



# ZERO BEAT

Southeastern Massachusetts  
Amateur Radio Association, Inc.  
54 Donald Street  
South Dartmouth, MA 02748



OUR 72nd YEAR

Volume 40, Issue 2

SEMARA W1AEC

February 2004

## Something for Everyone

It seems that everyone is interesting in something small—be it QRP stuff, model trains or baseball cards. The January Tech talk was originally scheduled to be given by **Carl Bredberg, K1KID**, on QRP. Instead he arranged for volunteers to present their stuff to a small crowd of about 18.



**Bill Miller, K1IBR**, showed his Altoid-cased 80-meter QRP rig and matching 1:1 Balun. The receiver is direct conversion and crystal controlled. Bill uses parallel crystals to get more tuning range. He uses a back-biased 1N4004 diode to act like a variable capacitor. Interestingly, the volume is controlled by varying the amount of RF fed to the receiver. A fascinating design!

Bill also showed us a 40-meter QRP ensemble that consisted of a transceiver, that tunes to 7.125 MHz, an antenna tuner and a reflected power meter that is used to obtain the best match. Bill replaced the original FET finals with transistors because he thought 17 W was too much for a QRP rig!

**K1IBR'S 80-M CW XCVR & BALUN**



**Dave Dean, K1JGV**, gave us an overview of model railroading. He brought samples of different gauge rolling stock and rails. The large S-scale on his right, through O/O-27, to HO, to N on his left, showed us the wide range of possible sizes. The only manufacturer to use the 3-rail AC system was Lionel with the O-gauge track. This arrangement minimized problems when forming loops. The others use a 2-rail system and DC power. This necessitates isolation sections when forming loops.

**Ray Arruda, KB1EVX**, gave the last talk of the evening. He spoke about some interesting early baseball cards which included some great players I even knew. For this talk he brought in his 1960 collection for us to look through.

It was a great evening and was enjoyed by everyone. It just goes to show how the kind of diverse interests that club member have. A special thanks goes to **Carl Bredberg, K1KID**, for arranging this evening. And a special thanks to the speakers for sharing their interests with the rest of us.



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**Southeastern Massachusetts  
 Amateur Radio Association, Inc.**  
 54 Donald Street,  
 South Dartmouth, MA 02748

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## ADVERTISING

**Commercial ads** the size of a business card will be accepted. Rates are \$5.00 for one insertion, \$20.00 for six insertions, and \$35.00 for twelve insertions.

**Non-commercial ads** up to forty words in length will be accepted. Rate is \$3.00 for one or \$12.00 for six insertions. Club members have one free non-commercial ad per month.

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THE DEADLINE FOR  
 SUBMITTING ARTICLES FOR  
 PUBLICATION IS THE 15<sup>TH</sup>  
 OF THE PRECEDING MONTH.

## HAMMING AROUND

**E1A01\* What exclusive frequency privileges in the 80-meter band are authorized to Extra class control operators?**

- A. 3525-3775 kHz
- B. 3500-3525 kHz
- C. 3700-3750 kHz
- D. 3500-3550 kHz

\* From the Amateur Extra Class (Element 4B) Question Pool ANSWER - See page 7

# IT SEEMS TO ME ...

The year of 2004 is living up to its potential already. The ARRL has started the ball rolling with its latest proposal to restructure the Amateur Radio Service. How does all this seem to you? I am all ears!

The ARRL is asking the FCC to create a new entry-level Amateur Radio license that would include HF phone privileges without requiring a Morse code test.

“The League also proposes to consolidate all current licensees into three classes, retaining the Element 1 Morse requirement—now 5 WPM—only for the highest class. The entry-level license class—being called “Novice” for now—would require a 25-question written exam. It would offer limited HF CW/data and phone/image privileges on 80, 40, 15 and 10 meters as well as VHF and UHF privileges on 6 and 2 meters and on 222-225 and 430-450 MHz. Power output would be restricted to 100 W on 80, 40, and 15 meters and to 50 W on 10 meters and up.

“Under the ARRL plan, current Novice licensees—now the smallest and least active group of radio amateurs—would be grandfathered to the new entry-level class without further testing. The middle group of licensees—Technician, Tech Plus (Technician with Element 1 credit) and General—would be merged into a new General license that also would not require a Morse examination. Current Technician and Tech Plus license holders automatically would gain current General class privileges without additional testing. The current Element 3 General examination would remain in place for new applicants.

“The ARRL plan calls on the FCC to combine the current Advanced and Amateur Extra class licensees into Amateur Extra, because the technical level of the exams passed by these licensees is very similar. New applicants for Extra would have to pass a 5 WPM Morse code examination, but the written exam would stay the same. Current Novice, Tech Plus and General licensees would receive lifetime 5 WPM Morse credit.

“The ARRL license restructuring design calls for no changes in privileges for Extra and General class licensees on 160, 60, 30, 20, 17 or 12 meters. Novice licensees would have no access to those bands.

“See [www.arrl.org/news/stories/2004/01/19/1/](http://www.arrl.org/news/stories/2004/01/19/1/) for the full text and specific subband proposals for each class.” —*ARRL Bulletin 3*

## 2004 SEMARA OFFICERS

### President

Donald Manley, N1PMB

### Vice President

Charles Moszczenski, KB1FRL

### Secretary

Ronald Silvia, WB1HGA

### Treasurer

Scott Szala, W1EV

### Trustees: (year term is up)

Edward Blouin, KA1AW (2004) - Chairman  
 Norman Riley, W1ATI (2005)      Andrew Reuter, WA1FNM (2006)  
 William Miller, Jr., K1IBR (2007)      Larry Houbre, Jr., AA1FS (2008)

### Board of Directors:

Ray Arruda, KB1EVX  
 David Dean, K1JGV  
 Marty Jordon, KA1YFV

# MEETING MINUTES

The Business Meeting was called to order January 8, 2004 at 7:00 p.m. by **Donald Manley, N1PMB**. Twenty nine members were present.

The Secretary's report (**Ron Silvia, WB1HGA**) was accepted as read without correction.

The Treasurer's report (**Scott Szala, W1EV**) was accepted as read.

## STANDING COMMITTEE REPORTS

*Buildings and Grounds* (**Andy Reuter, WA1FNM**)—Absent.

*Technical* (**Carl Bredberg, K1KID**)—A new mike and boom is being installed in the club station.

*Activities* (**Scott Szala, W1EV**)—Nothing to report at this time.

## SPECIAL COMMITTEE REPORTS

*Scholarship* (**Larry Houbre, Jr., AA1FS**)—Nothing to report.

*Internet* (**Larry Houbre, Jr., AA1FS**)—The club web page is now updated..

*Fleamarket* —No report.

*ARES* (**Tony Duarte, N1XRS**)—The activation request of SEMARA ARES went well with 50 check-ins. Next session will be February 21, scenario to be announced. There is an ARES workshop to be held in Hingham, MA on April 3, 9 a.m. to 4 p.m.

*Communications* (**Charles Moszczenski, KB1FRL**)—No reports..

*Ratifications*—No new members.

*President's Comments* (**Donald Manley, N1PMB**)—The President thanked **Scott Szala, W1EV** for his efforts towards the successful Xmas party. He announced that three members were ill over the holidays: **Bill Vincent, W1POW**; **Bill Field, WA1FYF**; and **Albert Crook, N1ALN**. Silent key: **Sam Wagstaff, N1PGN**.

### Old Business—

*Motion passed\**: to forward monies of monthly contingency fund (\$50.00 per committee per month). Also, to continue practice of buying coffee, tea, soda, donuts, malasadas and similar goods for club use by members and guests.

### New Business—

*Motion passed\**: to buy a new 40 GB hard drive (\$83.99) for club's station computer.

*Motion passed\**: to set date of Fleamarket this year to second Sunday in September.

*Motion passed\**: to set date of Fleamarket in year 2005 to September 11.

*Motion passed\**: no equipment donated to the club shall be loaned to members or guests.

*FOR THE GOOD OF THE CLUB*—**Scott Szala, W1EV** mentioned that Al volunteered his time to fix the club HF antenna on the tower.

The meeting adjourned at 7:55 p.m.

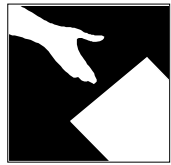
*Submitted by Ron Silvia, WB1HGA, Secretary*

*\* All motions accepted and passed by the members present.*



## DIRECTIONS TO CLUB

**SEMARA CLUBHOUSE**  
 54 DONALD STREET  
 SOUTH DARTMOUTH  
 (508) 992-0613  
 147.00 / 147.60



## CLUB NOTES

February is a month full of Valentines and Presidents. I remember that everyone in my class had to give a card to all the other students. It sure made for a hugh pile of cards to take home! Did you every find out who your secret Valentine was?

Of course, the best part of the month was the Presidents week school vacation. It was a good time to take a break from being a student and go back to just being a kid. Do they do that any more?

No one was voted in as members of the club during the January 8, 2004 business meeting! Are we doing something wrong, or was the weather too cold?

Anne Purcell, widow of **Larry Purcell, N1AS**, donated her late husband's radio equipment to the club recently. There were two truckloads of radio equipment in addition to several antennas and masts. Some highlights of the equipment include:

*Drake* R4C receiver with matching MS4 speaker, C4 station console, and TV3300 low-pass filter; *ICOM* IC-22S two meter transceiver; *National* NC-300 receiver; *Knight* Star Roamer receiver; *Heathkit* HM-2102 SWR meter; *MFJ*-1030BX receiver preselector; *MFJ*-956 SW/MW/LW tuner; *Triplet* multimeter; various signal generators; and repair parts used to fix radio equipment.

A big **THANK YOU** goes out to **Anne** for this most generous donation.



# THANK YOU

## SEMARA EVENT CALENDAR

### FEBRUARY 2004

- 5—**Business Meeting**, 7:00 p.m.
- 7—VE Session, 10:30 a.m.
- 15—Ragchewing, 6:30 p.m.
- 19—Tech Talk, 7:00 p.m. **Optical Communication**, by *Tim Smith, N1TI*
- 25—ZERO BEAT **folding party**, 4:30 p.m.



Ragchew at the clubhouse every Sunday at 7 - 11 a.m.  
Drop by and enjoy a cup of coffee and donuts!

## NEXT SEMARA VE SESSION

FEBRUARY 7, 2004

10:30 A.M. @ CLUBHOUSE  
**LARRY HOUBRE, JR., AA1FS**  
508-991-6055

## February VE SESSIONS

- 12 **Providence, RI, 7:00 p.m.**  
Judy Nelson, KC1RI  
401-231-9156
- 14 **Falmouth, MA, 9:00 a.m.**  
Joanne Reid, N1LNE  
508-548-1121
- 16 **Fall River, MA, 7:00 p.m.**  
Arthur J. Denault, KB1CNB  
774-644-3469
- 19 **Norwood, MA, 7:30 p.m.**  
Richard Cantin, AA1TI  
508-339-1089
- 21 **Tiverton, RI, 9:00 a.m.**  
Jack P. Garforth, N1JK  
401-683-2250

# SEMARA Notes

SAMUEL S. WAGSTAFF, N1PGN, SK  
**Samuel S. Wagstaff, N1PGN, 85**  
 died Sunday, January 4, 2004. Sam was a Lt. Colonel in the Army Reserve and an avid military historian. Many will remember him for the auto driving school he ran for many years. He was curator of the Fort Taber restoration in New Bedford.  
*May he rest in peace.*



## 145.490- REPEATER STATUS UPDATE

The repeater should now be back on the air putting out its full 100 watts. The main amplifier was replaced. The exciter was ok but the 30 watt amp after the exciter was bad. (This is an amp within the repeater itself before it gets to the main amp.) The FET within this amp was replaced and the repeater is now working

People may see a difference in the repeaters TX coverage as I believe the repeater was only putting out half power around 40 to 50 watts because the main amp's power supply was not working and it was running on backup power. I think this has been the deal even before it was the KD1CY repeater but I am not sure.

The main problem at the site seems to be a large amount of power surges as I have had to replace many MOVs. We have a 80 dollar surge suppresser inline now that should take any hits the site should get in the future. There was a homemade device inline but didn't seem to be doing its job as I had to repeatedly change MOVs in the repeater and the old amp.

I will be working on the old amp and adding the changes that have been made to the new one. There are 3 more MOVs on the AC line in as well as other components that I feel should be added. This amp will be a back up to the new one if anything should happen.

The Weather net was the only net running on 49 and they use 147.00 if 49 should fail, as recently.

## MEMBERS' ECHOLINK NODES

CALL	FREQ	PL	NODE
WB1HGA	147.440 simplex	67.0	2061
KB1HGJ	145.520 simplex	123.0	4722
N1XRS	146.595 simplex	141.3	8998
W1DBX-L			63494
KD1CY	145.490-		142790
W1RJC	443.800+	88.5	4259

Any additions? Send the information to:  
[editor@semara.org](mailto:editor@semara.org)

Antone D. Duarte Jr., N1XRS

## BOSTON 23 REPEATER

Problems showed up when the landlords replaced the window-washing rig on the building. They rotated our antenna 90 degrees, and now have about 3 tons of metal quite close to the antenna.

Once things warm up enough to work thee (and when we can schedule all the necessary people), we will go and add 10' of mast (to raise the antenna over the window washer) and rotate it back so the bottom (most likely to be shaded) dipole faces east rather than south. Hopefully that will clear things up.



Mike, [n1list@arri.net](mailto:n1list@arri.net)

## DISGUISED EMAIL ADDRESS

The email addresses in the online members listing pages have been "disguised" ... the @ replaced with \* ... to hopefully inhibit spamming. Alas, it may already be too late, but it will stop future harvesting ... at least that's the hope.

Larry, AA1FS

# License in a Weekend

**Get your Technician Class Amateur Radio License  
In one weekend !**

*The Falmouth Amateur Radio Association*  
**\*\*\*License in a weekend class\*\*\***

**Pre-registration required, no walk-ins, 1 CEU credit**

**Friday, April 16 through Sunday, April 18, 2004**

**Location**

**Barnstable County Fairgrounds Classroom  
Route 151, Falmouth, MA**

**Text**

**ARRL's Technician Q & A Book, 3<sup>rd</sup> Edition  
*You must have this text***

**Schedule**

**Fri. 7-9 p.m., Sat. 9 a.m.-5 p.m., Sun. 9 a.m.-2 p.m.  
(ARRL VEC exams 2 p.m. Sunday)**

**Course Fee \$50.00**

**includes \$12.95 text plus lunch Sat. & Sun.,  
exam fee *and* 1 year membership in FARA**

**To register and for more info**

**Call Bob, N1WAT @ 508-477-0771 or e-mail, [bodot@gis.net](mailto:bodot@gis.net)**

**Or register on the web at [WWW.FALARA.ORG](http://WWW.FALARA.ORG)**

**Note**


**No prior experience required—no age limit—all are welcome.**

**Class size is limited so register early to assure placement.**

**Registration is closed 7 days prior to start of session.**

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### ***A POINT TO PONDER***

**"I do not feel obliged to believe that the same God who has endowed us with sense, reason, and intellect has intended us to forgo their use."**

**- Galileo Galilei**



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**B. 3500-3525 KHz**

# SEMARA NET DIRECTORY

**Sunday** - 8:00 a.m. 28.700

**Daily** - 7:00 p.m. 147.000

**Monday to Friday**  
7:30 a.m. 3.872

— **SEMCARES NET** —  
1<sup>st</sup> Sunday each month at 7:30 p.m.  
145.490- (Fairhaven Repeater)

**FAIRHAVEN WEATHER NET**  
8:00 p.m. Monday-Friday 145.490

**SEMARA SWAP NET** — Mondays at 7:30 p.m. on 147.000

# FLEAMARKETS

**14 Feb Marlboro, MA**—AARC @7  
Ann KA1PON 508 481 4988

**15 Feb Westford, MA**—GBARC @8  
Pat ARC 866 371 0512

SEMARA WEBSITE:

<http://www.semara.org>

E-MAIL: [info@semara.org](mailto:info@semara.org)

## LOCAL REPEATER DIRECTORY

Frequency	CTCSS	Call	Location	Frequency	CTCSS	Call	Location
<b>144</b>				<b>440</b>			
145.150 -	123.0	WA1DGW	Fall River	441.400 +	192.8	WG1U	Assonet
145.490 -		KD1CY*	Fairhaven	442.200 +	88.5	N1NRL	Fall River
146.655 -	88.5	WA1GPO	Falmouth	442.600 +	100.0	K1LIQ	Tiverton, RI
146.685 -		W1LM	Plymouth	443.450 +	88.5	K1MYL	Westport
146.700 -		K1CR	Cranston, RI	443.500 +	141.3	K1PBO	Barnstable
146.730 -		W1SGL	Sandwich	443.600 +		NS1N	Norwell
146.760 -		W1HQV	Scituate, RI	443.800 +	88.5	W1RJC*	Dartmouth
146.955 -	88.5	K1PBO	Dennis	444.200 +	118.8	N1YHS	Bourne
147.000 + SEMARA	67.0	W1AEC	Dartmouth	444.250 +	141.3	WA1GPO	Falmouth
147.135 +	67.0	ND1N	Taunton	444.350 +	88.5	W1ACT	Fall River
147.180 +	67.0	W1MV	Bridgewater	444.550 +	88.5	W1MV	Bridgewater
147.345 +	88.5	KB1QL	Vineyard	447.075 -	88.5	N1DZD	Kingston
* Nodes: IRLP=4617, EchoLink=142790				* Nodes: IRLP =4259, EchoLink=4259			

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