



ZERO BEAT

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



Since 1932

Volume 45 Issue 8

SEMARA-W1AEC

August 2009

Cuttyhunk Island Activation

Cuttyhunk Island — USA215 and IOTA NA-046 was activated on July 25-26, 2009 by **Henry-K1WCC** and **Chris-K1KEK**.

These photos were taken of the Cuttyhunk Island Lighthouse activation for the Amateur Radio Lighthouse Society on July 25 & 26. As you are aware, the island is the last in the Elizabeth Island chain off the SE coast of Massachusetts, tailing off the “elbow” of Cape Cod.

This is one of the most difficult lighthouses to activate. The island is accessible only by boat.

Operation was by battery power with a 12-V regulator so the battery put out full power for the whole operating period.



VERTICAL ANNTENNA



OPERATING SITE—HIGH ON A HILL

The operation was conducted without any shelter, except for an umbrella. Rain and fog on Sunday drove them off the island, to Chris's boat and home.

Questions and comments to Henry — k1wcc@comcast.net.

A big thanks to **Henry-K1WCC** and **Chris-K1KEK** for their outstanding effort to give everyone a "new" one.

Submitted by **Whitey-K1VV #957**



BATTERY AND 12-V REGULATOR



TRANCEIVER SET-UP



HENRY-K1WCC & CHRIS-K1KEK

ZERO BEAT

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2009 SEMARA OFFICERS

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vacant

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Repeater

Rick Cabral- W1RJC,

Dave Goldstein - W1DJG

Website

Tim Smith - N1TI

It seems to me ...

de Bob - K1KVV <editor@semara.org>



That there are lots of activities going on for your entertainment and enjoyment. If you are interested in visiting the New England Steam and Wireless Museum with the Newport Radio Club group, the response deadline is August 15 (see page 5). Check out the two local events that need communications support (see page 5). For those whose like to look to the skies, there is the annual Perseid Meteor Shower (see page 6). Or listen for one of the four student-built satellites just deployed by the Endeavour prior to returning to earth (see page 6). To get your warmed up for more digital modes, the W1AW transmissions will add PSK31 and MFSK16 in addition to RTTY to their schedule (see page 6).

Don't have enough to do? Try taking a course in basic emergency communications. As announced by Ed Caron, "On Saturday October 3rd, we will hold an EMMCOM workshop at the Acushnet EOC. This class will cover all the material that is covered in the ARRL Basic Emergency Communications course 101. If this workshop goes well, I will try to arrange for an advanced class in the future."

73 de Ed-KAIRSY
 508-998-0295 ex.232

eacaron@acushnetema.com

www.acushnetema.com

ka1rsy@comcast.net

While I'm on this tack, let me remind everyone that SEMARA is reinstating its annual Tailgate Hamfest on Sunday, September 13. Let everyone you know that it is planned to be better than ever with inside tables available for the first time.

So gather all your valuable *junque* and come on down to sell it and bring home some new *junque*!

See you there!?!

POINT TO PONDER

**"Everyone is too old for something,
 but no one is too old for everything."**

~Anonymous

HAMMIN' AROUND

Question* E5A17 What is the resonant frequency of a parallel RLC circuit if R is 47 ohms, L is 25 microhenrys and C is 10 picofarads?

- A. 10.1 MHz
- B. 63.2 MHz
- C. 10.1 kHz
- D. 63.2 kHz

* 2008 Element 4 Extra Class Question Pool (good thru 2012-06-30)

Answer on page 8

Club Notes

Summer time is fleeting fast. Before you know it, Labor Day will be here ... and that means the SEMARA Tailgate Hamfest will be the following Sunday. Get all your *junque* together and plan on setting up shop to sell, sell, sell!



This year there will be inside tables as well as refreshments for all to enjoy. So, please, tell all your friends and acquaintances to "come on down" and enjoy the fun while making a little spare change along the way.



See you there!

NEXT SEMARA VE SESSION



October 3, 2009
Clubhouse @ 10:30 AM
 Contact: Larry Houbre-AA1FS
LRHguy@earthlink.net
 508-991-6055

Here's a challenging Sudoku puzzle to attack while waiting for the band to open. Letters used: **A, D, E, H, J, L, O, S and W**. The main diagonal spells a 9-letter word. **Solution is on page 8.**

	E	S	A			L		H
		J			L		A	
L		O	D			S		
E	O				H	J	S	
	J		W	E	A		O	
	L	H	O				W	D
		L			E	A		S
	S		H			O		
H		A			O	D	J	

SEMARA 900 MHZ FREQ. PAIR

927.8375 MHz (repeater output)
902.8375 MHz (repeater input)

LOCAL NETS

Everyone is welcome to check in!

147.000+ (PL 67.0 Hz) (FM) — **"Camel" Net Roundtable** is held *every evening* at 7 p.m. on the SEMARA Repeater, **W1AEC**.

50.200 MHz (USB) — Net is held *Wednesdays* at 8:30 p.m. **Bob, N1HCW** (Acushnet) is net control.

28.490 MHz (USB) — Net is held *Tuesdays* at 8:30 p.m. **Bob, N1HCW** (Acushnet) is net control.

3862 kHz (LSB) — **SEMARA Morning Net** is held *weekdays* from 7:30-8 a.m. ET

3545± kHz — **SEMARA CW Net**. [Mondays at 8:00 p.m. Cancelled because of low **QNI**.]

VE SESSION RESULTS

The result of the August 1, 2009 VE session is as follows:

Keith S. Rowe — KBISUM
 passed the Technician written exam.

Welcome to the hobby!

SEMARA HAMFEST

It's official, the SEMARA Hamfest will be held on the second Sunday in September, the 13th.

Contact **Tim, N1TI** with your ideas about what you can do to help.

CLUB NUMBERS

GPS Coordinates:
Lat. N 41° 36.795' Long. W 070° 56.550'
*Maidenhead Grid Coordinates: **FN41mo***
*For FISTS Sprints: **FISTS #10555***

Official Meeting Minutes



BOARD OF DIRECTORS

July 25, 2009

The meeting was called to order by President **Louie (W1CH)** at 10:25 AM. Five members were present:

Louie-W1CH

Bob-K1KVV

Marcel-W1MLD

Dave-K1JGV, and

Dick-K1AHA.

There was considerable discussion on the following subjects, most of which were concerns in an email from **Tim (N1TI)**.

Poles on grounds should be re-arranged to provide access for various functions and other area's should be barricaded.

Camera locations outside will be left to **Tim (N1TI)**. We should have coverage for the whole area.

The handicap ramp should be a priority item. **Dave (K1JGV)** will get estimates from local contractors who specialize in these types of projects. Estimates should be available for the next business meeting.

Flea Market. Inside tables should have a cost of \$10.00 as well as outside tables for \$5.00. *This will be brought to the membership.*

The Buzzards Bay Triathlon Committee has requested the use of our repeater for September 20, 2009. They will only be using it for that one day. *This will be brought to the membership.*

By-Law and Constitution. **Bob (K1KVV)** brought up discussion on appointing a By-Law and Constitution Committee for various changes such as dues, membership etc.

Tower area. Considerable discussion about the tower area and Al Costello on cleanup and fencing in that area was had and all were in agreement. Safety is a prime issue in this matter. If not done by the time of the Flea Market, we recommend putting up caution tape to keep people away from that area.

Adjournment

At 11:40 AM, motion to adjourn made and seconded, voted unanimously.

Respectfully Submitted
Marcel Dumont, (W1MLD)



NEWLY GRADED DRIVE AND REAR OF CLUBHOUSE



RELOCATED BBQ PIT

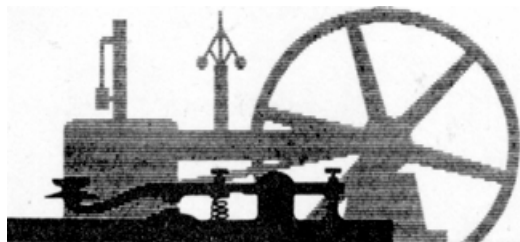


LOOK WHO'S MOWING THE GRASS [SONNY-K1USW]



SEMARA News

STEAM & WIRELESS MUSEUM



You are invited to the New England Steam & Wireless Museum in East Greenwich, RI.

www.newsm.org

Date & Time: 7 PM on Monday October 12, 2009

This is an invitation for both Newport County Radio Club members and non-members to attend.

The fee is \$12 per person for groups of 10 or more. We will tour the facility, gain first hand knowledge of how a spark gap transmitter works, and talk steam & radio.

There will be light *hor d'oeuvres* and refreshments. It will be fun.



Please respond (RSVP) by **Aug 15th** by email or voice mail with your intention to attend. I need ten attendees to make this happen.

73 de **John-K1JSM**

President, Newport County Radio Club

email: jsmills63@mac.com

cell: 401-258-8604



MEMBERS' S-LINKS

Frequency	CTCSS	Call/IRLP/E-link	Location
147.520 s	—	K1JGV-L/-/277143	N Dartmouth
147.540 s	67.0	W1EAV-L/4568/45688	Marion

SUPPORT THESE TWO EVENTS

Cranberry Trifest
Aug 29 & 30, 2009
(Two Day Event!!)

The Cranberry Trifest (formerly Cranberry Country Triathlon) offers three races the weekend of August 29-30.

On Saturday, August 29, there will be a sprint distance triathlon followed by a kids duathlon.

Sprint triathlon (9:00AM start) and kids duathlon (11:00AM start).

On Sunday, August 30, will be the 8th year of the Cranberry Olympic distance race.

Olympic triathlon (8:00AM start); the Olympic distance race is the 2009 USAT Northeast Regional Club Championship.

The site of the Cranberry Trifest is the Ted Williams Camp with entrances off Precinct Street and Rte 18 in Lakeville, MA.

http://www.sunmultisportevents.com/Cranberry_Trifest.htm

Event Coordinator does donate to ham groups who help out!

Buzzards Bay Triathlon
Sept. 20, 2009

<http://www.maxperformanceonline.com/buzzardsbayrace.html>

Location: Demarest Lloyd State Park,
 Barney's Joy Road, Dartmouth, MA

Time: 9:00AM Start

Sprint Triathlon: 1/3 Mile Swim, 14.7 Mile
 Bike, 3.1 Mile Run

Buzzards Bay triathlon makes every triathlete appreciate the beauty of an amazing park and course layouts. The bike course is a major highlight with views of the bay, farmhouses, and stone walls, with fall foliage at its peak. Demarest Lloyd State Park is true hidden gem that serves as a fantastic season wrap-up!

Communications information will be posted at <http://n1xrs.net/events/>

73 de **Tony-NIXRS**

aduarte@acushnetema.com

www.acushnetema.com

(508) 998-0295 Ext 204

More SEMARA News

PERSEID METEOR SHOWER

According to a story on www.Spaceweather.com, this year's Perseid meteor shower could be even better than usual.

"A filament of comet dust has drifted across Earth's path and when Earth passes through it, sometime between 0800Z and 0900Z (4 - 5 AM EDT) on August 12, 2009, the Perseid meteor rate could surge to twice its normal value."

NASA's Meteoroid Environment Office



W1AW ADDS NEW DIGITAL MODES

W1AW is to add new digital modes to its transmitting schedule. After a survey of W1AW-listeners, W1AW will begin using two different modes on **August 17, 2009**.

On August 17, 2009, W1AW will *replace* its AMTOR and ASCII transmissions with PSK31 and MFSK16, respectively.

RTTY (Baudot) will continue to be the first digital mode used in the transmission schedule.

The frequencies used by W1AW for all its digital transmissions will remain the same.

All regular 6 PM and 9 PM eastern time digital transmissions will begin with RTTY. PSK31 and MFSK16 will be sent as time allows.

The Tuesday and Friday Keplerian data bulletins will be sent using RTTY and PSK31.

The W1AW operating schedule — complete with times and frequencies — can be found on the ARRL Web page at <http://www.arrl.org/w1aw.html#w1awsked>.



STUDENT-BUILT SATELLITES

The space shuttle Endeavour landed Friday, July 31, but before it left orbit it deployed four student-built satellites, all with telemetry downlinks in the 2 meter, or 70 cm, amateur bands.

The twin spherical satellites — named **Castor** and **Pollux** — were designed by students in cooperation with the Naval Research Laboratory as part of the Atmospheric Neutral Density Experiment (ANDE). Both satellites will transmit **1200-baud packet** radio telemetry on **145.825 MHz**. Hams are encouraged to submit telemetry reports with special QSLs and mission patches planned. Check the ANDE Web site, http://www.nasa.gov/mission_pages/station/science/experiments/STP-H2-ANDE.html for updates.

Castor and Pollux will carry an **FX.25 experiment** that adds Forward Error Correction to standard AX.25 packets. The hope is that FX.25 will improve communication efficiency while still being compatible with existing packet equipment. The satellites will also occasionally run **GMSK/FX.25** modulation experiments at **9600** baud.

In addition to Castor and Pollux, Endeavour will also deploy student satellites from the University of Texas and Texas A&M. The tiny picosatellites, christened **BEVO-1** and **AggieSat2** respectively, are part of an ambitious experiment that will ultimately culminate in autonomous docking of picosats in orbit. For this mission, however, BEVO-1 and AggieSat2 will launch as one unit and then separate to collect position data and test a new NASA Global Positioning System receiver known as **DRAGON**.

BEVO-1 will transmit **Morse code** beacons (20 WPM) or packet radio data telemetry at **437.325 MHz**. AggieSat2 will beacon at **436.250 MHz**. The satellites will primarily transmit 9600-baud packet telemetry when over the United States. As with Castor and Pollux, reception reports are welcome.

Orbiting at a relatively low altitude of 185 miles, these satellites should be easy to receive with standard FM transceivers and omni-directional antennas. They should enjoy an operational life of 3-6 months and will likely re-enter the Earth's atmosphere within a year.

VE SESSIONS

Walk-ins permitted unless otherwise noted.

<http://www.arrl.org/arrlivec/examsearch.phtml>

SEMARA – 10:30AM **Oct 3rd**

Larry Houbre-AA1FS
LRHguy@earthlink.net
 508-991-6055

Braintree, MA – 9:00AM **Aug 8th**

William Needham-K1WN
K1WN@aol.com
 781-845-4400

Canton MA – 7:30PM **Aug 20th**

Louis Harris-N1UEC
N1UEC@n1uec.org
 508-333-5714

Cranston, RI – 9:00AM —

Kenneth Carr-KB1AWV
KB1AWV@yahoo.com
 401-828-1665

Falmouth, MA – 9:00AM **Aug 8th**

W. Ben Fleck-K2LYE
BenFleck@cape.com
 508-540-2583

Fall River, MA – 7:00PM **Aug 17th**

Skip Denauly-KB1CNB
skip@newtestamentschool.org
 774-644-3469

Providence, RI – 7:00PM **Aug 13th**

Louis Mester-W1CH
W1CH@arrl.net
 401-263-6045

Slatersville, RI – 9:00AM **Aug 29th**

Robeert E. Jones-WB1P
WB1P@arrl.net
 401-333-4787

COMING FLEAS & FESTS

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

8 Aug **RASON H'fest** **Gales Ferry, CT**
 Radio Amateur Society of Norwich
 Chuck—W1FJW@arrl.net

19 Aug **Flea @ MIT** **Cambridge, MA**
 Steve—W1GSL@mit.edu

13 Sep **SEMARA Tailgate** **Clubhouse**
 Tim — n1ti@arrl.net

ALL-OF-THE-TIME ACTIVITIES

AT THE CLUBHOUSE BUSINESS MEETING

7 PM First Thursday of the month

SUNDAY RAGCHEW

7-11 AM SUN

MOST-OF-THE-TIME ACTIVITIES

* EARLY BIRD BREAKFAST: 6 AM TU & TH
West End Grill

1000 Rockdale Avenue, New Bedford

* CLUB COFFEE MEET: 1 PM WEEKDAYS

Boston Coffee & Bagel

122 Allen Street (corner of Dartmouth Street)
 New Bedford

LUNCHEON: 11:30 AM FRIDAYS

Meet at the clubhouse at 11:15 AM

Each week we decide which local restaurant is to have the honor of our presence.

* *Call first on repeater to see who's coming*

SOME CONTESTS

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

CW Aug 8, 0000Z - Aug 9, 2359Z 3.5-28

Worked All Europe www.waedc.de

All_modes Aug 8, 1600Z - Aug 9 2359Z 1.8-28 50-440

Maryland-DC QSO Party www.w3cwc.org

Phone_CW Aug 15, 0800Z - Aug 16, 0800Z 1.8-28

RTTY Aug 15, 0000Z - Aug 16 1600Z 3.5-28

SARTG WW RTTY Contest www.sartg.com

Phone_CW Aug 15, 0800Z - Aug 16, 0800Z 1.8-28

Russian Dist. Award Contest rdaward.org/rdac1.htm

CW Aug 15, 1200Z - Aug 16, 1200Z 1.8-28 50

Keymen's Club of Japan Contest www.jarl.com/kcj

CW Aug 15, 1500Z - Aug 15, 1800Z 1.8-28

Silent Key Memorial Sprint qrparci.org

Phone Aug 15, 1800Z - Aug 16, 0600Z 1.8-28

North American QSO Party ncjweb.com

Phone_CW Aug 15, 2000Z - Aug 17 0200Z

1.8-28 50,144 **NJ QSO Party** www.qsl.net/w2rj

All_modes Aug 22, 0700Z - Aug 23, 2200Z 1.8-28

Hawaii QSO Party www.karc.net

Phone_CW Aug 22, 1600Z - Aug 23, 0400Z 3.5-28

Ohio QSO Party www.ohqp.org

Phone_CW Aug 29, 0600Z - Aug 30, 1159Z 3.5-28

ALARA Contest alara.org.au

Phone_CW Aug 29, 1200Z - Aug 30, 1159Z 3.5-28

YO DX Contest www.hamradio.ro

LOCAL REPEATER DIRECTORY

See <http://www.semara.org/repeaters.htm>

Frequency CTCSS Call/IRLP/E-link Location 144 (within 35 miles of SEMARA)

145.110 -	67.0	NB1MA	New Bedford
145.130 -	151.4	WF1A	W Greenwich, RI
145.150 -	123.0	WA1DGW	Fall River
145.170 -	67.0	KA1RCI	Lincoln, RI
145.190 -	67.0	KA1RCI	Johnston, RI
145.210 -	192.8	N1JL	Coventry, RI
145.330 -	94.8	K1CW	Bristol, RI
145.350 -	100.0	N1BS	W Warwick, RI
145.450 -	100.0	W1SYE	Portsmouth, RI
145.490 -	67.01	W1SMA/4617/4611	Fairhaven
146.625 -	141.3	K1RSR	E Prov., RI
146.655 -	88.5	WA1GPO	Falmouth
146.685 -	82.5	N1ZIZ	Plymouth
146.700 -		K1CR	Cranston, RI
146.730 -	67.0	W1SGL	E Sandwich
146.805 -	67.0	NN1D	Fall River
146.835 -	192.8	WA1QCA	Johnston, RI
146.880 -	100.0	WC1R	Newport, RI
146.940 -	67.0	K1KYI	Cumberland, RI
146.985 -	67.0	KA1RCI	Exeter, RI
147.000+	SEMARA 67.0	W1AEC/4347/44347	Dartmouth
147.015+	77.0	N1MIX	N Prov, RI
147.045+	141.3	W1HDN	W Warwick, RI
147.075+	67.0	KA1RCI	Portsmouth, RI
147.105+	103.5	W1PHR	Cranston, RI
147.120+	173.8	K1WEW	Portsmouth, RI
147.135+	67.0	KA1GG	Taunton
147.165 +	67.0	N1VDJ	Exeter, RI
147.180+	67.0	W1MV/—/64231	Bridgewater
147.195+	127.3	K1SMH	Attleboro
147.225 +	67.0	WA1NPO/—/423517	Whitman
147.315+	67.0	WG1U/—363590	Plymouth
147.330+	131.82	W1AQ/4907/147330	E Prov., RI
147.345+	88.5	KB1QL/—/402289	W Tisbury
147.375+	110.9	N1YHS	Falmouth

222

223.760 -		K1KYI	Scituate, RI
223.780 -	88.5	N1PYN ²	Brockton
223.820 -	67.0	N1JBC	Newport, RI
223.900 -		KA1ABI	Coventry, RI
223.920 -		KA1LMX ²	Warwick, RI
223.960 -	127.3	KA1RCI	Johnston, RI
223.980 -		W1OP	Johnston, RI
224.040 -	67.0	KA1RCI	Lincoln, RI
224.060 -	103.5	N1ZZN	Norwell
224.200 -	100.0	KA1MYV	Lincoln, RI
224.320 -	118.8	W1ZSA	Walpole
224.400 -	103.5	NIKUG/4133/94940 ²	Quincy
224.560 -	100.0	KA1NXS	Exeter, RI
224.620 -	88.5	N1LEO ²	Attleboro
224.660 -		W1KG	Medway
224.760 -		KA1SOO	W Warwick, RI
224.920 -	67.0	N1JBC	N Prov., RI
224.960 -	88.5	W1VET ²	Warwick, RI

Check <http://www.nerepeaters.com/se.htm#222>

Frequency CTCSS Call/IRLP/E-link Location 440 (within 25 miles of SEMARA)

441.400+	192.8	WG1U	Assonet
441.750+	192.8	W1AQ ²	E Prov., RI
442.550+	67.0	WG1U	Assonet
443.150+	94.8	K1CW	Bristol, RI
444.350+	88.5	W1ACT ²	Fall River
446.375 -	67.0	KA1RCI	Little Compton, RI
447.225 -	88.5	WP4US	Taunton
447.525 -	88.5	WA1TAQ	Portsmouth, RI
448.325 -	186.2	KC2GDF	Newport, RI
449.525 -		NN1D	Fall River

Check <http://www.nerepeaters.com/se.htm#440>

902

921.2000 (-12 MHz)		KA1RCI	Prov., RI
921.7000 (-12 MHz)		W1OP	Johnston, RI
927.4125	67.0	N1OTY	Plymouth
927.4250	131.8	W1WCF	Bridgewater
927.4500	D031	WG1U	Abington
927.4625	103.5	WG1U	Assonet
927.4750	131.8	N1ZZN/4571/465188 ¹	Marshfield
927.4875	131.8	N1UEC/4486/278206 ¹	Wrentham
927.5750	D051	N1UMJ	Rehoboth
927.6125	131.8	KA1RCI ^{2 3}	Lincoln, RI
927.6250	131.8	W1EHT ³	Pembroke
927.6500	D031	W1SMA	Dartmouth
927.6750	D244	N3LEE ²	Cumberland, RI
927.6875	131.8	KA1DTA	Taunton
927.7125	131.8	KB1HTO ³	Norton
927.7625	67.0	KA1EZH	N. Prov., RI
927.7759	D244	K1RJZ/4977 ¹	Boston
927.7875	127.3	N1SEC	N. Attleborough
927.8250	131.8	N1JFU/4335 ^{1 3}	Hingham
927.8625	D031	NN1D/4004	Fall River

¹ NEAR-900 Net ² OFF ³ Transmits 100.0 Hz tone

Check <http://www.nerepeaters.com/se.htm#902>

ANSWER: HAMMIN' AROUND

What is the resonant frequency of a parallel RLC circuit if R is 47 ohms, L is 25 microhenrys and C is 10 picofarads? A. 10.1 MHz, Recall $|X_L| = |X_C|$ at resonance, $|X_L| = 2\pi fL$ and $|X_C| = 1/(2\pi fC)$, So, $f = 1/(2\pi\sqrt{LC})$, $25 \times 10^{-6} \text{H}$ and $10 \text{pF} = 10 \times 10^{-12} \text{F}$, $\sqrt{LC} = 15.8 \times 10^{-9}$.

ANSWER: SUDOKU

Word: WHOLESALE

E	J	D	O	L	S	V	M	H
W	L	O	D	V	H	E	S	J
S	H	V	E	W	J	L	D	O
D	W	E	S	J	O	H	L	V
L	O	H	V	E	W	D	J	S
V	S	J	H	D	L	M	O	E
J	E	S	W	H	D	O	V	L
O	V	W	L	S	E	J	H	D
H	L	D	J	O	V	S	E	W