



ZERO BEAT

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



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SEMARA-W1AEC

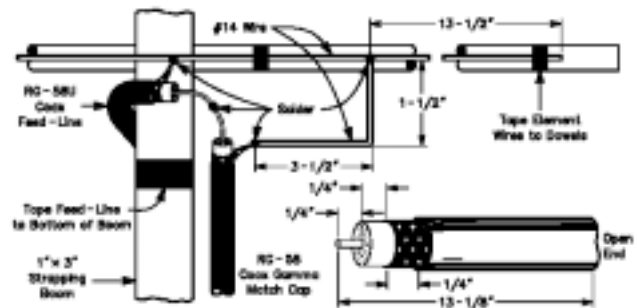
April 2007

2-Meter Econo Beam

Whitey, K1VV, first published this in the ARRL Hints & Kinks column March 1, 1999.

Fox hunting was taking off locally, and upwards of two dozen fox hunters were showing up Saturday mornings. This got me to thinking about how to construct an inexpensive fox hunting beam for 2 meters, the Econo Beam.

I built my version of the beam using a 4-ft piece of 1x3-inch wood strapping with 7/16-inch dowels to hold the #14 copper wire elements. The most difficult and expensive part to secure was the 50-pf variable capacitor for the gamma match. So I replaced the 50-pf variable capacitor with a piece of RG-58 coax, the center conductor soldered to the center conductor of the feed line and the braid to the gamma match wire. The ARRL Handbook states that RG-58 has about 29

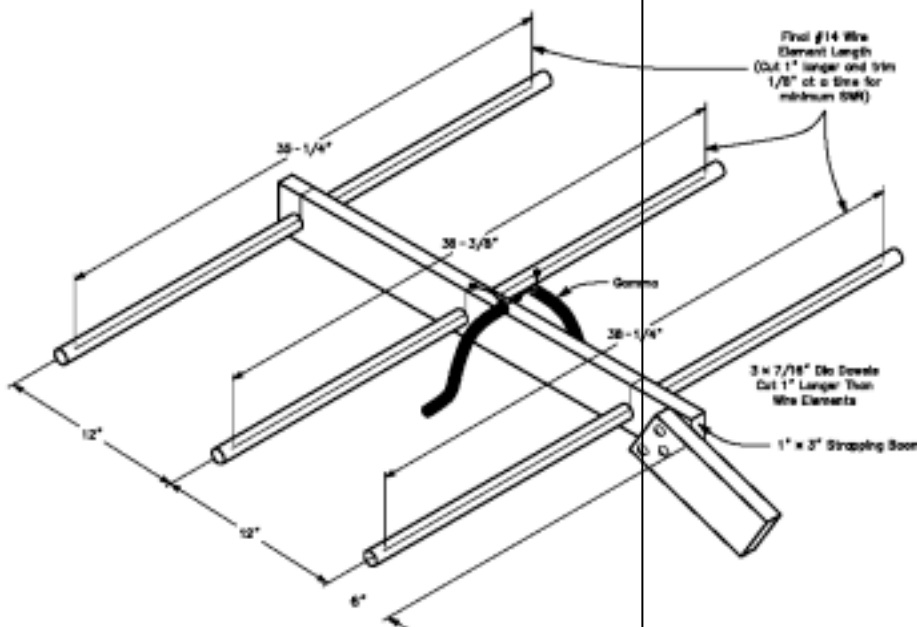


pf/ft. Noting that the gamma match capacitor was about 25-pf, I cut a piece of coax 15 inches long. I then set up the beam, and, using a MFJ-259 antenna analyzer, trimmed the element wires and the gamma match coax 1/8" at a time until it walked the beam onto 146 MHz, and obtained an SWR of less than 1.2 to 1.

If you make a mistake and cut off too much, it's simple enough to cut another longer piece and start over.

If you don't have access to an MFJ-259, you can use an SWR meter. Even a typical HF SWR meter will work well enough to get you in the ballpark, but you may not be able to attain an indication of less than 2:1.

~Whitey, K1VV



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Southeastern Massachusetts
Amateur Radio Association, Inc.
54 Donald Street,
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EDITOR

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2007 SEMARA OFFICERS

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Lou Mester - W1CH

Vice President

Bob Kelley - K1KVV

Secretary

Armand Augustine - W1BUG

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Bill Vincent - W1POW (2009)

Dave Dean - K1JGV (2010)

Tim Smith - N1TI (2011)

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Building and Grounds

Mike Miller - N1ITQ

Scholarship

Larry Houbre, Jr. - AA1FS

Technical

Dave Goldstein - W1DJG

SPECIAL COMMITTEES

Activities

Scott Szala - W1EV

ARES/SKYWARN

Rob Macedo - KD1CY

New Building

Dave Dean-K1JGV

Radio Events

Ron Silva-WB1HGA

Repeater

Rick Cabral-W1RJC,

Dave Goldstein-W1DJG

Website

Tim Smith - N1TI



It seems to me ...

de Bob - K1KVV <editor@semara.org>

That SOMETHING is finally happening! The Quonset hut is being readied for eventual removal. The SEMARA Building/Renovation Committee is doing a lot of the necessary ground work in researching all the permitting and environmental issues. **Dave Dean, K1JGV**, and **Rob Macedo, KD1CY**, have been documenting every step as they plow through this problem. They have come up with two options (recast here) that they will 'flesh' out so the membership can make an informed decision. Since no one argues that the Quonset hut shouldn't be removed, I've removed that from the discussion.

Option A. Replace the entire building with a new building. Material make-up of the new building would most likely be steel due to keep the cost low.

Option B. Build an addition that ranges from doubling the footprint of the existing building to some smaller addition while doing some level of repair work on the existing building. (The addition could be either wood or steel.)

It will be interesting to hear just what the cost difference might be for the two options. Of course, as with any building project, each option can have lots of variations, depending on how much beyond 'bare basics' the club decides to go.

At this point, the Committee has things well under control and the membership has the information as it develops. So ... let's pull together on this one. Be sure to let the committee know that you appreciate their efforts. *Support our troops!*

POINT TO PONDER

"The man who goes alone can start today; but he who travels with another must wait till that other is ready."

- *Henry David Thoreau (1817-1862)*

HAMMIN' AROUND

Question* G9D09 What standing-wave-ratio will result from the connection of a 50-ohm feed line to a resonant antenna having a 200-ohm feed-point impedance?

- A. 4:1
- B. 1:4
- C. 2:1
- D. 1:2

* 2004 General Class (Element 3) Question Pool (good thru 2008-06-30)

Answer on page 7



CLUB NOTES

April is the month when the weather is still windy but getting warmer. This is just the time to check out your equipment. Think about operating away from your home location, say at a public location such as a school or park or even in a mall.



With the new rules and privileges, we can use this time to let the public know that there is a world of fun out there in the 'ether.' We can help them enjoy the mystery of talking to strangers and making friends around the world.



No applications for life membership were received at the March 1, 2007 business meeting.



Four candidates successfully passed exams at the VE session on March 3, 2007. They were:

Bradford E. Paiva, KB1IQR passed *General* and

Cesar Braga, Jr, KB1OQC passed both *Technician* and *General*;

Leslie M. Dule and **Stanley J. Chmilewski, KB1OQB** both passed *Technician*.

Plus **Sati P. Mitra, N1QYM** upgraded with CSEs to *Extra*.

Job well done!



Enjoy your new privileges!

LOCAL NET ACTIVITY

Please support these local nets by checking in!

2-m Roundtable "Camel" Net is 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 is held *Wednesdays* at 8:30 p.m. on 50.200 MHz USB. **Bob, N1HCW** (Acushnet) is net control. This informal net discusses everything from antennas to the weather as well as the recent band openings.

10-m Net is held *Tuesdays* at 8:30 p.m. on 28.490 MHz USB. **Bob, N1HCW** (Acushnet) is net control. This informal net welcomes everyone, especially those new to HF.

368 kHz SEMARA Morning Net is held *weekdays* from 7:30-8 a.m. All are welcome, especially those from outside the area.

SEMARA VE SESSION

Saturday, April 7, 2007

10:30 a.m.

Contact: Larry, AA1FS

LRHguy@earthlink.net

508-991-6055



SUDOKU

Here's something to keep you busy while waiting for the 10-m net to start. Solution is on page 7.

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

SEMARA NEWS



CAUGHT IN THE ACT!

In anticipation of the hut removal later this year, a work party was organized to dispose of all junk and store the dozen or so worth-while items in the storage facility. This was accomplished *toute suite*.

Next, a work party decided it was time to move the radio equipment out of the decaying Quonset hut and reinstall it in the main meeting hall. **W1AEC** has been transferred and is up and working. **W1AEC** is fired back up 'barefoot' without the AMP, logging computer and some other bells and whistles.

After pulling the antenna patch panel off the hut, we transferred it to the wall in the main hall and reassembled the coaxial lines. Then the rotor control box, etc. was re-installed near the floor. We relocated the station ground, formed drip loops, stuffed, sealed and covered all the input lines from the weather. All exposed holes were covered in the hut, the station equipment was moved and we broke to 'strap on the feedbag.'

After lunch, it was just a matter of organizing and hooking things up. **Don Manley, N1PMB**, has the distinction of being the first to make a contact with the 'new' station. Again, my hat is off to all who helped.

I'll let the pictures tell the story. The culprits were caught in the act!

In ham radio...73, Dave, K1JGV

ANYONE INTERESTED?

PSK31 / WSJT

Anyone up there playing with PSK31 or WSJT ?

73 de Art W1FJI, Tallahassee, Fl

QRS CW?

Now that the CW-only HF sub-bands are available to every ham, can we 'Elmer' them?

73 de Bob, K1KVV

LAUNCH OF 10-M SIDEBAND NET

TUESDAYS @ 8:30PM local time – 28.490 MHz
USB – **Bob-N1HCW** (Acushnet) Net Control

Launched March 6, the net is alive and well with check-ins from Martha's Vineyard, Dartmouth, New Bedford, Mattapoisett, and Acushnet. This net is an opportunity to join a welcoming place for those that haven't been on 10-m SSB before.

Signals seem to be weaker than usual. This is a good opportunity to experiment with antennas and polarizations. The low sun spot numbers can't last forever.

All hams are welcome to join in the informal exchange of conversation and technical chit-chat.

73 de Bob, K1KVV



MEETING MINUTES



MARCH BUSINESS MEETING

March 1, 2007

Louie-W1CH called the meeting to order at 7:00PM followed by Salute to the Flag.

Moment of Silence in memory of **Bill Miller-K1IBR** who passed February 5, 2007.

Roll call: 33 voting members present, 1 guest.

Secretary Report: Larry-W1DBX made a motion to accept it as posted on SEMARA website. Passed unanimously

Treasurers Report:

Mike-KB1NB read the report and John-W1ZYV made a motion to refer it to audit. Passed unanimously.

Standing Committees

Technical: Chairman not present (no report)

Building and Grounds: Mike-N1ITQ thanked **Mike-KB1NB** for the helping hand repairing the cold air return.

He stated that he didn't think that the fuel gauge on the tank was accurate and should be replaced.

Informed the membership that we are now on "automatic oil delivery" system.

Noted that a "soda run" would be needed in the near future.

New Building Committee: Dave-K1JGV introduced members of his committee that were present.

Handed out a two-page document outlining options for the proposed construction project that the committee has discussed up to this moment on time.

Rob-KD1CY (committee member) gave a brief overview of the options. There was discussion of the pros and cons by membership present. Most agreed, the options were headed in the right direction, but much more concrete information as to plans and costs, permitting etc. was needed. The committee agreed with the membership and will try to have all details by the June business meeting for a vote on which plan to proceed.

Communications: Bob-K1KVV read a card from Mrs. Grace Kish, wife of SK **Bob-KA1YON**, expressing her appreciation of sympathy expressed by the club and members.

Read a Communication from **Tim-N1TI**, expressing a desire to resign his chair on the technical commit-

tee, citing personal reasons, and that he would reconsider at a later date. He recommended that **Dave-W1DJG**, his present sub-committee chairman, be asked to fill the position.

Activities: **Scott-W1EV** announced that there would be a memorial dinner served at the clubhouse in memory of **Bill Miller-K1IBR** who passed February 5, 2007, during April, the exact date not yet determined. It will be open to all members and their spouses, and no tickets will be sold for the event. It will have no cost to SEMARA, as he will buy and donate all the provisions needed. The date, when announced, will be posted on the web site.

Ratification of New Members:

No Applications submitted.

Presidents Comments:

No comments expressed.

ARES/Skywarn: **Rob-KD1CY** gave a report on the last drills.

Some equipment needs attention (will discuss with technical committee).

The P3 Hurricane Hunter will visit Quonset Point, RI on April 30th during 2-6PM. A special event station will be operative.

Old Business:

John-WA1ESO reported to the membership with samples of QSL cards that were discussed at the last meeting. The cards will cost \$130 per thousand.

He made a **motion** to purchase and it **passed** unanimously.

Jim Gilbert-(no call) submitted a proposal to clean the club building as per the guidelines recommended by the BOD at the last meeting. He stated that he would charge \$45 per cleaning.

Some concern to the club's liability in hiring was expressed. It was also brought up that the job should be posted on the reflector, so that all members would have a chance to bid, if they choose to. **Ron-WA1HGA** **motioned** to table and refer it to the BOD for discussion and recommendations. It **passed** unanimously.

New Business:

Alan-WB1FQP made a **motion** that the club be named the "William M Miller Jr. Meeting Hall" in memory of **Bill-K1IBR** who passed recently. It **passed** unanimously.

(Continued on page 6)



MEETING MINUTES



continued

(Continued from page 5)

Armand-W1BUG motioned that a 14x17 photo of Bill he donated be accepted by the club and hung in a predominant wall in the hall. The motion **passed** unanimously.

Rob-KD1CY motioned that the new building committee collect all the information needed and present it to the membership. It should be complete with costs, permitting procedures, and bldg plans on more than one construction method. The target date for this would be June 2007. A vote could be taken at this time deciding the path to follow, and allowing the committee to proceed. It **passed** 32 yes, 1 no.

Dave-K1JGV would like to organize a work party in the near future to clean out the hut and dispose of all the junk. Please contact him if interested in joining him in this project. Also all salvageable material will be moved to the storage container until the project is complete.

Mike-N1ITQ requested a key to the storage trailer, because during the work parties, he will need access to the trailer. It was suggested that he should have a key, as chairman of the building and grounds committee.

Don-N1PMB made a **motion** that all the radio equipment now in the radio room be brought up into the meeting hall, citing safety hazards in the hut, and also possible water damage that could result due to the deterioration of the outer skin of the hut. The motion **passed** unanimously.

Rob-KD1CY made a **motion** that the building and grounds chairman be assigned a key to the storage trailer. It **passed** unanimously.

Mike-N1ITQ made a motion that he is allowed to purchase a new fuel gauge for the oil tank, because he suspects that it is not accurate. After some discussion the motion was **denied** with just 2 in favor.

Mike-KB1NB explained the procedures to elect a new *Board of Trustee member* to replace **Bill-K1IBR** who passed recently.

1. The meeting after the vacancy requires notice to the membership.
2. The following meeting will open nominations for the position.
3. The next business meeting would include the election.

The *Chair of the Board of Trustees* will be assumed by **Larry-AA1FS**, as he is now the ranking

member on the board.

Larry-W1DBX informed that he was acting in behalf of Rick-W1RJ, in seeking permission to return his 440-repeater system, under the same agreement as before, at the SEMARA repeater site. It was noted that a request such as this should not be done by a third party, and that Rick-W1RJ come to the membership directly or contact the BOD for discussion on this matter, and that recommendations could be made to the membership for their approval.

John-WA1ESO inquired about a 6 mtr. Beam tied against the tower and not in use at this time. He said that he was interested in it and wondered if an auction could be held **Ron-WB1HGA** also expressed an interest in acquiring a broken keyer that is in the radio room and offered the club \$20 for it. Again, it was noted that it would have to be brought to the technical committee to see if it was OK to discard, and that it would also have to be sold at auction. The *Technical Committee* will be asked to evaluate the two items, to determine if they are still useful to the club. If they are declared surplus, they could be auctioned at the next business meeting.

Louie-W1CH appointed **Dave-W1DJG** as chairman of the *Technical Committee*, and Dave accepted.

Wayne-WA1CCM asked for permission to refurbish the SEMARA sign on Donald Street. It will be done at no cost to the club and permission was **granted** unanimously. He also reported that the "Wm. M. Miller Jr. Way" sign that was approved at the last meeting was ready and would be installed soon.

Armand-W1BUG will have the "*Club Officers Board*" updated with the engraving of last year's officers. It was noted that the vice-president plate would be engraved with the name of **Dave-W1DJG**, who served the majority of the year in that capacity.

Bob-K1KVV announced a new 10 mtr. Net to be held on 28.490. It will be controlled by Bob-N1HCW on Tuesdays at 8:30 PM.

Don-N1PMB made a motion to adjourn and there was no discussion. The motion passed unanimously.

The meeting adjourned at 8:48 PM.

Respectively Submitted,
Armand Augustine, W1BUG, Secretary



APRIL VE SESSIONS

Walk-ins permitted unless otherwise noted.

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

SEMARA Clubhouse — 10:30 a.m. 7 April
 Larry Houbre-AA1FS
LRHguy@earthlink.net
 508-991-6055

Braintree, MA — 8:45 a.m. 14 April
 William Needham-K1WN
K1WN@aol.com
 781-843-4000

Canton, MA — 7:30 p.m. 19 April
 Lou Harris-N1UEC
N1UEC@Norwood-ARC.org
 508-668-0858

Cranston, RI — 9:00 a.m. 28 April
 Ken Carr-KB1AWV
KB1AWV@arrl.net
 401-828-1665

Fall River, MA — 7:00 p.m. 16 April
 Skip Denault-KB1CNB
skip@NewTestamentSchool.org
 774-644-3469

Falmouth, MA — 9:00 a.m. 14 April
 Ben Fleck-W2LYE
BenFleck@cape.com
 508-540-2583

Middletown, RI — 9:00 a.m. 14 April
 Jack Garforth-K1IG
K1IG@verizon.net
 401-683-2250

Providence, RI — 7:00 p.m. 12 April
 Lou Mester-W1CH
W1CH@cox.net
 401-263-6045

Slatersville, RI — 9:00 a.m. none
 Robert Jones-WB1P
WB1P@arrl.net
 401-333-4787

APRIL NE DIVISION FLEA MARKETS

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

15 Flea @ MIT Cambridge, MA
 Nick -- 617-253-3776

21 Greater Portland Hamfest S Portland, ME
 Peter -- 207-642-7840

29 Southington ARA Southington, CT
 Chet -- 860-628-9346

SOME APRIL CONTESTS

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

Lighthouse Spring Lites QSO Party - all modes, 0001Z Apr 7-2359Z Apr 15. CW 1.830, 3.530, 7.030, 14.030, 21.030, 28.030; SSB 1.970, 3.970, 7.270, 14.270, 21.370, 28.370. > arlhs.com.

PSK31 Flavors Contest - PSK31 and variants, 1200-1800 local time 14 April 2007. 14.070-14.080 only. > <http://harvey.licht.home.sprynet.com/PSKFlavors/2007/2007RulesPost.htm>.

Kids Roundup - Phone, 1400Z Apr 21-2200Z Apr 22. Freq: 80 m- 70 cm. > www.ki3ds.org.

TARA Skirmish - Digital modes, 0000Z-2400Z Apr 21. 160-6m. > www.n2ty.org/seasons/tara_dpx_rules.html.

Florida QSO Party - CW/SSB, 1600Z Apr 28-0159Z Apr 29, 1200Z-2159Z Apr 29. CW up 35 kHz from band edges; Phone 7.260, 14.260, 21.335, and 28.485. > www.floridagsoparty.org.

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

A. If a load on a feed line is purely resistive, the SWR can be calculated by dividing the line characteristic impedance by the load resistance or vice versa, which ever gives a value greater than one. $200/50 = 4:1$ SWR.

SEMARA HandiHam Affiliate

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

LOCAL REPEATER DIRECTORY

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

Frequency	CTCSS	Call	Location
144			
145.110 -	67.0	KB1BWN	New Bedford
145.130 -	151.4	WF1A	W Greenwich, RI
145.150 -	123.0	WA1DGW	Fall River
145.450 -	100.0	W1SYE	Portsmouth, RI
145.490 -	67.0 ¹	W1SMA	Fairhaven
146.655 -	88.5	WA1GPO	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
147.000+ SEMARA	67.0*	W1AEC	Dartmouth
147.045+	141.3	W1HDN	W Warwick, RI
147.120+	173.8	K1WEW	Portsmouth, 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
147.315+	67.0	WG1U	Plymouth
147.330+	173.8 ²	W1AQ	E. Prov., RI
147.345+	88.5	KB1QL	Vineyard

* IRLP-4347 & E-Link-44347

¹IRLP-4617 & E-Link-4611; ²required for use of IRLP-4907

440

441.350+	103.5	KA1RCI	Providence, RI
442.200+	88.5	KE1AK	Fall River
442.350+	67.0	WG1U	Plymouth
442.950+	82.5 ⁵	K1RK	Barnstable
443.450+	88.5	K1MYL	Westport
443.500+	141.3 ⁵	K1PBO	Dennis
443.750+	118.8	N1YHS	Bourne
443.800+	88.5 ³	W1SMA*	Dartmouth
443.850+	141.3	AA1PL	Exeter, RI
444.250+	141.3 ⁵	WA1GPO	Falmouth
444.350+	88.5	W1ACT	Fall River
444.550+	88.5	W1MV	Bridgewater
447.025 -	77.0 ⁴	N1JBC	Johnston, RI
447.075 -	88.5	N1DZD	Kingston
449.175 -	100	N1RMH	Plymouth
449.275 -	DPL 244	W1WNS	W. Bridgewater

³IRLP-4259 & E-Link-4259; ⁴IRLP-5920 & E-Link-55920; ⁵ Cape Net
* OFF THE AIR

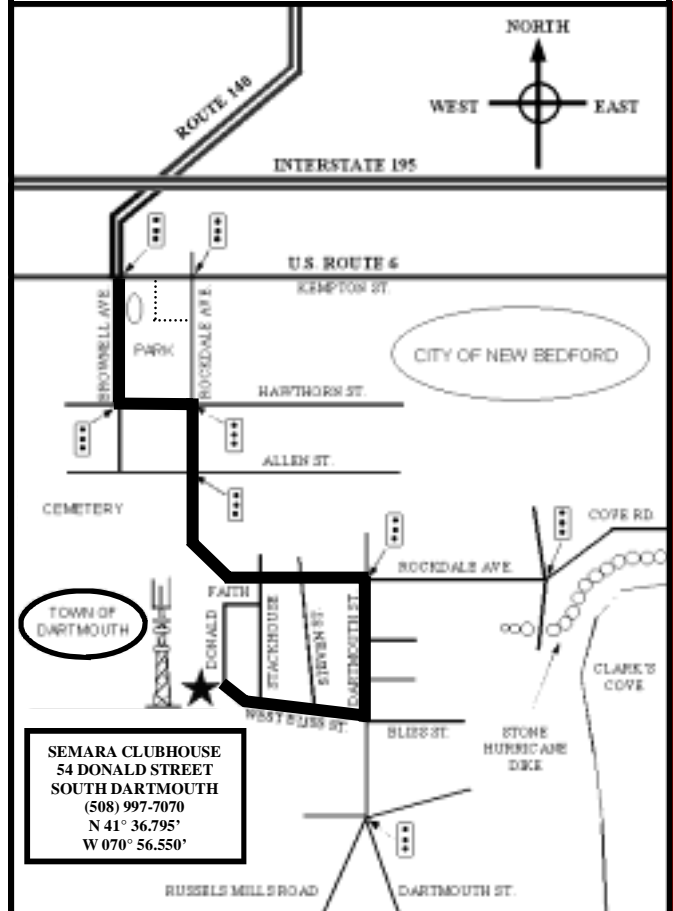
FISTS CW no.10555

Grid Coordinates: **FN41mo**

GPS Coordinates:

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

Directions to SEMARA



Monthly Business Meeting first Thursday: 7 PM

Ragchew at the clubhouse Sunday 7-11 AM

SOMETIME ACITIVITIES

NOT-SO-EARLY BIRD BREAKFAST 6 AM T & TH

The Symposium

851 Mount Pleasant Street, New Bedford

CLUB COFFEE MEET 1 PM WEEKDAYS

Boston Coffee & Bagel

122 Allen Street (corner of Dartmouth Street)

New Bedford

11:30 AM FRIDAY LUNCHEON

Meet at SEMARA clubhouse at 11:15 AM to determine which local restaurant is to be honored by our presence.