



CAPERS **Sept 2007**

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 – KB1ILY – phone- 203-798-8096
Secretary – Martha Babbitt – KB1IES - phone - 860-350-8804
Treasurer – Bill Webb – W1AFX - phone - 203-775-0536



Meeting: Friday, Sept. 14 at 8 p.m.

Message From the President

I hope that all have had an enjoyable summer. Summertime ham radio activities can be most enjoyable. I learned a great deal about various aspects of early radio and television and had the opportunity to discuss radio with hams and others from around the world at the AWA meeting in the Rochester, NY area.

September is a busy month for CARA. The big event is the Hamfest on Sunday September 16. Please attend and encourage all your ham friends to attend as well. The CARA Hamfest is the only Hamfest in Western Connecticut. In addition to the flea market and vendors, CARA members will share their knowledge of ham radio by delivering talks on a variety of subjects. We are one of the few Hamfests in the state that has a complete program concerning ham radio. The Hamfest is the major fund raising activity for the club each year. CARA members should plan to help

with the program. Let us continue to make the CARA Hamfest one of the premier ham radio events in the state.

The VE exam will be held on September 8th. If you are not an Extra this is a good opportunity to upgrade and buy some new gear at the Hamfest on the 16th.

The programs for the fall months have been planned. This month's meeting will be given by Jonathan, K1RFD, of Echolink fame. He will speak on sound cards and sound card programs in Amateur Radio.

The October meeting will concern emergency communications and will be presented by W1JMA and crew. At the November meeting Joel, W1ZR from the ARRL HQ will discuss the selection of HF rigs. I am sure he will discuss how to get the most for your hard-earned money. As usual, the Holiday party will be held in December. Those who have a construction

project that can be discussed in 10-15 min are welcome to present it at a meeting. When longer programs are given at most one construction project can be presented at a individual meeting. If you would like to make a longer talk, please volunteer to give a program in the spring months (Feb. – May) Earlier this year we had an excellent program on conversion of CB radios to 10m.

The web page is expected to be updated shortly. KL7CE, W1JMA and AB1DO will be in charge of improving the web page. Thank you!

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

73 de Frank, N8WXQ

*Note: This month's issue of the CAPERS is being distributed early because your editor will be out of town next week.
– 73, KA1JDD*

Join Us at Stony Hill FD!

Club meetings and classes are held at the Stony Hill Fire Department, Route 6, Bethel, across from the Stony Hill Inn.

Directions: I 84 Eastbound, Exit 8 (Route 6), straight through the light at the exit, East on Route 6, past Target, about a half-mile on the right. I 84 Westbound, Exit 8 (Route 6), merge left past the gas stations, reversing direction and heading East on Route 6, past Target, a half-mile on the right. CARA meetings are held on the second Friday of the month beginning at 8 p.m., with Informal “rag chewing” beginning at 7:30 p.m.

Scheduled VE Sessions for 2007

- September 8
- December 1

All are Saturday sessions, and all will be held at the Stony Hill Fire Station starting at 11:30 a.m. Doors will be open about 11 a.m. For information on what to bring with you and to confirm you plan to attend a session, please contact Frank N1PE at frsileo@att.net

CARA September Hamfest!

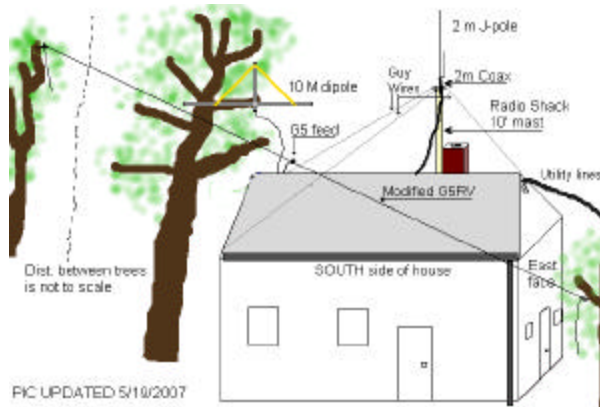
Sunday, September 16 is the date of the annual CARA Hamfest—the only hamfest in Western Connecticut!

The last page of this month's newsletter is a flyer promoting this major event. Tell your friends on the air, make copies of the flyer and distribute them or post them in prominent places. Please help get the word out, and mark the Hamfest date—September 16--on your calendar!

We need everyone's help for the hamfest to be a success—registration desk, raffle ticket sales, set-up and take-down, traffic control, food table, seminars. If you have an assignment, great! If not, please contact Joe AB1DO or Jim KD1YV at the Sept 14 meeting for an assignment!

It's Almost Autumn...Do You Know What Shape Your Antennas Are In?

Autumn is almost here in the northern hemisphere... it's hard to believe the summer has flown by! Now we are heading rapidly toward the good DX season for the 160, 80, and 40 meter bands as the daylight shortens and winter conditions begin to take over. The noisy thunderstorm season will take a winter vacation, and the long nights will mean that these bands will be open many more hours. 20 meters will continue to be the ever-reliable workhorse for DX, since it continues to deliver even during sunspot minima. There does seem to be evidence that the cycle has bottomed and that we are again on the way up, but this is still the time to get ready for fun on the lower frequency HF bands.



The first thing to do is to find out if your antenna system is working. This seems obvious, but if you have been off the lower frequencies for the summer because of the atmospheric noise, you may not know what the condition of your antenna really is.

I like to follow a three-step autumn antenna tune-up, with the station equipment safely disconnected from the power mains and antenna.

1. Physical inspection. This means taking a trip outside during daylight to inspect the whole enchilada, including the grounding system, the feedline, the supports, end insulators, radiating element, and the like. What you are looking for in this initial inspection is obvious problems, such as wires sagging onto tree limbs, broken ladder line, coax with cuts in the outer jacket, obviously broken antenna parts, and any potentially dangerous condition.
2. If everything seems in order outside, the antenna can be reconnected to the station equipment, and you can run a few simple tests. The first one is a "listening" test, which simply means that you tune the receiver to each frequency band in turn, checking to hear signals and simply seeing if the antenna system seems to be working at all. If you are

hearing other stations and the usual noise one hears during the daytime, you are ready to proceed to the next step.

3. Now it is time to try some on-the-air testing. If you have specialized equipment like an antenna analyzer, you could try that before transmitting, to see if the antenna's design frequency has changed over the summer. If you don't have that kind of equipment, then you will need to run a few SWR tests.

Remember, any on-the-air transmission must be identified! Suppose you always work phone, on the higher end of 75 meters. Your antenna was tuned to 3.975 MHz last summer. An SWR check reveals that the lowest SWR is now closer to the CW end of the band. Something is making the antenna look longer! It is time to look outside again to see if some of that spare wire hasn't slipped back through an end insulator.

Similarly, a vertical antenna might now have an SWR high in the phone band, when you really wanted to work CW. This means it is time to check low-band tuning coils, especially the exposed ones, on antennas like the Butternut vertical, and to check for aluminum tubing sections that might have become loose and slipped.

Finally, it is time for a real-world performance test. A ground-mounted vertical with a broken or corroded radial system might have a great SWR, but perform poorly.

Sometimes bad or waterlogged feedline that is really lossy can pass an SWR test, but really attenuate signals.

Don't depend on low SWR readings as your final proof that an antenna system is ready for winter DX! You should get on the air and get some signal reports before concluding

that your antennas are "good to go" for another winter.

TNX to: Patrick Tice, WA0TDA
patt@courage.org
wa0tda@arrl.net

Electric Safety For Amateur Radio Operators

*Our thanks to California Edison for the following tips. It always pays to remind ourselves of the proper way to safely handle antennas when working near power lines. It's all too easy in the heat of the moment or the rush to get a project completed that we can be tempted to take unsafe shortcuts. As the sergeant on Hill St. Blues used to remind his team: "Let's be careful out there."
-Ed*

Antenna Safety - Look Up and Live!

Building and operating a "ham" radio station is a perfectly safe pastime. However, carelessness can lead to severe injury, burns or even death by electrocution. The information here is provided as a general guideline to electrical safety. More specific details are available through the American Radio Relay League and the National Electric Code. When installing and operating an antenna, several safety precautions must be taken.

- * Assume all overhead power lines are energized and dangerous. They are not covered! This includes the service drop, which typically runs from the power pole to your home or shack.
- * Look for power lines which can be hidden by trees and buildings.
- * Plan the work and work the plan. Before you put up or take down an antenna, assess the job; discuss the project's activities with your helpers and agree on specific assignments. Ask yourself... "at any time can arms, legs, head, the antenna, wires or tools come in contact with power lines?"

- * Use a safety spotter. Nobody can do the work alone and assess safety distances. A safety spotter's only job is to keep people and equipment safely away from power lines.



(Metal pole in contact with high tension wires...Don't let this happen to you!!)

- * Remember the 10-foot rule. Keep all equipment, tools, your antenna, guy wire and tower at least 10 feet away from power lines.
- * Contact your local power company if you must work closer than 10 feet from a power line or if you're in doubt about safety clearances. They will work with you to make safety arrangements.
- * Never use metal ladders or long-handled metal tools when working near power lines.
- * Make sure the antenna cannot be rotated into power lines. Or that it cannot fall into a power line if the guy wires fail and the tower falls.
- * Use non-conductive guys.
- * Have a solid earth ground for your antenna and operating equipment. This helps reduce the risk of electrical shock and also provides a low-impedance path to ground for stray RF.
- * Call your power company's "dig alert" phone number at least two days in advance

of digging a tower footing or a cable trench. This generally is a free service which will mark the location of the underground utilities near your home, shack and work area. Underground utilities may be buried just a few inches below the surface!

Field Day and Remote Site Safety

Field Day, ARES assignments, camping areas and other sites often place you in spots where you're unfamiliar with the location of overhead and underground utilities. Before anyone sets up the antennas and equipment, all of the operators and assistants should walk the site together and assess the safety of the location.

* Your first step is to locate the power lines. Point them out to everyone and discuss how you will all approach the set up and breakdown of the antennas, towers, awnings and tents

* Never set up an antenna in the dark. But if you feel you must do so, first use a high powered spotlight to locate overhead power lines. Look for where the power lines are, as well as where they are not. Remember, power lines can easily be hidden by trees and buildings.

* Assess antenna clearances. Locate your antennas as far as possible away from power lines -- and no less than 10 feet! Make sure your temporary antennas or guy wire can't fall into power lines.

* Never throw an antenna wire, guy wire or rope into a tree which is located near a power line. If a power line is touching a tree, stay away!

* If you encounter a downed power line, stay away and keep others away. Call 9-1-1 immediately.

Portable Generators

Exercise care with portable generators. Be sure fuel is stored safely. Never re-fuel a hot engine.

Keep in mind that the backflow from a portable generator can seriously hurt or kill an unsuspecting power line employee or First Responder if they're working in the field following a disaster or emergency. For that reason, never plug a generator directly into the house circuit. Specially-designed power transfer boxes are required and that's a job for a trained electrician .

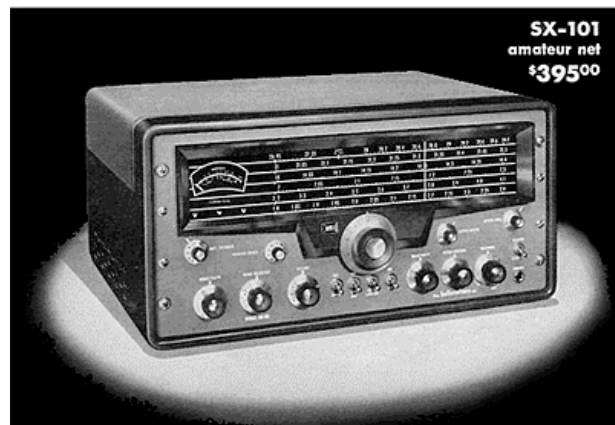
Everything Old is New Again

A generous individual who wishes to remain anonymous donated \$40,000 to the Vintage Radio and Communications Museum of Connecticut, enabling the museum to pay off their debt to the town of Windsor, Connecticut. The donation comes as the museum plans to reopen this summer for the first time in more than seven years. Since that time, the museum has acquired a 20,000 square foot building in Windsor, and



New heavyweight champion!

Hallicrafters new SX-101 receiver employs heaviest chassis in industry...incorporates V.F.O. feature*...has 2000° disc logging counter.



volunteers have been hard at work restoring the building for public use.

The town of Windsor extended the museum at \$35,000 loan that helped them pay insurance and other expenses while the group worked to ready its new location. A \$100,000 state grant paid for major building upgrades, allowing the museum to plan for an August opening. The Vintage Radio and

AVAILABLE NOW



For more than 22 years Hallicrafters has been closer to the radio amateur field than any other communications manufacturer. The many leading Hallicrafters developments have been based on what the amateur wanted and needed. The result of this close association is this radio man's ideal—the finest component units (Model SX-100 AM-CW-SSB receiver, Model HT-30 transmitter-oscillator, Model HT-31 linear power amplifier) in a completely packaged radio station—**MODEL SR-500.**
\$1495⁰⁰

FOR THE FIRST TIME
commercial broadcast styling in a
complete amateur radio station.
HALLICRAFTERS MODEL SR-500
a single package for
PROFESSIONAL EFFICIENCY

Communications Museum of Connecticut is dedicated to the preservation of old-time communications equipment and to educating the public. The museum displays radios, televisions, motion picture and telephone equipment, as well as vintage advertising and memorabilia. Audio, video

and paper libraries, along with an extensive collection of schematics, are also available for research. For more information, visit their Web site <"
[target= blankhttp://www.vrcmct.org](http://www.vrcmct.org)>.



HAMFEST HELP...

The next big club event coming up is the Sunday, September 16 Hamfest at the Edmond Town Hall in Newtown. Already signed up to help out? Great! If not, please contact Joe AB1DO or Jim KD1YV to find out how YOU can help make this important event a success!



Sponsored by Candlewood
Amateur Radio Association

Western CT Hamfest



Sanctioned
by ARRL

- **Sunday, Sept. 16, 2007**
(Rain or Shine)
- Edmond Town Hall
45 Main St (Rt. 6)
Newtown, CT
- Set-up 7 a.m.
- Doors open 8:30 a.m. - 12:30 p.m.

**Talk-in on
147.300+
PL 100**

- Admission \$5 (under 10 free)
- Tables \$12.50 (includes 1 admission)
- Tailgating \$8 (includes 1 admission)
- Ham Radio Equipment
- Computer Gear
- Door Prizes
- Refreshments
- Free Parking

Battery Exclusive!
Big batteries at
rock bottom prices!

Commercial Vendors Include

- QuickSilver Radio Products
- Ham Source
- Radio Oasis

Don't Miss the Raffle!
Win a Brand New HT.

Seminars

- Mechanical TV - Those were the days
- Airmail - How it works, incl demo
- Satellite Communications - How to do it
- NVIS Antennas (courtesy of ARRL)

Contact Information

- Joe de Groot - AB1DO: (203) 938-4880
- Jim Ritterbusch - KD1YV: (203) 775-1946
- Email: ab1do@arrl.net
- Web site: www.danbury.org/cara

Directions

Take exit 10 off Rt. 84. Go West onto Rt. 6 (westbound make a right, east bound make a left). Approx. $\frac{3}{4}$ mile at flag pole make a right onto Rt. 25. Edmond Town Hall will be approx. 100 yds on left.

Candlewood Amateur Radio Association (CARA) Hamfest, Sept. 16, 2007
c/o Joe de Groot - AB1DO, 30 Sunnyview Drive, Redding, CT 06896. Phone # (203) 938-4880

Name _____ Daytime Phone # _____

Address _____ Evening Phone # _____

Please reserve _____ indoor tables @ \$12.50 each. Amount Enclosed \$ _____

I need _____ / do not need _____ electricity. Please make checks payable to CARA