

## Candlewood Amateur Radio Association - Post Office Box 3441 - Danbury, CT

Visit us on the Web at http://www.danbury.org/cara
President - Frank Etzler - N8WXQ - phone - 860-350-3523
Vice President - Harlan Ford - W1QH - phone- 203-798-8096
Secretary - Bill Thoren - N1TIW - Phone - 203-744-5138
Treasurer - Bill Webb - W1AFX - phone - 203-775-0536



Meeting: Friday, April 10 Stony Hill Fire Station

### From the President

CARA has a number of upcoming events.

The New England QSO Party will held May 2 and 3. As usual CARA will operate W1AW on Sunday May 3. We will need a few Extra class hams and some new operators as well to go to W1AW. All CARA members should plan to operate the QSO party. Your participation will give hams across the world the opportunity to work New England.

Elections will be held at the June meeting. We seek nominations for office as well as someone to head up the nominations committee. Do not hesitate to nominate yourself.



I have printed CARA business cards. Please take some at the meeting and leave a few at various places where people might find them. Community bulletin boards, doctor's offices, barbershops, the EOC etc. might be suitable places. Take the time to put a good face on Amateur Radio.

The ARRL has issued the following important bulletin for Radio Amateurs. This is a significant rule change.

"FCC Delays SSB and AM Change -- The FCC announced April 1 that the scheduled mandatory changeover of SSB and AM HF voice communications in the Amateur Radio Service has been delayed for one year: originally scheduled to begin April 1, 2009, the new changes will now take effect April 1, 2010. Under the plan, originally approved by Congress during the Clinton Administration, all Amateur Radio voice communication in the HF spectrum (3-30 MHz) will adopt digital voice technologies, reducing the bandwidth of typical QSOs from an average of 2.4 kHz to an average of 1.5 kHz. No particular protocol is specified -- amateurs can use any method they desire as long as it is digital. During the transition period, 20 meter nets have been assigned temporary frequencies in the 10 meter band for their analog (SSB or AM) operations; they have also temporarily been allowed to use up to 10 kW due to limited propagation on that band. Note that 160 meters is not included in this changeover, as it -- being below 3 MHz -- is an MF, rather than an HF band. As previously announced by ARRL, QSLs for 10 meter contacts using the temporarily authorized higher power will not count toward DXCC." [April fool hi hi]

This month' meeting program will be presented by Kevin Johnson formerly from Amphenol on RF connectors. Amphenol manufactures a wide variety of RF connectors including many used in amateur radio. Please give Kevin a warm welcome.

I look forward to seeing each of you at the meeting.

73 de Frank, N8WXQ

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## CARA Meeting Minutes for March 13, 2009

The meeting was called to order by President Frank Etzler, N8WXQ, at 8:00 PM with 18 members and guests in attendance.

The program for the evening on "Feedlines" was presented by Bill Schaeffer, N1PJG, and Steve Simons, KF6AJ.

Bill started off the program with a Connecticut Light and Power (CL&P) safety film on the dangers of power line voltages. as in thousands of volts. With regards to the injuries that can happen when people get hit with high voltage, let's just say that it would probably not be a good idea to schedule this film for a dinner meeting! Other than the obvious one of staving away from downed wires, another thing that we. as possible emergency responders, should be aware of is that metal structures as well as the ground near the accident site may be electrically charged. In general, whenever there is an incident involving damage to the power grid, there is a good chance that power is not where it is supposed to be so "stop, look and listen" before going in.

During the rest of the program Bill reviewed the characteristics of various feedlines, both coax and ladder line, using computer graphics of tables found in the Radio Amateur's Handbook and other sources.

## **Wire Antennas**

## Wire Gauge

When cutting a dipole for a particular frequency it will need to be "about" %5 shorter than it's calculated length (468/frequency) due to inductance. The inductance will vary with size.

### Bare or Insulated

Insulated wire will be 3.5 % shorter than it's bare counterpart.

### Solid or Stranded

Stranded conductors are much easer to work with and won't break as easy.

He had several samples of feedlines mounted on a panel and also distributed a handout, "Understanding SWR by Example" by Darrin Walraven, K5DVW. That article was from the November 2006 *QST* and is probably not the last word on the subject but the more ways SWR is presented the better

the chances that someone will have an "aha" moment of understanding.

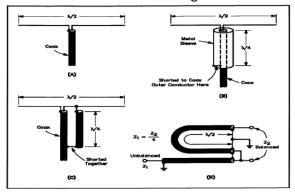


Fig 19.12—Quarter-wave baluns. Radiator with coaxial feed (A) and methods of preventing unbalanced currents from flowing on the outside of the transmission line (B and C). The  $V_2$   $\lambda$ -phasing section shown at D is used for coupling to an unbalanced circuit when a 4:1 impedance ratio is desired or can be accepted.

Next Steve, KF6AJ, demonstrated several uses for the MFJ 259 Antenna Analyzer. It is not a laboratory grade instrument but gives useful information about the characteristics of that metal we have stuck up in the air and the line connecting it to our rig. I have a 259 and regularly use it to verify my antennas, especially the mag mounts on the car, but after actually seeing some other uses such as coax loss, cable length and distance to a cable fault I will be giving it more of a workout.

We would like to express our thanks to Bill and Steve for a very interesting program.

During the business meeting after the program the Secretary's report was accepted as was the Treasurer's report of \$10,697.64

Frank, N8WXQ, had CARA business cards printed up and he distributed them to those present. We will use these cards as contact information to the community. Also, Frank is looking for CARA members who would be willing to present a program to other organizations in the area. Contact him if you are available.

Field Day this year is June 27, 28, 2009. John, W1JMA, is Chairman and the following e-mail he sent the day after our meeting details the discussion we had

during the meeting and, with his permission, is here entered in the Minutes.

At the meeting last night the following issues were discussed regarding field day.

Chair is W1JMA
Publicity is Barry KA1JDD
Food Chair is Judy N1TGK
Station Captain #1 is Frank N8WXQ
Station Captains #2 are Dan W1QK and
Harlan W1QH

Harlan is going to check and see if we can use two 756pro3 jump kits from Danbury EOC

Gene KL7CE will take the Computer from Oscar KO1F and test network and software. Gene will also set up a digital station.

More to follow at the next 3 meetings. 73 John W1JMA

Joe, AB1DO, reported that planning for our Hamfest on 13 Sep 2009 is on schedule. So far a tentative list of vendors includes KJI, Quicksilver, Radio Oasis and The Parent Shop

Ken, KD1DD, Joe, AB1DO, and Gene, KL7CE, are continuing work on a secure WiFi emergency communications network.

CARA has an active VE testing program and Frank, N1PE, is looking for others to share the duties. If this is an aspect of Amateur Radio that you would like to try out, contact him at <a href="mailto:frsileo@att.net">frsileo@att.net</a> or 203-438-0218.

The meeting was adjourned at 10:30 PM

Bill Thoren, N1TIW Secretary

## 2009 CARA-sponsored VE session schedule:

- June 6th
- September 12th
- December 5<sup>th</sup>

All dates are Saturdays. Sessions will continue to be held at the Stony Hill Fire Station at 59 Stony Hill Road (Route 6) in Bethel, CT.



Registration begins at 11:30 AM. Walk-ins are always welcome--preregistration is not required. But if you know you will be attending a session a "heads up" e-mail or call is always appreciated.

For further info, contact Frank Sileo, N1PE, <a href="mailto:frsileo@att.net">frsileo@att.net</a>, 203-438-0218.

### Nets

CARA Weekly Net: Sunday nights at 7:30 p.m. 147.30+ (PL 100)

Connecticut Phone Net (CPN) Monday through Saturday, 6 p.m., on 3.973 and Sundays at 10 a.m. on 3.965...

CW Connecticut Net, Nightly, 7 p.m., 3.640

WestConn Net: Nightly at 8:30 p.m. 147.18+ (PL 114.8)

*Tips Net:* Tuesday evenings at 7:30 p.m. on 146.73- (PL77) (linked statewide).

*R-Com Weekly Net.* 145.47- ( PL100) Thursday Evenings, 8 p.m.

ConnARES Local VHF Net (now part of Area 5): Second Monday of each month, 8 p.m. on CARA repeater: 147.30+ (PL 100)

Conn ARES Issues Net:: 3.965 mHz +/- on Thursdays @ approx. 6:15 p.m. (following CT Phone Net.)

Note: The CT Phone Net often moves to 3.973 to avoid ongoing early evening interference from a short wave operator

# Have **YOU** renewed your CARA membership for 2009?

If not, use the attached registration form and return it to Bill W1AFX.

Make sure you continue to receive the Capers!

## ARRL Continuing Education Course Registration:

Registration remains open through Sunday, April 5, 2009, for these online course sessions beginning on Friday, April 17, 2009: Amateur Radio Emergency Communications Level 2; Antenna Modeling, and Radio Frequency Propagation.

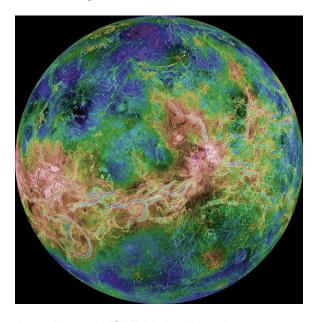
Each online course has been developed in segments -- learning units with objectives, informative text, student activities and quizzes. Courses are interactive, and some include direct communications with a Mentor/Instructor. Students register for a particular session that may be 8, 12 or 16 weeks (depending on the course) and they may access the course at any time of day during the course period, completing lessons and activities at times convenient for their personal schedule. Mentors

assist students by answering questions, reviewing assignments and activities, as well as providing helpful feedback. Interaction with mentors is conducted through e-mail; there is no appointed time the student must be present -- allowing complete flexibility for the student to work when and where it is convenient. To learn more, visit the CCE Course Listing page <<a href="http://www.arrl.org/cep/student">http://www.arrl.org/cep/student</a> or contact the Continuing Education Program Coordinator <<ce@arrl.org>.

## German AMSAT Team Transmits, Receives Signals from Venus

On March 25, a group from AMSAT-DL bounced radio signals off the surface of Venus, marking the first time Amateur Radio operators have bounced radio signals off another planet <a href="http://www.amsat-">http://www.amsat-</a>

<u>dl.org/pic/gallery2/main.php?g2\_view=core.Dow</u> nloadItem &g2\_itemId=7561>.



According to AMSAT-DL President Peter Guelzow, DB2OS, the Earth-Venus-Earth (EVE) transmission is another step in preparing for a mission to Mars. According to an AMSAT-DL press release, the team's transmitter was generating about 6 kW CW on 2.4 GHz.

Guelzow said that signals were sent from a ground control station at the IUZ Sternwarte observatory in Bochum: "After traveling almost 100 million kilometers and a round trip delay of about 5 minutes, they were clearly received as echoes from the surface of Venus. This was the first German success to receive echoes of other

planets. In addition, this is the farthest distance crossed by radio amateurs, over 100 times further than echoes from the moon (EME reflections)."

The EVE experiment was repeated on March 26 for several hours with "good echoes" from Venus, Guelzow said. "Morse code was used to transmit the well-known 'HI' signature known from the AMSAT OSCAR satellites."

For receiving the EVE reflections, Guelzow said that the team used a fast Fourier transform (FFT) analysis with an integration time of 5 minutes. "After integrating for 2 minutes only, the reflected signals were clearly visible in the display," he said. "Despite the bad weather, signals from Venus could be detected from 1038 UTC on until the planet reached the local horizon."

Guelzow explained that with the EVE reflections, the high power amplifier "has therefore passed this crucial test as a final key component for the planned P5-A Mars mission. By receiving generated echoes from Venus, the ground and command station for the Mars probe has been cleared for operational use and the AMSAT-DL team is now gearing up for building the P5-A space probe. AMSAT-DL wants to show that low-budget interplanetary exploration is possible with its approach."

Development, design and construction of this first German Mars mission have been achieved by AMSAT-DL and its partner organizations, Guelzow explained. "Already a third of the total project costs were performed. More work shall follow during the mission. AMSAT-DL would like to demonstrate that their approaches to low-cost space missions are feasible." -- Information provided by AMSAT-DL

Some news articles courtesy ARRL Letter



# Candlewood Amateur Radio Association P.O. Box 3441, Danbury CT 06813

2009 Membership/Dues Application	
Name:	Call:
Address:	
City:	State: ZIP:
Class: Phone:	VE: ARRL: Email Capers:(default Yes)
e-mail	
Full Member \$30  Family (2 members) \$52.50  Family (3 members) \$65.00  Family (4 members) \$75.00* *\$10 each additional member  Senior (65+)/College Student \$23.50  Associate Member (Non-Ham) \$15	Send check payable to CARA  To:  Bill Webb, W1AFX 12 Stage Road Brookfield CT 06804  w1afx@arrl.net 203-775-0536
Student (Under 18) \$5	

Copy and distribute our Hamfest Flyer to everyone you know who may be interested!



Sponsored by Candlewood Amateur Radio Association

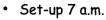
# Western CT **Hamfest**



Sunday, Sept. 13, 2009

(Rain or Shine)

Edmond Town Hall 45 Main St (Rt. 6) Newtown, CT



Doors open 8:30 a.m. - 12:30 p.m.

Talk-in on

147.300+

PL 100

Big batteries at

rock bottom prices!

- Admission \$6 (under 10 free)
- Tables \$15 (includes 1 admission)
- Tailgating \$10 (includes 1 admission)
- Ham Radio Equipment Battery Exclusivel
- Computer Gear
- Door Prizes
- Refreshments
- Free Parking

KJI Electronics

Commercial Vendors Include (tentative)

- QuickSilver Radio Products
- Radio Oasis
- The Parent Shop

Don't Miss the Raffle! Win a New Mobile Rig.

## Seminars

- Air travel proven mobile HF gear (KL7CE)
- Internet linking (K1RFD, author Echolink)
- (to be determined)

## Contact Information

- Joe de Groot AB1DO: (203) 938-4880
- Email: ab1do@arrl.net
- Web site:

www.danbury.org/cara/hamfest.html

## Directions

Take exit 10 off Rt. 84. Go West onto Rt. 6 (west bound make a right, east bound make a left). Approx. 3 mile at flag pole make a right onto Main Street/Rt. 6/ Rt. 25. Edmond Town Hall will be approx. 100 yds on left.

Candlewood Amateur Radio Association (CARA) Hamfest, Sept. 13, 2009 c/o Joe de Groot - AB1DO, 30 Sunnyview Drive, Redding, CT 06896. Phone # (203) 938-4880	
Name	Daytime Phone #
Address	Evening Phone #
Please reserveindoor tables @ \$15.00 each.	Amount Enclosed \$
I need/ do not need electricity.	Please make checks payable to CARA