



# Capers

January 2011

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

Visit us on the Web at <http://www.danbury.org/cara>

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**Next Meeting: Friday, January 14, 8 P.M. @ Stony Hill Fire Station**

## **From the President...**

Greetings, All:

I hope you have all had a wonderful and safe Holiday Season! Now it's time to "Grab yer partner and Do-Si-Do" – Yep, we have our Annual QSL "Square-Dance" of sorting QSL cards for the "W1" Bureau for this month. Pizza will be provided by the Club, so we'll be there for the duration. Come and enjoy some good camaraderie, conversation, and see some really interesting QSL cards. Who knows? You may find a rare one for yourself! Hey, how about that post-Christmas blizzard? – Seems some of us should have some interesting stories to tell. I was listening to Skywarn nets and the snowfall amounts reported were quite interesting. However, those reports Sunday night seemed "sparse" Monday morning when one could see in the daylight – with all the drifting and blowing!

Next Month's (February) program is tentatively going to be a presentation on home-brewing VHF antennas by Mark, N1MG. Mark is an avid QRPer and seems quite knowledgeable when it comes to discussing home-brewed antennas.

We also have a Special Event coming up – CARA turns 81 (!) this year and Dan, W1QK, is heading up a Special Event Station along with Jim, KD1YV, and Bill, N1TIW. I look forward to the Club's members helping out with preparations and making this Special Event really special.

See ya all at the "Dance" – wear your walking/dancing shoes!

73,  
"QH"

## CARA VE session schedule:

### Sessions For 2011

Sessions are held at the Stony Hill Fire Station at 59 Stony Hill Road (Route 6) in Bethel, CT.

Registration begins at 11:30 a.m. Walk-ins are always welcome; pre-registration is not required.

For further info, contact Frank Sileo, N1PE, in Ridgefield, CT at 203-438-0218 or [frsileo@att.net](mailto:frsileo@att.net).

March 5, 2011  
June 11, 2011  
Sept 10, 2011  
Dec 3, 2011

### **OPERATORS NEEDED FOR CARA SUNDAY NET!**

Additional volunteer net controllers are needed for the 7:30 Sunday evening CARA net. Right now, Bill, N1TIW and Harlan W1QH are handling the lion's share of the work. Some additional volunteers – even for one or two Sundays a month – would be appreciated.

Any licensed club member can handle the net. There's a simple script to guide you and it's excellent practice in net operation for ARES work you may be involved in.

Don't be shy. Please get in touch with Harlan, "QH" to let him know your availability. You'll be added to a list so we can alert you when your help is needed to cover an upcoming net.

## 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., 3.533 (note correction to 3.533)

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.)



## Minutes of the December Meeting

Since the December meeting was a Christmas party, there are no minutes for this meeting.

Tom Buckley WB2TRY  
Temporary Newsletter Editor



## Amateur Allocation at Lower MF Gains Formal Support in the Americas

A secondary allocation to the Amateur Radio Service at 461-469 and 471-478 kHz gained inter-American support in meetings held earlier this month in Bogota, Colombia, with the Permanent Consultative Committee of the Inter-American Telecommunication Commission (CITEL) adopting the US position for the MF allocation. World Radio Communication Conference 2012 (WRC-12) Agenda Item 1.23 calls on participants “to consider an allocation of about 15 kHz in parts of the band 415-526.5 kHz to the Amateur Service on a secondary basis, taking into account the need to protect existing services.”

Canada -- which had previously supported a secondary allocation at 472-487 kHz -- withdrew that support and aligned itself with the US at the meeting in Bogota. Over the course of the meeting, Argentina, Brazil, Colombia, the Dominican Republic, Uruguay and Venezuela signed on to have CITEL present the agenda item at WRC-12 as an Inter-American Proposal (IAP). The

support of six countries is required for a proposal to gain IAP status. The US agreed to support the allocation earlier this year, despite initial opposition by maritime interests.

As a member of the US delegation, ARRL Technical Relations Specialist Jon Siverling, WB3ERA, attended the meeting, serving as Rapporteur for the agenda item. IARU Region 2 President Reinaldo Leandro, YV5AMH, was also in attendance on behalf of the IARU. The adoption of an affirmative IAP on Agenda Item 1.23 represents an important milestone in the ARRL’s and the IARU’s international advocacy efforts.

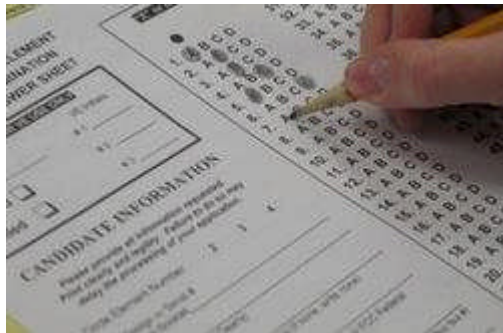
ARRL Chief Executive Officer David Sumner, K1ZZ, explained that while the milestone is important, there is still work to be done on the agenda item to maximize success at WRC-12: “While we still face an uphill battle internationally, gaining the support of one of the major regional telecommunications organizations this early in the process improves our chances for achieving an allocation at WRC-12.”

CITEL is one of six regional telecommunications organizations whose formal positions carry significant weight during deliberations at a WRC. The WRC-12 is scheduled for January 23-February 17, 2012 in Geneva.



## NCVEC Releases New General Class Question Pool

The Question Pool Committee (QPC) of the National Conference of Volunteer Examiner Coordinators ([NCVEC](#)) released the new [General class \(Element 3\) question pool](#) on Tuesday, December 7. This new question pool -- including graphics and diagrams -- will become effective for all General class examinations administered on or after July 1, 2011; it will remain valid until June 30, 2015. The current General question pool that became effective July 1, 2007 will expire June 30, 2011. The new General pool contains 457 questions, from which 35 are selected for an Element 3 examination. The [current Technician class question pool](#) that was effective July 1, 2010 is valid through June 30, 2014. The [current Amateur Extra class pool](#) that was effective July 1, 2008 is valid until June 30, 2012.



## ARRL Introduces Book on Selecting, Using Antenna Tuners

Antenna tuners are devices often misunderstood in the Amateur Radio world. While not every station requires an antenna tuner to transmit radio signals, without one an incompatibility between the transmitter and the antenna system can result in poor performance. *The ARRL Guide to Antenna Tuners: A Radio Amateur's Guide to Antenna Matching* by Joel R. Hallas, W1ZR, will help you understand how to select the

right tuner for your needs and how to use it in your shack.

*The ARRL Guide to Antenna Tuners* discusses the details of the different configurations and requirements of antenna tuners. It explores the design, construction and applications of the different types available. You'll be able to determine if one is necessary in your station, what type of tuner is needed and where to install it for maximum improvement. This book will give you a better understanding of your antenna system and the way it can be improved through the selection and use of the appropriate antenna tuner.

Contents include:

- Why Might I Need an Antenna Tuner
- A Look at a Typical Configuration
- So Just What is an Antenna Tuner?
- Tuning an Antenna Tuner
- The Internal Tuner -- How Does it Help?
- An External Tuner at the Radio
- Transmission Lines and Loss
- Moving the Tuner to the Back 40
- Transmission Line Choices for Low Loss
- Balanced vs Unbalanced Lines
- So What's a Balun, an Unun, a Choke?
- Balanced Antenna Tuners
- Antennas that Work Well with Tuners
- A Survey of Available Tuners

Hallas has been a radar and telecommunications systems engineer, engineering manager, telecommunications executive, college teacher and is now Technical Editor of *QST*, the monthly journal of ARRL, the national association for Amateur Radio. He has earned BS and MS degrees in electrical engineering.

**DXCC: Eight African Operations Approved for DXCC Credit**

ARRL DXCC Manager Bill Moore, NC1L, reports that eight operations in Africa -- 9Q/DK3MO (Democratic Republic of the Congo), 3C0C (Annobon), 3C9B (Equatorial Guinea), 3V9A (Tunisia), 3V0A (Tunisia), TS7TI (Tunisia, also includes /p operation), TS8P (Tunisia, also includes /p operation) and TS9A (Tunisia) -- have been approved for DXCC credit. All operations -- with the exception for the 9Q/DK3MO -- are 2010 operations. The 9Q/DK3MO operation is good for operations commencing in 2007 through the present.

“If you had cards for any of these operations rejected in recent applications, please send an e-mail to the ARRL DXCC Desk,” Moore said. “Please note that due to heavy e-mail volume, you may not receive a reply. Results will appear in Logbook of The World (LoTW) accounts, as well as online on the daily listings.”

WA5KGQ, and Technical Director Dr Richard Schwoebel, WB5OJO, all played key roles in planning the project. They installed Amateur Radio equipment -- including a 20 meter vertical dipole -- on board to be used as a backup for the commercial frequencies. As it turned out, the crystal-controlled sideband gear on the commercial radios malfunctioned, making the craft unable to send important navigation, position and safety information

**Notes on the December Party**

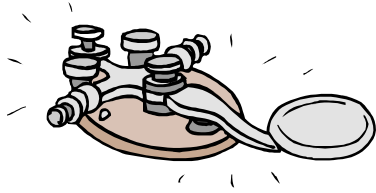
"Some 30 CARA members and their families attended the December 10 Annual Holiday Party held at the Stony Hill Fire Station. Club President Harlan, W1QH, welcomed everyone and extended holiday greetings. The meeting was marked by good conversation and delicious snacks, entrees and desserts supplied by members and their families. A number of members also participated in a ham radio "grab bag." It was a wonderful evening and we're already looking forward to next year's event!"



**This Month's Quote**

“Samuel Morse must have lost his mind if he believes in this idea himself!”

(Senator Oliver Hampton Smith, 1842, after having seen a demonstration of Morse's new invention.)



### **New Rules Governing Vanity and Club Station Call Signs to Take Effect February 14**

On Wednesday, December 15, 2010, new rules affecting vanity and club station call signs, within the Amateur Radio Service, were published in the Federal Register. They can be found in PDF format at <http://edocket.access.gpo.gov/2010/pdf/2010-31349.pdf>.

These new rules will go into effect on February 14, 2011. Thirteen months ago, the FCC announced its intention of modifying Part 97 as it applies to the vanity call sign system and club station call signs, aligning the rules to prior Commission decisions. Last month, the Commission released a Report and Order (R&O), outlining its decision. Along with the changes to the call sign rules, the FCC made "certain minor, non-substantive amendments" to portions of Part 97.

### **New Edition of ON4UN's Low-Band DXing Now Shipping!**

The fifth edition of [ON4UN's Low-Band DXing: Antennas, Equipment and Techniques for DXcitement on 160, 80 and 40 Meters](#) by John Devoldere, ON4UN, features new and updated material. This is a book -- with CD-ROM included -- that every fan of 40 meters through Top Band needs in the shack. It is definitely loaded with everything you need to succeed on the low bands.

It's been 25 years since Devoldere published the original *Low Band DXing*, sharing his knowledge of techniques for success on 160, 80 and 40 meters. Over the years, the book has evolved to keep pace with our growing knowledge of propagation, equipment, operating techniques and receiving and transmitting equipment for the low bands. This edition is no different, with significant new additions and updates throughout the book.

This new edition boasts almost 700 pages and includes a thoroughly revised discussion of receiving antennas. In addition, low-signal transformers for Beverages and other receive-only antennas are analyzed in great detail, along with effective common mode filters. You'll also find a new examination of phased arrays -- with new concepts such as the hybrid-fed 4-square array and opposite-voltage feed system -- and dozens of new propagation maps based on *DX Atlas*. Devoldere has also added an in-depth analysis of the influence of sunspot cycles on 160 meter ducting, as well as a new discussion of cutting edge technology including Software Defined Radio and the revolutionary LP-500 Digital Station Monitor.

Contents include:

- Propagation
- DXing on the Low Bands
- Receiving and Transmitting Equipment
- Antenna Design Software
- Antennas: General, Terms, Definitions
- The Feed Line and the Antenna
- Receiving Antennas

- The Dipole Antenna
- Vertical Antennas
- Large Loop Antennas
- Phased Arrays
- Other Arrays
- Yagis and Quads
- Low Band DXing from a Small Garden
- From Low Band DXing to Contesting

A CD-ROM is also included with the new fifth edition! This CD-ROM includes the entire book in a fully searchable PDF format, as well as Devoldere's software (*Windows XP* only), antenna modeling files, photographs and more.

Devoldere is a recognized expert on low band DXing and his operating achievements speak for themselves. On 80 meters, he has the highest number of DXCC countries confirmed worldwide (he is holder of the DXCC 80 meter award #1 with 357 countries confirmed on that band). When this book was published, Devoldere had the highest country total outside North America with 312 countries confirmed on 160 meters.

### **2010 a Banner Year for DXCC, Incoming/Outgoing QSL Bureaus**

With the coming of more sunspots, comes more DX. And when more amateurs are working DX, that means the ARRL's Membership and Volunteer Programs Department -- especially the DXCC desk and the ARRL Incoming and Outgoing QSL Bureaus -- goes into high gear.

"Compared to 2009, 2010 saw a dramatic increase in the number of cards we received from ARRL members that were sent to foreign QSL bureaus, as well as the number of cards we sent out to the bureaus," said DXCC Manager Bill Moore, NC1L. "In addition, the number of DXCC applications -- including those for initial awards and endorsements -- also increased."

Through December 14, 2010, the ARRL Outgoing QSL Bureau received 709,800 cards destined for foreign QSL bureaus from ARRL members in the US. This represents an increase of 16 percent over the 2009 number of about 612,000 cards. In 2009, the ARRL shipped 673,500 cards -- or close to 4500 pounds of cards -- to foreign bureaus. "We have processed nearly 660,000 cards in 2010, and the year isn't even over yet," said MVP Administrative Manager Sharon Taratula. "I would not be surprised if we surpassed 750,000 cards by the end of the year."

As the number of QSL cards has increased, so have the number of DXCC applications. In 2009, the DXCC Desk processed 7134 applications for initial awards and endorsements; these 2009 applications included almost 762,500 QSOs. So far in 2010, the DXCC Desk has processed 6895 applications, containing almost 860,000 QSOs, for an increase of 13 percent over 2009. "With all of the year's applications not yet fully processed, we've seen the number of QSOs increase in 2010 over 2009, even though the number of applications is a tad lower," Moore said. "Come the end of the year, I expect the 2010 application total to surpass the 2009 number."

### **How the Bureaus Work**

Each day, QSL cards are delivered to the [Outgoing QSL Bureau](#) where they are placed in dated bins. They are then sorted by

country prefix in according to the date they were received in the Bureau. Every other month, volunteers and ARRL staff assist Outgoing QSL Bureau Associate Rose-Anne Lawrence, KB1DMW, pack up the cards for the most active bureaus and prepare them for shipment. The Outgoing QSL Bureau uses two sizes of cartons for sending QSL cards, depending on the size of the shipment -- either 4 or 20 pound cartons. These cartons are sent to the bureaus via private shipper. Cards going to less active entities are forwarded every 90 days via USPS First Class International Mail, either in smaller boxes or in a padded envelope.

Within the US, the [ARRL Incoming QSL Service](#) is made up of numerous call area bureaus, with one bureau serving each call area. These call area bureaus act as central clearing houses for QSL cards arriving from foreign countries. ARRL volunteers sort all incoming cards according to the number in a call sign, 0-9. Then all the cards are sent to the appropriate call area bureau. Volunteers within each bureau then sort the cards according to the first letter in a call sign's suffix. The cards are then sent to those in the call area who participate in the Incoming QSL Service. While amateurs must be an ARRL member to take advantage of the Outgoing QSL Bureau, membership is not required to receive cards from the Incoming QSL Service.

"There is a definite cycle here in the Bureau," Lawrence said. "We keep really busy all year long, but it really gears up in the fall right around Thanksgiving weekend. It tapers off a little in the spring after contest season when a lot of hams enjoying activities in the nice weather. Hams really do love their QSL cards, and we get to see so many beautiful ones pass through the Bureau."

Lawrence receives help from volunteers in the Bureau: Lisa Zeug, K1UQT, and Michael Zeug, W1YM, are Area 1 letter sorters from Massachusetts who also help out ARRL HQ in the QSL Bureau. Richard Lawrence, KB1DMX, and David Kaplan, WA1OUI, both help with all parts of the Bureau operation at HQ. John Meyer, K9QVB, -- the Area 9 Incoming Manager -- comes to Newington all the way from Illinois to spend a week in May every year, slotting cards all day.

### **Chevy Brings In Ham Radio Expert to Engineer Hidden Antenna**

The 2011 Chevy Camaro Convertible boasts new AM/FM antenna technology, thanks to its fans and one ham radio operator.

Fans spoke out after leaked photos of the new Camaro revealed an AM/FM whip antenna on the rear deck lid.

Chevy turned to ham radio operator and antenna expert Don Hibbard to help redesign the [car's](#) antenna. Hibbard and colleague Gregg Kittinger were challenged to conceal the AM/FM antenna without sacrificing radio reception.

"We weren't sure that it would be possible," said Kittinger. "Typically antennas are hidden in a vehicle's rear window, but with a retractable soft-top roof, that's not an option."

The result was an innovative way to build put the antenna inside the rear spoiler.

"Where other automakers have tried and failed, Chevy succeeded," said Hibbard. "We hope to take what we've learned with the Camaro Convertible, build on it and apply it to future vehicles."



## OPERATING TIP

"There is a 100% chance they will never call me if I don't keep calling CQ." (Thanks, Andy N2NT)

## Technical Web Site of the Week

The FCC recently released its most recent version of the "[Spectrum Dashboard](#)" which allows you to browse and zoom in on all allocated spectrum from 225 MHz to 3700 MHz with a graphical tool. (From the December issue of "[Cheese Bits](#)" Mt Airy "Packrats" VHF Radio Club)

## Ham Radio News

*(The following news items came from the ARRL Connecticut Section Web Page.TB)*

Did you enjoy the Nutmeg Hamfest? The forums were well attended and there certainly seemed to be lots of interest in many different things. ASEC Art AF1HS won the big prize this year—congrats again Art! And if you've ever been to that prize drawing, you know that it can take a while. Unlike other years, the first ticket drawn was Art's; since he was present, the prize was awarded right away. It was fun!

Many thanks to the Meriden Amateur Radio Club, to John N1GNV president, Bill W1KKF who handled the prizes and the info booth and Paul K1SEZ program chair this year. Thanks to all of the committee members—it was a great show again this year!

Activity on the home front was high this month. Barb, K1EIR is back on the air from her location after many years thanks to the efforts of Pierre N1EZT, Jon N1BDF and

George WA1FLA. Pierre and Jon spent many hours designing a suitable 80 and 40 meter antenna that would work with her land configuration. That very night, Barb checked into every known traffic net and took traffic back to CT from outside the Section. She reports that everyone has been very helpful to her and is absolutely thrilled to be back on the air from her home. CW ops, look for her on 80 and 40! A big thank you to all involved!

Members of The Valley Amateur Radio Association handled the communications for the Wheeling and Able River Walk sponsored by The CT Chapter of The Spinal Cord Injury Association. Many thanks to all those who participated: Barb K1EIR, Jon N1BDF, Joe KA2EKA, Mark KB1SIX, Bill N1EGL, George WA1FLA John K1FBI and Betsey K1EIC. Amateur radio got great PR in the sponsor booklet handed out to all participants. The event was unique in that three of the communicators also participated in the walk! Many thanks to all those who participated; the weather seemed to get colder as the day wore on!

The Valley Club will meet this coming Tuesday at the Pine Rock Firehouse Shelton at 7:30 when Bob KB1FYL will speak on some aspect of radio astronomy.

Three members of the Stratford ARC and the Connecticut Radio Society participated in the annual JOTA (Jamboree on the Air) on Saturday October 16 from Strang Scout Reservation in Goshen CT during the Housatonic Council of the Boy Scouts of America Fall Camporee. The call sign of the station was W1CRS: The Connecticut Radio Society. .

Many thanks for doing this special event; it gives our service exposure to young people and that's really what's needed.

In other ARES news, John KB1QBZ has agreed to be EC of Stamford and Frank KB1IFX will relinquish that post and become the EC for Region 1 Red Cross. A warm thank you to both of you for taking on these leadership positions; it is very much appreciated. Thanks, too, to DEC Allan NN1H for recruiting these leaders.

### **A Lesson to Be Learned**

An old prospector shuffled into the town of El Paso, Texas leading an old tired mule. The old man headed straight for the only saloon in town, to clear his parched throat. He walked up to the saloon and tied his old mule to the hitch rail. As he stood there, brushing some of the dust from his face and clothes, a young gunslinger stepped out of the saloon with a gun in one hand and a bottle of whiskey in the other. The young gunslinger looked at the old man and laughed, saying, "Hey old man, have you ever danced?" The old man looked up at the gunslinger and said, "No, I never did dance... never really wanted to." A crowd had gathered as the gunslinger grinned and said, "Well, you old fool, you're gonna' dance now," and started shooting at the old man's feet. The old prospector, not wanting to get a toe blown off, started hopping around like a flea on a hot skillet. Everybody was laughing, fit to be tied. When his last bullet had been fired, the young gunslinger, still laughing, holstered his gun and turned around to go back into the saloon. The old man turned to his pack mule, pulled out a double-barreled shotgun, and cocked both hammers. The loud clicks carried clearly through the desert air. The crowd stopped laughing immediately. The young gunslinger heard the sounds too, and he turned around very slowly. The silence was almost deafening. The crowd watched as the young gunman stared at the old timer

and the large gaping holes of those twin barrels. The barrels of the shotgun never wavered in the old man's hands, as he quietly said, "Son, have you ever kissed a mule's ass?" The gunslinger swallowed hard and said, "No sir..... but I've always wanted to." There are two lessons for us all here: 1. Don't waste ammunition. 2. Don't mess with old people.

