



ZERO BEAT

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



Since 1932

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SEMARA-W1AEC

May 2011

Not Grandpa's Ham Radio

What do you say when you are asked about Ham Radio, formally Amateur Radio? I like to tell them it's a personal communication hobby where you say "Hello" to strangers and "Goodbye" to a friend. To help address the idea that Ham Radio is an old fashion, out of date hobby, I've borrowed ideas from the <[ARRL.org](http://www.arrl.org)> website pages on "What is Ham Radio."

Many folks are not aware of the *changes that have taken placed in Ham Radio* over the last fifty years or so. Hams now have access to ten High Frequency (HF) bands, Grandpa's six HF bands have been augmented by the addition of three more HF bands plus a channelized, voice-only, low-power HF band. See <<http://www.arrl.org/graphical-frequency-allocations>> for the US Amateur Radio Bands in graphical form. Note that Ham Bands are just that, bands (or frequency ranges) that are available on a first come basis. No one owns any particular frequency; there are modes of communication based restrictions – data/CW, voice, or specialized modes (like amateur television, for example).

Other changes since Grandpa's days are: the Morse code requirement has been dropped; all licenses are issued for ten years; and there are now only three classes of license, Technician, General, and Extra. The exam for the Technician license consists of 35 questions taken from a published question pool. The exam is designed to test knowledge of the FCC rules and regulations and some basic radio principles.

So, *what else is new* since Grandpa became a Ham? In a word, **technology!** The introduction of relatively inexpensive, integrated, solid-state electronics along with the increasing power of personal computers has revolutionized Ham Radio. What used to take lots of expensive, specialized equipment can now be done with simple, commercially available electronics and a computer. Soundcard-based interfaces allow many

modes that were considered exotic a few years ago. Just think of it, Radio Teletype (RTTY) doesn't need oiled paper tape and lots of mechanical gear anymore! A soundcard interface to your voice transmitter and a personal computer does it all.

Other *soundcard applications* include high-speed Morse code (CW) for meteor burst communications, ultra slow-speed CW for very weak signal communications, earth-moon-earth (EME) communications, and the like. Soundcards support new typewriter modes, for example binary phase shift keying (BPSK) that takes up less space than hand-sent Morse code. Further, the internet is used by hams to connect using voice over internet protocols (VoIP) from a hand-held transmitter/receiver. This capability is especially useful in time of emergencies.



"*What's the Appeal of Ham Radio?* Some hams are attracted by the ability to communicate across the country, around the globe, or even with astronauts on space missions. Others may like to build and experiment with electronics. Computer hobbyists enjoy using Amateur Radio's digital communications opportunities. Those with a competitive streak enjoy "DX contests," where the object is to see how many hams in distant locations they can contact. Some like the convenience of a technology that gives them portable communication. Many are interested in being able to serve their community in time of emergency. Mostly we use it to open the door to new friendships over the air or through joining an Amateur Radio club."

~Bob-K1KVV



Club Notes

May is the month for new things to happen at SEMARA. Take a look at the postings on our web-site:



[semara \[dot\] org](http://semara.org).

The March licensing class yielded new Technician class licensees.

- Noah Bedford - KB1VKT
- Tim Klatt - KB1VKU
- Tom Orlovski - KB1VKV
- Mike Dumont - KB1VKW



Congratulations to the class and to the instructors!

Mark your calendars! *Field Day* is June 25-26, 2011. This can be a fun event. It's also a good way to introduce newcomers to the fun of a grand on-the-air experience.



Who knows, there may even be some fantastic culinary delights as well.

See *Ben (NIWBV)*



Looking for volunteers to participate in this week-long special event using the callsign **K2H**.

Contact **Bob-K1KVV**

[k1kvv \[at\] arrrl \[dot\] net](mailto:k1kvv@arrrl.net)



NEXT SEMARA VE SESSION

June 4, 2011

Clubhouse @ 10:30 AM

Contact: Larry Houbre-AA1FS

[exams \[at\] semara \[dot\] org](mailto:exams@semara.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) — “*Camel*” Net **Roundtable** operates weekdays *irregularly* at 7 PM on the SEMARA Repeater. *Looking for a net control operator.*

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.

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

LOCAL REPEATER DIRECTORY

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 a fun Sudoku puzzle to while away the time waiting on net control. (Solution on p. 8.)

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

Official Meeting Minutes

April 7, 2011



The meeting was called to order at 7:10 p.m. by the President, **Marcel (W1MLD)** with salute to the flag. The roll was called with 22 members and 0 guests present.

SECRETARY'S REPORT

There was a motion made, seconded and unanimously approved to accept the report as posted on the board and in *Zero Beat*.

TREASURER'S REPORT

The Treasurer, **Mike (KB1NB)** stated that assets currently on hand are \$35,898.38. Several bills were paid including first quarter federal taxes. McGurk Fence also sent a copy of a receipt (for NetCom) for completion of the fence at the tower. A motion was made, seconded and vote unanimously approved to refer the report to audit.

STANDING COMMITTEES

Buildings and Grounds No one was present from the Building and Grounds Committee, however **Marcel (W1MLD)** stated that one estimate had been received for work on the roof and others were expected.

Scholarship Sonny (K1USW) stated that, to date only one application has been received. The committee will meet shortly to award the scholarship and the recipient should be at the May meeting. He also mentioned that, next year, he would notify Department Heads in the schools as opposed to only Guidance Counselors as not many students were aware of the scholarship. It was also mentioned that **Melissa (KB1UDU)** could give advice on how better to get the word out to students. **Bob (K1KVV)** mentioned that, next year we could look into advertising the scholarship on ARRL.

SPECIAL COMMITTEES

ARES, RACES, SKYWARN Rob (KD1CY) informed the membership that the P3 Hurricane Hunter aircraft would be on display at Otis AFB on Monday, May 2 and will be open to the public between 2:30 and 5:30 p.m. There will be a special event station hosted by the Falmouth Amateur Radio Association with assistance from the Taunton Communications Group. There will also be a public service event using amateur radio to provide communications. Volunteers should speak with him. Guests are also welcome to attend.

He also mentioned that the ARES net on the Fairhaven repeater and RACES on the SEMARA repeater are working well. Some changes are being

made at MEMA and **Michael Leger (N1YLQ)** will be the new RACES officer. Rob is also available to give a SKYWARN class for SEMARA if there is interest.

Ed (KA1RSY) spoke about the South Coast HEAR network (South Coast Hospitals Emergency Amateur Radio Network). They participated in a drill hosted by Sturdy Hospital in Attleboro. The drill went well and revealed a few issues which were resolved. The system is still a "work in progress" and is progressing well. Volunteers are still needed to operate in some hospitals and can contact him by email.

Radio Events Bob (K1KVV) stated that this is a good month for contests and contacts can be made with several states. He also spoke of the Rookie Roundup and Lighthouse contests. Events will be posted on the website.

COMMUNICATIONS

Marcel (W1MLD) informed the membership that he received communication from the Attorney regarding the handicap restroom. The only information available was emails to and from officials in Boston and the only signature was "L/M." He will look more into that. Some discussion followed. It was decided that we would call for a final inspection as all requirements on the original permit have been fulfilled. The variance is in progress as there is a considerable amount of work involved.

OLD BUSINESS

Questions were brought up regarding the state of the new 220 repeater. **Rob (KD1CY)** stated that he would contact **Rick (W1RJC)** for information. **Marcel (W1MLD)** also mentioned that **Tony (NN1D)** will be appointed to the Technical Committee and will be an asset. Also, the first Technician class taught by Tony was successful with 5 out of 6 students getting their licenses. Tony is planning another class tentatively to begin around May 1. Some discussion followed about the classes and potential advertising.

NEW BUSINESS

Joe (N1IXC) recommended per **Armand (W1BUG)** sending a congratulations to member **Linda Enos (KA1QCO)** on her appointment as Superintendent at GNB Voc Tech High School. It was also mentioned that **Sonny Mello (W1ESG)** was in the hospital. A card will be sent.

(Continued on page 5)

SEMARA News

Bob Ambroult N1VUG, SK

Robert R. Ambroult, 68, of Fairhaven, passed away unexpectedly at St. Luke's Hospital, on Wednesday, April 13, 2011.

Bob hosted the 7 PM 2-meter "Camel" Net Roundtable for many years. He was also known for his famous chili, enjoyed by all when he brought it to the clubhouse to share.

Our condolences to his family for their loss.



May he be at peace.

Sonny Mello W1ESG, SK

Manuel C. "Sonny" Mello, age 70, of New Bedford, passed away Wednesday, April 13, 2011, in St. Luke's Hospital. He was the husband of Jacqueline (Cormier) Mello to whom he had been married for 50 years.

Sonny was an active member of SEMARA since 1983. We will miss his sense of humor and seeing him on his FATBOY motorcycle.

Our condolences to his family for their loss.

May he be at peace.



(Minutes continued from page 4)

FOR THE GOOD OF THE CLUB

Bob (K1KVV) reminded the members that volunteers are needed for Field Day as well as the 13 Colonies event on the first week of July.

Marcel (W1MLD) mentioned an email request from the MMRA Boston "Project Breadwalk for Hunger" looking for volunteers. Information will be posted on the board for anyone interested.

He also mentioned the need to dispose of the old copy machine.

It was also noted that **Dave (W1DJG)** has donated two new HD radio converters, which could be auctioned or raffled off. Some discussion followed.

Bob (K1KVV) suggested the need for a person in charge of a tailgate event this coming September.

Marcel (W1MLD) spoke briefly about computer use and passwords for the club's computers as some are having difficulty using them.

ADJOURN

A motion was made, seconded and unanimously approved to adjourn at 7:55 pm.

Respectfully Submitted,

Marc M. Dumont (KB1ODE), Secretary

May Technician License Class

The classes are to begin on *May 4, 2011, 7 to 9 PM* for 5 weeks; the 5th week is the test. **Tony-NN1D** will give the class with a maximum of 20 students. Applicants should call him at **508-910-1753** or email him at <[administrator \[at\] dartmouthpd \[dot\] org](mailto:administrator@dartmouthpd.org)> for registration.

The class is free; but there is a charge for the book and CD of **\$23.00**. The test by the VEs is **\$16.00**. That's a total of **\$39.00**. These classes are sponsored by SEMARA. They will be held at the **Dartmouth Police Department**, training classroom, 249 Russells Mills Road, Dartmouth.

Hurricane Awareness Tour

**P3 Hurricane Plane at Otis AFB
Falmouth, MA
Monday 5/2/11**

Public tours will be open from 230-530 PM.
School tours will occur between 930 AM-130 PM.



A flyer on the Hurricane Awareness Tour can be seen via the following link:

http://www.erh.noaa.gov/box/HAT_tour.shtml

50/50 Raffle

The 50/50 raffle was won by **John (WA1LSH)**.
\$65.00 was split \$32.50/\$32.50

More Semara News

SEMARA Field Day

OK, I put the bug in everyone's ear a couple of months ago and now it's time to start cracking. *Field Day is June 25 and 26!* That's less than two months away!

The ARRL website full of all kinds of info:

<http://www.arrl.org/field-day>

The previous years we have taken baby steps into trying to get a "Class A" station on the air. I would like to continue this trend and in 2011, get SEMARA completely "off the grid" and operate both days.

Some points to ponder:

- Last year our operators got killed by the sun (and the equipment got very toasty). We had to set up shop by noon. We need some kind of shelter this year. Also if we want to operate in the evening, *we need a shelter that is bug proof!*
- While I have a generator I lent to the cause last year, the thing was noisy enough that talking at the radio table was next to impossible. *Anyone have any ideas?*
- There was some talk about pulling up stakes at SEMARA and heading out someplace else. *Did anyone look into the venues they suggested?*
- While I re-use the radios in the club, we need various bits and pieces to set up:
 - ◆ Coax
 - ◆ Antennas
 - ◆ Poles to mount antennas on
 - ◆ Surge Protectors
- **We need people!** A majority of the operation last year was done by myself, **KB1UAM** and my friend **KB1TNE**. *Our second radio was left unused most of the time.* If we want to run two days we need folks from 2 PM Saturday to 2 PM Sunday. Running the full 24 hours is not a big deal to me, but it would be nice to be in operation 12-16 hours during the event. **Volunteer!**

This is a great way to show off the club and our clubhouse to hams and non-hams alike. Last year we had a visitor from Boston who was in the area and wanted to check us out. If we all pitch in, we can make this a great event.

See you at the club!

~Ben Jackson - NIWBV

Morse Messages on Mars

The next Mars rover now being built - named *Curiosity* - will apparently be taking Morse code with it to the red planet when it is launched this fall. *The ARRL Letter* reports that The Planetary Society's Science and Technology Coordinator, **Emily Lakdawalla**, reported on her blog that the pattern created by the rover's six wheels "are in a pattern of short squares and longer rectangles -- almost like dots and dashes. Morse code." The patterns reportedly spell out "JPL."

The official function of these patterns is as "visual odometry markers," which help observers visually determine how far the rover has traveled. *Curiosity* is scheduled for launch between November 25 and December 18 of this year, and for arrival on Mars sometime next August [2012].

Special Callsigns for Royal Wedding

If you work any stations in the United Kingdom with **GR**, **MR** or **2R** prefixes during late April or early May, then you'll be part of the celebration of the wedding of Prince William and Catherine Middleton.

The special callsign prefixes were authorized by the British government, at the request of the Radio Society of Great Britain, to be used between **April 29**, the date of the royal wedding, and **May 9**. William is second in line to the British throne, after his father, Prince Charles.

ARISSat-1

Be ready when it launches. For details on BPSK1000, see

<http://www.ka9q.net/bspk1000.html>

The BPSK1000 Telemetry Modem for ARISSat-1

Phil Karn, KA9Q

Revised 17 January 2011

Windows program by **Doug Quagliana, KA2UPW**
Mac OSX program by **Gilbert Mackall, N3RZN**



More Semara News

CEPT Reciprocal Agreement

On Monday, February 7, the FCC released a Public Notice (DA 11-221), adding a new country to the CEPT reciprocal operating arrangements for US citizens who hold an FCC-issued General, Advanced or Amateur Extra class Amateur Radio licenses. US hams may now operate in *Montenegro*, as well as the other countries covered by the European Conference of Postal and Telecommunications Administrations (CEPT), subject to the regulations in force in the country visited, to operate in those countries.

US amateurs with a **General** class license will be granted *CEPT Novice Radio Amateur License* privileges, in accordance with ECC Recommendation (05) 06 (as amended), which can be found on the web at

http://www.erodocdb.dk/doks/implement_doc_adm.aspx?docid=2136.

US amateurs holding an **Advanced** or **Amateur Extra** class license will be granted *CEPT Radio Amateur License* privileges in accordance with CEPT Recommendation T/R 61-01 (as amended), which can be found on the web at

http://www.erodocdb.dk/doks/implement_doc_adm.aspx?docid=1802.

While operating an amateur station in a CEPT country, the US amateur must have a copy of the Public Notice, proof of US citizenship and evidence of their FCC license in their possession. They must show these documents to proper authorities upon request.

ICOM D-Star Repeater Promo

As many as 70 U.S. radio clubs could possibly end up with free D-Star repeater systems from ICOM America under the terms of a short-term promotion announced by the company. The basic deal is that ICOM is offering clubs a discounted package deal on an ID-RP2C repeater controller, matching 2-meter or 70-centimeter RF module and gateway software. The package is \$3,000 if purchased directly from ICOM America between April 25 and May 9, 2011.

Part two of the offer is that the first 70 clubs that meet a very specific set of criteria within 90 days of the purchase date would qualify for a full refund of the \$3,000 purchase price.

For specific details, qualifying criteria and limitations, see

<http://www.icomamerica.com/en/dstarpromo>.



CEPT Countries List February 7, 2011

participating in CEPT Recommendation T/R 61-01

- | | | |
|--|---|---|
| 1. Austria, | French Polynesia and Clipperton, New Caledonia, and Wallis and Futuna), | 26. Netherlands, |
| 2. Belgium, | | 27. Norway, |
| 3. Bosnia and Herzegovina, | | 28. Poland, |
| 4. Bulgaria, | 12. Germany, | 29. Portugal, |
| 5. Croatia, | 13. Greece, | 30. Romania, |
| 6. Cyprus, | 14. Hungary, | 31. Slovak Republic, |
| 7. Czech Republic, | 15. Iceland, | 32. Slovenia, |
| 8. Denmark (including Greenland and the Faroe Islands), | 16. Ireland, | 33. Spain, |
| 9. Estonia, | 17. Italy, | 34. Sweden, |
| 10. Finland, | 18. Latvia, | 35. Switzerland, |
| 11. France (including Corsica, Guadeloupe, French Guyana, Martinique, St Bartholomew, St Pierre and Miquelon, St Martin, Reunion and its Dependencies, Mayotte, French Antarctica, | 19. Liechtenstein, | 36. Turkey, |
| | 20. Lithuania, | 37. Ukraine, |
| | 21. Luxembourg, | 38. the United Kingdom (including Northern Ireland, the Channel Islands and the Isle of Man). |
| | 22. Macedonia, | |
| | 23. Moldova, | |
| | 24. Monaco, | |
| | 25. Montenegro, | |

Some Contests

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

- Microwave Spring Sprint 902+**
 May 7, 6AM—1 PM *All_modes*
sites.google.com/site/springvhfupsprints
- Worldwide EME Contest 2.3G**
 May 7, 0000Z—May 8, 2359Z *Phone_CW*
www.dubus.org
- QSO Contests:*
- 7th Area HF+VHF 7qp.org**
 May 7, 1300Z—May 8, 0700Z *All_modes*
- Indiana HF www.hdxcc.org/inqp**
 May, 7, 1600Z—May 8, 0400Z *Phone_CW*
- New England HF www.neqp.org**
 May 7, 2000Z—see website *All_modes*
- Armed Forces Communications Test HF**
 May 14, 1200Z-May 15, 2400Z *Phone_Digital*
www.netcom.army.mil/mars
- Portugese Navy Day HF**
 May 14, 1500Z—May 15, 1500Z *Phone_CW*
 May 21, 0800Z—May 21, 1500Z *Digital*
www.nra.pt
- FISTS Spring Sprint HF**
 May 15, 1700Z—May 15, 2100Z *CW*
www.fists.org/sprints.html
- 50 MHz Spring Sprint 50**
 May 14, 2300Z—May 15, 0300Z *All_modes*
sites.google.com/site/springvhfupsprints
- His Majesty King of Spain Contest HF**
 May 2100Z—May 22, 2100Z *CW*
www.ure.es

VE Sessions

Walk-ins permitted unless otherwise noted.
<http://www.arrl.org/find-an-amateur-radio-license-exam-session>

- SEMARA – 10:30 AM** **June 4th**
 Larry Houbre-AA1FS
 <exams [at] semara [dot] ord>
 508-991-6055 
- Fall River, MA – 7:00 PM** **May 16th**
 Skip Denault-KB1CNB
 <skip [at] newtestamentschool [dot] org>
 774-644-3469
- Falmouth, MA – 9:00 AM** **May 14th**
 W. Ben Fleck-K2LYE
 <BenFleck [at] cape [dot] com>
 508-540-2583
- Providence, RI – 7:00 PM** **May 12th**
 Louis Mester-W1CH
 <W1CH [at] arrl [dot] net>
 401-263-6045

Coming FLEAS & FESTS

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

- 5/14 *Cape Ann ARA's Ham Radio Flea Market*
Glouster, MA www.caara.net
- 5/15 *FLEA at MIT*
Cambridge, MA www.swapfest.us
- 5/20-22 *Dayton Hamvention*
Dayton, OH www.hamvention.org
- 5/28 *The Hartford Hamfest*
Vernon, CT www.na1rc.org

Answer: Sudoku ²²

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

Answer: HAMMIN' AROUND

Which of the following types of feedline has the lowest loss at VHF and UHF?
 C. Air-insulated hard line

CLUB ACTIVITIES

- BUSINESS MEETING**
 7 PM First Thursday of the month
- SUNDAY RAGCHEW**
 7-10 AM SUN
- MOST-OF-THE-TIME (call ahead)**
 LUNCHEON: 11:30 AM FRIDAYS
 Meet at the clubhouse at 11:15 AM