CARA

CAPERS Mar 2008

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

Message From the President

Well it is almost spring again. It's time to order stuff for the coming antenna tune-ups. It is also time to begin planning mobile and portable operation for the fair weather months. HF mobile operation can be great fun.

This month's program will concern high-performance HF mobile antennas. HF mobile antennas are significantly more challenging as greater care to grounding and antenna design must be taken. The design of the required inductive loading can affect significantly the antenna performance. No you can't just stick an antenna on a magmount and expect good performance.

At this month's meeting, Rich, K1OF, will discuss the relative performance of common HF mobile designs. After Rich's talk you may have a better understanding of the trade-offs between performance and convenience. A few month's ago, Rich's excellent article on this subject appeared in QST magazine.

Congratulations to Oscar, KO1F for his article in the March issue of QST concerning emergency communications. In this article a photograph of Harlan, KB1ILY also appears. Oscar and Harlan have done a lot of hard work in the area of emergency communications. *(Ed. Note: The article appears in this month's issue courtesy of QST.)*
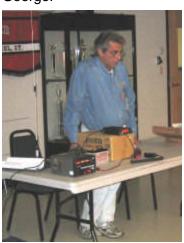
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On March 1 CARA held a VE exam. Two new technician licenses were earned. One of the test-takers is one of CARA's newest members. I will introduce him again at the meeting.

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

73 de Frank, N8WXQ

Thanks to K2ZZ!

Thanks to club member George K2ZZ (myradiooasis@aol.com) for an interesting February program. George brought along a lot of the most popular items from his stock and explained and demo'ed some of the latest Alinco gear and a new line of compact switching power supplies. He also provided a handy bag of "goodies" including the latest literature on the Alinco line. Tnx again, George!

Checking out K2ZZ's merchandise

CARA Meeting Minutes
February 8, 2008

- The meeting was called to order by Frank, N8WXQ at 8:10 p.m.
- The minutes of the previous meetings, both General and Planning were accepted
- The treasurer reported that the balance in the treasury is $9446.60. To date, 14 members have not paid their 2008 dues. The report was accepted
- W1JMA gave a Field Day update. FD is the 28th and 29th of June, please mark your calendars we need full participation.
- The repeater committee reported the 6m machine was functioning at its Redding winter home. Please use this machine so further adjustments can be made to improve. The gas company tower has been eliminated as a possible new home for the repeater.
- AB1DO reported that the hamfest tasks are all on track.

- Frank reported that the New England QSO party, the first weekend in May is all set and CARA will staff the W1AW station. Extra Class volunteers are needed. W1AW has some new equipment to try out.
- The club received a thank you note from Don and Martha.
- Frank alerted the group that a widow of a ham contacted him for help in the estate dissolution. This topic will be discussed at the next planning meeting in two weeks.
- George, K2ZZ, Radio Oasis presented the evening program.
- Formal meeting was closed.

Respectfully submitted,

John M. Ahle, W1JMA Secretary

CARA Planning Meeting Minutes
February 22, 2008

The meeting was called to order at 8:15 by Frank Etzler, N8WXQ.

The turnout was poor due to inclement weather.

Topics discussed:

- Use of Boy Scouts volunteered by Jamie, KB1MQB to move the 6m machine to the site in early spring
- John Ahle to follow up with the Parent Shop on our logo apparel
- Ken suggested CARA investigate putting up a WIFI repeater in area so EOCs can have internet connections point to point. There was some discussion about another club doing this as reported in QST. The idea needs further discussion after the 6m repeater and routine maintenance is completed on the existing repeater systems

- There was a discussion about Airmail and D-Star

Submitted by: John Ahle W1JMA

-- W1JMA Secretary

REMINDER: All members are invited to attend and participate in the monthly CARA Planning Meeting—generally the fourth Friday of each Month, 8 p.m., at the Stony Hill Fire Station.

Think You're a Geography Wiz? Take this test…
Here is a little Internet quiz that you may like to try…suggested by Pete, KZ1Z:
"DXers are great masters of Geography, right? Test out your knowledge by participating in this Internet quiz."

http://www.lufthansa-usa.com/useugame2007/html/play.html

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, at 7 p.m. on 3.640 (SEE ACCOMPANYING ARTICLE FOR INFO ON SLOW-SPEED CW NET)

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 generally moves to 3.973 to avoid ongoing early evening interference from a short wave operator on 3.965. Continue to check 3.965 for the CT Phone Net and for emergency ARES traffic, but be prepared to go to 3.973 in the event of interference.)

S-L-O-W – Speed CW Net

The following news item is from Bill KW1B: "The daily "Connecticut Net" CW net has begun twice-weekly slow-speed sessions to encourage new comers. Join us Wednesday and Saturday evenings at 7:00 PM, 3,533 MHz.

These special slow-speed sessions were created just for all our members who hanker to try out CW and see if they enjoy it. It seems there is some relatively new interest in CW around these days---even with all the "code-less" licensees that are the norm now. Several have expressed a new interest in working with the very oldest of ham radio modes.

We don't know if it's the Romance Of Early Radio, or an interest in traditional modes, or just what the root of it might be; but the curiosity is there. Not in everybody; but in quite a few. The other thing they say is, "Where can I go to try it out?" Aye... There's the rub! Well, when you're as shaky on your CW legs as a newborn foal, "on-the-air" holds some Fear Of Embarrassment, and a Code Practice Oscillator isn't much fun. So, where to go? Maybe you'd learn a bit faster from a Slow-Speed CW Net.

I'll tell you two things about such a net that you won't believe till you get into it a little bit. First, it can be fun. (I NEVER thought I'd ever say such a thing.) Secondly, the pace of events, even in a slow-speed CW net is very much faster than any voice net. (How can that be? That makes no sense. Well, you'll see it's true if you take the plunge, and dust off that old Bencher, and fire up that

keyer lost in some box under some workbench somewhere.)

The magic of the very rapid pace of it is in the bare economy of what is sent! Since more than a few of the Old-Timers think that CW skills are worth preserving in at least a few modern-day hams, it's been decided to officially invite, encourage, and assist those adventurous souls who are willing to give it a shot. Why bother with such an old-fashioned mode?

There are several reasons, some applicable to EmComm.
1) CW is efficient. It is a very narrow-band mode, concentrating all its energy in a very thin slice of spectrum. It gives you more communications "punch" than any other mode, bar none. Did you ever notice that moon-bouncers and those guys who are working with weak signals way down at ultra-longwave at 500 KHz all use CW? The most range for the watt is why.
2) 2) CW is done at "writing speed". One guy sends, one guy copies in RealTime---done! Message passed!
3) 3) CW provides a degree of mode-based "data denial" that we don't have on any voice mode. Yes, computers copy CW, but very, very few scanner people or media people have such software; so, effectively, the Morse Code is very nearly a secret code in actual practice.
4) 4) It's fun to develop a personal skill shared by few. Working CW connects you to the oldest, deepest roots of ham radio. What other mode is over a century old and still in daily use?
5) 5) You'll work some Killer DX. If you've struggled with the SSB pile-ups, and just got frustrated, you'll be amazed how much better it is on CW. There are still pile-ups, of course, but they're smaller and more manageable. You'll see.

Ok. Fine. So, what's next? Glad you asked... Connecticut's very oldest net, the nightly "CN" CW net has established two

nights a week for slow-speed sessions, just for "new-bies". Wednesday is hosted by Andy, NX1Q, and Saturday, is NCS-ed by Bill, KW1B. 7:00 PM is the appointed hour, and 3.533 is the designated frequency. (The net is quite punctual.)

Here are two briefing documents, one extremely simplified to the barest of essentials, and the other is far more detailed. To get started, you need only the "essentials" one for now. http://www.StudioOne-CT.Com/JobPocket/CWEssentials.doc and http://www.StudioOne-CT.Com/JobPocket/CWDetailed.doc

There are two kinds of "speed" related to this activity. First, is the raw CW speed. The net is done at around 7 words per minute, or maybe a bit less. When you check in, NCS will adapt to you, so don't check in using your very best and speediest "fist", 'cause that's what you'll hear coming right back. Not to worry. They'll slow down for you happily. That IS the point of a slow-speed net!

The other kind of speed is the pace of events. Things happen quickly---even at a slow CW copying speed. You've got to stay alert and follow the flow. This might not sound like a Big Deal, but you'll see what I mean if you decide to take the leap into working this century-old mode. For example, checking in to a CW net happens much, much faster than on any voice net--- as crazy as that sounds! You'll see...

Here are some other slow-speed CW nets you can probably hear to get a little pre-practice: Connecticut Net-Slow (CNS) 3.533 1800 EST, Wed & Sat (This net meets seven days a week.) New York (Empire Slow - ESS) 3.576 18:00 EST, Daily Maine Slow Speed Net 3.585 18:00 EST, Daily Ohio Slow Net 3.535 18:10 EST, Daily New Jersey Slow (NJSN) 3.547 18:30 EST, Daily East Pennsylvania 3.537 18:30 EST, MWF Vermont - New Hampshire 3.530 19:00 EST, Daily Maryland Slow Net (MSN) 3.563

19:30 EST, Daily "Hit and Bounce Net" (Wide Area) 3.576 19:30 EST, Daily Carolina Slow Net (CSN) 3.571 20:00 EST, Daily A.R.T.S. (Wide Area) 7.052 06:30 EST, Daily.

For most modern radios, set your dial to those frequencies accurately, in the CW mode, and the radio will take care of all the little stuff like "offsets" and so forth.

73, KW1B
203-438-3117 if you'd like to talk about it.

P.S. Oh, yeah... One other thing. Consider our CN net frequency of 3.533 as being "open" for calls between us, 24-7. Code practice with an oscillator is kinda boring, so make a call on there for other Connecticut folks, and have a QSO just about anytime in the day, evening, or over the weekend. Call, "CQ CT DE [callsign]" K" and see what turns up. Also: monitor there for others. Ya never know.... There's no better or more enjoyable practice than to ragchew with a pal, live. No pressure, just fun... "

HAM Video Site
"We have all heard of YouTube. Here's an additional video URL. This site is designed for ham radio ops. www.CQtube.com (brand new site just went on line. Looks like it has potential) CQoogle.com has potential for videos but no uploads yet. You may also search for audio, images, and the web there."
73, Pete, KZ1Z

'Simply Simplex' Article by Oscar, KO1F, Published in March 2008 QST
Reproduced on the next couple of pages, with the permission of QST Magazine, is the complete article by Oscar, KO1F, as it appeared in the March 2008 issue of QST.

Congratulations to Oscar, Harlan, and all those who participated in the "Simply Simplex" exercise in cooperation with the Danbury EOC.

PUBLIC SERVICE

Simply Simplex

Oscar P. Fuller Jr, KO1F
ko1f@arrl.net

Repeaters are great! Distributed around the country, networks of repeaters serve a critical need in day to day communications and most especially during emergencies. Many of these repeaters' support and maintenance is due to dedicated individual hams or clubs whose only reward is to serve the ham community and contribute to better communications in the region.

As reliable as repeaters are, many depend on battery backup power in the event of a power outage. This may work fine...for a while. However, in an extended outage, batteries strain and finally give up. A power outage is only one concern. Storms, physical damage, system failures, even sabotage are all risks we must face and plan around.

So, what happens when repeaters fail or are not available during an emergency? The answer for the Danbury, Connecticut ARES team is "simply simplex."

Even if the repeater is working during an emergency, heavy traffic could force the ARES team to seek alternates. As the Danbury team assessed the different options available, we became convinced that a disciplined net, operating simplex could be the answer to either a repeater system failure or to avoid heavy repeater demand during an emergency. But how can we be sure simplex would work for us in our area?

Danbury is located in western Connecticut in Fairfield County and rests in the foothills of the Berkshire Mountains. The surrounding terrain consists of rolling hills and is heavily wooded. Small mountains lace the horizon to the west and northwest (the western highlands). Danbury covers an area of 44 square miles with elevations ranging from about 300 to 1050 feet. While there are no "real" mountains to contend with, the hills in this heavily forested area have the potential to make simplex communications, not so "simple".

At a recent meeting, one of our local ARES members, Mark Hertzberg, WA2IZQ, proposed we conduct an exercise to "map" the Danbury area to ensure that we could talk from specific locations around town back to the Danbury Emergency Operations Center (EOC — KX1EOC / WC1AAX). It was quickly agreed that we should proceed with planning to conduct a simplex exercise as a test.

Under the leadership of Harlan Ford,

KB1ILY — Assistant District Emergency Coordinator (ADEC) for Connecticut ARES Region 5 South — and coordination from Mark Hertzberg and Oscar Fuller, KO1F, the exercise was designed and planned in two stages and scheduled for the coming next two months.

The proposed test plan was presented to Mr. Paul Estefan — City of Danbury, Director of Emergency Management. Paul has been a consistent and enthusiastic supporter of the ham operation within the Danbury EOC and the ARES team. He agreed the test would be beneficial to the city and should proceed. He assisted by providing the team with several specific locations he wanted included in the drill. Paul's interest was to ensure key city locations were tested — locations the city has in their operations planning to use in the event of an emergency. To assist with tracking our findings, Paul provided a detailed street map of Danbury to be posted in the EOC after the exercise to display our results. Each member of the ARES team contributed to the list of locations to include those that might be used from a communications perspective during an emergency.

Finally, 27 sites were selected as potential deployment locations that included schools, fire and police headquarters, hospitals, key city services locations, and served agencies (e.g. Red Cross). In addition, it was decided that we should include an alternate (backup) EOC location, taking into account the possibility our primary EOC location might be unavailable due to damage or contamination. Armed with our overall plan and input from several sources plus the guidance we received from the city, we proceeded to develop the details of the plan.

To make life a little easier for the team, (and to take into consideration the price of gas), we agreed the test should be conducted as part of our regularly scheduled meeting. Members would simply "stop by" assigned locations on their way to the meeting. Using this approach minimized the additional travel required and provided us with an opportunity to discuss the findings as part of the regular meeting.

The intent was to assess each site as to whether or not that location could communicate directly with the Emergency Operations Center (EOC) (located inside City Hall, in the center of town) and a secondary location at a higher elevation identified as a possible back-up site for the EOC.

Harlan Ford, KB1ILY, operates as the primary net control from the Danbury EOC.

Prior to the exercise, readings were taken at each site to identify latitude / longitude as well as elevation and grid square locator number. An Excel® spreadsheet was used to set up a form that allowed our net control and alternate control station (back-up) an easy way to document signal reports from the various locations.
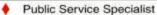
As we began to publicize the upcoming drill, other EOC teams in surrounding communities volunteered to test with us to assess how well we could communicate with them using only simplex mode.

As part of the test, our Region 5 District Emergency Coordinator, David Hyatt (N1DAV) agreed to come to the Region HQ in Litchfield, CT to test communications from that location. Given that the Region HQ location would be the focal point for any regional emergency we were anxious to find out whether or not we would have any problems communicating with them using only simplex communications. We had some concerns given Litchfield is about 30 miles north of Danbury.

Primary participants for this exercise were members of the ARES/RACES team in Danbury, including Harlan Ford, KB1ILY, at the primary EOC and Mark Hertzberg, WA2IZQ, at the secondary (backup) EOC location. Oscar Fuller, KO1F; Tom Kimball, WA8UNS; Gene Gregory, KL7CE; Rosty Slabiciky, N2FEX; John Will, KB1LYP, and Jim Ritterbush, KD1YV, were deployed to test the various sites.

The stage was set, and now it was time for the team to move into action. The first phase of this test to be conducted was underway. As the team members left their homes, they stopped by specified locations and attempted to contact both the primary and secondary EOC locations. Depending on their personal equipment, we asked the team to contact the net control stations and test three power levels. The first test was with a handheld on full power (around 5 W), followed by two additional tests from a mobile station — one

at mid power (approximately 25 W) and one at full power (about 50 W). Signal strength readings would be assessed by the control operators at the primary and alternate EOC locations and logged for analysis. Once the readings were taken, operators moved on to other locations and repeated these tests on their way in to the meeting. At the meeting we reviewed the readings and were able to address any open questions about the testing. We knew that testing so many locations would take more than one session. The second half of the test was scheduled for May, and each person again took location assignments that best fit their commute to the primary EOC (meeting location).

It was during the initial test that the surrounding Emergency Operations Centers in other communities — Ridgefield, Newtown, Brookfield and Bethel — were tested, and all were successful. While there was some variability in signal strength, all were readable.

We were pleased (and a little surprised) to find we could hear and be heard at the Region 5 HQ location in Litchfield, CT EOC — not 5×9, but certainly readable.

Following the same procedure as the first part of the test, the second phase of the exercise was completed the following month with the remaining locations tested and logged.

Results

Overall, we were very pleased with the results. With few exceptions, we were able to communicate with little trouble. Even the handhelds worked better than expected. We were able to profile every site relative to how well a simplex signal would reach the EOC and alternate EOC. With this information, we'll be able to send the right people and the right equipment to each location as needed. Key to this information is knowing that in some cases an operator will need more power to have effective dialog with net control. Having this information will provide the communications coordinator or incident commander with critical data needed to ensure effective communications.

A formal report was prepared for Mayor Mark Boughton and the City of Danbury.

Mayor Boughton and his team have provided outstanding support for the EOC ham operation in Danbury. His leadership was essential in recent expansion and equipment upgrades for the ARES station in the EOC. The report was presented to Mike McLachlan, Chief of Staff for the Mayor of the City of Danbury and to Paul Estefan — Director of Emergency Management. In accepting the report on behalf of the city, Mike McLachlan expressed his "thanks to all the team members who participated in compiling this important information and providing such a professional report." Mike added, "The timing is perfect as Danbury is reviewing its communications strategy and this work will be an important component of the input to that plan." Paul Estefan said, "Every community should have this information to know where their radio communications hot spots and weak spots are located." Copies of the report were made available to the Fire Chief and Chief of Police.

Knowledge is power. Armed with this information we will be able to assign the team with the right equipment and power output, to any of the locations tested assured they will be able to reach the EOC in time of need. We will have updated a map of the area in the EOC to reflect the simplex connectivity to tested locations in the area. That map will serve as a reference document and guide us in our deployment to make sure we put the right resources in the right locations.

PR Tips from ARRL
The Swiss Army Knife for PIOs CD, version 2008, is now available. This is the "all in one" toolkit on a disk for Amateur Radio public relations.

To receive a copy, send a self-addressed stamped envelope (make sure the SASE is large enough for a CD disk!) with at least 70 cents postage on it and a note to: Public Relations ARRL 225 Main St Newington, CT 06111

CARA

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

Membership Application

Name:_____   Call:_____

Address:_____

City:_____   State:_____   ZIP:_____

Class:_____   Phone: _____   VE: ____   ARRL:_____   Email Capers:__x___

e-mail _____

Dues:

Associate Member (non-ham)	$15	_____
Full Member	$30	_____
Senior/Student (>65yrs/<18 yrs)	$23.50	_____
Family (2 members)	$52.50	_____
Family (3 members)	$65.00	_____
Family (4 members)	$75.00*	_____
* additional members @ $10 each		_____
TOTAL		_____

Send Dues to:
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