



# Capers

February 2013

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

Visit us on the Web at [www.CaraRadioClub.org](http://www.CaraRadioClub.org)

President – Roger Strong – KB1NYY – phone- 203-794-1665  
Vice President – John Will – KB1LYP- phone - 203-270-0475  
Secretary – Bill Thoren – N1TIW - Phone – 203-744-5138  
Treasurer – Bill Webb – W1AFX - phone - 203-775-0536

***Friday, February 8, 8 p.m. @ Stony Hill Fire Station***



## CARA Minutes...

### CARA Meeting January 11, 2013

The meeting was called to order at 7 PM by CARA President Roger Strong, KB1NYY, with 18 members and guests present.

We started the meeting early because our program/project for the evening was our yearly card sort for the District 1 Incoming QSL Bureau. This project is very labor intensive and time consuming so even with the early start it was still rather late when the cards were boxed up and ready for John, W1JMA, to return to the Bureau for the next step in the sort.

There was no formal business meeting; anything of that sort slipped in during socializing over and around pizza, soda and cookies.

-- Bill Thoren, N1TIW, Secretary

### **REMINDER:**

***If you have not yet made your dues payment for 2013, please use the form at the end of the newsletter or on our web site. THANKS!***

## How Do You Choose an Antenna Analyzer?

By Dan Romanchik, KB6NU

A reader recently e-mailed me:

"In the past you told me you started with the Autek RF-1, and later moved to the Palstar ZM-30. I am finally getting around to thinking about purchasing an antenna analyzer, but I am stumped by the choices. In order of increasing purchase price this is what I've turned up:

- \* Autek RF-1 - \$139.95
- \* Autek RF-5 - \$229.95
- \* Rig Expert AA-54 - \$340.00
- \* Palstar ZM-30 \$399.99
- \* W4RT Electronics MiniVNA \$399.99
- \* Rig Expert AA-230PRO \$690.00
- \* Timewave Technology TZ-900S \$899.99

"How does one decide? Where does one go to find out the differences? Other than asking a fellow ham, how does one find out which one is the best antenna analyzer without paying an arm and a leg (unless the feature(s) so purchased are deemed worth the cost)?

"Thanks! 73"

When I replied, I noted that he had actually missed several other good choices:

- \* Autek VA1 - \$199.
- \* MFJ 259B - \$240.
- \* YouKits FG-01 - \$250.
- \* Comet CAA500 - \$450.

The Autek VA1 is actually the antenna analyzer that I first purchased. The MFJ 259B is arguably the most popular antenna analyzer on the market. MFJ has several other models with different feature sets. The YouKits FG-01 is a very cute, little analyzer with a small graphical display. It is made in China and sold in the U.S. by TenTec.

So, how do you choose just one from this list? Well, I think the first thing that you have to ask yourself is how you're going to use the

analyzer. If all you're going to do is to check the SWR of your HF dipoles, then buy the Autek RF-1. It's the least expensive unit, is reasonably accurate, and is small and lightweight, making it easy to use outside where your antennas are located.

If you want to do some more serious frequency analysis, then you should be looking at the W4RT miniVNA or, if you have more cash, the Timewave TZ-900s. These instruments can help you do a lot more in-depth analysis of your antenna system. The software for the miniVNA, for example, will easily plot the SWR of a multi-band vertical antenna from 3 - 33 MHz.

Some antenna analyzers do more than just SWR. For example, what sold me first on the Autek VA1 and then on the Palstar was that they also measured reactance. So, you can use the antenna analyzer as an LC meter as well. Palstar also says that you can use the ZM-3 as a low-level signal source. While I have used my Palstar to measure inductance and capacitance, I have yet to use it as a signal source.

Next, you need to consider what bands you'll be using it on. Many antenna analyzers only cover the HF bands. That's a bummer if you like operating 6m, or like to experiment with VHF/UHF antennas. A friend of mine bought the Palstar antenna analyzer after talking to the company at Dayton. At the time, they said that they were planning to come out with a model that covered 6m, as well as the HF bands.

Unfortunately, they never did come out with a 6m version, and he was sorely disappointed. He ended up buying a miniVNA instead. The miniVNA can be used up to 170 MHz right out of the box, and up to 1.5 GHz with an optional extender.

Asking your fellow hams about the antenna analyzers they have is actually a good way to figure out what's best for you. If you ask nicely, they might even let you borrow their analyzers or come over and show you how it works on your antennas.

Reading the reviews on eHam is also a good way to gather information before making a purchase like this. You certainly have to take the reviews there with a grain of salt, but if several reviewers mention a particularly good or particularly bad feature of a product, then it's certainly something worth taking a hard look at.

If you're new to the hobby, starting out small and working your way up might be a good strategy. You could buy one of the less expensive models and get used to how they work, then sell it and make the leap to a more sophisticated unit. The way things are going, you should be able to sell your first antenna analyzer for at least 80% of what you paid for it.

The March 2012 QST contains an in-depth review of four analyzers (available online to ARRL members), including the Comet CAA-500, MFJ-266, RigExpert AA-54, and the Youkits FG-01. Each analyzer reviewed had various plusses and minuses. Even if the unit you are considering was not reviewed, the article provides a guide to the kinds of questions you should be asking as you go through the selection process.

(When he's not analyzing antennas, Dan, KB6NU blogs about amateur radio at KB6NU.Com, writes and publishes the "No-Nonsense" series of amateur radio license study guides, and just has fun with amateur radio. You can reach him by e-mail at [cwgeek@kb6nu.com](mailto:cwgeek@kb6nu.com), @kb6nu on Twitter, or on 40m CW many evenings.)

#### **ANY ELMERS OUT THERE?**

CARA would like to publish a listing of "Elmers" – or ham radio coaches—who could provide advice and guidance to new and existing hams on specific aspects of ham radio. Maybe you love kit building, are expert in wire antennas or are a fan of software defined radio (SDR). If so, please send a note to the CAPERS editor.

## **BILL, N1TIW, TO PRESENT AT BETHEL LIBRARY**

Our own Bill, N1TIW will be presenting a special program at the Bethel Library, "Samuel F. B. Morse: Artist and Inventor." The program will be held Tuesday, February 5, from 6:30 to 8 p.m. in the Bethel Library Lobby.

Seating is limited. If you plan to attend you must register with the library. Please call 203-797-8756, ext. 4, to reserve a space.

Bill's presentation underscores that Morse was more than the inventor of the electromagnetic telegraph system. He was also a gifted painter and sculptor.

Bill will also be demonstrating a model of Morse's telegraph system.

The Library has advertised the program for adults, and for children Grades 6 and above.

## **Coming Events in Radiosport**

- February 2 -- Minnesota QSO Party; AGCW Straight Key Party
- February 2-3 -- Vermont QSO Party; Mexico RTTY International Contest; 10-10 International Winter Contest (SSB); Black Sea Cup International; EPC WW DX Contest
- February 2-4 -- Delaware QSO Party
- February 3 -- North American Sprint (CW)
  
- February 8 -- NCCC Sprint Ladder
- February 8-10 -- YLRL YL-OM Contest
- February 9 -- Asia-Pacific Spring Sprint (CW); FISTS Winter Sprint
- February 9-10 -- New Hampshire QSO Party; Louisiana QSO Party; CQ WW RTTY WPX Contest; YL-ISSB QSO Party (CW); KCJ Topband Contest; Dutch PACC Contest; OMISS QSO

- Party; RSGB First 1.8 MHz Contest;  
AWA Amplitude Modulation QSO Party
- February 10-11 -- Classic Exchange (Phone)
  - February 11-15 -- [ARRL School Club Roundup](#)
  - February 13 -- NAQCC Straight Key/Bug Sprint
  - February 13-14 - CWops Mini-CWT Test

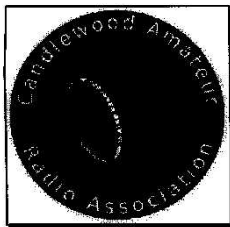
All dates, unless otherwise stated, are UTC. See the [ARRL Contest Branch page](#), the [ARRL Contest Update](#) and the [WA7BNM Contest Calendar](#) for more information. Looking for a Special Event station? Be sure to check out the [ARRL Special Event Stations web page](#).

**Some photos from the January “QSL Card Square Dance: Courtesy of Bill, N1TIW...**



...And a reminder of the “Good Old Days...”





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

**2013 Membership/Dues Application**

Name: _____		Date: _____
Address: _____		
City: _____	State: _____	
E-Mail: _____	Zip Code: _____	
E-Mail Capers? (CARA News Letter): <input type="checkbox"/> Y <input type="checkbox"/> N (Default = "Y")		Phone: _____
Call Sign: _____	ARRL Member?:	<input type="checkbox"/> Y <input type="checkbox"/> N
Class: E A G T N	VE?:	<input type="checkbox"/> Y <input type="checkbox"/> N

**Membership Rates:**

<input type="checkbox"/> \$30 full	<input type="checkbox"/> Full Member	\$45.00	<input type="checkbox"/> Family (2 Members)
<input type="checkbox"/> \$15 Sr/Stdnt or Assoc	<input type="checkbox"/> Senior (65+)/Student (Under 18)	\$60.00	<input type="checkbox"/> Family (3 Members)
	<input type="checkbox"/> Associate Member (Non-Ham)	\$75.00	<input type="checkbox"/> Family (4 Members)

Send Check, Payable to "CARA"  
TO: Carl Braun  
64 Orchard Avenue, Woodbury, CT 06798  
E-Mail: carl@braunhome.com  
Phone: (203) 263-4662