	Greenfield MA	FCARC	Mon 6PM $2@WESCO pkLot	Richard KD1XP 413 6656611 F+
16 May	Forestdale RI	RIAFMRS	@VFW rt146 8A flea+auct	Rick K1KYI 401 725 7507 F+
17 May	Flea at MIT	Third Sunday -- April thru October		Nick 617 253 3776 F
23 May	Vernon CT	NARC	@TollandAgC I84x67 $3@9 $7tg$10/T@6	Wayne 860 487 1921
29-31 May	Rochester NY	ARRL AtlConv $10/S@6 +$8/B		Harold K2HC 716 424 7184 F+
31 May	Sorel-Tracy PQ	Hamfest du Quebec		Jean VE2UL 514 587 2986 A
6 June	Herman ME	Pine St ARC		Rodger KA1TKS 207 848 3846 A
6 June	Montreal PQ	Montreal ARC jrhay@haya.qc.ca		James VE2VE 514 697 7205 A
6 June	E Hartford CT	Vintage R	Museum @1173 Main $10/tg@7	860 675 9916 F
6 June	Plattsburg NY	CVARC	@ClintonFG camp4PM Fri	Sandra KB2WXE 518 643 9514 +
6 June	Goshen CT	SoBARC	@FG rt63nr4 $5/Tg@6 $3@8:30	Bill N1GIS 860 364 5976 F+

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Items of Interest.....

(Continued from page 4)

introduced by the US, expanding on the theme and reviewing the status of technical sharing studies.

Working Party 8A met in mid March. This group--Amateur Radio's "home" in the ITU--is responsible for the amateur and the amateur-satellite services, among others. Representing the IARU at this session was ARRL International Affairs Vice President Larry Price, W4RA. He introduced an IARU paper detailing progress in HF data communication in the Amateur Service and setting out the characteristics of PACTOR I and II, CLOVER, and G-TOR. Several ARRL papers also were submitted by the US to update existing documentation.

Something called "fixed wireless access" (FWA--and sometimes called wireless local loop) could become a hot topic for Amateur Radio at the next WRC. The idea is to connect user telephone or data equipment via radio instead of wirelines to an access point in the public switched telephone network. FWA proponents are looking at the suitability of more than 100 frequency bands between 27 MHz and 66 GHz--some of which involve amateur bands. A committee called Joint Rapporteur Group (JRG) 8A/9B is looking at FWA issues. Participants include those involved in the mobile and amateur services--from WP 8A--and the fixed service. Price also represented the IARU on JRG 8A/9B.

For more information on WRC-99 preparations, see **http://www.fcc.gov/wrc-99**. *--thanks to Paul Rinaldo, W4RI, and Steve Mansfield, N1MZA*

ARRL PRESENTS AT HURRICANE CONFERENCE

Field Services Manager Rick Palm, K1CE, Palm was a presenter at the National Hurricane Conference, held April 6-10, in Norfolk, Virginia. Palm opened the program entitled "The Role of Amateur Radio in Hurricane Communications" with an overview of Amateur Radio disaster operations.

Subsequent presentations on local plans and operations were delivered by Virginia SEC Frank Mackey, K4EC, Norfolk EC Dan Bigio, AD4ZK, North Carolina SM Reed Whitten, AB4W, NC Assistant SEC Bernie Nobles, WA4MOK, and Dare County (NC) EC Harry Bridges, K4UOR.

Hurricane Watch Net Manager Jerry Herman, N3BDW, discussed the role of his net during the 1997 hurricane season. Don Mahan, KD4WGV, covered amateur operations in support of the National Red Cross's Disaster Operations Center.

Palm explained the role of ARRL Headquarters in supporting local Amateur Radio disaster operations. He then led a roundtable discussion to conclude the four-hour session.

The audience of 40 was made up of both emergency planners and amateurs. Palm attended the general session April 8, opened by Virginia Gov. Jim Gilmore and then-Acting National Hurricane Center Director Jerry Jarrell, who gave a summary of the 1997 season. As it was last year, disaster mitigation was a dominating theme of the conference.

Commerce Secretary William M. Daley this week named Jarrell as the sixth director of the National Hurricane Center. He'd been serving as acting director since last September. An announcement from the Center called Jarrell "a friend of Amateur Radio and always acknowledging the efforts of the volunteer Amateur Radio operators at W4EHW," the Center's ham station.

Next year's hurricane conference will be held in Orlando, Florida, and the League has been invited to be a sponsor. *--thanks to Rick Palm, K1CE, and Julio Ripoll, WD4JNS*

REPORT: NYC TAXIS ABANDONING 10 METERS

Under heavy pressure from authorities and from increased Amateur Radio activity, taxicab operators in The Big Apple reportedly are moving off 10 meters in droves, says Gerry Smith, W6TER, of New York. Smith heads an ad hoc committee that's been working for more than a year in the Hudson Division to clean up the problem. "Sure, there is a straggler or two, but for the most part, the band is clean," Smith announced recently in a report published in *The Hudson Loop* newsletter distributed to ARRL Hudson Division hams. Smith says that he was able to work Argentina recently on 28.045 MHz, one of the frequencies most often used by the cabbies.

ARRL Hudson Division Director Frank Fallon, N2FF, says Smith contacted him in early 1997 about starting up the ad hoc group to attack the problem. "I was honestly not too hopeful that we would be able to solve a problem that was almost ten years old," Fallon conceded. "Now, I'm no longer skeptical of what can be accomplished."

Smith credited a crackdown by the New York City Taxi and Limousine Commission (TLC) and the FCC for the exodus and called it "the largest successful enforcement action ever." During mandatory quarterly inspections, the FCC paid a visit and warned drivers with illegal radios that future violations could result in hefty fines. For its part, the TLC mailed an industry notice to taxi owners, fleet shops and repair stations warning the cabbies of possible enforcement action. To help the process, the ad hoc committee purchased frequency counters for the TLC to use in its regular inspections and during airport raids and street inspections and is providing training in their use. The problem is potentially huge. There are some 44,000 New York City cabbies and more than 12,000 cabs. Drivers supply their own radios. Some 1500 or more illegal radios were believed to be in operation.

At its January meeting, the ARRL Board of Directors applauded actions by the FCC and the TLC to crack down on illegal use of the 10-meter band by taxi drivers. The Board urged confiscation of equipment and fines to drivers who fail to comply, as well as removal of illegal transmitters from all cabs.

Smith praised the "tremendous cooperation" between the TLC and the ad hoc committee, which also includes Fallon, RF engineer Marvin Bronstein, K2VHW, and attorney Arnold

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Items of Interest.....

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Katz, W2QK. A ham since 1954, Smith is a telecommunications consultant.

"The days of no fines are over with," he said, citing a pledge by the TLC to enforce its ban on illegal radios by imposing fines of up to $300. Smith encouraged hams to use 10 meters regularly as a way to deter interlopers and to report CB-type activity on the band.

Fallon hopes the success with the taxi radios indicates the "new mood" at FCC in enforcement. But he says hams will continue to monitor compliance. "The best part of the entire effort is to attend a New York City Amateur Radio club meeting and hear members say, 'Yea! The cabs are gone!' Fallon said.

VIRGINIA GOVERNOR SIGNS STATEWIDE HAM ANTENNA BILL

Hams in Virginia are celebrating that state's new Amateur Radio antenna bill that limits local regulation of Amateur Radio antennas. Gov Jim Gilmore signed the measure this week, and it becomes law on July 1.

Success followed an intense lobbying effort on the part of Virginia's Amateur Radio Community to get the bill approved by the General Assembly and signed by the governor. Bob Ham, KK4IY, of Vinton was the prime mover behind the bill. He, in turn, commended the bill's patron, state Sen John Edwards of Roanoke for "an outstanding job above and far beyond the call of duty." But victory did not come without some compromises.

For all areas of the state, the bill--Senate Bill 480, "Placement of Amateur Radio Antennas"--incorporates the essence of the limited federal pre-emption known as PRB-1 into the Commonwealth's statutes. It requires local ordinances involving the placement, screening, or height of antennas to impose the "minimum regulation necessary to accomplish the locality's legitimate purpose."

The original bill would have prohibited all localities from restricting antenna height to less than 200 feet above ground level "unless an Amateur Radio antenna clearly represents an unreasonable risk to human health or life." The version ultimately signed by the governor keeps the 200 feet regulatory minimum in localities having a population density of fewer than 120 persons per square mile according to the 1990 US Census, and provides for a 75 feet regulatory minimum height in more densely populated communities. Localities may not regulate the number of support structures in either case.

The new law would require "reasonable and customary engineering practices" be followed in erecting towers. Municipalities would still be able to set "reasonable requirements" on screening, setback, placement, and health and safety requirements.

The measure faced fierce opposition from the Virginia Municipal League and the Virginia Association of Counties. When it was introduced January 26 many observers gave the bill little chance of success. Now, its proponents are hoping it will serve as a model for other states.

"This legislation will be looked upon by the rest of the country, and--I am sure--will be emulated," said Virginia SEC and RACES Officer Frank Mackey, K4EC. Mackey acknowledged that the bill's success was built upon public service and emergency communication needs. "Only a small percentage of active hams are involved in this type of communications," Mackey said. "But without those hams justifying our cause there would be no rag chewing, DXing, contesting or the many other facets of our hobby."

Mackey urged his fellow amateurs to become involved in public service work.

Ham expressed "heartfelt thanks" to all who participated by sending e-mail, writing letters, making telephone calls, sending faxes, or appearing at the hearings. "Without the full support of the Virginia Amateur Radio community, this legislation would not have become law," he said. "We, as Virginia Amateurs, have a right to be proud of our efforts."

Ham has proposed forming The Virginia Association of Radio Amateurs as a non-profit entity to serve as a watchdog agency "to assure that the new law is implemented correctly and to come to the aid of Virginia Amateurs who might experience difficulties with a locality in the future."

You Know You're a Ham when.....

- Your idea of sightseeing is checking rooftops for antennas
- You'd rather turn on your rig instead of your wife.
- In a conversation, you wait for the courtesy tone before speaking.
- You hear a scraping sound when you go through the fast-food restaurant's drive-up lane.
- You purchase a home in an industrial park because there was no other way to get a 3-phase 440 run directly to the house.
- You smile and say, "hi hi" during dinner conversations with business associates instead of laughing appropriately.
- Corollary: you say, "73" to your mom when hanging up the phone after you yearly Mother's Day call.
- The first words you baby son says are not, "Ma ma," and "Da da," but "Q-S-L-, 5-9."
- Your neighbors burn you in effigy over a flaming pile of VCRs.
- You forbid your youngest child from leaving the ham shack until she breaks the 3Y5 pileup.
- You purchase a home in an industrial park because there was no other way to get a 3-phase 440 run directly to the house.

Support H.R. 3572!

What does H.R. 3572 do?

H.R. 3572 is a straightforward piece of legislation that would require the Federal Communications Commission to provide "equivalent replacement spectrum" in the event the Commission might need to reallocate any Amateur Radio frequencies. As spectrum management is a dynamic (not static) process of continual adjustment and accommodation between various radio services, this measure would maintain the FCC's ability to be an effective spectrum manager while ensuring that the existing amount of amateur spectrum could not be diminished.

What can you do?

When ARRL wants Congress to pay attention to a particular piece of legislation, it often helps to ask our members write a brief letter to their representative in Washington. Such letters indicate that the legislation is not just the project of a special interest group, but has the backing of the folks back home.

This is called "grassroots advocacy."

In fact, with non-controversial legislation like HR 3572, a letter from the district is often all that is required to convince a member of Congress to sign on as a co-sponsor of a bill.

So, if you are an ARRL member who supports legislative protection for Amateur Radio spectrum, please help by writing.

What's the objective?

The objective is to get as many co-sponsors as possible. What does co-sponsorship mean? It means that the member of Congress has read the bill and agrees that it is worthwhile legislation. Co-sponsorship is not a vote in favor of the bill. However, the more co-sponsors a bill has, the more attention is likely to be paid to it, particularly if there are sufficient co-sponsors from both political parties. And, if we're not able to get action on the bill this session of Congress, the more co-sponsors we get the easier it will be to have the bill introduced early next session.

Where should you look?

ARRL members can find their representatives' web pages and e-mail addresses at http://www.house.gov/writerep/.

To find your senator's web page and e-mail address, try http://www.senate.gov/senator/membmail.html

Resources

You can download a sample of a letter to your congressman at http://www.arrl.org/govrelations/hr3572.html

Editor's Note: *The above came off the ARRL website, and seems like a good way to make the FCC think carefully about making spectrum decisions. It would make it difficult to take spectrum away from amateur ration capriciously. When groups like the "Little Leo" people come along and want to grab spectrum, the FCC will know that it must replace whatever it takes away with spectrum that will support communications as did the reallocated spectrum....and if there is none available, this bill would effectively block giving irreplaceable spectrum to other services. So take a minute and write or email your representatives.*

(Continued from page 5)

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1998        Town-State       Sponsor                    Location
Contact Source
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7  June Newington CT             @HS Flea $4@9$20/T@8       Bob KD1LU 860 675 1419
7  June Queens NY                @HallofScience 47-01 111st Stephen WB2KDG 718 898 5599 A+
13 June Dennis MA BarnstableARC  @ThepSmithRd $5/sp@7       Don Haaker 508 760 1571 F
14 June Bethpage NY  LIMARC      @Briarcliffe               Richie N2WJL 516 520 9311 A
20 June E Greenwich RI Antique   $5@8 @Wirless+SteamMus     Bob W1NTE 401 885 0545 F
21 June Flea at MIT                                         Nick 617 253 3776 F
11 July Union ME     Pen-BayARC                             Will KD1ZS 207 785 2739 A+
18 July Nashua NH NE Antique RC  $5@8 $1@9 @ Res Ctr Church 617 923 2665 F
18 July Wellesley MA  WARS       @Babson Pepisco Pav        Barb N1ICQ 781 329 2628
18 July Newport NH    SRAR Fest  @common + RC air show      Bob N1CIR 603 863 5383 A+
19 July  Flea at MIT                                        Nick 617 253 3776 F
19 July Farmingville NY RCARC                               Jo Ann N2IME 516 399 1877 A
25 July Saco ME       PAWA       @Elks Rt1 B@8 indoor + TG  Roger KA4ATI 207 883 4560 +
8 Aug   St Albans ME             @ Snow Mobile Club         Howard WA1SBI 207 876 3702 M
8 Aug   Gardner MA   MARC       @6AM                       Paul W1SEX 978 632 9432 +
15 Aug  Charlotte VT  BARC       @OldLanCG B$5@8friPM Setup Ed N1PEA 802 878 4543 +
16 Aug   Flea at MIT                                       Nick 617 253 3776 F
23 Aug  Yonkers NY    YARC                                  John WB2AUL 914 969 6548 A
23 Aug  Enfield CT East V-UHF Conf FLEA $3@8 @Harley        Mark K1MAP 413 566 2445
23 Aug  Adams MA    NoBARC       @BoweFG $10/S@6 $3@9       Todd N1XHR 413 496 8054 F+
28-30 Aug Boxboro MA ARRL NE DivConv                        Dave W1TQ 978 649 3907
30 Aug  Yonkers NY   WECA                                   Thomas WB2NHC 914 741 6606 A
2-5 Sept Rochester NY Antique WA Conf @Thwy Marriott        Joyce 607 739 5443
12 Sept BallstonSpa NY SCRACES fri 6P $4-5+15camp           Darlene N2XQG 518 587 2385
12 Sept Windsor ME   AARA        @Fairground $4@8           Frank N1ITR 207 623 9217 M
13 Sept Hicksville NY    LIMARC                             Richard N2WJL 516 520 9311 A
13 Sept S Dartmouth MA SE MassARA @club $2@9 $10/S@7        Bill K1IBR 508 996 2969 F
19 Sept Forestdale RI RIFMRS     @VFW rt146 8A flea+auct    Rick K1KYI 401 725 7507 +
19 Sept Randolph Ctr VT CVARC    @TechCol I89x4             Bill AD1I 802 685 2295
20 Sept Flea at MIT                                         Nick 617 253 3776 F
20 Sept Newtown CT    CARA       @TownHall rt6              Kenneth KD1DD 203 743 9181 A
26 Sept Lincoln ME  Bagley ARC   @Ella Burr school          Sylvia N1JNR 207 732 5185 M
26,27 Sept Lancaster NH MooseSwappers @FG $10Sat@5AM        Russ N1YZE 603 922 5514 +
27 Sept Yonkers NY    Metro70    @LincolnHS $25/T@7 $6@9    Otto WB2SLQ 914 969 1053 F
27 Sept Framingham MA            @ HS $14@7:30 $10tg $3@9   Bev N1LOO 508 626 2012 +
2,3 Oct Rochester NH Hoss Traders @FG x13 rt16              Joe K1RQG 207 469 3492
4 Oct Queens NY                  @HallofScience 47-01 111st Stephen WB2KDG 718 898 5599 A+
11 Oct Wallingford CT NUTMEG CT Conv                        Gordon K1BIY 860 342 3258 A+
18 Oct Flea at MIT                                          Nick 617 253 3776 F
24 Oct Nashua NH NE Antique RC  $5@8 $1@9 @ Res Ctr Church 617 923 2665 F
24 Oct Longueuil PQ MSARC                                   Francois VE2FDA 514 672 9861 A
24,25 Oct Waltham MA Photographica @HS $5@10 ~photo~ bef 9PM Ed 617 965 0807 F+
25 Oct Lindenhurst NY GSBARC     @KoC $20/T@7 $6@9          Peter WB2OQQ 516 541 4886 W+
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LAST UPDATE 4-29-98 de W1GSL List is normally updated twice a month - look for the latest version
Source F= Flyer T= tentative early info + = new info this month A= ARRL V= VE list D= W1DL W= web M= W1JTH WR NV 73 CQ QST = Mags +
This list has been compiled from many sources. While we believe the info to be accurate the author can not be responsible for changes or errors. Check with the sponsoring organizations for more details. This list will be posted monthly to USENET. Mailed copies are sent when additions are made.

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Additions/ Corrections via Internet w1gsl@mit.edu US Mail W1GSL POB 397082 MIT Br Cambridge MA 02139

The Minuteman

Volume 27 Issue 5 May 1998

In this issue.....

- **Want Some Gain?**
- **Items of Interest**
- **Flea Market Listing**
- **Support H.R. 3572!**
- **You Know You're a Ham When...**

THE MAY MEETING IS ON THE SECOND WEDNESDAY - MAY 13.

Election Slate - May, 1998

President: Andy Morrison, N1BHI
Incumbent

Vice-Pres. Clark Conti, N1NVK Incumbent

Secretary: Dave Croll ,KT1X and Lynne Ausman, KA1NLD
Incumbents

Treasurer: Ian MacLennon, AF1R
Incumbent

Clerk: Ed Mulhern, N1NOM
Incumbent

Board : Al Kunian - KA1AL
Incumbent

Board Tom Qualtieri - WB1GMA
Incumbent

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