

The Minuteman



Volume 13 Number 3

The OFFICIAL NEWSLETTER of the MINUTEMAN REPEATER ASSOCIATION

January 1985

MEMBERSHIP MEETING

DATE

Wednesday, January 16, 1985

LOCATION

Covenant Congregational Church, 315 Whitwell St., Quincy. Corner of Granite

and Whitwell Streets. Limited parking available behind the church. Talk-in on 146.67

TIME

7:30 PM, doors open at 7:00 PM for

socializing.

SPEAKER

Panel discussion by some of our own technical heavies on subject of (whatelse?) repeaters. Here's a chance to ask all those

questions that you have been afraid to ask before.

RAFFLE

Raffle prize 2 meter 2-30 watt amplifier.

Tickets available at meeting.

REFRESHMENTS

Free coffee and donuts.



1984-85 MEETING DATES

MAY 21

WEDNESDAY JAN. 16 MONDAY

TUESDAY

QUINCY MAR. 18

continued on page 2

PRESIDENT'S CORNER

I hope you all had a happy holiday season, and wonder what New Year's resolutions you made.

One resolution Radio Amateurs need desperately is to do at least one thing to help HAM Radio. We are under serious attack (especially 220 MHZ) by commercial radio interests and I am afraid that the pressure for our frequencies will continue. I will cite only one example; that of cellular mobile telephones. Who among us has not seen or heard the advertisements? One ad I saw in the Boston Globe cost more than the annual budget of the MMRA, and that is only the beginning. Can you imagine what will happen as equipment prices lower and every neighbor will be boasting up about the status symbol value of his or her cellular mobile phone. Once the sleeping giant of the public is awakened, look out!! One need only remember citizens band. Your resolution to help HAM Radio may be best employed in your awareness to write to the League or the FCC when you hear of attacks on any amateur band. Let's not be provincial and take solace that your favorite band is not under present attack; use your radios and let them hear us out there loudly and clearly.

We have geared the January meeting to you, our Membership. We noticed that there were many questions that you have concerning repeaters and their components, antennas and FM radios and that you would like your questions answered in everyday English

and not in the parlance of engineers.

For that reason, the Board decided to have an informal panel composed of our technical group answer your questions.

When we convene we will have coffee and donuts and begin with the panel. We should learn a great deal about our hobby from this format and understand at least most of what is being said. The meeting at Quincy is in accord with an old MMRA tradition of conducting meetings in the various areas served by our repeaters.

There will be a meeting in January of technical people, a committee if you will, which will assist our Technical Chief in the final implementation of the Weston/Arlington link. This may give

us a protocol to establish facilitating future linking.

We hope this will establish an MMRA Technical Committee which may be drawn upon from time to time by the Technical Chief. The advantage of such an organization has already proven its value when we constructed the KIBC type controllers in use in Weston and Marlboro. This not only gave us a budget boost but a controller made to our needs. We are doing everything we can think of to make the budget dollar go as far as possible, but we need your help. There are many of you who have not renewed and it is now January.

We do not have the money or manpower to chase after dues and, I wish that I did not have to burden you with my orations on this subject and I will say simply that we leave it to your con-

science.

Our goals for the remainder of this fiscal year are to complete the linking, as I outlined, and to begin with establishing an

auto patch for Stoneham.

The history of the MMRA has become quite interesting over our almost 15 years existence and I am enclosing a copy of the minutes of a June 1973 meeting. I felt you would enjoy this memorabilia and it is interesting to see the budget required almost 12 years ago and the per member cost. I believe there were less than 250 members then and three repeaters. Historically, the Boston repeater was moved to Quincy and on the air in January 1974 as 146.07/67.

Please let us know if you enjoy some moments in past MMRA history to be published occasionally.

I'd like to welcome in the new calendar year with you at the January meeting with a hot coffee toast.

De KA1AL

MINUTEMAN REPEATER ASSOCIATION, INC.

MEETING OF DIRECTORS

MAY 3, 1973

At 8:00 p.m., a regular meeting of the Board of Directors of the MMRA was held at the home of KlyvB, duly called to order by WIPRI, President.

PRESENT: CCK, OQK, PRI, JDD, RAK, NPN, IRH, and YVB. ABSENT: JDP. WSN, AND WPO.

In the absence of JDF, JDD recorded the minutes as temporary clerk.

The first order of business being the conduct of the forth-coming elections it was agreed by the board that no absentee ballots would be accepted after May 21. It was further established that no electioneering would be permitted after the membership meeting was formally convened. New members may join at the meeting and be permitted to vote until the President issues a final call beyond which the electorate will

be frozen.
The formal meeting will be convened at 8:30 p.m. and JDF will be in charge of the raffle.

The President then proposed that a preliminary budget be established for the forthcoming fiscal year in order to formulate a sensible recommendation with regard to dues. formulate a sensible recommendation with regard to dues. The President further noted that the problem is compounded by the fact that the Treasurer has not made 1973 financial information available to RGC, MMRA Auditor. On the basis of interim information the President recommended that the dues remain the same. YVB suggested that the dues level should be keyed to the objectives of the group and RAK proposed that the entire question be deferred until September after the election of new officers and directors. CCK moved that the dues be lowered to \$10 per year, which motion was defeated. (YVB seconded and CCK and YVB voted in favor). RAK moved, seconded by IRH, that the dues be set at \$15 per year. Motion was defeated with only the proponents in favor.

favor

in favor. OOK moved that the dues be left at present level, seconded by

M/S/P: That it be recommended that the dues remain at present level. (opposed - RAK, CCK)

RAK then presented a technical report on the three repeaters:

Weston - documentation completed Boston - telephone control installed and fail-safe system in process, equipment to be converted from Motorola to Progline. Workbanch constructed by ESP has been installed.

Marlborough - Progline backup system ready.

PRI noted that he has never seen financial figures for the past six months and CCK agreed to make them available without further delay.

WSN announced the following committees and appointments:

1. Technical Co-ordinator - RAK

2. Education Committee - VIB

3. Decals - UAQ

4. Programs - PRI declines and successor open

5. Activities Committee - JDF

6. Newsletter Editor - UAQ

7. Public Service Committee - CQK with instruction that all committee activities be coordinated with the Board of Directors. Directors.

WSN further indicated that regular Directors' meetings will be held two weeks prior to following membership meetings: Monday, September 10, Tuesday November 13, Wedndesay, January 9, Monday, March 2, and Tuesday May 2.

M/S/P: That a budget for fiscal year 1973 -1974 in the total amount of \$6210 be and hereby is approved and adopted to be allocated as follows: (RAK and CCK opposed)

Public Service Committee - \$700, including the purchase of portable base unit for around \$400.

Vice President - \$150, membership meetings , \$150 activities committee, \$50 entertainment of guest speakactivities committee, \$50 entertain ers, \$150 as Membership Coordinator. Secretary - \$750, including postage Treasurer - \$200 Clerk - \$150 Newsletter - \$1800(twelve issues) Technical Committee - \$750 Education Committee - \$50

Weston rent - \$350 Telephone charges - \$600 NERA dues - \$210

Insurance and miscellaneous - \$150

WSN noted that this budget amounts to a cost of approximately per member and does not take into account potential tax liability.

That the Board recommend to the membership that dues remain as presently established (opposed CCK, RAK).

PRI reported that of the 50 Dycomm amplifiers, only 18 remain unsold, and then repeater is property of MMRA at no cost.

M/S/P: That the remaining 18 amplifiers be sold as an MMRA obligation relieving PRI of financial responsibility (Unanimous)

There being no further business the meeting was adjourned at l1:00 $p_{\pi^{\rm m}*}$

A true copy

ATTEST:



EDITOR'S CORNER

Now that the holidays are behind us, it is time to get down to some serious hamming. Many of us will be hooking up those new Commodore computers to our rigs to work some RTTY. Some of us will continue to be content smashing the invaders from ZORK. Oh well, whatever turns you on!

Just a thought about the upcoming weeks. Prediction 1 – We will have snow during the commuting hours. Prediction 2 – There will be someone on our repeaters telling you that he also is getting snow - amazing! Let's all use a little common sense during critical travel periods. Leave a little air space for the emergencies that can crop up. Our repeaters are there for the using. However, talking for the sake of hearing your own voice may result in another ham not getting the message out. $\,$ Prediction 3 - Half of you will applaud this article, half will be looking for the first snow flake.

Editor

COMING EVENTS

Sunday, 17 February, Algonquin Amateur Radio Club will hold a Flea Market at the Marlboro Jr. High School at Thresher Street, off Union Ave. or off Bolton Street (Rt. 85). The doors will open at 8:30 AM for sellers and 10:00 AM for buyers. The Flea Market runs until 2:00 PM. Advanced reserved tables are \$7.50. Tables sold at the door \$10.00. Admission is \$1.00. Make check payable to Algonquin Amateur Radio Club, Box 258, Marlboro, MA 01754. Food available, free parking, talk-in on 146.01/.61 and .52/.52 direct.

FLASH!! FLASH!! FLASH!! FLASH!!

19/79 ARA is sponsoring all level F.C.C. exams. They will be held Saturday March 16, 1985 at Ryan Hall in the Ireson Building at 493 Western Ave. (Route 107) Lynn, MA. from 10:00 AM to 1:00 PM (this is in the Lynn Hospital complex).

The pre-exam requirements for the general, advance, and extra applicants: Submit a 610 form plus a check, made payable to ARRL/VEC, for \$4.00. These are to be sent 30 days (2/13/85no walk-ins) prior to the exam to Ralph Gandolfo (KAIE) 18 Murdock Drive, Peabody, MA 01960.

The pre-exam requirements for the tech: The same as the higher class license but mailed to Bob Kalustian (WA1DVR) 36 Columbia Road, Arlington, MA 02174.

The novice pre-exam requirements: There is no fee and we will accept walk-ins but prefer you mail a 610 form 30 days (2/13/85) prior to the exam to spread out our work load. If you do mail in your 610 it should be sent to Bob WAIDVR, to the above

In the near future, we hope the restriction of no walk-ins for all but the novice will be changed, until it is we are bound by the stated procedures.

The 19/79 ARA gratefully acknowledges the help of Steve. WAIDFL-Craig McGarvey, and the Lynn Hospital for their part in obtaining the use of the facilities.

The first bug to hit a clean windshield lands directly in front of your eyes.

A good carpenter is one who can keep a straight face while repairing a do-it-yourself project.

ANOTHER VISIT WITH THE ASYMMETRIC BAILEY DIPOLE Chet Smith, KICCL

Moses advised us to "be sure your sins will find you out." A couple or three years ago, George Downs, WICT, published a story using some analysis I had provided him on the asymmetric version of the coaxial or Bailey dipole. The Minuteman Newsletter, evidently being short of more worthwhile material has reprinted George's tale of wonder. Hiding in the text is that if anyone wanted to concoct one of these things for other than the 2-M band to run me down. Tom Berran, NIBDC, has done this, and to make good on George's promise and satisfy Tom and everybody else once and for all I have worked up a chart using dimensionless parameters. Figure 1 is the Chart.

Dig out your November 1984 copy of "The Minuteman" for the definitions of D_1 , L_1 , D_2 and L_2 . The curve is based on Tai's formula for the dipole and covers the cases of most interest here. Be warned, however, that Tai's equation breaks down when the half-length of the dipole exceeds a quarter-wavelength. A couple

of examples of how to use the chart:

Let F=440 MHz, and $D_1=1/2$ inch, D_1 is the diameter of the upper part of the antenna. The wavelength is = 68.18 cm (26.843 in). From the chart the length L_1 of this portion must be 0.234 \(\text{or } 15.955 \) cm (6-9/32 inches). The Radiation Resistance is 59.532 Ohms. For the asymmetric dipole to be resonant at 50 ohms the R_a of the lower portion should be 100 - 59.532 = 40.468Ohms or about 59.5 & 40.5 respectively. Project a line horizontally from 40.5 to the curve and drop down. The value of ${\rm L}_2$ is about 0.207 \(\text{which is 14.114 cm (5.9/16 inches).} \) Using your well-calibrated eye-ball the value of D_2 is 0.135 λ or 9.204 cm (3-5/8 in.).

A similar exercise for 220 gives the following results:

 $F = 222.5 \text{ MHz} (\lambda = 133.33 \text{ cm})$ $Z_{in} = 50 + j0$

 $D_1 = 1/2$ inch (1.27 cm), $L_1 = 0.2364 \, \lambda \, 31.52$ cm (12 13/32 in)

 $D_2 = 19.43$ cm (7 21/32 in) $L_2 = 0.2035 \,\lambda$ 27.13 cm (10 11/16 in)

de KICCL

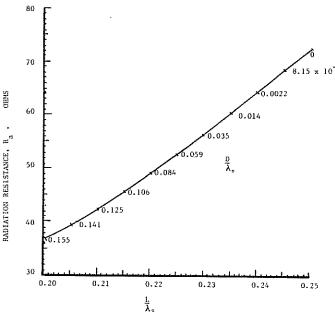


FIG. 1 CHART RELATING RADIATION RESISTANCE TO DIPOLE HALF-LENGTH AT RESONANCE WITH CORRESPONDING DIAMETERS

Wisdom is tolerated best when you afflict it upon people in small doses.

If a boy walks around a puddle, he is either ill or wearing old shoes.

MORE SCHOOL SCRIBBLINGS de KO1M

Most likely by the time this item appears in "The Minuteman" our latest amateur radio classes will be a fond and successful memory. Again, I pay tribute to all who have given of their interest, time, talent and dedication in bringing new hams into the fold - and hopefully into MMRA. We owe everyone participating in the education program an immeasurable vote of gratitude!! I hope they will continue in our efforts and others will find it feasible to join us as time and circumstances warrant. Our next series of classes will be in the fall of 1985 and will follow one of the yet to be decided formats:

1) Fall session (only): Four separate classes - Novice; Tech/General; Advanced; Extra.

Fall session: Novice & Tech/General and Spring session: Advanced & Extra.

In which direction we move will hinge on several variables including classroom space, teacher availability, etc. I will update you

as time progresses.

Co-terminous with the above has been the introduction of the new 'volunteer examiner program, ' mandated by F.C.C. and most capably administered by A.R.R.L. MMRA's initial foray into this arena was on 12/3/84. In addition to the amateur radio classes we are planning MMRA-sponsored FCC test sessions, at least twice annually and covering all license classes. By the way, the novice testing procedure has changed little, the only change being that both CW and theory written are given by the volunteer amateur (general or higher) at the same time. The written test is prepared by the volunteer. If you have any questions on this point please call me. Meanwhile, I would like very much to prepare a list of hams willing to assist in the volunteer examiner program. Although ARRL is only certifying advanced and extra class license holders - at least as of this time - there is a place for everyone in this program. We have a job for everyone who applies (gratis, of course) - so please let me know. I will handle the paperwork and you will tie up about four hours of your time once or twice a year in behalf of amateur radio. FCC is out of the testing business - we are in!!! Best 73 & 88.

WELCOME TO NEW MEMBERS

NIBPU	Royce	Marlboro
W4CBC	Douglas	Walpole
KAlckg	Jonathan	Natick
KA6CPJ	James	Sudbury
NICTA	Alton	Framingham
NICWY	Bruce	Lexington
NICYB	Rick	Shrewsbury
WB2DCL	Ralph	Westboro
NlDDZ	Robert	Newton
NIDEA	James	Lincoln
NZDTR	James	Westboro
AI3E	Dwight	Stow
KALEEC	Eric	Billerica
WALEYK	George	Wentworth, NH
WAZFDG	Alan	Hudson
W1FDW	Donald	Townsend
KALGFN	Kenneth	Fayville
WlGMM	Arthur	E. Hampstead, NH
KAlHOY	David	Dracut
KlJIY	Joel	Brockton
KALKHK	Edward	E. Weymouth
KALLKM	Glenn	Cambridge
KALLIM	Antonio	Lexington
KB1MH	Michael	Hudson
WlQGL	William	Lexington
WlQMT	Jim	Arlington
WB8RUN	Klaes	Marlboro
WAISNH	Peter	Billerica
итебн	Sue	Melrose
WIWNZ	John	Winchester
WlYUT	Albert	Pawtucket, RI

It's always easy to see both sides of an issue you are not particularly concerned about.

Don't knock the weather - without it nine-tenths of the people wouldn't start a conversation.

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