



# ZERO BEAT

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



OUR 74th YEAR

Volume 42, Issue 5

SEMARA W1AEC

May 2006

## WX4NHC Hurricane Conference



On Saturday February 4th, there was an Amateur Radio Conference at the National Hurricane Center in Miami, Florida put on by National Hurricane Center Coordinators, Julio Ripoll-WD4R and John McHugh-K4AG. **Rob Macedo, KD1CY** was invited to attend the conference and gave a 15 minute presentation on the *VoIP Hurricane Net*. His Tech Talk on April 20



**ROB MACEDO  
KD1CY**

was on the WX4NHC Amateur Radio Conference. and he gave a "virtual tour" with pictures of the National Hurricane Center and the co-located NOAA agencies. He also showed a couple of videos that were provided to him at the conference.

Watch for the *Hurricane Drill* in June.



**VIDEO SHOWN AT THE TECH TALK**

## ZERO BEAT

<http://zerobeat.semara.org>

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**Southeastern Massachusetts  
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### EDITOR

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### ADVERTISING

Club members may have one free  
 non-commercial ad per month.

THE 25<sup>TH</sup> OF THE PRECEDING MONTH  
 IS THE DEADLINE FOR SUBMITTING  
 MATERIAL FOR PUBLICATION.

### 2006 SEMARA OFFICERS

#### President

Rick Cabral, W1RJC

#### Vice President

Carl Bissonette, WA1AKR

#### Secretary

Ronald Silvia, WB1HGA

#### Treasurer

Scott Szala, W1EV

#### Board of Directors:

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 Carl Bredberg, K1KID  
 Tim Smith, N1TI

#### Trustees: (year term is up)

Andrew Reuter, WA1FNM (2006)-Ch  
 William Miller, Jr., K1IBR (2007)  
 Larry Houbre, Jr., AA1FS (2008)  
 Bill Vincent, W1POW (2009)  
 Don Manley, N1PMB (2010)

FISTS CW no.10555

(Adventure Radio Society)  
 Bumblebee no. 71

Grid Coordinates:  
**FN41mo**

GPS Coordinates:  
**Lat. N 41° 36.795'**  
**Long. W 070° 56.590'**



## It seems to me ...

de Bob, K1KVV <[editor@semara.org](mailto:editor@semara.org)>

That CW enthusiasts are trying too hard to justify the advantage that CW has over SSB under weak signal conditions. While it may be true, isn't it really stating the obvious? A few months ago I made the point that the effective signal-to-noise gain of a narrow-band mode over a wide-band mode is essentially due to the ratio of the respective bandwidths. A 3-6kHz wide SSB signal needs 50-100 times the power output to match a 60Hz CW signal *if* the CW receiver can close down to that bandwidth! With the more common 250Hz or 500Hz filters, the ratio is much less impressive.

*What is my point?* I haven't heard the same kind of respond from BPSK31 operators. Not only is BPSK31 a narrower mode, 31Hz bandwidth, but is it also a coherent mode since it uses a phase-lock detection approach to detect the phase information. Compared to an *ideal* CW signal, BPSK31 has a practical **SNR gain of 9dB**, 6dB from the narrower bandwidth and 3dB from the coherent detection scheme. So, why isn't there more talk about BPSK31? I think it is because it is not part of the licensing requirement.

*What do you think?* [BPSK31 is not a QRO mode since it uses *distortionless* USB.]

## POINT TO PONDER

“Unless you try to do something beyond what you have already mastered, you will never grow.

~Ralph Waldo Emerson

## HAMMIN' AROUND

Question\* G3A12 What is the K-index?

- A. A linear index of solar activity
- B. A measure of geomagnetic stability
- C. An index of solar flux measured at Boulder, Colorado
- D. A daily value measured on a scale from 0 to 400 to express the range of disturbance of the magnetic field

\* 2004 General Class (Element 3) question pool

Answer on page 7



# MEETING MINUTES

**T**he April 6, 2006 Business Meeting was called to order at 7:00 p.m. by the President, **Rick Cabral, W1RJC**, with the salute to the flag and a roll call of 29 members. A quorum was present.

**Secretary's Report (Ron Silvia, WB1HGA)**– The minutes of the previous business meeting, appearing in the current issue of *Zero Beat*, is accepted as distributed.

**Treasurer's Report (Scott Szala, W1EV)**– absent. Report accepted as read by the president.

## STANDING COMMITTEE REPORTS

**Buildings & Grounds (Mike Miller, N1ITQ)**– review the list of work performed last month including electrical work inside the attic now wired to code; there are now motion detectors on individual outside lights; and a reminder that April 22 is shingling party.

**Scholarship (Larry Houbre, Jr., AA1FS)**– absent.

**Technical (Roland Daignault, N1JOY)**– Anderson PowerPoles are now connected to power supply in radio room; both radio room PCs are done, with the meeting room PC to go; two attempts have been made to install master antenna that have been foiled by weather; and old repeater items, Rx, Tx and controller, were sold on eBay resulting in \$687.07 deposited by club Treasurer.

## SPECIAL COMMITTEE REPORTS

**Website (Larry Houbre, Jr., AA1FS)**– absent.

**Activities (Scott Szala, W1EV)**– absent.

**ARES (Rob Macedo, KD1CY)**– Rob announces Workshop on April 8 from 9 to 4 p.m. in Walpole town hall; Massachusetts hurricane exercise and drill will be on first weekend in June; and he reminds us about the monthly ARES Net, to check website for repeater frequencies.

**Radio Events (Ron Silvia, WB1HGA)**– Ron reminds us the spring FISTS Sprint will be held next month.

**New Building (Roland Daignault, N1JOY)**– Roland acquired a donated Square-D 200 Amp generator transfer switch to replace the 100 Amp switch. Scott Szala donated a like-new 200 Amp Square-D QO style electrical panel full of circuit breakers. Roland lined up a licensed electrician who will review the installation for any potential code issues, after the bulk of the work is done.

**COMMUNICATIONS (Carl Bissionette, WA1AKR)**– absent.

**RATIFICATIONS\***– One application for life membership was received:

**Antonio Soares**, no call.

**PRESIDENT'S COMMENTS (Rick Cabral, W1RJC)**– Rick has expressed concerns about our absentee club Vice President and is looking for input on this.

**OLD BUSINESS**– none.

## NEW BUSINESS–

**Motion\***– to upgrade electric service panel and transfer switch up to \$250 to accommodate current and new building. †

**Motion\***– to install remote base antenna on tower for the 440 repeater. This is to link other repeaters including MMRA system, with full access to SEMARA members.

**Motion\***– by building committee: to accept cash and material(s) donations; with cash to be handled by club Treasurer. This motion tabled, pending up-coming Board of Directors meeting recommendations.

## FOR THE GOOD OF THE CLUB–

That an auction be held after tonight's meeting to move remaining items off the bench; **Ed, WA1ZCB** was welcomed back after a winter stay in Florida; and **Tim, N1TI** "pleaded" for "anyone wishing to give a Tech Talk" to please contact him.

**Meeting adjourned** at 8:12 p.m.

*Submitted by*  
**Ron Silvia, WB1HGA,**  
*Secretary*

\* Motions are voted, and passed, by those present.

† This motion was passed (revised 4 May 2006).



**WB1HGA**



## CLUB NOTES

**M**ay is a transition month for hams. There are some nice 'warm-up' activities that we can use to motivate ourselves to aim higher and challenge ourselves: the New England QSO Party and the spring FISTS Sprint are just two that come immediately to mind.



**O**ne application was voted life membership at the April 6, 2006 business meeting:

**Antonio Soares**, no call.

*Welcome to the club!*

**O**ne candidate successfully passed the general Class written exam (Element 3) on April 1. Congratulations to:

**Joseph B. Hankins, KB1MPY.**

*Job well done!*



**BILL MILLER, K1IBR, BILL VINCENT W1POW,  
RAY ARRUDA KB1EVX, WITH ARMAND  
AUGUSTINE, W1BUG, PHOTOGRAPHER**

**S**EMARA's *Old Cronies* are spotted leaving the Assonet Inn on a recent spring Friday afternoon. They meet almost every Friday for a luncheon and ragchew.

## LOCAL NET ACTIVITY

*Please support these local nets by checking in!*

**2-m Roundtable Net** held every evening at 7 p.m. All are welcome to join in on the SEMARA Repeater, W1AEC, 147.000+ with a PL of 67.0 Hz..

**6-m Net** held Wednesday at 8:30 p.m. on 50.200 MHz USB. .

**3868 kHz SEMARA Morning Net** held weekdays from 7:30 - 8 a.m. All are welcome to join in. Recent check-ins from SEMARA members outside the area: **Randy, W1RTF**, MD and **Steve, KB1GVT**, ME.

## CLAM BAKE

**T**he clam bake will be held Saturday, May 20 at noon. Tickets will go on sale at the May 4 business meeting at approx 6 p.m. Tickets will be \$20. Hope to see you at the clam bake.

**Scott, W1EV**

## ARRL "HELLO" CAMPAIGN

*Adapted from the Handiham World Weekly  
E-Letter dated 15 March 2006*

**A**RRL has devised a campaign to promote Amateur Radio to everyone. Too often enthusiastic hams preach to the choir, telling each other how much fun ham radio is! We already know how great radio is, don't we?

A special four-page brochure targeted at the **NON-ham** public will be also be available. You can find a sample of this in *QST*. Please take the brochure out of the magazine and give it to a **non-ham** friend, relative or co-worker or leave a few in your doctors' office and similar places. For only the cost of the postage, we can get them by emailing our request to [hello@arrl.org](mailto:hello@arrl.org). We need to tell ARRL what they are to be used for, how many we need, and where to send them. They are **not** meant for hamfests, club meetings and such – these are places where *hams* gather. The brochure is meant for distribution to NON-hams. More information at: <http://www.arrl.org>.

# Keeping the Flame

## SANDY NECK LIGHT USA 732

**T**his should have been a NEW ONE for everyone, we could not find any previous activation date.

**Don, N1DT** and I activated Sandy Neck Light USA 732 on Cape Cod on Saturday April 15, 2006.

We arrived at parking lot on Barnstable Harbor across from Sandy Neck at 7:20 a.m. Temperature about 60 F, light wind from the SW, light fog and overcast sky. We set up to work 75 meter phone – Murphy visited us right away – we could not get the 75 meter antenna to tune to any lower than 3 to 1 SWR. 75 is the only band we need a tuner for. After checking the coax and the tuner we found that the banana plug connection on the bottom of the hitch base mount was disconnected. We reconnected that and made a few QSOs on 75. We soldered that connection when we returned home.

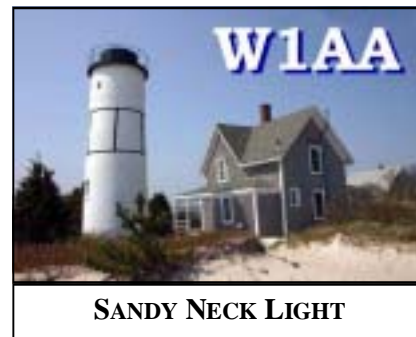
Band conditions were very poor: the solar flux was 79, the A index was 30 and the K index was 4. What did we expect?

**T**his is a beautiful mile long white sandy beach on Barnstable harbor with many morning joggers and beach walkers. One woman showed up with two golden Labs and proceeded to throw a couple of tennis balls far out in the water for them to retrieve, the dogs loved it. Dogs are NOT allowed on the beach during the summer months!

We then went to 40 phone for a few QSOs; Don ran a few QSOs on 40 CW. About 10 a.m. we tried 20 phone. We used the voice recorder in the IC-7000 to call CQ steadily from 10 a.m. to 10:15 – NOT a reply. Later Don managed to work a couple of stations in MA and NH on ground wave. It is surprising some times how far we can work stations on 20 meters. One time when we were at a light in RI we worked a station on 20 phone in CT almost 100 miles from us on ground wave.

Although we tried 20 phone several times, conditions did not improve. So most of our time was spent on 40 phone and CW. We find that a CQ on the QRPers' frequency around 7040.0 will nearly almost always bring a few QSOs with that group.

**S**orry conditions were so poor – No DX – No Florida or west coast QSOs. One positive thing happened, a couple of guys showed up to dig clams. While Don was on CW we talked to them about the clam digging in the area and watched them for a while. We took a few photos of them digging the



elusive clam from the sand. One of them asked if we could send them some of the photos we took and we said we could via the internet. For this they offered us some of the clams, which we took home and made a chowder Saturday night. It could not have been a better end to a day's activation

The QSO break down is as follows:

We were able to use the DX Packet node on Cape

Band	Phone	CW
75	7	
40	48	17
20	3	5
<b>Total</b>	58	22 = 80

Cod to spot ourselves on the DX Summit on the internet, we could make a good solid connection. We posted a new spot each time we changed bands or modes.

**W**e had a number of people ask us what we were doing. We took some time to explain as well as we could in a few minutes and gave them a ARLHS business card with the ARLHS URL. We have a 3 ring binder with a photo of the current light and a history of the light we downloaded from the internet that we showed them. The binder also has a QSL of each of the lights we have activated. Most people seemed to show a genuine interest in the activity. You are the reason we activate the lights, thank you for being there.

Keep the Flame!

73 de Don, N1DT(CW) #962 and Whitey, K1VV  
#957 / W1AA

# More SEMARA Stuff

## SHINGLING PARTY, PART 1

**E**arly on Saturday, May 22, the long awaited North Wall shingling party got under way. As of 10:30 a.m., the crew consisted of **John, WA1ESO**, and **Ed, WA1ZCB**, lead carpenters, ably assisted by **Henry, W1GYL**, **Alan, WB1FQP**, and **Stan, KB1KSF**, with **Ron, WB1HGA** not only doing the shingling but also cooking the food on the grill. The photos show the story.



PREPARING TO PUT ON THE FIRST ROW

**Shingling Party, Part 2** is scheduled for Sunday, April 30 when a larger turnout is expected due to the additional draw of coffee and donuts.



ED, WA1ZCB SHOWING HOW TO DO IT



PART 1 – READY FOR PART 2

## 2M/440 BAND OPENING

**T**here was a good band opening on 2m and 440 around 6 a.m. to 7 a.m. this morning, April 27, while I was on the road. At the top of the Bourne Bridge, I could get into 147.505-1MHz PL 77.0 in W. Haven, CT, and 444.500+ PL 77.0/DCS 073 in Woodbridge, CT – both were at half scale. I did get into 146.955- PL 74.4 in Westford, MA, and 147.270+ PL 146.2 in Marlboro, MA, from the Cape Cod Community College parking lot in W. Barnstable. Had a nice QSO with everyone up there. So anyway check it out and see what you can get into. As **Roland, N1JOY**, would say, "SEE YA!" 73, **Chris, W1EAV**

## DONUTS

**M**ike **McDonald, KB1NB** keeps track of the variety of donuts used to avoid buying unpopular varieties!

WHAT Dedication! A big "Thank You" to Mike and John for picking up the donuts every Sunday Morning. They are the only two to get a cheer when they enter through the door!



MIKE, KB1NB

*Armand Augustine, WIBUG*

## MAY VE SESSIONS

Walk-ins permitted unless otherwise noted.

From <http://www.arrl.org/arrlvec/examsearch.phtml>

- 6 SEMARA Clubhouse — 10:30 a.m.**  
Larry Houbre, AA1FS  
508-991-6055
- 7 Falmouth, MA — no walk-ins**  
*TECH-IN-A-WEEKEND*  
Ben Fleck, K2LYE  
508-540-2583
- 11 Providence, RI — 7:00 p.m.**  
Louis Mester, W1CH  
401-263-6045
- 13 Falmouth, MA — 9:00 a.m.**  
Ben Fleck, K2LYE  
508-540-2583
- 13 Braintree, MA — 8:45 a.m.**  
William Needham, K1WN  
781-843-4400
- 15 Fall River, MA — 7:00 p.m.**  
Skip Denault, KB1CNB  
774-644-3469
- 18 Canton, MA — 7:30 p.m.**  
Lou Harris, N1UEC  
508-668-0858
- 20 Slatersville, RI — 9:00 a.m.**  
Robert Jones, WB1P  
401-333-4787

## NE DIVISION FLEA MARKETS

From <http://www.arrl.org/hamfests.html>

- 5-6 May Hopkinton, NH**  
HOSSTRADERS — Joe 207-469-3492
- 6 May Goshen, CT**  
SoBARC — Lee 860-435-0051
- 8 May Whately, MA**  
Franklin Cty ARC — Bill 413-774-4669
- 21 May Cambridge, MA**  
Flea @ MIT — Nick 617-253-3776
- 27 May Vernon, CT**  
Hartford Hamfest — Wayne 860-487-1921
- 3 Jun Hermon, ME**  
Bangor Hamfest — Roger 207-848-3846
- 11 Jun Newington, CT**  
NARL — George 860-463-0948
- 18 Jun Cambridge, MA**  
Flea @ MIT — Nick 617-253-3776
- 8 Jul Union, ME**  
Pen-Bay ARC — Scott 207-354-6809
- 16 Jul Cambridge, MA**  
Flea @ MIT — Nick 617-253-3776
- 19 Aug St Albans, VT**  
StARC Tailgate — Arn 802-285-6457
- 20 Aug Adams, MA**  
NoBARC — George 4/3-443-7539
- 20 Aug Cambridge, MA**  
Flea @ MIT — Nick 617-253-3776
- 25-27 Aug Boxboro, MA**  
NE Div Conv — Mike 978-250-1236
- 10 Sep South Dartmouth, MA**  
SEMARA Tailgate — Rick 508-997-7070

**B.** The K-index represents readings of the Earth's geomagnetic field, updated every 3 hours at Boulder, Colorado. K-index values indicate the stability of the Earth's geomagnetic field. Steady values indicate a stable geomagnetic field, while rising values indicate an active geomagnetic field. The K-index trends are important indicators of changing propagation conditions. Rising K-index values are generally bad news for HF propagation and falling values are good news, especially for propagation paths involving latitudes above 30° north. Values of 4 and rising warn of conditions associated with auroras and degraded HF propagation.

# SEMARA HandiHam Affiliate

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

## LOCAL REPEATER DIRECTORY

Frequency	CTCSS	Call	Location
<b>144</b>			
145.130 -	151.4	WF1A	Cranston, RI
145.150 -	123.0	WAIDGW	Fall River
145.450 -	100.0	W1SYE	Portsmouth, RI
145.490 -	67.0 <sup>1</sup>	KD1CY	Fairhaven
146.655 -	88.5	WAIGPO	Falmouth
146.685 -		N1ZIZ	Plymouth
146.700 -		K1CR	Cranston, RI
146.730 -	67.0	W1SGL	Sandwich
146.760 -		W1HQV	Scituate, RI
146.805 -	67.0	NN1D	Fall River
146.835 -	192.8	WA1QCA	Johnston, RI
146.880 -	100.0	WC1R	Newport, RI
146.940 -		K1KYI	Lincoln, RI
146.955 -	88.5	K1PBO	Dennis
<b>147.000+</b> SEMARA	<b>67.0</b>	<b>W1AEC</b>	<b>Dartmouth</b>
147.045+	141.3	W1HDN	W Warwick,
RI			
147.135+	67.0	KA1GG	Taunton
147.165+	67.0	WA1HAH	Exeter, RI
147.180+	67.0	W1MV	Bridgewater
147.195+	127.3	K1SMH	Attleboro
147.330+	173.8 <sup>2</sup>	W1AQ	E. Prov., RI
147.345+	88.5	KB1QL	Vineyard

<sup>1</sup>IRLP-4617 & E-Link-4611; <sup>2</sup>required for use of IRLP-4907

<b>440</b>			
441.400+	100.0	WG1U	Plymouth
442.200+	88.5	KE1AK	Fall River
442.950+	82.5 <sup>5</sup>	K1RK	Barnstable
443.450+	88.5	K1MYL	Westport
443.500+	141.3 <sup>5</sup>	K1PBO	Dennis
443.800+	88.5 <sup>3</sup>	W1RJC	Dartmouth
443.850+	141.3	AA1PL	Exeter, RI
444.200+	118.8	N1YHS	Bourne
444.250+	141.3 <sup>5</sup>	WAIGPO	Falmouth
444.350+	88.5	W1ACT	Fall River
444.550+	88.5	W1MV	Bridgewater
447.025 -	77.0 <sup>4</sup>	N1JBC	Johnston, RI
447.075 -	88.5	N1DZD	Kingston
449.275 -	103.5	W1WNS	W. Bridge-
water			

<sup>3</sup>IRLP-4259 & E-Link-4259; <sup>4</sup>IRLP-5920 & E-Link-55920; <sup>5</sup> Cape Net

## MAY SEMARA EVENTS

**4—Business Meeting** 7 p.m.

**6—VE Session** 10:30 a.m.

**11—Ragchew**, 6:30 p.m.

**18—Auction and Tech Talk** – 7 p.m.

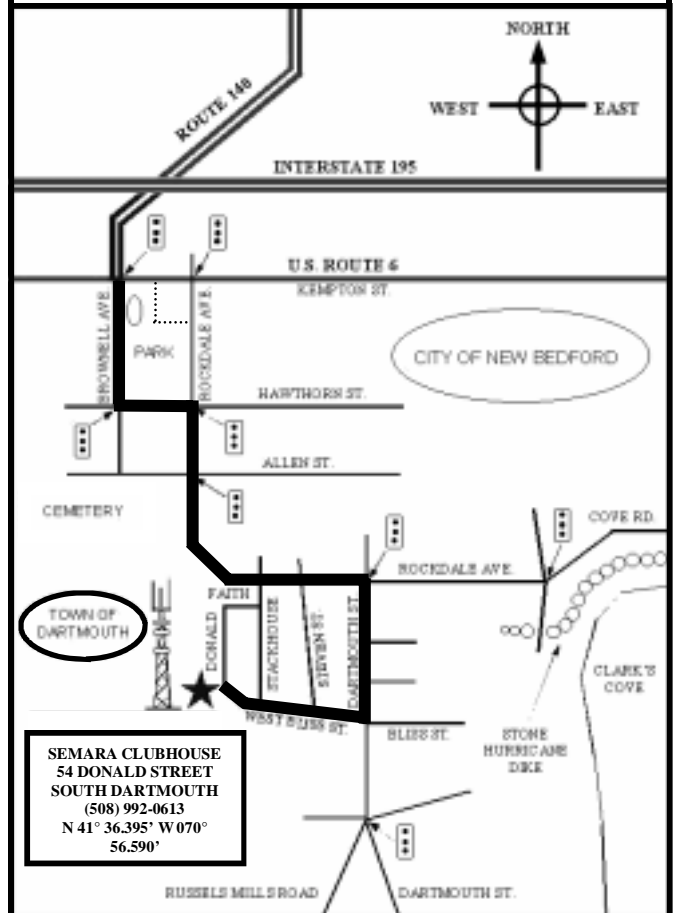
*Fox Hunting, Tim Smith, N1TI*

**25—Ragchew**, 6:30 p.m.

Ragchew at the clubhouse every Sunday 7 – 11 a.m.

Drop by and enjoy a cup of coffee and donuts!

## Directions to SEMARA



## SEMARA ACTIVITY DIRECTORY

### — RAGCHEW —

**Sat** - 8 p.m. 28.700 MHz USB

**Sun** - 8 a.m. 28.700 MHz USB

**Wed** - 8:30 p.m. 50.200 MHz USB

**Daily** - 7 p.m. 147.000+ SEMARA

**Mon-Fri** - 7:30 a.m. 3.868 MHz LSB

### — WEATHER NET —

**Mon-Fri** - 8:00 p.m. 145.490- [alt. 146.655-]

— **W1RJC Sunday Activities 443.800+** —

9 p.m. - ARRL News followed by Amateur Audio News