



ZERO BEAT

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



Since 1932

Volume 48 Issue 10

SEMARA-W1AEC

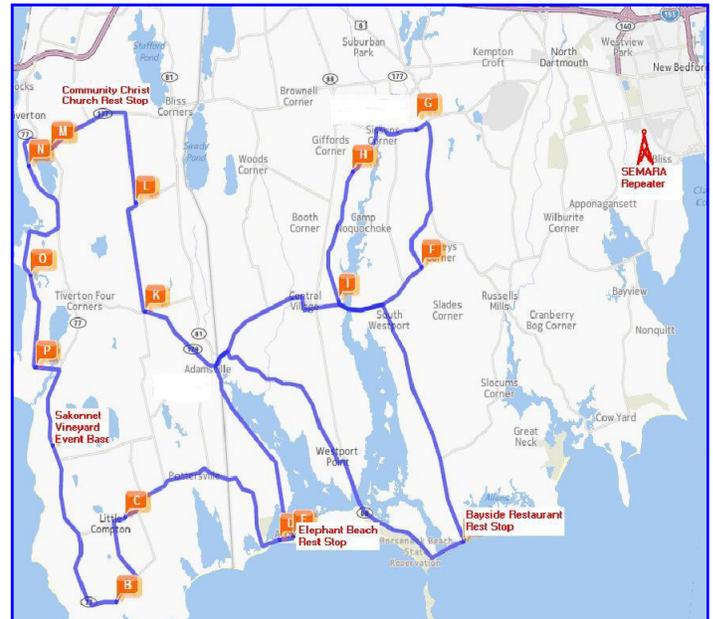
October 2012

Public Service Event



Cystic Fibrosis Cycle for Life Rhode Island Ride

Map: Tiverton, Little Compton, Westport, Dartmouth area.



A very positive experience on Sept. 22. The weather was good for a bicycle event. We did not lose any riders. There were no accidents or injuries that I know of. The foundation raised \$44,259 by 90 riders. Not bad for a first time event.

The hams arrived at Little Compton and then on to their assigned rest stops in plenty of time.

Assignments: John, WA1ESO, assist Net Control – message runner; Marty, KA1YFV @ Christ Community Church; Joe, N1IXC @ Elephant Beach; Tony, N1JXZ @ Bayside; and Ted, W1GRI - Net control @

the Vineyard.

Sag Wagon: Brian, N1TBT & Tony, KBIUAM.

The hams had plenty to eat and drink. The bright yellow T-shirts given to all volunteers were nicely designed. All were offered a beer or wine with their meal.

I reached out to the Newport Radio Club to get a few more hams. Some cross effort is a good thing. 5 out of the 7 hams were from SEMARA

The SEMARA repeater proved to have excellent coverage over the bicycle event route. No doubt this was a SEMARA public service project.



73, John, WA1ESO

ZERO BEAT

Published online monthly

©2012 Southeastern Massachusetts
Amateur Radio Association, Inc.
54 Donald Street
South Dartmouth, MA 02748
(508) 997-7070

<<<< >>>>

EDITOR: Bob Kelley—K1KVV
E-mail: [editor\[at\]semara\[dot\]org](mailto:editor[at]semara[dot]org)
SEMARA: <http://www.semara.org>
E-mail: [w1aec\[at\]semara\[dot\]org](mailto:w1aec[at]semara[dot]org)

<<<< >>>>

2011 SEMARA OFFICERS**President**

Marcel Dumont—W1MLD

Vice President

Joe Krisnowsky—N1IXC

Secretary

Marc Dumont—KB1ODE

Treasurer

Mike McDonald—KB1NB

<<<< >>>>

Directors:

Andy Reuter—WA1FNM

Brad Paiva—W1BEP

John Walsh—WA1LSH

<<<< >>>>

Trustees: (year term is up)

Henry Blanchett—W1GYL (2012) ch.

John Walsh—WA1LSH (2013)

Louis Mester—W1CH (2014)

Joe Krisnowsky—N1IXC (2015)

Dick Halliwell—K1AHA (2016)

<<<< >>>>

STANDING COMMITTEES**Building and Grounds**

Marty Jordan—KA1YFV

Tony Lessa—KB1UAM

Scholarship

Sonny Eddleston—K1USW – chair

Chuck Moszczanski—KB1FRL

Alan Dulong—WB1FQP

Joe Krisnowsky—N1IXC

Technical/Repeater/Website

Dave Goldstein—W1DJG: Technical

Rick Cabral—W1RJC: Repeater

Rick Cabral—W1RJC: Website

Ben Jackson—N1WBV: facebook

<<<< >>>>

SPECIAL COMMITTEES**Activities**

VACANT

ARES/SKYWARN/RACES(ACS)

Rob Macedo—KD1CY

QSL Manager

John Nery—WA1ESO

Radio Events

Bob Kelley—K1KVV

Tech Talk

Brad Paiva—W1BEP

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

that we need an injection of energy. If you take a careful look at the content of the recent issues of *Zero Beat*, you'll notice the lack of significant coverage of SEMARA related activities. Why? Because there isn't that much.

Every month I scramble around trying to find something of interest to the membership. So, tell me what is it that interests the membership? Clearly, I don't have a clue! Of course you could give me feedback - just use the [editor \[at\] semara \[dot\] org](mailto:editor[at]semara[dot]org) email address.

Is there anyone out there who would be willing to become an *Assistant Editor*? Could you provide some material about SEMARA activities and interests? Could you fill a few pages on a monthly basis?

In past years, *Zero Beat* would report on activities such as *QRP Outings*, *Fox Hunts*, and the monthly *Tech Talk*. When **Bill (K1IBR-SK)** was alive, he and others would share their construction projects - *DDR Antennas* or *Xtal Sets* anyone?

In this issue, I have reproduced some short articles from yesteryear. They seem to be relevant today as well. Some will jog your memory, others will let you know that things haven't changed much. So, is old news like yesterday's fish? Or, does it tell you something about the health of SEMARA?

Look at the 2005 article on passing the Element 1 (Morse code 5 wpm) exam. You just have to recognize 5 words and anticipate the likely responses to *antenna*, *rig*, *name*, *location* and *RST*. Dave Dean used to give practice sessions on Sunday mornings - I think that was when we had a separate *Radio Shack (Quonset Hut)*. Perhaps we can get back to doing things like that when we are setup to do more than coffee klatch on Sunday mornings.

POINT TO PONDER

“Depression is about the past,
anxiety is about the future,
stay in the present.”

~unknown

HAMMIN' AROUND

Question* G9B05 How does antenna height affect the horizontal (azimuthal) radiation pattern of a horizontal dipole HF antenna?

- If the antenna is too high, the pattern becomes unpredictable
- Antenna height has no effect on the pattern
- If the antenna is less than 1/2 wavelength high, the azimuthal pattern is almost omnidirectional
- If the antenna is less than 1/2 wavelength high, radiation off the ends of the wire is eliminated

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

Answer on page 8.

Club Notes

October is the month when great things are going to happen! I might as well be optimistic, being pessimistic doesn't seem to get me anywhere.



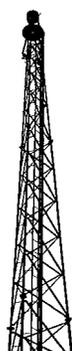
Did you remember that this is the month for NEAR-Fest - 12, 13 Oct. - in Deerfield, NH?

This is also the month when the Scouts hold their 55th Jamboree on the Air - 20-21 Oct. Locally, they'll be at Camp Norse in Kingston, MA. See the article on page 6.



See the listing on page 8 for some great radio events to get into.

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



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 RACES/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.)

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

NEXT VE SESSION @ SEMARA

October 6, 2012

Clubhouse @ 10:30 AM

Contact: Larry Houbre-AA1FS

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

508-991-6055



Official Meeting Minutes



September 6, 2012

The meeting was called to order at 7:05 p.m. by the President, **Marcel (W1MLD)** with salute to the flag. The roll was called with 20 members and 0 guests present.

SECRETARY'S REPORT

A motion was made, seconded and unanimously voted to dispense reading the report and accept as posted on the board and in Zero Beat.

TREASURER'S REPORT

The Vice President, **Joe (N1IXC)** read the Treasurer's report in the Treasurer's absence. The following amounts were reported: Net Worth: \$43,630.19, Total inflow: \$2835.14, Expenditures: \$315.00 (Legal and Professional) and \$215.52 (Utilities).

It was also reported that a total of \$5560.00 had been received from NETCOM.

STANDING COMMITTEES

No reports.

SPECIAL COMMITTEES

ARES, RACES, SKYWARN

Ed (KA1RSY) spoke about the upcoming monthly hospital exercise and of the recent SKYWARN self-activation in the area.

QSL Activities

John (WA1ESO) reported that no QSLs were sent out this month and 2-3 were sent last month.

Radio Events

Bob (K1KVV) mentioned several events listed in Zero Beat and that there is much activity on VHF and UHF bands.

It was also mentioned that **Brad (W1BEP)** has a D-Star (440) repeater and 2 meter hotspot located in Freetown, both working well.

OLD BUSINESS

The President, **Marcel (W1MLD)** spoke about the possibility of obtaining the spare radio building from NETCOM, details to follow in the coming month, as well as progress of repairs and reinstallation of the Log Periodic antenna onto the tower.

John (WA1ESO) gave information regarding the upcoming CF event and the request for volunteers. Eric (N1WCO) gave details on the upcoming flea market.

Bob (K1KVV) asked the status of the past month's

motion regarding dues, no BOD meeting was held but will be discussed at the BOD meeting to be held the following Saturday.

The topic of the generator for the Police Department was also discussed with no new information available.

ADJOURN

A motion was made, seconded and unanimously voted to adjourn at 8:00 p.m.

Respectfully submitted,

Marc M. Dumont (KB1ODE), *Secretary*



Board of Directors Meeting

September 8, 2012

The SEMARA Board of Directors meeting was called to order by the President, **Marcel (W1MLD)** at 11:00 a.m. with 4 members and one guest present. Topics discussed were as follows:

Dues: Per vote by membership at the July Business Meeting, the topic of reinstating dues was discussed. After some time it was decided to table the issue until a later meeting where more board members were present, then bring findings to the members at the following business meeting.

Building: The topic of acquiring the spare building from NETCOM as an addition to the main building was discussed. **Marcel (W1MLD)** has spoken in detail with AI from NETCOM and more, final details are expected within the next month. Plans regarding specifics on location, possible modifications to the existing building and construction details were discussed.

Log Periodic Antenna: Ongoing repairs and reinstallation details were discussed in hopes to complete work on the antenna and have it operational in the near future.

Adjourn: The meeting adjourned at 12:00 p.m.

Respectfully submitted;

Marc M. Dumont (KB1ODE), *Secretary*

SEMARA News

SEMARA's Tailgate Story

Eric,

I have heard nothing about the Tailgate Party: attendance, profit/loss, how it compared to last year, etc.

Did anyone take photos? I haven't received anything about it.

~Bob-K1KVV editor@semara.org

Sorry Bob,

It went really good. I can't remember how many attended; it only lasted till 11:30 after it rained for a little while. I don't think anyone took any pictures.

That's about it from here,

73, Eric-N1WCO



9:00 AM CROWD

Still seems to be true today. [Ed.]

Zero Beat October 2004 - Vol. 40, Issue 10

SOLICITING TECH TALK VOLUNTEERS

This is a solicitation for volunteers for future tech talks. Here is a great opportunity to present a topic that you are passionate about, have knowledge of, that you would like to share, or just participate in a presentation of general interest.

The topic only needs to be of general interest and does not have to be specifically "ham radio" related. Previous talks have ranged from computer technology to model railroading with radio related topics in between.

Please notify me of any interest you may have in giving a talk to the friendly folks at SEMARA. You will get your picture published in Zero Beat.

~~The next open date is the 21st of October, then any 3rd Thursday of any month thereafter.~~

Help keep the "Tech Talks" coming. Notify me, if you would like a reservation to talk along with your topic and the date you would like to present.

73 de Carl, K1KID*

***Brad (W1BEP)** is now in charge of **Tech Talks**. And Tech Talks are now supposed to follow each business meeting.

Still true today.![Ed.]

Zero Beat June 2004 - Vol. 40, Issue 6

WHAT ARE YOUR WISHES AND WHO ELSE KNOWS?

by **Armand Augustine-W1BUG**

What are your wishes for all that ham equipment, accessories, parts, and other equipment that you may have in the event of your [sudden] death? It may be helpful to your survivor to create a plan for the disposal of the equipment. A good way to do it is to first discuss it with your probable survivor, then record your wishes and put them into a sealed envelope. Tell your survivor where the envelope is kept so it can be found easily. (Unscrupulous people work fast when people are grieving over a death.)

Your survivor is now aware of your wishes, and your plan can be carried through. An inventory of your equipment and approximate selling prices (don't forget to upgrade prices periodically and keep them realistic) is a valuable tool in helping your survivor to avoid being taken advantage of by "self serving friends."

If you wish to donate equipment to a club or association, discuss it with a club officer so they are aware of your desire. Donations to many associations can be tax deductible with receipts for the items. Be sure to inform your survivor that is also important to call whomever you have designated when the survivor feels ready to do so, and not before. Clubs or organizations that are bequeathed these kinds of donations are most likely to wait for a call from your survivor.



Thoughts About the CF Bike Ride

Because all seemed to have enjoyed the event, I am quite certain most if not all ham volunteers will want to do it again next year. May I suggest that we bring the SEMARA banner with the club logo to the next public service event the club participates in?

Do we have one? For next year, I think a group photo that includes the club banner and a sign with the CF event in the photo would work. That is about all I have.

73, John WA1ESO

SEMARA News (cont.)

Zero Beat April 2005 - Vol. 41, Issue 4

Know the Five Words

By Norm Fusaro, W3IZ

ARRL Affiliated Club/Mentor Program Manager
March 28, 2005

The Element 1 Morse code exam is designed to test the 26 letters of the alphabet and the 10 numerals, 0 through 9, as well as the punctuation marks period, comma, question mark and slash and prosigns AR BT SK. The slash is also called prosign DN. The test will not contain abbreviated text like ES for and or TU for thank you or other shortcuts that you would use on the air. The exam is a typical QSO that will have all of the standard information that is normally exchanged on the air. Relax. You can do this. *It's only five words.*

But which five words? Okay, here are the five words that you need to know to successfully pass the exam: antenna, rig, name, location and RST. If you can copy these five words and the information that follows them in the test along with the call signs of both stations you should be able to answer 7 out of 10 questions about the QSO in order to pass the exam.

Let's look at these five words a little closer.

Antenna. Here are some common antennas that you should learn to recognize. They are dipole, yagi, quad, longwire, zepp, beam and vertical.

Rig. Know your radios. Icom, Kenwood, Yaesu, Heath, Collins, Drake and Ten Tec are very common brands.

Name. Copy the name as you hear the letters. Don't try to guess at it after the first two letters. What you think is going to be John can easily be Jorge or Joanne.

Location. No abbreviations are used and names of US States will be spelled out.

RST will be sent as numbers and will never be spelled out, nor will it be sent in cut numbers, such as 5NN.

73

A typical, non-exam, CW QSO usually repeats some information, especially at slower speeds: ... NAME IS BOB BOB ... RST IS 5NN 5NN ... QTH IS MATTAPOISETT MATTAPOISETT ... If you want to be sure something is copied correctly is frequently repeated, like ZIP IS 02739 02739 ... and so forth.

CW QSOs can be very efficient and asking for fills slows everything down - but sending words twice can actually make the overall QSO shorter. Just as in voice message handling, sending FIGS twice ensures they are received correctly.

~Bob-K1KVV

Still could be true today. [Ed.]

Zero Beat September 2004 - Vol. 40, Issue 9

"It Seems to Me..."

New technology seems to go nicely with the old. We had a great time with the first Fox Hunt in a long time in July. This month we will try to put into practice what we learned in the August Tech Talk about GPS Devices. In place of the September Tech Talk, we will have a GPS 'Fox Hunt.' This combines Radio and Geocaching skills.

Perhaps someday we will be able to combine several amateur radio skill into a kind of Olympic event similar to the Triathlon, with different skills needed for the different events. Just think about it, the Olympic Games started out testing skills that were useful for battle. Let's put together skills that are useful for Safety, Search, Rescue, and such.

That's not such an outlandish idea, is it?

73 de **Bob, K1KVV**

From the *October 2012 ARRL EMA Section News*

55th Jamboree on the Air

The 55th Jamboree on the Air is coming October 20-21, and among the many efforts being organized across New England and the country, **Don Burke, KB1LXH** is coordinating volunteers to assist with a JOTA station at Camp Norse in Kingston under the call sign **KCITAC**.



"Annawon Council is hosting us during its Cranboree Weekend. Boy Scout and Venture Crews (Scouts age 11-21) are camping at Norse for the weekend and will be our radio guests." Don adds, "This will allow us more time with the Scouts, as they will be able to visit the station in the morning as a small patrol and then return in the afternoon for more air time on their own."

"These young Scouts will be the life blood of our hobby in the coming years and we need your help to make it as exciting as we can for them." "Trustees and owners of repeaters who are willing to be listed as places to make contacts during JOTA, send me your name, call sign and location, the modes you will use for JOTA and the call sign you will use for the day. I will send you the list of local JOTA Groups before the event."

Email Don at <[DonEB425 \[at\] verizon \[dot\] net](mailto:DonEB425@verizon.net)>.

A Dip in the Pool

Taken from *Courage Center Handiham World Weekly E-Letter - Week of Wednesday, 03 October 2012*



It's time to test our knowledge by taking a dip in the pool - the question pool, that is!

Let's go to the General Class pool, where we take a look at two related questions:

G2A06 asks: *Which of the following is an advantage when using single sideband as compared to other analog voice modes on the HF amateur bands?*

Possible answers are:

- A. Very high fidelity voice modulation
- B. Less bandwidth used and higher power efficiency
- C. Ease of tuning on receive and immunity to impulse noise
- D. Less subject to static crashes (atmospherics)

Hold that thought while we take a look at the next question in the pool.

G2A07 asks: *Which of the following statements is true of the single sideband (SSB) voice mode?*

Possible answers are:

- A. Only one sideband and the carrier are transmitted; the other sideband is suppressed
- B. Only one sideband is transmitted; the other sideband and carrier are suppressed
- C. SSB voice transmissions have higher average power than any other mode
- D. SSB is the only mode that is authorized on the 160, 75 and 40 meter amateur bands

To answer these questions correctly, one must know something about single sideband and why it is the preferred mode of phone operation on the HF bands. You also need to understand the nature of the bands themselves - how the spectrum space is much more limited than that of our VHF and UHF bands, not to mention the characteristics of propagation and the challenge of noise and interference on the HF bands.

When I am teaching about this in my radio club's General Class course, I like to point out that an HF band is like a city block with parking places for automobiles along the curb. A delivery truck might take up several parking places that might

be filled by regular passenger cars. You could fit even more compact and subcompact cars into the available parking space.

Our amateur radio signals are like those different kinds of vehicles, depending on the mode of operation that we choose. An FM signal suitable for a repeater on the VHF bands can take up 5 to 15 kHz, which is a pretty big "parking place". Single sideband voice only takes up 2 or 3 kHz, so you could potentially "park" up to five SSB signals in the same space as one FM signal. Amateur television (fast scan) takes up a whopping 6 MHz, which would be the equivalent of a huge piece of construction equipment, taking up every parking place on the block! AM voice operation takes up around 6 kHz.

AM used to be very common on all of the popular HF bands before SSB. As SSB came into more common use, it became pretty obvious that it "made the trip" through noise and interference better than the old AM signals, thanks to its ability to use the available power only for part of the signal containing information. And it was a huge bonus that you could fit 2 SSB signals into the same "parking space" on the band as a single AM signal.

By now you know that answer **B. Less bandwidth used and higher power efficiency** is the correct answer to the first question. And the reason that is correct is contained in the correct answer to the second question: **B. Only one sideband is transmitted; the other sideband and carrier are suppressed.** This allows the available power to be concentrated in only one sideband, allowing you to concentrate on sending only information-containing power.

There is no sense using power in the carrier and the other sideband because one sideband contains all the necessary voice information. That is why most of the phone signals on the HF bands are SSB. AM is still used on certain frequencies, where the folks who enjoy using older equipment or who simply prefer AM like to hang out. One such hangout is around 3.885 MHz. You might try listening early in the morning on that frequency to hear some of the old AM equipment in use!

Please e-mail me at [handiham \[at\] couragecenter \[dot\] org](mailto:handiham@couragecenter.org) to comment.

Patrick Tice, WA0TDA
Handiham Manager



There are some other fine points in this discussion that have been omitted. Please talk to me if you'd like to explore other technical aspects of modulation modes, etc.

You can always email me at [editor \[at\] semara \[dot\] org](mailto:editor@semara.org) to comment on this or any other article in *Zero Beat*.

Bob-K1KVV
editor

Some Radio Events

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

- Oct 5, 1400Z-Oct 7, 0200Z 1.8-28
DX/NA YLRL Ann Party www.ylrl.org
- Oct 6, 0000Z-Oct 7, 2359Z 2.3G+
ARRL EME Contest www.arrl.org/contests
- Oct 10, 0001Z-Oct 10, 2359Z 28
10-10 Sprint www.ten-ten.org
- Oct 13, 1600Z-See website 3.5-28 50,144
Arizona Cent QSO Party www.azqsoparty.org
- Oct 13, 1600Z-See website 3.5-28 50,144
Penn QSO Party www.nittany-arc.net
- Oct 15, 1300Z-Oct 19, 2359Z 1.8-28 50+
School Club Roundup
www.arrl.org/school-club-roundup-scr
- Oct 20, 0000 local-Oct 21, 2359 local 1.8-28 50+
55th Jamboree on the Air non-contest Scouting event
<http://www.arrl.org/jamboree-on-the-air-jota>
- Oct 20, 1000 Z-Oct 21, 1000Z 3.5-28
Scandinavian YLRA Contest www.sylra.is
- Oct 20, 1400Z-Oct 20, 2300Z 1.8-28 50+
Iowa QSO Party www.wa0dx.org
- Oct 20, 1400Z-Oct 21, 0200Z 1.8-28 50+
New York QSO Party www.nyqp.org
- Oct 20, 1600Z-Oct 21, 2359Z 1.8-28 50
W/VE Islands QSO Party www.usislands.org
- Oct 20, 1900Z-See website 1.8-28 50-432
Telephone Pioneer QSO Party www.tpqso.com
- Oct 21, 1700Z-Oct 22, 0100Z 3.5-28 50,144
Illinois QSO Party www.w9awe.org/ILQP.html

Local VE Sessions

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

[find-an-amateur-radio-license-exam-session](http://www.arrl.org/find-an-amateur-radio-license-exam-session)

Walk-ins permitted unless otherwise noted.

- SEMARA – 10:30 AM** Oct 6th
Larry Houbre-AA1FS
 <[exams \[at\] semara \[dot\] org](mailto:exams@semara.org)> 
508-991-6055
- Falmouth, MA – 9:00 AM** Oct 13th
W. Ben Fleck-K2LYE
 <[BenFleck \[at\] verizon \[dot\] net](mailto:BenFleck@verizon.net)>
508-540-2583
- Providence, RI – 7:00 PM** Oct 11th
Louis Mester-W1CH
 <[W1CH \[at\] arrl \[dot\] net](mailto:W1CH@arrl.org)>
401-263-6045

Coming FLEAS & FESTS

www.arrl.org/hamfests/search

- 7 Oct Meriden CT
CT State Conv John N1GNV 203-440-4973
- 12-13 Oct Deerfield NH
NEAR-Fest XII www.near-fest.com
- 21 Oct Cambridge MA
FLEA at MIT Nick 617-253-3776
- 27 Oct Gales Ferry CT
Tri City ARC Auction
Darryl WA1DD 860-443-7799

Answer: HAMMIN' AROUND

How does antenna height affect the horizontal (azimuthal) radiation pattern of a horizontal dipole HF antenna? C. If the antenna is less than 1/2 wavelength high, the azimuthal pattern is almost omnidirectional

Answer: Sudoku ¹⁸

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

CLUB ACTIVITIES

BUSINESS MEETING

First THURSDAY of the month @ 7 pm

Sunday RAGCHEW

7-10 am

Thursday COFFEE CROWD

Dunkin Donuts @ Bliss Corner, Dart. @ 1 pm

Friday LUNCH BUNCH

Leave for LUNCH at 12 noon

Gather @ clubhouse before 12
 or phone/call ahead