



# CAARA Newsletter



AN ARRL AFFILIATED CLUB

JUNE ISSUE- 2012

## President's Corner

by Stan-W4HIX



May was another busy month. I want to thank everyone who helped out on the Twin Lights Half Marathon and the YuKanRun 5K. CAARA did its usual excellent job that was very appreciated by the race organizers. If haven't worked one of these events, please consider it—it is very rewarding.

A personal note, my daughter Katie graduated from Clark University this month and she's spending a month in Luxembourg to finish up language requirement. Sandy and I are very proud of her accomplishment.

The communications trailer continues making progress. Moving the gear into the trailer has already helped free up space in the clubhouse, and will definitely help with the overall organization of the gear. I've realized that with this organization, we have a resource that we can provide to the City of Gloucester of a mobile headquarters—tents, tables, chairs, AC power and communications.

Field Day preparation continues. Again, the trailer allows us to prepare the gear without taking up all of the space in the downstairs. Computers for the networked logging are being prepared, and it looks like we'll have one or two hotspots. Dean KB1PGH has put a lot of work into public relations for the event, and there is a possibility of getting a 100' freestanding tower for the event. The menu looks good, so all we need is good weather and we should have a great event.

One more item that's going on is a revamping of the 2<sup>nd</sup> floor. We're looking at it from a "start from scratch" basis. I'm excited—I think we'll be able to create a great operating/working space.

See you around the clubhouse.

## Clerk's Corner



Well we all know the big ham radio event that happens every year on last full weekend in June and that is the ARRL Field Day event. Field day started in 1933 and has grown to a point where about 35,000 amateur radio operators all across North America participate in the event. If your new to amateur radio "Field Day" is part contest, part emergency communications exercise and part public outreach event where we demonstrate what we are and what we do to the general public. The most important thing to remember though is that the primary focus every field day is to have fun. Field day is a great social gathering event for hams. All hams make field day whatever they want. You can take it seriously or relax. Field day is amateur radio clubs trying to get as many contacts as possible or a single ham going camping and setting up QRP and giving away points. If your wondering more on the complete history of the Amateur Radio Relay Leagues Field Day there's an excellent article in the 1999 QST magazine written by Rol Anders K3RA and it is called, "Field day- A Mirror of Amateur Radio History". Of course with Field day comes with our responsibility as hams to make the public more aware of what we do. It's a different world now where our hobby is competing with the internet, video games and the virtual world of computers to grab hold of peoples attention. For a couple of decades now the naysayers keep trying to ring the death knell of amateur radio but the facts show otherwise. Back in 1991 just as cellphones, computers and the internet were coming of age there were 494,000 amateur radio licenses in the United States. Now fast forward 20 years to September 2011 and there are now over 700,000 hams all across America. If you think about that's pretty good considering the aging population in America. Sure, greater numbers are one thing but experienced operators are better and that's where Field Day comes in. I highly recommend that all CAARA members as possible to come to field day and get on the radio.

(continued on page 3)

**CAARA Newsletter**  
**Cape Ann Amateur Radio Association**  
*6 Stanwood Street*  
*Gloucester, MA 01930*

CAARA Newsletter is a monthly publication of the Cape Ann Amateur Radio Association (CAARA). It is the policy of the editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio and of interest to CAARA members, and space is available. Material is accepted on a first come, first serve basis. Articles and other materials may be submitted by internet to Jon at k1tp@arrl.net. If possible, material should be in Word format. Material may also be submitted as hard copy to Jon-K1TP or any Club Officer.

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Jon Cunningham- K1TP Editor  
Dean Burgess- KB1PGH Club Reporter

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## Welcome to CAARA:

CAARA, an ARRL affiliated club, operates the 2 meter W1GLO repeater on 145.130 MHz with antennas located on the Cingular tower in the Blackburn Industrial Complex in Gloucester Massachusetts. It has an average effective radius of 60 miles, and serves Eastern Massachusetts, Cape Cod, Rhode Island, Southern New Hampshire, and maritime mobile stations. CAARA also operates the W1GLO repeater on 224.900. The former W1RK 443.700 repeater with antennas located in Magnolia is now located at the CAARA clubhouse and has a very limited range.

The Association is one of the few amateur radio clubs that has its own clubhouse. Located at 6 Stanwood Street in Gloucester, it includes a permanent HF station with rotating beam and vertical antenna along with a 2 meter packet station and 2 meter voice and 220 MHz transceivers.

Amateur radio exams are held on the second Sunday of each month at 10:00AM at the CAARA clubhouse. Anyone who is considering a new license or an upgrade, is welcome to test with us. There is no pre-registration necessary. Contact the head of our VE team Bob Quinn if you have any questions about monthly testing.

Monthly member meetings are held on the first wednesday of each month at 7:30 PM except for July and August.

Each Sunday evening at 9:00pm, the club operates a 2 meter net on 145.130. This is an open and informal net which disseminates club news and prepares operators for emergency communications work. All are invited to check into the net as club membership is not a requirement.

**CLERK'S CORNER** (continued from page 1)  
Especially to those who just earned their Technician Class Licenses or haven't been on the air in a while. While I'm at I might as well give everyone another task. Please help spread the word of Field Day which will be Saturday, June 23rd and Sunday, June 24. Please invite as many people as possible and that includes your family members. Especially those under 18. Bring them by and let them get on the air on the GOTA station. With all of our technology we can easily prove that it is not their grandfather's radio anymore. See you at Field Day!

Submitted by:

Dean Burgess- *CAARA Clerk and ARRL EMA Public Information Officer.*

### **MAY MEMBER'S MEETING**

CAARA held its monthly members meeting on Wednesday, May 2nd at the clubhouse. For this meeting we watched this DVD of "**W3AO and the Last Big Field Day**". This video was made back in 2004 and featured W3AO's quest to make 50 Alpha, or 50 stations for field day. The next year the ARRL made the ruling that the maximum number of stations will be 20 Alpha. I would highly recommend viewing



this video for the logistical reasons alone. **CQ Communications** has announced the launch of the CQ Industry Insider, an e-mail newsletter for the hobby radio industry. The newsletter will report on news and trends in the amateur radio, scanning and listening marketplace, as well as company news and announcements, marketing tips and an idea exchange for spotlighting concepts for new products and

services. According to Publisher Dick Ross, K2MGA, the goal in publishing the Industry Insider is to help businesses in the amateur radio industry thrive and grow by sharing industry news and trends, marketing tips and product ideas. The Editor of the CQ Industry Insider is Jason Feldman, who currently works with both Popular Communications and WorldRadio Online, and is Director of Pop'Comm's monitoring registration program. He came to CQ with considerable experience in producing e-mail trade newsletters.

### **High Altitude Balloon Crossband Repeater Payload Northeast USA**

Amateur radio operators in New England and northern Atlantic coast in the US and Canada are invited to listen and operate via the crossband repeater payload on a high altitude balloon flight from Hermon, Maine. Launch is planned for June 2, 2012 at about 0830 EDT (UTC-4) by members of the **Pine State Amateur Radio Club** as one of the events during the 25th Annual Bangor Hamfest at Hermon High School. The club is working with the University of Maine Electrical and Computer Engineering Department to plan and execute the flight.

The crossband repeater frequencies are:

Uplink: 147.570 MHz

Downlink: 446.100 MHz

The payload will also include APRS for position and altitude tracking. University of Maine tracking information can be found at: <http://eece.maine.edu/umhab/>

Coverage for the VHF/UHF repeater is estimated to be more than 450

miles. Stations as far away as western New York, Long Island, all of New England, and Maritime Canada should be able to work it.

The PSARC High Altitude Balloon team will award a certificate for the station furthest away from the balloon to make contact through the repeater. Please join in to help set a distance record for the repeater.

The latest launch information and more details are available on-line:

<http://www.n1me.org/Hamfest.php>

<http://eece.maine.edu/umhab/> (which will be updated shortly before the launch.)

**Steve Jordan, KD1OM,**  
President PSARC

## KB6NU releases 21 Things to Do After You Get Your Amateur Radio License

21 Things to Do After You Get Your Amateur Radio License is now available for the Kindle and Nook.

Written for the new ham—or the ham that hasn't really

been all that active lately—its 21 chapters include:

Join a club, Join the ARRL, Find an Elmer, Buy a radio, Get on the air, Set up a shack, Buy some tools, Buy a digital multimeter (DMM), Build an antenna, Build a kit, Go to a hamfest, Learn the lingo, Subscribe to mailing lists, blogs, and podcasts, Upgrade to General, Go to Field Day, Learn Morse Code, Get to know your (ham) neighbors, Buy QSL

cards, Join SkyWarn, ARES, or RACES, Participate in a contest, and last but not least, HAVE FUN!

### 21 Things to Do After You Get Your Amateur Radio License



Dan Romanchik, KB6NU

**The ARRL has launched an International Membership** with a digital version of **QST** magazine for \$39 (£25).

QST is one of the world's leading amateur radio magazines and the digital version should have an appeal to English speaking radio amateurs around the world. It could be that in certain countries some amateurs may prefer the digital QST to locally produced publications.

According to ARRL the new format offers several advantages including enhanced content, timely access, and a more interactive experience.

The digital edition is easy to navigate; flip pages from cover-to-cover, zoom in/out, search (full text), print and share, and follow live hyperlinks. Each issue will include unique, digital-edition-only content—video, audio features and extra content.

The ability to print the magazine means you can use free utilities, such as CutePDF Writer, that appear as a printer to create PDF's, however, the quality isn't that good.

As well as the latest issue ARRL members can access the digital QST archive which starts with the January 2012 edition.

QST Magazine

<http://www.arrl.org/qst>

## CLUB NEWS



CAARA President Stan Stone W4HIX displays a Motorola XTS 1500 VHF Portable radio that he is currently programming for the city of Gloucester's Emergency Operation Center. The city of Gloucester purchased these radios through a FEMA grant. These handhelds cost about \$1000 per radio and can also cover the VHF amateur radio bands.



Here's one of the Model 243 IBM Thinkpads that will be used during the station logging coming up on Field Day. These Thinkpads have new Wi-Fi Dongles and will be configured to operate each station HF rig with the NN1M logging software by CAARA Vice President Dick Macpherson WB1W. CAARA President Stan Stone purchased these refurbished laptops and donated them to the club. Thanks Stan for the donation and Dick for all the hard work getting field day logging ready!



I noticed this “mini” beam attached to an emergency vehicle while walking around Nearfest on May 4. It is a Mosley triband (10-15-20 meter) beam that can handle 500 watts ssb and can be taken apart in 5 minutes according to the hams that own it. They did modify it for quick dismantling for their emergency vehicle which they also use for Field Day. The cost range is about \$500 and I thought the construction was a little on the weak side. They claim it can handle winds of 60+MPH if no icing is involved. It might be a good choice for CAARA for Field Day and our own Emergency trailer.



40 feet Rohn Tower being erected at Nearfest by the “falling derrick method”....it was interesting.

## CAARA PROMOTES AMATEUR RADIO !!

CAARA Clerk and ARRL Eastern Mass Public Information Officer Dean Burgess KB1PGH presents the ARRL Amateur radio License Manual on behalf of the club as a donation to the Rockport Public Library. Last month the club donated the same book to the Gloucester Library and we are now looking for donations to buy ARRL License Manuals for the Essex and Manchester Public Libraries. If you would like CAARA to continue donating amateur radio reference material to local public libraries you can send your monetary donation to the CAARA Clubhouse 6 Stanwood Street Gloucester, Mass 01930 and write care of "Book Fund" on the envelope and check. All contributions will be greatly appreciated.



On Saturday April 28th 2012 the Cape Ann Amateur Radio Association sponsored a "Tech in a Day" course at the Lanesville Community Center. The course was led by Caara President Stan Stone W4HIX and this all day course focused on 6 separate study periods where the candidates memorized the FCC Amateur Technician Class exam question and answer pool. There were 19 candidates and 14 passed their exams. There will be another "Tech in a Day" course planned for the fall of 2012.



CAARA Club President Stan Stone W4HX and ARRL VE Liaison Bob Quinn WV1A discuss the upcoming Tech in a Day examinations at the Lanesville Community Center on Saturday, April 28th.



Prospective hams take their FCC License Exams.

**CAARA ARRL Volunteer Examiners** grade the FCC Technician Class License Exams. We would like to thank the following VE's for helping grade the exams:

- Bob Quinn WV1A
- Stan Stone W4HIX
- Hank McCarl W4RIG
- Dean Burgess KB1PGH
- Ruth Hodsdon WW1N
- Dirk Van Lichtenberg W1DVL
- Ron Beckly N1RJB
- Scott Harrison KD1Q
- Chris Jasper NZ1AF





CAARA member Dean Burgess-KB1PGH gave the “**Tech in a Day**” candidates an outside demonstration of HF portable operation on behalf of the club. The Buddipole has been set for 20 meters SSB and ready for operation.

Here’s a list of contacts that were made on 20 meters with the Buddipole dipole set at 19 FT and 100 watts.

- 1 KB9WLF SW Illinois
- 2 HB9ESS Switzerland
- 3 HB9QT Switzerland
- 4 N4WZ Florida-QSO party
- 5 W4MWM Georgia
- 6 KB1RXA Georgia Mobile
- 7 WG0AT Mt Herman Colorado at 9000 FT elevation. Portable, Buddipole to Buddipole contact
- 8 N4FCG Florida-QSO Party
- 9 HB9CA Switzerland

Here’s a closer look of the portable HF set up with the Icom IC 7000 HF Mobile rig which is powered by a 12 Volt Deep Cycle marine battery which is fed through an MFJ Battery Booster to bring the proper voltage to 13.8 Volts which the Icom needs to operate at 100 watts.



# W1GLO works NE QSO PARTY !!!

Members of the Cape Ann Amateur Radio Association worked the yearly New England QSO Party under the club call W1GLO. This yearly contest was held during the weekend of May 5th and 6th.



Rick Maybury WZ1B  
and Larry Beaulieu AJ1Z  
copy CW on 20 meters  
during the contest



Dave Macculloch  
KB1VZR and Pete  
Chadbourne K1LJO  
work the SSB station on  
40 meters on the Yaesu  
FT 897D





**NEARFEST Fleamaket at Deerfield Fairgrounds, NH on May 4-5:** I camped out with about 20 other New England hams from the 3864 afternoon SSB group. We played radio, cooked out, looked at lot's of used gear, and dodged a few raindrops.



# THE BIG CLUB PROJECT

The Board of Directors has determined that the 2nd floor is in dire need of some organization and oversight. To that end, the “2nd Floor Committee” (for lack of a better name) has been formed, and the Board has appointed Dick Ober, K1VRA, as Chair.

This new committee has been tasked to coordinate the efforts of those people already involved, as well as with recruiting new people, in making good use of the area. When appropriate, the chairperson will bring the Committee member’s ideas to the Board for approval, and to be granted funding where needed, of projects deemed in the interest of the club. Goals, both time and functional, will be set and adhered to - this is not just another pie-in-the-sky idea that will go nowhere. It has the full backing and support of the Board.

The goal is to improve the area for ham radio operations, bringing organization and stability, making sure there is sufficient power/outlets available, grounding buses, coordinate PC integration and networking, making the most of the resources available to us and, most of all, to create an area that is useful, educational and user-friendly for all club members, not just the few cognoscenti who built it.

We would like to create a cadre of “Elmers” to make sure new (and potential) members are “brought into the fold and shown the ropes” of Amateur Radio in a coordinated and creative manner. In addition, we want to create an area we can all be proud of, one to “show off” to visitors, city officials, etc., and one that may be pressed into emergency service at a moment’s notice.

In the beginning, we will be creating 3 to 4 separately functional radio stations. While most types of operation will usually be available to any station, one station might be specifically oriented toward Morse Code operation, and as such it will have, for example, the rig with the best CW filters installed in it, the best key and keyer, etc. Another station might be oriented toward the digital modes and will have equipment assigned to it most suitable for that purpose. Yet another would be set up to favor phone operation, and will have the best microphones, outboard compressors, etc. assigned to it. A VHF/UHF station could be added, as well.

Some of the club members have expressed interest in creating an “Antique” or “Old-Time” radio station utilizing some of our “vintage” gear. We hope to be able to accommodate those interests, too.

This is not to say that CW operation will not be available to the other stations. They will most certainly have a key/keyer available to them at all times, and the CW and digital stations will be equipped with a mic, etc. The idea is to create the BEST environment for a specific use and secondarily, other modes will work well, too. This way, we could host a CW or phone contest operation utilizing some or all of the stations simultaneously, without having to scrounge equipment.

Deciding which equipment to place in each specific area will be determined by the group. This will change from time-to-time, depending on new projects, equipment acquisitions, etc., and by general agreement of the committee members. The goal here is stability. Ultimately, we want to be able to depend on this area not only for member’s use, but to be ready for emergency operation AT ALL TIMES!

Other areas we will create will be devoted specifically to repair and testing of radios and other equipment. Spare equipment, parts storage, etc. will all be integrated into the new design.

We hope this new organization will entice some of the members who have not been involved in the past, and that they will feel more comfortable stepping up and participating in the design, creation, and eventual operation of this area. It promises to be a rewarding and fun project. Anyone seriously interested in taking on some of the idea work, design and/or construction, or who wishes to take on a role as a club Elmer, is welcome to participate. If you don’t think you can spare much time, even casual participation is welcome. This is a club function.

Please contact Dick, K1VRA ([dick@k1vra.com](mailto:dick@k1vra.com)), or any other member of the board to find out how you can contribute.



# SHACK OF THE MONTH: Dave - KD1NA



Here are the pictures of my stations. (above) The main station consists of the following: On the right; Elecraft K3 transceiver. LP-100A SWR and power meter. RF Space SDR-IQ Software Defined Receiver (Used for the panadaptor display). On the left; KPA500 Linear (Elecraft) LDG AT-600Pro Autotuner (Soon to be replaced by an Elecraft KAT500 Tuner)

Antennas: (left) Tennadyne T6 Log Periodic Cushcraft 3 element 6 meter beam. Diamond 2 meter/ 440 vertical.



The Workshop Station consists of the following: Yaesu FT450D. (Soon to be replaced by an Elecraft KX3). Heathkit HW101. Heathkit SB220 Linear. MFJ antenna tuner. 73 Dave KD1NA

## CLUB EMERGENCY TRAILER GETS NEW TIRES

by Jon- K1TP



On a dreary Wednesday afternoon, I caught up with Jake- K1LDL and we changed the tires on the new Emergency Trailer. The trailer had sat around for some time and the tires were all dry rot, so the city of Gloucester purchased a new set of tires and rims from Foster's Eastern Tire in Gloucester. What a pit crew we would have made for some Indy Car, with me on the jack and Jake on the air gun, we had the job done in ten minutes.....

## **Active Amateur Radio Op Don Keith, N4KC Publishes New Novel; Movie Based On Book In Pre-Production:**

Active amateur radio operator Don Keith, N4KC, will publish his latest novel and 24th book July 4, 2012. **FIRING POINT** (Signet/Penguin, 704 pgs.) is a taut, fast-paced thriller, set in Russia and beneath the polar ice pack, and tells the story of an American nuclear submarine crew and a team of Navy SEALs who are called upon to rescue the kidnapped Russian president. In the process, they will attempt to avert World War III.

**FIRING POINT** was co-written with former submarine skipper George Wallace and is the duo's second novel together. The first, **FINAL BEARING**, was a national best-seller and is still available wherever books are sold, including a new release as a Kindle eBook from Amazon.com.

The latest novel has also been optioned by Relativity Films (Act of Valor, Social Media, The Fighter) and is in pre-production as a major motion picture. The film will be produced by Neal Moritz (the Fast and Furious films, 21 Jump Street, I Am Legend, xXx: State of the Union) with a 2013 release planned.

Keith was first licensed as an amateur radio operator in 1961, when he was 13 years old. He is an American Radio Relay League member and holds the Amateur Extra class license. He is an active DXer and contesteer and enjoys writing articles about the hobby and encouraging newcomers to ham radio. Many of his articles on the hobby appear on his radio web site: [www.n4kc.com](http://www.n4kc.com).

N4KC has written books on such subjects as college football—including a biography of legendary coach Paul “Bear” Bryant—NASCAR racing, broadcasting, and several books on submarines and World War II history. The Naval Submarine League recently declared Keith to be “the most prolific historian of U.S. submarine history.” His book **THE ICE DIARIES** told the story of the historic voyage of USS Nautilus, the world's first nuclear-powered vessel, beneath the polar ice pack to the North Pole in 1958. That book was co-written with the commander of the submarine who took her there, the late Captain William Anderson. The book was submitted for consideration for the Pulitzer Prize.

The fiftieth anniversary of that remarkable feat led

Keith to put amateur radio special event station N9N on the air from Historic Ship Nautilus and the Naval Submarine Force Museum in Groton, Connecticut, in August 2008. That effort led to over 2,000 contacts with stations in all fifty states.

Keith's latest historical work is **UNDERSEA WARRIOR**, the inspiring biography of World War II's first true submarine “ace,” the remarkable and controversial Dudley “Mush” Morton and his storied sub, the Wahoo. He was a recent guest on a segment of cable television network C-SPAN's “Book TV” to discuss that book.

For more information on Don Keith N4KC and his works, visit [www.donkeith.com](http://www.donkeith.com).

### **Deputy Fire Ch. Miles Schlichte turned in his resignation**

As many of you are probably aware, Deputy Fire Ch. Miles Schlichte turned in his resignation as the Gloucester Emergency Management Director, effective June 30th. Gloucester has chosen a new fire chief from Michigan. Miles has resigned because he was performing two full-time jobs, but only receiving a small stipend for the emergency manager's position, and also to clear the way for the new chief to establish his own EM structure. The city administration has been reluctant to invest in a emergency management department, so Miles has done a tremendous amount with little or no money. Miles was able to repurpose the trailer we now have—otherwise it would still be in the DPW yard today.

Miles will remain the city liaison to CERT. So how does this affect CAARA? I don't think we'll know for quite a while. Miles was very effective at recruiting and integrating volunteers into the emergency management of Gloucester, much more so than recent fire chiefs. CAARA has been responsible for communications support at the Gloucester EOC, and we will have to meet with the new fire chief to determine his position on this.

Personally, I feel Miles' resignation will set back the progress made in the EOC. I believe I understand why he has taken this position, and I think it is a big loss for the City. I will keep the membership posted as we work out our evolving relationship with the City.

Stan  
W4HIX

## Done! by Larry W2LJ

The paddles are done. The assembly was in the class of “Easy-peasy-lemon-squeezy” territory. And assembly time was all of about a 1/2 hour or so.

The instructions provided by Doug Hauff were superb and easy to follow. The hardest part, installing the compression spring was no big deal at all. Slipped one end of the spring over one of the spring retainer screws and used a tweezer to finagle the other end over the other screw. No launching into orbit or getting lost. Viola! Kit is about \$45.00



What I like most about these are:

- 1) Materials – nice grade of aluminum.
- 2) Weight – miniscule.
- 3) Size – Super small; but yet not to the point where these are difficult to use. And I can be ham fisted, at times.
- 4) Ease of adjustment – Here’s the best part. I like my paddles to have MINIMUM arm movement. There should be no “clacking” and the closer I can get the feel to compare to a touch keyer the better. I succeeded here with the DCP. The adjustment screws have a fine enough thread pitch where this was easy to attain. The only thing that I have to say that is negative, is that when you have the paddles attached to your radio (and it is on), you have to be careful about how you pick these up if you want to move them. Your first inclination will be to reach down (or over) and just grab the key with your hand. If you do it that way, you will most likely start inadvertently sending dits and dahs. Like I did – several times. Oops! That minor inconvenience being noted, I would give these paddles a 5 out of 5 star rating. For their intended use, these paddles will more than fit the bill.

Now all I have to do is figure out some kind of leg mounting scheme.

72 de Larry W2LJ

QRP – When you care to send the very least!

## Discover Digital QST!

If you’re an ARRL member, you now have access to the new digital edition [http://www.nxtbook.com/nxtbooks/arrl/qst\\_201206/index.php](http://www.nxtbook.com/nxtbooks/arrl/qst_201206/index.php) of the June 2012 issue of QST. It is available to all ARRL members at no cost. All you need to do is log on to the ARRL website. Also available: digital editions of the January through May 2012 issues. You will find links to all the digital editions on our website <http://www.arrl.org/qst/>. But wait — there’s more! All ARRL members now also have access to every issue of QST via the Periodicals Archive <http://www.arrl.org/arrl-periodicals-archive-search> — from the first issue, published in December 1915, through the December 2011 issue. You’ll find more information about the digital edition in the FAQ (frequently asked questions) section. We hope you enjoy the new digital editions of QST. Unless you have chosen to opt out <http://www.arrl.org/QST-Print-Edition-Opt-Out-Form> of the print edition, you will continue to receive QST in the mail each month.

## History This Week

*A look back at events that made history **this week** - compiled by the Summerland Amateur Radio Club of Lismore, NSW*

**780 BC** First total solar eclipse reliably recorded by Chinese

**1869** Voting Machine patented by Thomas Edison

**1872** Mahlon Loomis patents wireless telegraphy

**1879** First electric railway opens at Berlin Trades Exposition

**1896** First car accident occurs, Henry Wells hit a bicyclist (NYC)

**1910** First roundtrip flight over the English Channel (C.S. Rolls, England)

**1977** First personal computer, the Apple II, goes on sale

**1785** Benjamin Franklin announces his invention of bifocals

**1844** First telegraphed news dispatch is published in Baltimore Patriot

**1844** Samuel F.B. Morse completes first telegraph line

**1919** Charles Strite patents pop-up toaster

**1946** Patent filed in US for H-Bomb



## **Rochester Hamfest 2012: *Here we GROW again!***

**[Sponsored by the Rochester Amateur Radio Association](#)**

We outgrew our previous location and we didn't like relying on the weather; so we moved to become a huge indoor event - still only \$5.00! If you can only make one big hamfest this summer we're sure you won't be disappointed at the newest Rochester Hamfest!

**When: June 30, 2012 (6:30am - 4pm) - Last chance Auction starts at 2pm.**

**Where: [Rochester Institute of Technology Campus \(Close to the Thruway Click for Directions\)](#)**

### **Highlights:**

- **WEATHERPROOF!**
- 60,000sf of beautiful INDOOR air-conditioned space for Commercial Vendors and Flea Market
- Outdoor tailgating available on pavement
- Raffle prizes include: Five (5) dual band hand held radios, gift certificates, and more!

### **Tickets and Attendance**

All at the same low prices!

- Admission: \$5 - (FREE for RaRa members & kids)
- Indoor Flea Market Space: \$5 - (FREE for RaRa members)
- Table and chair rental \$10.00 (Note: Only available by advanced reservation **before June 10th!**)
- Outdoor Tailgating: \$5 - (FREE for RaRa members)

Save time and \$\$\$ - Get your tickets and reserve your space now!

Don't wait in line: Advance ticket holders can use "Express Check-in lanes".

## Yaesu FT1D Digital Handheld

One of the most eagerly awaited products at Dayton Hamvention was the new Yaesu FT1D digital and FM handheld.

It has, for an Amateur Radio rig, a number of innovations:

- A microphone that uses a mini-USB plug and has a built-in camera for low resolution (320x240) pictures,
- An 80 character group short messaging facility
- 9600 bps data transfer
- Micro-SD card slot
- E-GPS facility

Although the optional extra microphone has a camera there appears to be no way to display the pictures on the radio which some may see as reducing its usefulness.

The use of 9600 bps with 12.5 kHz channel spacing (is it 10 kHz in Japan?) was a surprise. Some had expected it to support 5 or 6.25 kHz channel spacing with a resultant data rate of 4800 bps (digital speech using an AMBE vocoder only requires a 3600 bps data rate).

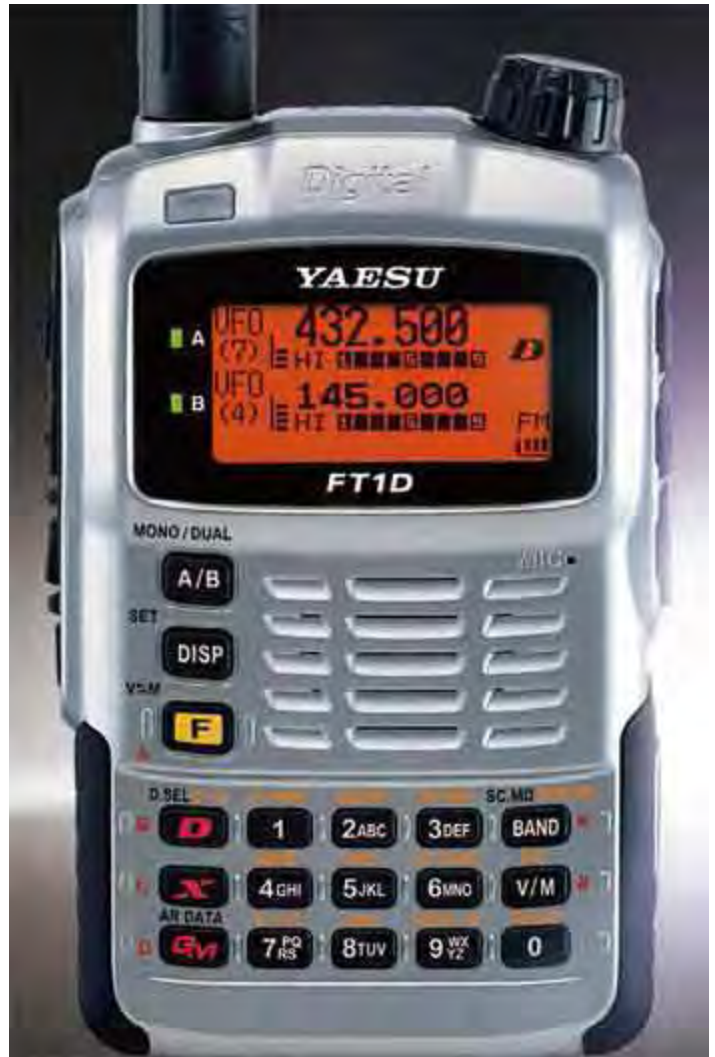
The modulation used is what Yaesu describes as C4FM otherwise known as 4 level FSK or 4-FSK and is the same as that used for Digital PMR-446 equipment. 4-FSK has advantages over other types of digital modulation such as GMSK.

Both ICOM and Kenwood have been producing 4-FSK equipment for the PMR market since 2007 so in some ways it's surprising that Yaesu beat them both in releasing an amateur version of 4-FSK.

As yet Yaesu hasn't announced any mobiles, base stations or repeaters so it appears that FT1D's can only talk to other FT1D's in digital mode.

After Dayton some questions remain:

- Does it have APRS? The website of at least one amateur radio dealer had been saying the rig did APRS but the brochure makes no mention of it only referring to E-GPS
- Which Vocoder does it use? The AMBE seems the obvious choice but the brochure doesn't say
- What will it cost? Yaesu currently sell the VXD-10 high power digital handheld to the leisure market for 63,000 yen (\$796) hopefully the FT1D will be cheaper!



The new Yaesu **FTDX-3000** HF+50 MHz 100W Transceiver displayed at the 2012 **Dayton** Hamvention!!

### ATTENTION CAARA CLUB KEYHOLDERS

Recently we have had a few incidents of members using the club and forgetting to shut things off before leaving.

If you are using the CAARA clubhouse, be sure to turn off the heat, turn off the radio's and computer, and shut off the lights before you leave. Please be responsible.



# KENWOOD



## Rising to the Occasion

Kenwood's new TS-990S raises the bar on the HF performance and DX operating ease in more ways than one. The dual display and dual watch function will give you the edge in DX contesting.

## TS-990S

Dual TFT Display & Dual Receiver  
HF / 50 MHz Transceiver

- Frequency Range: HF+50MHz
- Output Power: 5W - 200W
- Mode: SSB, CW, FSK, PSK, FM, AM
- Built-in Switching Power Supply
- Built-in Antenna Tuner
- COM port, USB A/B port & LAN port

**NEW RADIOS SHOWN AT DAYTON HAMFEST...WITH PRICES, \$5k+**

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## FLEX-6000™

*Signature Series*  
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**THE GAME HAS  
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## ODDS AND ENDS

### **N1MM Contest Logging program Tutorial !**

CAARA member Dick Macpherson WB1W will be giving a tutorial on the NN1M Contest Logging software program that the club will be using for Field Day. This instruction session will be held at the CAARA clubhouse on 6 Stanwood Street in Gloucester, Mass on Sunday, June 17th at 10 AM. We encourage all of those who are planning to operate the radios on Field Day to attend this course. As always this course is open to all CAARA members interested in operating this logging software program.

### **CAARANET CONTROL OPERATOR CALLOUT**

The clubs CAARANET Sunday Night Net committee is looking for more control operators!

We would like to give other members the opportunity to be net control operators for our weekly net. If you are new to ham radio, running a radio net is a great opportunity to get some practice in providing emergency communications and passing routine communications traffic. There is no previous experience needed and its a great way to meet new hams and use your 2 meter radio! So if your interested please e-mail me at [dburg101@aol.com](mailto:dburg101@aol.com). I'll be more than happy to put you in the rotation. By the way, all members can now download the CAARANET preamble and Logsheet. All you have to do is click on the "CAARANET link on the clubs website [www.caara.net](http://www.caara.net) .

### **Local 2 meter repeater frequencies you might want to program in your radio.**

145.130 MHZ - offset, with no PL tone, W1GLO located in Gloucester

147.390 MHZ + offset, 131.8 PL tone, WA1PNW located in Beverly

145.470 MHZ - offset, 136.5 PL tone, NS1RA located in Danvers

146.880 MHZ - offset, 118.8 PL tone, NS1RA located in Salem

145.490 MHZ - offset, 131.8 PL tone, KB1KHO located in Ipswich

147.850 MHZ + offset, 100.0 PL tone, W1VYI located in Topsfield

146.670 MHZ - offset, 146.2 PL tone, W1BRI located in Quincy

### **MONTHLY MEMBERS MEETING NOTICE !!**

The June monthly members meeting will be held on Wednesday, June 6th at 7:30 PM at the CAARA Clubhouse on 6 Stanwood Street in Gloucester Mass. For Junes meeting Caara members John Graves WA1JG will be giving a presentation on the uses and theories of vertical HF antennas. We will also be going over the plans for the upcoming ARRL Field Day weekend at the Fuller School Field.

### **CAARA provides comms for Motif #1 5k Road Race !!**

Several members of the Cape Ann Amateur Radio Association provided health and welfare communications for the 2nd annual Motif #1 5 K Road race. The 5 K was held in the center of Rockport, Ma on Saturday, May 19th and about 400 runners participated in the event. CAARA members provided a total of 15 hours of volunteer time providing race safety communications. Providing event communications is one way that amateur radio operators and ham clubs like CAARA gives back to the community in public service. All with no remuneration and using all their own personal and club radio gear, which was purchased privately. The Motif 5 K Road Race Committee would like to thank the following CAARA members for helping out with the race: Curtis Wright AA3JE, Ruth Hodsdon WW1N, Nate Dewolf KB1VST and Stan Stone W4HIX.

### **W1GLO to operate in Original 13 Colonies K2H Special event !!**

The members of CAARA have once again been invited by the Original 13 Colonies Special Event station committee to operate in the digital portion of thier event. The event call will be K2H/MA and this event will be held during Independence week which will be July 1st through July 5th. CAARA members can find out more about this event at [www.13colonies.info](http://www.13colonies.info)

### **Small asteroid buzzes Earth on May 29th**

A small asteroid is flying past Earth today inside the orbit of geosynchronous satellites and only 14,000 km above the surface of our planet.

Named "2012 KT42," the 3 to 10-meter wide space rock ranks #6 on the top-20 list of known close-approachers to Earth, which makes it significant despite its small size.

More information and images may be found on <http://spaceweather.com>



## The anniversary ILLW grabs imagination

The 15th annual **International Lighthouse and Lightship Weekend** in August has inspired many to register early with 32 countries and nearly 250 registered already.

Although this is just over half of the countries normally attracted by the event it is slightly ahead of expectations with ten weeks to go.

The weekend increases the public awareness of lighthouses and lightships and their need for them to be preserved, promotes amateur radio and fosters international goodwill.

The event was started mainly by late Mike Dalrymple GM4SUC and the Ayr Amateur Radio Group in 1995 as the Northern Lighthouse Activity Weekend with stations at Scottish lighthouses. It quickly went international.

The third weekend in August coincides with the worldwide lighthouse open day organised by the Association of Lighthouse Keepers that sees public access to many of the featured lighthouses.

During the weekend a group or individual sets up an amateur station at or adjacent to a lighthouse, lightship or marine beacon that is listed.

To register, complete a short online form, read the event rules and have lots of fun. We have complete statistics on past events, reports from previous years and we're on Facebook too.

Visit the website at [illw.net](http://illw.net) for the International Lighthouse and Lightship Weekend held on August the 18th and 19th.

*Jim Linton VK3PC*

## First impressions of the Elecraft KX3

*by Juilian G4ILO*

Good conditions and a new toy to play with has resulted in a lack of time to write about them. Since my last post I have spent a lot of time getting to know the Elecraft KX3. For those of you on the waiting list all I can say is: it's worth the wait. If you aren't, then what are you waiting for?

The KX3 really is the ultimate portable rig. It knocks the FT-817 into a cocked hat. It looks and feels like a baby K3. The only reservation I would have about its adoption by diehard SOTA enthusiasts who go out in all weathers is that it is rather an expensive radio to subject to the worst of the British climate. But as a fair weather walker I would have no such reservations. In fact I have already got a plastic toolbox with a foam insert into which I will soon be making a KX3-sized hole!

If you are a K3 owner then the KX3's similarity to its parent means you will know what to expect. But there are also things where familiarity to the K3 is not an advantage, where functions are not in the same place. The KX3's front panel is a little bit shorter and quite a lot less wide, but the same number of functions have been crammed into it. All the buttons have dual functions depending on whether they are pressed or long-pressed. The radio is powered on and off by pressing two buttons at once. Some of the knobs have three functions depending on whether you press them first or long-press the button below.

If it sounds complicated then it really isn't and you'll quickly get the hang of it. The only thing I can't understand is the decision to make AGC Slow/Fast/Off an option on the configuration menu. The AGC button on my K3 gets a fair bit of use, mainly to turn AGC off when operating PSK with a wide bandwidth. But I don't plan on using the KX3 for data modes much so this isn't an issue I'm particularly bothered with.

The KX3 designers have made a few unusual choices of interface sockets, notably a 4-pole 3.5mm jack for the



microphone. These jacks are a bit hard to obtain but don't worry: you probably won't need to. Four poles are only needed to support the up/down buttons of the Elecraft MH3 mic. You can actually plug a computer headset with its two 3-pole 3.5mm jacks into the phones and mic sockets (RF immunity not guaranteed.) You won't have a PTT but you can use VOX instead or the XMIT button on the front panel. Ideal for windy hilltops (is there any other sort? Some SOTA operators may be put off by the lack of 2m coverage. Elecraft has promised 2m will be available as an option, as it is for the K3. Hopefully it will perform better than the ubiquitous hand-helds and even the FT-817 when subjected to the large out of band signals experienced on British hilltops. What many people will want to know is: what is the receiver performance like? "Better than an FT-8173 But that would surprise no-one and in any case is only an educated guess. I don't have the antennas or QTH to subject the KX3 to challenging input levels. All I can say is that the KX3 receiver is quiet and delivers clear and open-sounding audio. Just like a K3, in fact.



*CAARA event coordinator liasion Dean Burgess KB1PGH waits at the finish line to report the race status to race net control operator Ruth Hiodsdon WW1N*

**CAARA and the Twin Lights Half Marathon**  
 Several members of the Cape Ann Amateur Radio Association volunteered their time and provided their amateur radio equipment to provide logistical and public safety communication for the 2nd Annual Twin Lights Half Marathon on Saturday May 12. The half marathon started at Good Harbor Beach in Gloucester, then the route

went up RT 127A, through the center of Rockport to Pigeon Cove and then looped back to Good Harbor Beach. The race started at 9 AM with over 1000 runners taking the field. CAARA had amateur radio operators spread throughout the race course, along with other operators staged with local police and ambulance services. During this race amateur radio operators were responsible for the calling out of ambulances to assist downed runners, along with providing contact information to Addison Gilbert Hospital. CAARA also provided real time race intelligence for the event coordinator so she could make the proper decisions throughout the Half Marathon. CAARA also had Ron Beckly N1RJB in the tail car to keep us aware of the last runner status. There were 10 amateur radio operators who provided communications for this event from 8 AM to 1 PM with a combined total of 50 hours of volunteer service to the public! All race communications were on the club repeater frequency of 145.130 MHz. Overall the race went well and as always we learned a few lessons to make it easier next time around. Here's the breakdown of the operators and their positions

Race Net Control: Curtis Wright AA3JE and Ruth Hodsdon WW1N

Race event coordinator liasion: Dean Burgess KB1PGH

Police and Ambulance Liasion: Steve Ross N1IBS (From NSRA)

Tail Car: Ron Beckly N1RJB

Hospital Liasion: Hank McCarl W4RIG

Stationed along race route: Stan Stone W4HIX, Nate Dewolfe KB1VST, Sue Downey N1XQW, Sandy Downey KB1PVN

