



CAPERS

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Meeting: Friday, November 11 at 8 p.m.

Issue: November 2005

MESSAGE FROM THE PRESIDENT

At the October meeting Joe, AB1DO, gave an excellent program on software defined radio. Congratulations Joe.

The contest season is upon us again. I hope that all are taking the time to work the major contests and make at least a few good DX contacts. Even though we are near the solar minimum, many opportunities still exist to make excellent DX QSOs on the low bands (160 -30m). You will find it easier to work stations using CW and digital modes. You should be aware the frequency allocations on the low bands vary throughout the world. You need to become familiar with the band plans in order to maximize your DX success.

At the November meeting we will have a special speaker, Steve Ford, WB8IMY, the editor of QST and author of the HF Digital Handbook. Steve will discuss operating digital modes on HF. For those who are not as confident with CW, RTTY and PSK31 offer good DX opportunities. I have already earned DXCC – RTTY. Steve is very knowledgeable on this subject.

I encourage all members to attend the work meetings on Tuesday night (11 days after the regular meeting) at 8:00 p.m. at St. Paul's church. This is your opportunity to help set the agenda for the club. Programs, activities, equipment purchases, etc. are discussed and planned at this meeting.

I look forward to seeing you at the November 11 meeting.

73 de Frank, N8WXQ

Meetings

CARA's regular meetings are held on the second Friday of each month beginning at 8 p.m., at St. Paul's Church Hall, Brookfield Center, CT. Informal "rag chewing" begins at 7:30 p.m.

Food For Thought on Emergency Preparedness

by Bill N1TIW

"When disaster strikes, we're all going to be on our own for a minimum of 72 hours."

San Francisco Mayor Gavin Newsom as quoted in *Time* magazine, September 19, 2005 (Web site www.72hours.org)

I started thinking about doing this CARA Capers article after reading "How to Get out Alive" in the May 2, 2005 issue of *Time* magazine. I figured it would fit in with the "be prepared" emphasis of Amateur Radio. Then in the June 2005 issue of *World Radio* on page 34 there were some thoughts about emergency communications by Jerry Wellman, W7SAR. Finally we have hurricane Katrina and it's aftermath which prompted Mayor Newsom's remarks.

Most of this stuff we have all heard many times before so I will merely point up some things that struck me in each of the three articles listed above.

Starting with "How to Get out Alive"... In fires and airplane crashes "...people sometimes freeze when they need to flee." "Be a nerd- People who obey fire drills and read safety diagrams on airplanes have programmed their brains to escape." What else improves your chances of survival? Experience. One of the people on the 49th floor of the World Trade Center Tower 1

immediately left by the closest stairwell. Why? The year before he had escaped a house fire. Also, as a child in Peru he had been in an earthquake and then years later he was in several small quakes in Los Angeles.

Earlier this year I was on the 22nd floor of a hotel in Boston and decided to find the nearest stairwell. Interesting place. Large pipes with manual and automatic valves, and a few maintenance and housekeeping staff and some strange looks as I made my way to the ground floor.

W7SAR's article, "A good attitude makes the difference" went beyond the usual list of Go Kit contents. At the end of column two he gave the view of a friend of his on what makes an effective EmComm (Emergency Communication) group. "He said, it works best when you have people ready and in place to make it happen--with or without the EC being on scene to personally call the shots."



Until recently I was not that familiar with Go Kits and find it interesting what different people put in theirs. W7SAR lists the usual tools plus some less usual "tools" such as "about \$20 in quarters, another \$50 in bills, along with a gallon of drinking water and some food."

Finally there's Katrina. Emergencies of all kinds have some features in common. First it's not "if" it's "when". The statistical odds of

the specific situation vary but preparation and training ahead of time do not vary.

Meaningful Entry-Level License Privileges are Top Priority, ARRL Says

NEWINGTON, CT, Nov 1, 2005--The ARRL again has urged the FCC to provide meaningful operating privileges to entry-level Amateur Radio licensees, including access to HF, even if it doesn't want to create a new license class. Commenting in response to the FCC's July 9 Notice of Proposed Rule Making and Order (NPRM&O) in WT Docket 05-235, the League also stood by its stance that the Commission retain the 5 WPM Morse code requirement for Amateur Extra applicants, but do away with it for General applicants.



"Retaining Morse telegraphy as a requirement for only the Amateur Extra class license, in ARRL's view, places Morse telegraphy in a proper, balanced perspective," the League told the Commission October 31, the deadline to comment in the proceeding. Reply comments are due November 14.

The FCC's NPRM&O proposed eliminating the 5 WPM Morse code requirement for all Amateur Radio license classes but denied requests to create a new entry-level license class with limited HF privileges. The League said the FCC needs to finish the job of license restructuring it began in 1998 by reviewing operating privileges for all classes--especially at the first rung of the licensing ladder.

"The elimination of Morse telegraphy, absent a more thorough review of operating privileges in the Amateur Service, will not address the ascertained flaws in the only entry-level license class," the ARRL asserted, referring to the Technician license. "That license class is not attracting or keeping newcomers in its present configuration, and it needs fixing right now."

The ARRL argued that if the FCC will not create a new Novice class license as the League had suggested in its earlier Petition for Rule Making (RM-10867) in the proceeding, it should modify Technician operating privileges instead. The present licensing regime limits Technicians to VHF bands and above, "leaving newcomers to the Amateur Service isolated from their peers holding higher class licenses," the ARRL said. "The Technician class is, for too many, a 'dead end' to what might otherwise be an active, progressive interest in Amateur Radio, technical self-training and incentive-based educational progress in the many facets of the avocation."

The ARRL reminded the FCC that its restructuring plan enjoyed the support the two Amateur Radio licensees in Congress--Rep Greg Walden, W7EQI (R-OR) and Rep Mike Ross, WD5DVR (D-AR).

Eliminating the Morse requirement for General class applicants "creates an anomaly with respect to the Technician class license," the ARRL noted. "If the telegraphy requirement for the General class license is eliminated, the distinction between the Technician class licensee and the Technician Plus class licensee will have disappeared completely." Therefore, the League contends, there is a logical basis for affording Technician licensees entry-level HF privileges.

Those privileges would be very basic under the League's plan, which takes into account the FCC's proposal to adopt the ARRL's so-called "Novice refarming" plan in WT Docket 04-140. The ARRL had earlier proposed the

same privileges for a reconstituted Novice license.

Under the ARRL plan, Technicians would have telegraphy and data privileges on 3.55-3.7 MHz, 7.05-7.125 MHz and 21.05-21.20 MHz at 100 W output and on 28.05-28.3 MHz at 50 W output. The League wants the FCC to provide HF phone and image privileges to Technicians on 3.9-4.0 MHz, 7.2-7.3 MHz and 21.35-21.45 MHz at 100 W output, and on 28.3-28.5 MHz at 50 W.

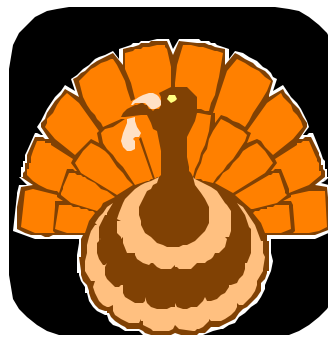
The time is right to take a look at the operating privileges of Amateur Radio license classes, the ARRL said in its filing, "because the entry-level license class is demonstrably neither attractive to newcomers nor encouraging in terms of retaining the interest of license holders."

To back up its assertions, the League pointed to surveys it conducted in 1992 and 2003. Nearly half of the licensees responding in the latter poll indicated that they were not currently active in Amateur Radio--up 30 percent from the earlier survey. "The number of inactive Technician class licensees is 46 percent," the ARRL noted, adding that more than a quarter of Technicians responding in 2003 said they'd never even been on the air.

The League pointed out that the FCC's proposed across-the-board elimination of the Morse requirement eliminates a simple mechanism for current Technician licensees to obtain HF operating privileges--passing the 5 WPM code exam.

If the FCC does nothing other than eliminate the Morse requirement for the General license, the ARRL commented, it would make no sense to continue to deprive Technician licensees the HF operating privileges that Tech Plus licensees now enjoy.

"To do otherwise is to draw a distinction that is entirely arbitrary," the League concluded.



CARA Standing Committees

Just a reminder to all members that these are the standing committees that help make CARA run. Our members and their ideas are our strength. Sign up for one of these committees if you have not already done so. Talk to any of the club officers at a regular meeting!

Repeater and Digital Equipment

- Repeater coordination
- Repeater maintenance
- Packet cluster maintenance
- Other digital equipment

Operating Activities

- Field Day- June 2005
- New England QSO Party – May 2005
- WACC
- Special event station or fall contest

Hamfest

- Plan and organize – September 2005
- Publicity

Membership

- Annual dues notification and follow up
- Annual new member drive

Education and Elmering

- Organize or sponsor class for entry-level license
- Organize Elmer support network for new hams

Organize two 3-person ARES deployment teams

Program Committee

Organize and arrange monthly program
Staff and Net Control for Sunday 7:30 p.m. CARA net
CARA CAPERS newsletter

**ARRL Holiday Toy Drive
Kicking Into Gear**

Toys already have begun showing up in Memphis, Tennessee, in response to the ARRL 2005 Holiday Toy Drive appeal. The



League has partnered with The Salvation Army for this year's effort to brighten the holiday season for children in the coastal areas of Alabama, Mississippi and Louisiana left homeless or displaced in the aftermath of hurricanes Katrina and Rita.

"As The Salvation Army continues to provide assistance to the victims of the largest natural disaster in modern US history, we are excited to partner with the ARRL in providing toys for children affected by hurricanes Katrina and Rita this holiday season," said Mark Jones, The Salvation Army's public relations director.

Because it still has the facilities to manage a large toy drive, The Salvation Army will handle the distribution end of the program. Its facility in Jackson, Mississippi, will coordinate distribution throughout the Gulf Coast region.

Country music artist Patty Loveless, D4WUJ, is the Holiday Toy Drive's national chairperson.

The collection point for the toys is in Memphis, Tennessee, where the League has secured a warehouse facility. Between now and December 10, the ARRL is encouraging ham radio operators throughout the US to purchase new, unwrapped toys for children ages 1 through 4 and send them with a QSL card to ARRL Toy Drive/The Salvation Army, 1775 Moriah Woods Blvd-- Suite 12, Memphis, TN 38117-7125.

Volunteers in Memphis will sort and stock the toys, and in early December, the toys will be transported to The Salvation Army facilities in hurricane areas that need help the most at that time.

Vanity Processing Could Be On Hiatus Until Late December

Thanks to Hurricane Wilma, the FCC likely will not be processing any vanity call sign applications until late December. The Wireless Telecommunications Bureau (WTB) halted vanity processing on or about September 23 after realizing that filing and regulatory deadline extensions for licensees in certain states affected by hurricanes Katrina and Rita could affect the vanity



program. This week, the FCC announced an additional extension--until December 22--for licensees adversely affected by Hurricane Wilma.

Because all three extensions apply to Amateur Radio's two-year "grace period," they could have an impact on vanity call sign processing. A WTB spokesperson said that the Wilma deadline extension probably would have the same effect on vanity processing as the previous two.

Nets

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

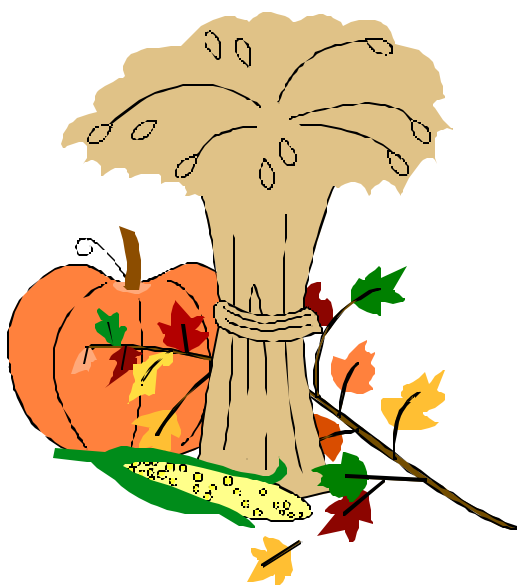
WestConn Net: Nightly at 8:30 p.m. 147.18+ (PL 114.8)

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 Area One (North) VHF Net: 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).



W1AW 2005/2006 Winter Operating Schedule

Morning Schedule:

Time	Mode	Days
1400 UTC (9 AM EST)	CWs	Wed, Fri
1400 UTC (9 AM EST)	CWf	Tue, Thu

Daily Visitor Operating Hours:

1500 UTC to 1700 UTC - (10 AM to 12 PM EST)
 1800 UTC to 2045 UTC - (1 PM to 3:45 PM EST)

(Station closed 1700 to 1800 UTC (12 PM to 1 PM EST))

Afternoon/Evening Schedule:

2100 UTC (4 PM EST)	CWf	Mon, Wed, Fri
2100 " "	CWs	Tue, Thu
2200 " (5 PM EST)	CWb	Daily
2300 " (6 PM EST)	RTTY	Daily
0000 " (7 PM EST)	CWs	Mon, Wed, Fri
0000 " "	CWf	Tue, Thu
0100 " (8 PM EST)	CWb	Daily
0200 " (9 PM EST)	RTTY	Daily
0245 " (9:45 PM EST)	VOICE	Daily
0300 " (10 PM EST)	CWf	Mon, Wed, Fri
0300 " "	CWs	Tue, Thu
0400 " (11 PM EST)	CWb	Daily

Frequencies (MHz)

 CW: 1.8175 3.5815 7.0475 14.0475 18.0975
 21.0675 28.0675 147.555
 RTTY: - 3.625 7.095 14.095 18.1025 21.095
 28.095 147.555
 VOICE: 1.855 3.990 7.290 14.290 18.160
 21.390 28.590 147.555

Notes:

CWs = Morse Code practice (slow) = 5, 7.5, 10, 13 and 15 WPM
 CWf = Morse Code practice (fast) = 35, 30, 25, 20, 15, 13 and 10 WPM

CWb = Morse Code Bulletins = 18 WPM

CW frequencies include code practices, Qualifying Runs and CW bulletins.

RTTY = Teleprinter Bulletins = BAUDOT (45.45 baud) and AMTOR-FEC (100 Baud). ASCII (110 Baud) is sent only as time allows.

Code practice texts are from QST, and the source of each practice is given at the beginning of each practice and at the beginning of alternate speeds.

On Tuesdays and Fridays at 2330 UTC (6:30 PM EST), Keplerian Elements for active amateur satellites are sent on the regular teleprinter frequencies.

A DX bulletin replaces or is added to the regular bulletins between 0100 UTC (8 PM EST) Thursdays and 0100 UTC (8 PM EST) Fridays.

In a communications emergency, monitor W1AW for special bulletins as follows: Voice on the hour, Teleprinter at 15 minutes past the hour, and CW on the half hour.

FCC licensed amateurs may operate the station from 1500 UTC to 1700 UTC (10 AM to 12 PM EST), and then from 1800 UTC to 2045 UTC (1 PM to 3:45 PM EST) Monday through Friday. Be sure to bring your current FCC amateur radio license or a photocopy.

The W1AW Operating Schedule may also be found on page 100 in the November 2005 issue of QST or on the web at, <http://www.arrl.org/w1aw.html>.

Soldering Tips

Soldering is an essential skill that every ham should be familiar with. The following tips on good soldering techniques are excerpted from information available at

<http://www.aaroncake.net/electronics/solder.htm>

Equipment

Soldering irons are the heat source used to melt solder. Irons of the 15W to 30W range are good for most electronics/printed circuit board work. Anything higher in wattage and you risk damaging either the component or the board. Note that you should not use so-called soldering guns. These are very high wattage and generate most of their heat by passing an electrical current through a wire. Because of this, the wire carries a stray voltage that could damage some delicate circuits and components. The choice of solder is also important. The best solder for electronics work is a thin rosin core solder. Remember that when soldering, the rosin in the solder releases fumes. These fumes are harmful to your eyes and lungs. Therefore, always work in a well ventilated area. Hot solder is also dangerous. Be sure not to let it splash around because it will burn you almost instantly. Eye protection is also advised.

Surface Preparation:

A clean surface is very important if you want a strong, low resistance joint. All surfaces to be soldered should be cleaned with steel wool and some sort of solvent. Lacquer thinner works well. Don't neglect to clean component leads, as they may have a build up of glue from packaging and rust from improper storage.

Component Placement

After the component and board have been cleaned, you are ready to place the component on the board. Bend the leads as necessary and insert the component through the proper holes on the board. To hold the part in place while you are soldering, you may want to bend the leads on the bottom of the board at a 45

degree angle. Once you are sure that the component is properly placed, you can move on to the next step.

Apply Heat

Apply a very small amount of solder to the tip of the iron. This helps conduct the heat to the component and board, but it is **not** the solder that will make up the joint. Now you are ready to actually heat the component and board. Lay the iron tip so that it rests against both the component lead and the board. Normally, it takes one or two seconds to heat the component up enough to solder, but larger components and larger soldering pads on the board can increase the time.

Apply Solder And Remove Heat

Once the component lead and solder pad has heated up, you are ready to apply solder. Touch the tip of the strand of solder to the component lead and solder pad, but **not** the tip of the iron. If everything is hot enough, the solder should flow freely around the lead and pad. Once the surface of the pad is completely coated, you can stop adding solder and remove the soldering iron (in that order). Don't move the joint for a few seconds to allow the solder to cool. If you do move the joint, you will get what's called a "cold joint".

Cold Solder Joints

A cold joint is a joint in which the solder does not make good contact with the component lead or printed circuit board pad. Cold joints can occur when the component lead or solder pad moves before the solder is completely cooled. Cold joints make a really bad electrical connection and can prevent your circuit from working.

Cold joints can be recognized by a characteristic grainy, dull gray color, and can

be easily fixed. This is done by first removing the old solder with a desoldering tool or simply by heating it up and flicking it off with the iron. Once the old solder is off, you can resolder the joint, making sure to keep it still as it cools.

Tips and Tricks

Soldering is something that needs to be practiced. These tips should help you become successful so you can stop practicing and get down to some serious building.

1. **Use heatsinks.** Heatsinks are a must for the leads of sensitive components such as ICs and transistors. If you don't have a clip-on heatsink, then a pair of pliers is a good substitute.
2. **Keep the iron tip clean.** A clean iron tip means better heat conduction and a better joint. Use a wet sponge to clean the tip between joints.
3. **Double check joints.** It is a good idea to check all solder joints with an ohm meter after they are cooled. If the joint measures any more than a few tenths of an ohm, then it may be a good idea to resolder it.
4. **Use the proper iron.** Remember that bigger joints will take longer to heat up with a 30W iron than with a 150W iron. While 30W is good for printed circuit boards and the like, higher wattages are great when soldering to a heavy metal chassis.
5. **Solder small parts first.** Solder resistors, jumper leads, diodes and any other small parts before you solder larger parts like capacitors and transistors. This makes assembly much easier.

GOT NEWS?

Have a news story, a feature article or a "for sale" item for the CAPERS? Just send your item to the editor, KA1JDD, c/o barry at connollyco.com.