



ZERO BEAT

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



Since 1932

Volume 48 Issue 8

SEMARA-W1AEC

August 2012

Beacons - Operating Aids



HF Beacons—A great tool for HF DXers

by Carl Bredberg, K1KID (taken from January 2004 Zero Beat)

Most folks unfamiliar with HF beacons will dismiss operating on a band that appears to have no activity, and move on to the next lower HF band looking for better conditions. What if the band was really wide open and everyone monitoring moves on, with out so much as a single CQ, because they hear no activity either?

Strange as it might seem, and based on my personal experience as well, this happens quite frequently. Of course no one wants to waste a lot of time CQing a dead band either, but there is a solution.

The "*Northern California DX Foundation*" has distributed 18 transmitters all around the world, on every continent and places in between. They are synchronized to operate one after the other in sequence, each on the same frequency in each band. Each transmitter transmits precisely on 14.100, 18.110, 21.150, 24.930, and 28.200 MHz in rotation.

On any given band, all 18 beacons will have transmitted their ID in CW at 22 wpm within a 3 minute period. After a beacon IDs, it transmits 4 long dashes, the first at 100 watts, next is 10 watts, then 1 watt and last is 100 milliwatts. So it is possible to determine if a band is open and how good the opening is, all in a 3 minute period. Now that's great stuff!

(Continued on page 6)

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Radio Events
 Bob Kelley—K1KVV

Tech Talk
 Brad Paiva—W1BEP

It seems to me ... de Bob - K1KVV, Editor

that we have a club with many different interests

Seashore Trolley Museum

~Chris-W1AEV



My brother Patrick and I, in front of car 34. Here's some historical information from the museum website.

"Horsecars began operating in New Bedford, Massachusetts, in 1872, and from this historic whaling city came Seashore's two oldest street railway cars, Nos. 10 and 34. No. 34 was built in 1878 as a horsecar by the Fiegel Car Company of New Utrecht, New York, for the New Bedford & Fairhaven Street Railway, a precursor of the latter day Union Street Railway. Electrified in about 1894, it was converted to a Railway Post Office car for operation between New Bedford and Onset in 1902. The windows on the side of the roof contain glass of several different colors and run the entire length of the body.

No. 10, from New Bedford, is a closed horsecar in its original condition. Built by the J.G. Brill Company of Philadelphia in 1880, it was preserved by the Union Street Railway after its replacement by trolleys on the Oxford line. In those years, it often made appearances on the street on special occasions, such as in 1922 when New Bedford celebrated its Golden Anniversary of street railway service. Since its acquisition by the museum in 1954, No. 10 has appeared in several parades in different cities." - www.trolleyuseum.com

POINT TO PONDER

"In our best moments we rise above lines
 that separate people from people."

~Curtis W. Reese

HAMMIN' AROUND

Question* G8B06 What is the total bandwidth of an FM-phone transmission having a 5 kHz deviation and a 3 kHz modulating frequency?

- A. 3 kHz
- B. 5 kHz
- C. 8 kHz
- D. 16 kHz

* 2015 Element 3 General Class Question Pool (good thru 2015-06-30)

Answer on page 8.

Club Notes

August is the month when summer really arrives. That's when we need to start our preparations for fall activities.



Be sure to participate in the Tailgate Fleamarket on September 9. Yes, I know it's still summer technically. But fall arrives a mere eleven days later and, anyhow, it's after Labor Day.

Are you ready for increased *radio activity* at **Whiskey One Atomic Energy Commission**? See the listing on page 8 for some great radio events to get involved in.

Watch our website for the latest postings: <http://semara.org>.

Ham Nation has moved to Wednesday nights as of July 11. It is now available for download in High-Definition. It is hosted by **Bob Heil, K9EID**, **Gordon West, WB6NOA** and **George Thomas, W5JDX**.



The show covers the excitement of ham radio. From tossing an antenna wire in a tree allowing you to talk to the world, to the importance of ham radio operators in time of disasters, Ham Nation has it all.

Tech Talks. Talks are now scheduled to follow each business meeting. For details, contact **Brad (W1BEP)** who is in charge.



NEXT VE SESSION @ SEMARA

August 4, 2012

Clubhouse @ 10:30 AM

Contact: Larry Houbre-AA1FS

[exams\[at\]semara\[dot\]org](mailto:exams[at]semara[dot]org)

508-991-6055



Club Numbers

GPS Coordinates:

Lat. N 41° 36.795' Long. W 070° 56.550'

Maidenhead Grid Coordinates: FN41mo

For FISTS Sprints: FISTS #10555

LOCAL NETS

Everyone is welcome to check in!

147.000+ (PL 67.0 Hz) (FM) — Massachusetts ACS Drill (Region 2, Sector A) is held on the first Monday of the month at 7:30 PM.

50.200 MHz (USB) — Net is held Wednesdays at 8:30 PM. Dick, K1AHA (Dartmouth) is net control.

28.490 MHz (USB) — Net is held Tuesdays at 8:30 PM. Dick, K1AHA (Dartmouth) is net control.

3868 kHz (LSB) — SEMARA Morning Net is held weekdays from 7:30-8 AM ET.

LOCAL REPEATER DIRECTORIES

See <http://www.nerepeaters.com/se.htm>

144 (<http://www.nerepeaters.com/2m.htm>)

222 (<http://www.nerepeaters.com/222.htm>)

440 (<http://www.nerepeaters.com/440.htm>)

902 (<http://www.nerepeaters.com/902.htm>)

Sudoku

Here is another Sudoku puzzle to solve while waiting for the net to start. (Solution on p. 8.)

3				6			5	4
4						2		
	5		9				6	
5	4	9				7		6
			3					2
1			6	5	7	4		
		7	2	8	6			
				3		1	8	7
		5		7				

Official Meeting Minutes



July 5, 2012

The meeting was called to order at 7:07 p.m. by the President, **Marcel (W1MLD)** with salute to the flag. The roll was called with 21 members and 0 guests present.

SECRETARY'S REPORT

A motion was made, seconded and unanimously approved to dispense with reading and accept as posted on the bulletin board and Zero Beat the Secretary's Report.

TREASURER'S REPORT

The Treasurer, **Mike (KB1NB)** reported total expenses of \$218.03, income of \$2838.50 and a total of \$40,422.80 on account. A motion was made, seconded and unanimously approved to refer the Treasurer's Report to audit.

After some discussion regarding NETCOM arrears, a motion was made, seconded and unanimously approved to send a letter to NETCOM requesting an appearance at the next *Board of Directors meeting* to address the outstanding balance and payment schedule.

STANDING COMMITTEES

Buildings and Grounds

Thanks go out to all who assist in keeping the grounds in good shape. Special thanks to Ray Arruda (KB1EVX) who donated a push lawnmower to the club and for assistance in grounds keeping.

Technical

There was some discussion regarding technical needs of the club such as repairing antennas as well as looking for volunteers for membership on the Technical Committee.

SPECIAL COMMITTEES

ARES, RACES, SKYWARN

Rob (KD1CY) spoke about local hospitals taking part in the net with newer operators as well as the possibility of a SKYWARN class given locally. **Ed (KAIRSY)** gave an update on MEMA and ARS communications.

Radio Events

Bob (K1KVV) mentioned events as listed in *Zero Beat*, including "Island on the Air" event scheduled for July 28.

Repeater

Marcel (W1MLD) read an email from **Rick (W1RJC)** regarding the repeaters.

Prices for a new rotor were \$399.95 (Yaesu) and \$599.95 (Hi Gain). Further, progress was being made making patch cables to link the 220 repeater to the pc and tying the 147.00 repeater into auto patch. All is expected to be installed soon.

Website

It was reported that all was working well and up to date.

OLD BUSINESS

After some discussion regarding both beam antennas, a motion was made, seconded and unanimously voted to approve expenditures to repair both antennas and get them operating.

Marcel (W1MLD) also stated that plumbing repairs to the bathroom have been completed.

NEW BUSINESS

There was some discussion regarding VE sessions at the club and the possibility of SEMARA sponsored sessions, as well as a possible Tech Talk about proper use of SEMARA equipment and operating protocol. A motion was made, seconded and unanimously approved to change to a format where Tech Talks are held after the monthly Business Meetings when available.

FOR THE GOOD OF THE CLUB

It was mentioned that help would be needed for the annual *Tailgate Flea Market* to be held on Sunday, September 9, 2012. It was also mentioned that if a member brings equipment to the club to be given away and that equipment is still there weeks later, the member should remove the equipment.

ADJOURN

A motion was made, seconded and unanimously approves to adjourn at 8:10 p.m.

Respectfully Submitted,

Marc M. Dumont (KB1ODE), Secretary



50/50 RAFFLE

The 50/50 raffle was won by **Rob (KD1CY)** and the split was \$26/\$26. Rob donated his winnings to SEMARA. Thanks Rob!

SEMARA News

The Coffee Crowd



ANDY-WA1FNM, BOB-K1KVV, DAVE-K1JGV AND DICK-K1AHA
(PHOTO BY RAY-KB1EVX)

The Thursday COFFEE CROWD has established their gathering time as 1 PM at the **Dunkin Donuts**, corner of Dartmouth and Garfield - just down the street from the clubhouse.

W2DAN Wins Hi Power HF Category



SEMARA would like to congratulate **Dave-W2DAN** for having the most QSOs in the High Power HF category in this year's Original 13 Colonies Special Event! Just a little jealous that Dave isn't a Massachusetts resident, **Bob-K1KVV** adds:

For the Original 13 Colonies Special Event, the HIGH POWER HF Winner is **Dave-W2DAN, K2C-RI** with **3608 QSOs**. Too bad he doesn't live in Massachusetts; we could have really used him. You do the math and see how the scores would have shifted if Dave was working for Massachusetts instead of Rhode Island.

13 Colonies Special Event Station Totals

K2A-NY: 4937	K2B-VA: 4261
K2C-RI: 5202	K2D-CT: 3628
K2E-DE: 3850	K2F-MD: 7230 (Top State)
K2G-GA: 5831 (3rd)	K2H-MA: 3814
K2I-NJ: 3783	K2J-NC: 3586
K2K-NH: 6210 (2nd)	K2L-SC: 5466 (4th)
K2M-PA: 4281	

Grand Total: 60,079

WM3PEN (BONUS STATION): 1681

~Bob-K1KVV

Lawn Caretakers

Most Thursdays, after the Coffee Crowd has exhausted their welcome at the Dunkin Donuts store, some of the folks take a ride over to the clubhouse to see how it looks. If the grass can stand a trim, that's when they go to work grooming the grass.



WHO'S THE ARAB?
[RAY-KB1EVX WITH SUN PROTECTION]



MARTY-KA1YFV DOING
THE HONORS ON THE NEW
TRACTOR



RAY-KB1EVX AND DICK-K1AHA



NE Division Conv

The 2012 ARRL New England Division Convention: "**Boxboro!**" will be held at the Holiday Inn Boxborough, in Boxborough, MA on August 24, 25 and 26. Enjoy an incredible convention for the day or the entire weekend! A perfect club activity or fun for the entire family! For tickets, reservations and more visit boxboro.org.



SEMARA News (cont.)

(Continued from page 1)

If you are not a CW type, not to worry. IDing the beacons can be done with your PC. There is software available that knows when a beacon should be transmitting and will highlight that beacon on a map. You need to synchronize your PC clock to WWV to get accurate time correlation for the beacon ID program. Time synchronization programs are available free on the website mentioned below.

See <http://www.ncdxf.org/beacons.html> for beacon frequencies under the "*Beacon Status*" tab on their web site. The software to ID the beacons, if you need it, can be downloaded from locations listed under the "*Tools for Listeners*" tab on the same web page.

I hope this is a help to all you DXers out there. Even if you don't chase DX, this is fascinating stuff. Give the beacons a listen, I think you will be fascinated too.

NCDXF/IARU Beacon Locations

Call	Location	Latitude	Longitude	Grid Sq
4U1UN	US United Nations, New York City	40° 45' N	73° 58' W	FN3ØAS
VE8AT	Canada Eureka, Nunavut	79° 59' N	5° 57' W	EQ79AX
W6WX	US Mt. Umunhum, CA	37° 09' N	121° 54' W	CM97BD
KH6WO	US Laie, Hawaii	21° 38' N	157° 55' W	BL11AP
ZL6B	New Zealand Masterton	41° 03' S	175° 36' E	RE78TW
VK6RBP	Australia Rolystone	32° 06' S	116° 03' E	OF87AV
JA2IGY	Japan Mt. Asama	34° 27' N	136° 47' E	PM84JK
RR9O	Russia Novosibirsk	54° 59' N	82° 54' E	NO14KX
VR2B	Hong Kong Hong Kong	22° 16' N	114° 09' E	OL72BG
4S7B	Sri Lanka Colombo	6° 54' N	79° 52' E	MJ96
ZS6DN	South Africa Pretoria	25° 54' S	28° 16' E	KG44DC
5Z4B	Kenya Kiambu	1° 01' S	37° 03' E	KI88MX
4X6TU	Israel Tel Aviv	32° 03' N	34° 46' E	KM72JB
OH2B	Finland Karkkila	60° 32' N	24° 06' E	KP2ØBM
CS3B	Madeira Santo da Serra	32° 43' N	16° 48' W	IM12OR
LU4AA	Argentina Buenos Aires	34° 37' S	58° 21' W	GFØ5TJ
OA4B	Peru Lima	12° 04' S	76° 57' W	FH17MW
YV5B	Venezuela Caracas	10° 25' N	66° 51' W	FK6ØNJ

Current Beacon Status

4U1UN	OFF due to roof repair
VE8AT	OK signal may be intermittent due to local conditions
VK6RBP	OFF HW failure
5Z4B	OFF lightning strike
LU4AA	OFF HW failure
YV5B	OFF not heard, contacting operator

FLEAMARKET 2012



Sunday, September 9, 2012
9 AM to 12 PM Rain or Shine

GENERAL ADMISSION ONLY \$2.00!

30+ YEARS OF FLEAMARKETS!
 (Seller Setup starts at 8 AM)

**Admission Includes
 One Raffle Ticket!**

- **FREE ADMISSION** for SEMARA members with a SEMARA table available for sellers.
- **VENDORS \$10.00** admission fee.

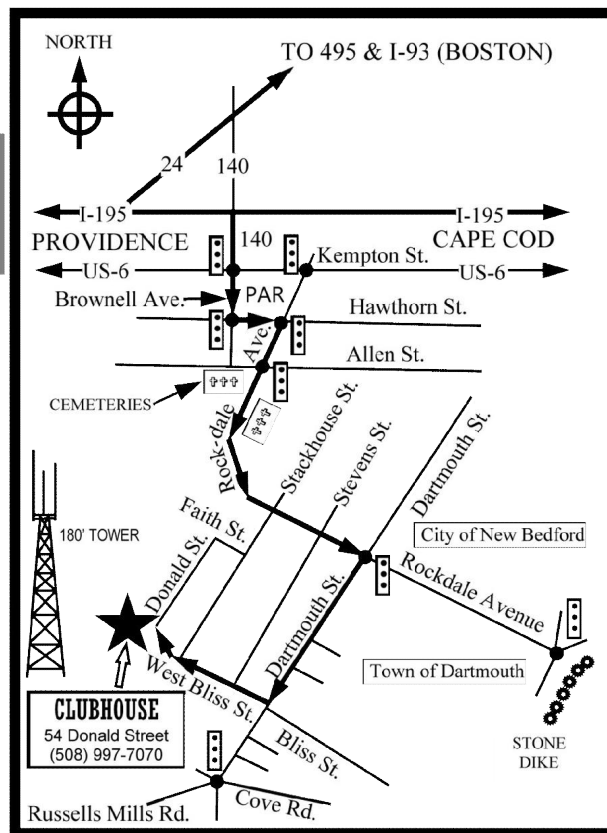
Talk-in on W1AEC Repeaters:

→ 147.000 + PL 67.0 ←

→ 224.800 - PL 67.0 ←

**54 DONALD STREET
 DARTMOUTH, MA 02748**

More Information: **SEMARA.ORG**
 Call Eric, N1WCO at (508) 295-2468
 or email flea [at] semara [dot] org.



Some Radio Events

<http://www.arrl.org/contest-calendar>

Phone/CW/Digital

Aug 4, 0000Z-Aug 5, 2359Z 1.8-28

Int'l Lighthouse-Lightship Contest illw.org

Aug 4, 1800Z-Aug 5, 1800Z 222+

ARRL UHF Contest arrl.org/contests

Aug 11, 1600Z (see website) 1.8-28 50-440

Maryland-DC QSO Contest
mdcqsoparty.w2vpr.org

Aug 11, 2000Z-Aug 11, 2400Z 50

Fall VHF Sprints www.svhfs.org

Aug 18, 6AM-Aug 19, 12AM 10G+

ARRL 10 GHz and Up Contest
arrl.org/contests

Aug 25, 0400Z-Aug 27, 0400Z 1.8-28

Hawaii QSO Party
www.hawaiiqsoparty.org

Aug 25, 1400z (seewebsite) 3.5-28 50, 144

Kansas QSO Party www.ksqsoparty.org

Phone/CW

Aug 4, 1200Z-Aug 4, 2359Z 1.8-28

European HF Championship
lea.hamradio.si/~scc/euhf/euhfc.htm

Aug 6, 1600Z (see website) 3.5 50,144

OK1WC Memorial Contest
www.hamradio.cz/ok1wc

Aug 18, 0800Z-Aug 19, 0800Z 11.8-28I

Russian District Award Contest
rdaward.org/rdac1.htm

Aug 25, 0000Z-Aug 27, 2400Z 3.5-28

YO DX Contest www.hamradio.ro

Aug 25, 1600Z-Aug 26, 0400Z 3.5-28

Ohio QSO Party www.ohqp.org

Answer: Sudoku ¹⁶

6	2	9	1	7	4	5	3	8
7	8	1	6	3	5	4	9	2
5	4	3	9	8	2	7	1	6
8	6	4	7	5	9	3	2	1
2	1	5	4	6	3	8	7	9
9	3	7	8	2	1	6	4	5
1	9	8	3	4	6	2	5	7
3	7	2	5	1	8	9	6	4
4	5	6	2	9	7	1	8	3

Local VE Sessions

<http://www.arrl.org/>

[find-an-amateur-radio-license-exam-session](#)

Walk-ins permitted unless otherwise noted.

SEMARA – 10:30 AM **August 4th**

Larry Houbre-AA1FS

[<exams\[at\]semara\[dot\]org>](mailto:exams[at]semara[dot]org)

508-991-6055



Fall River, MA – 7:00 PM

Aug 20th

Skip Denault-KB1CNB

[<skip\[at\]newtestamentschool\[dot\]org>](mailto:skip[at]newtestamentschool[dot]org)

774-644-3469

Falmouth, MA – 9:00 AM

Aug 11th

W. Ben Fleck-K2LYE

[<BenFleck\[at\]verizon\[dot\]net>](mailto:BenFleck[at]verizon[dot]net)

508-540-2583

Providence, RI – 7:00 PM

Louis Mester-W1CH

[<W1CH\[at\]arrl\[dot\]net>](mailto:W1CH[at]arrl[dot]net)

401-263-6045

Coming FLEAS & FESTS

www.arrl.org/hamfests/search

12 Aug	NoBARC	Adams MA
	Tim	413-822-7075
19 Aug	FLEA @ MIT	Cambridge MA
	Nick	617 253 3776
24-26 Aug	NE Conv	Boxboro MA
	Mike	978-250-1235
9 Sept	SEMARA Tailgate Fleamarket	Dartmouth MA
	Eric	508 997-7070

Answer: HAMMIN' AROUND

What is the total bandwidth of an FM-phone transmission having a 5 kHz deviation and a 3 kHz modulating frequency? D. 16kHz -recall the deviation is plus/minus and the modulation adds to the bandwidth.

CLUB ACTIVITIES

BUSINESS MEETING

First THURSDAY of the month @ 7 pm

Sunday RAGCHEW

7-10 am

Thursday COFFEE/WORLD PROBLEMS

Dunkin Donuts @ Bliss Corner, Dart. @ 1 pm

Friday LUNCH BUNCH - QSY to 12n

Gather @ clubhouse before 12

or phone/call ahead

Leave for LUNCH at 12 noon