



# CAARA Newsletter



AN ARRL AFFILIATED CLUB

NOVEMBER ISSUE- 2013



## President's Corner

by Stan-W4HIX

October 2013

Hey, how 'bout them Red Sox?

We continue to work on the purchase of 6 Stanwood from the City of Gloucester. The Request for Proposal (RFP) has been issued and is due back to the City by Nov. 25<sup>th</sup>. We still have some issues to work out with our neighbors on access, so like everything, it is taking longer than we expected.

CAARA conducted another successful Tech in a Day. We graduated 12 out of 14 participants. After eight sessions and over 110 Tech licenses, I'm going to do a thorough review of the materials. We've had a request from the Billerica CERT and Police Auxiliary to conduct a Tech in a Day for that group. Could be 30 people easily. Also a group from the Haverhill MRC (Medical Reserve Corp) is also looking for a class.

The board has decided to delay work on the siding of the building until next year. We have the funds to do the front wall and a contractor, but it will be getting late in the season to get started, so hopefully it will be the first thing on the list next year. This will give us a little more time for fundraising.

Also, does anyone know of a reasonably priced tree service to do some trimming on the trees around our power lines? With winter coming, I'd hate to see some of the limbs come down on someone's car.

We're going to get the 2<sup>nd</sup> floor finished up—painting, cables, etc. It is very functional right now—we ran JT65 for months collecting data on

propagation and have improved our APRS system dramatically. Our USB dongle SDR is tracking commercial aircraft quite nicely. Oh, and digital, voice and CW are good-to-go too.

One more thing, the club is open on Tuesdays—afternoon and evenings—for operating. Drop by and see what Gardi's (KA1BTK) is up to.

73 de Stan, W4HIX  
w4hix@caara.net

## Information Desk

Hello everyone and welcome to the second edition of the Information Desk. Once again my name is Dean Burgess and my callsign is KB1PGH. I am also a Public Information Officer for the Amateur Radio Relay League here in Eastern Mass. This month I'd like to cover all of the different aspects of amateur radio, especially the ones that don't get as much mention compared to others. Now if you watch the media you would think that amateur radio merely focuses on public service and emergency communications. Now while there is nothing wrong with that I think we all have to do a better job at educating the public of all the sub hobbies that fall within the umbrella of amateur radio. Especially if we are trying to promote the advancement of amateur radio and our ranks as well. So lets take a look of what goes on in our hobby. First off that comes to mind is contesting. I think that contesting is a great way to get those who like competition into our hobby. No to mention the whole section that covers "Worked all.". That aspect keeps those who are goal orientated interested in ham radio. Then you have electronic kit building. This is a great educational tool, not only for ham radio, but for anyone who is interested in the electrical or engineering fields. Then you have dxpeditions. This opens up a great avenue for those who want to travel. Within that we have portable operations and



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**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 Cub 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.

**New! The club is open every Tuesday from 4-8PM for CAARA members to stop by, chat, and use the extensive collection of ham radio gear.**

## Information Desk

SOTA for those who like the great outdoors and to keep physically active. Amateur radio can also contain a lot of planning and organization if you think about it. Ham radio makes for an educational experience in planning your own shack, planning your own dxpedition or planning for field day. Speaking of educational, ham radio has much to offer. Just think, in order just to earn our licenses we have to learn about electrical engineering, the laws of nature and physics and math. We also have to learn about astronomy, the weather, FCC regulations, RF engineering, world geography and electrical power. Now going back to emergency communications we don't much hear about the other aspects of that. In order to get involved with emergency communications you have to get involved with your local and state governments and public safety personnel and even the Salvation Army, the American Red Cross and FEMA's CERT teams. In emergency communications you have to train with these organizations and volunteer many hours of learning how to do radio nets and pass messages. Gee, ham radio even has tradeshows, flea markets, and other yearly organizational events. Ham radio operators get involved with the National Weather Services Skywarn spotter programs and neighborhood watch groups. We even have "Foxhunts" where you go have to hunt down tiny vhf transmitters in the woods. So I think you get the point, there is much more to ham radio than just the emergency communications headlines we read in the paper. With all these aspects one would think that having a ham radio license would be a good thing to put on your resume ! Here's this months tidbit. As of mid October the FCC is still not issuing amateur radio licenses due to the government shutdown. License tests are still be given but I would have to assume once this shutdown ends that there will be a bit of a backlog of licenses to issue so there will be delays. Good luck with that! See you in December!

### **EDITOR ROUNDUP by Jon-K1TP**

I want to thank Dean-KB1PGH and Curtis- AA3JE for their monthly contributions of stories and photo's for the newsletter. I wish some of our near 100 CAARA members would send me some ham information to publish! Perhaps a picture of your shack or antenna farm, what you have been doing, ideas for club meeting topics, ham news you found online, for sale items, etc.

We are still looking for a few good members to help us complete the painting and cleanup on the second floor, if you are willing to help, contact Jake- K1LDL on the repeater or at the club Sunday mornings.

The club has a half dozen boat anchor receivers and a few transmitters that need to be restored. If you would like to learn (or know) how to bring an old classic back to life, why not come up Sunday morning or Tuesday night and help the club out and have some fun. An elmer will help you thru the process.....don't be shy! It may involve swapping out some old capacitors in the power supply, testing tubes, cleaning up the case and chais, learning how to align a receiver....

If you would like to operate one of the radio's upstairs, just listening or actually making contacts, don't be shy. The extensive list of equipment is there for your use. We have a few loaner radio's if you would like to listen at home!

Do you need help designing a home radio station, just ask! We have hams with 50+ years experience in the club in all modes of operation and all types of gear who would gladly go to your home QTH and help you out.

### **CAARA HISTORY from Bob-WA1UCG**

#### **CAARA's 1st MEETING**

July 1976  
Sawyer Free Library's  
Conference Room  
Dale Avenue  
Gloucester, MA 01930

#### **CAARA Became a Corporation**

February 14, 1977  
Offices of Sandler, Sandler & Laramee  
28 Dale Avenue  
Gloucester, MA 01930

Meeting called to order at 11:00 am adjourned at 11:30 am



Nate Dewolf- KB1VST went to a WW 2 re-enactment and shot these pictures for us.





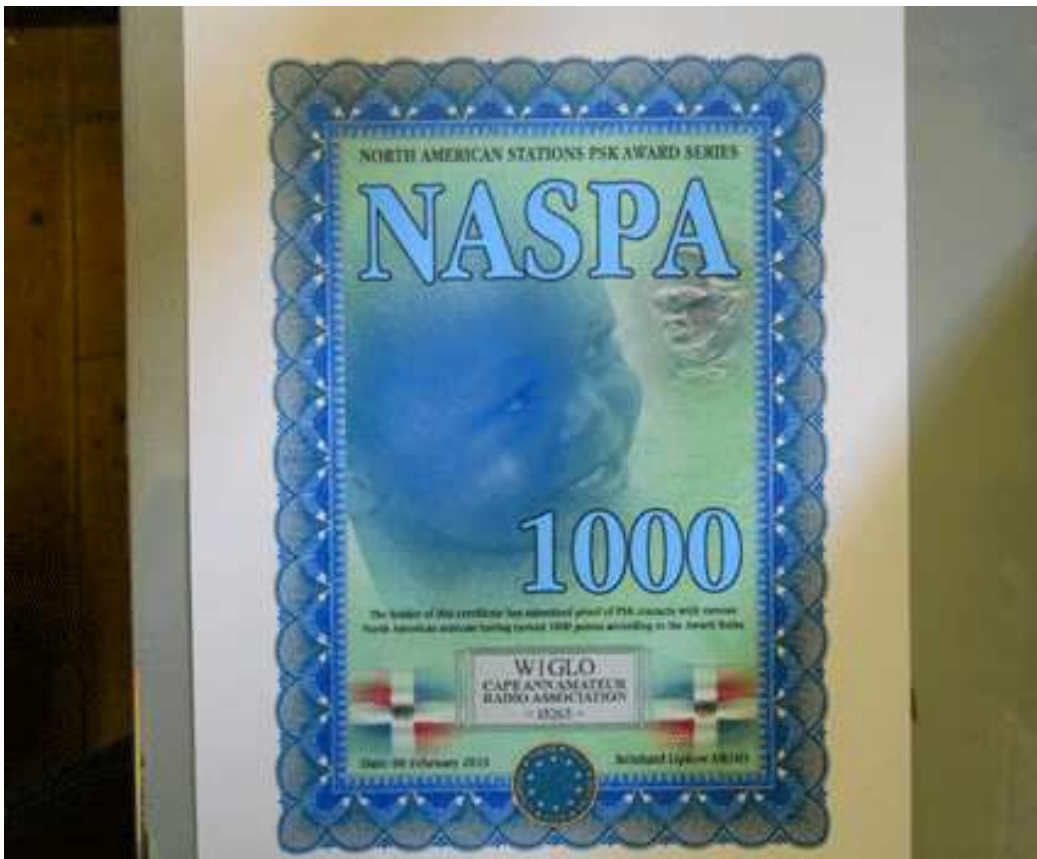
Nate Dewolf- KB1VST went to a WW 2 re-enactment and shot these pictures for us.





Here are a couple of pics of CAARA's PSK 31 awards. Thanks goes out to Hank McCarl- W4RIG who has worked most of the contacts and has obtained these awards for the club.

Below is a 1000 psk 31 Worldwide Contact Award given to WIGLO  
 Above a wide variety of digital contact awards on the wall of the CAARA clubhouse





Above is a photo of CAARA member Gardy KA1BTK making his presentation to the members of his initiative to open the clubhouse more during the week so club members have more access to operating the radio equipment in the newly renovated upstairs.

To the left is a shot of a QSL card from Japan which made a PSK 31 digital contact with W1T (Thacher's Island) during the recent Dxpedition this past summer.

October is Gloucester Fire Prevention Month. With this in mind, a new safety campaign – Gloucester CERT-Visible House Numbers and Working Detectors Save Lives – is about to begin. This pilot campaign is a joint effort led by Gloucester CERT (Citizen Emergency Response Team) in conjunction with Mayor Carolyn Kirk, Gloucester Fire Chief Eric Smith and the City of Gloucester Department of Public Works, who are working with Pathways for Children, the Gloucester TRIAD Council, the Gloucester Council on Aging, and CAARA (Cape Ann Amateur Radio Association). CERT members will begin door to door daytime visits to homes in the North Gloucester neighborhoods of Bayview, Lanesville and Annisquam on the morning of Saturday, October 19th. CERT's campaign mission is to focus citizen awareness on the importance of visible house/building street numbers and to deliver educational safety literature with contact information to homes in the targeted neighborhoods. While CERT's pilot campaign is limited to North Gloucester neighborhoods, this effort is intended to expand citywide leading to: (1) visible identifying numbers on every home and business throughout Gloucester; (2) working smoke and carbon monoxide detectors in every home and business; and (3) visible street signs on every corner.

Gloucester's first responders have reported difficulty locating victims because of unnumbered homes and businesses and unreported missing or hidden street signs. Every minute lost due to difficulty locating an inadequately numbered home can make the difference between life and death and the level of property damage suffered. You can help emergency responders locate you quickly during an emergency by having your home and business clearly posted with numbers large enough to be seen easily from the street in a contrasting color from the background on which they are posted. Four-inch fluorescent numerals are recommended for optimum nighttime visibility. Mayor Carolyn Kirk said: "This important public safety program has been an ongoing issue and we are delighted that CERT is taking the initiative to once again bring this to the public's attention. I urge all residents to take advantage of CERT's efforts to assist."



## FOR SALE ITEMS

Here are a few things I have available at the moment.

You asked for it !

Thanks

Sandy

n1mau/w1io

Item #1)

### **100' Rohn Free Standing Tower**

Tower, Rohn, Commercial Grade, Free Standing. Solid side supports, not tubular as the Rohn 25 or 335 Towers.

5 Sections, 20 ft each = 100 foot Tower.

Minor damage to 3rd or middle section, email for more pics.

I was going to use the bottom three sections so the damage is not an issue mounting a top plate.

Tapered Tower, goes from a 34" triangle to approx 12" triangle, rugged 3/4 and 1" uprights and \!" cross bars, all solid steel.

Surface rust, good clean up and some paint will make the tower look great.

Tower joins together using three point with four bolts each. (No hardware, rotor platform or Base Mount).

Wind-Load - first sixty feet – 35 sq feet. I will sell the lower 60 feet.

Asking \$: \$300 for the lower 60 feet; \$450 for 100 feet  
You take away, your dime, make an offer, you might get it but be reasonable.

Item #2)

Antenna, Mosley, PRO-67B Super Beam

Mosley, PRO-67B Super Beam: 10, 12, 15, 17, 20, 40 Meter

7 Element, 3 Elements on 12, 15, 17, 20, 4 Elements on 10, 2 Elements on 40,

No measuring, Pre-drilled, Color coded

18-8 & 300 series Stainless Steel

Frequency, MHz 28, 24, 21, 18, 14, 7

Forward Gain, dbd - 10 meters, 4 element 9.4, 12 meters, 3 element 8.3, 15 meters, 3 element 8.5, 17 meters, 3 element 8.5, 20 meters, 3 element 8.5, 40 meters 4.9

Front-to Back Ratio, dB - 10 meters 20, 12 meters 15, 15 meters 20, 17 meters 23, 20 meters 20, 40 meters 12

Power Rating, watts CW - 2500

Power Rating, watts SSB - 5000

Power Rating, watts AM/FM - 600

Power Rating, watts RTTY/AMTOR - 600

VSWR at frequency - 1.0/1 to 1.60/1

Boom Length, ft. - 24; Turning Radius, ft. - 23.67



Mast Size, in. hardware equipped - 2  
Maximum Element Length, ft. - 43.75  
Assembled weight, lbs. - 110  
Wind Surface Area, sq. ft. - 11.6  
Wind Load, EIA 80 MPH - 280  
Recommended Coax - Belden RG-8 / RG-213  
New in original box.  
New \$1800 / Asking \$1200.00, make a reasonable offer.

Added Note: 15 years old but new in box  
Item #3) - SOLD but pending...

#### **Antenna Rotor, Hy-Gain Tail Twister T2X-D**

Brand New still in box as shipped, never used.  
Item #3 continued:  
Hy-Gain Tail Twister Rotator System  
With DCU-1 Pathfinder Digital Controller  
Asking \$550 / BRO +shipping insurance and package if needed.

Added Note: 15 year old but new in box  
Item #4)

#### **Tower Accessories, Rohn Guying System Parts**

These are pieces that are left over after I took down my Rohn 25 Tower but can be used on other installs. They are parts for the guying system including HD insulators so you can make an antenna out of one of the guy wires.

Base Plate and House Bracket, 24", available but no pictures for additional cost.

Best reasonable offer + shipping any insurance you want and packaging.

Tower, Rohn, 25, 45, rotor, accessories, House Bracket, Insulators, Turnbuckles

4-1) Guy Brackets, qty 2, \$185, one with rings the other was used with Torque Arms.

The Arms are mounted on a Guying Bracket but are being sold separate.

4-2) House Bracket, 24", \$200

4-3) Rotor Plate, \$60

4-4) Base Plate, Hinged, \$300

4-5) Turn Buckles, 3/4 x 12, qty 8, \$25/ea

4-6) Insulators, Glass, qty 5, \$?

4-7) Equalizer Plates, Three guy Wires can be attached to one anchor point, these allow the guys to function as one and equalizes the pull on the guy system.

Item #5)

#### **iCOM 229A, 2 Meter Transceiver, 25W output**

Features: 20 Memories, Priority Watch, Call Channel, Memory Skip, Scan, Backlit LCD, Receive 138-174 MHz, 4 RF Output Levels

Used for Packet only, then put away when Packet

slowed down.

Comes with Power Cord and Manual; No Mic at this time !

Asking \$75

Item #6)

#### **iCOM - 475H, 430 MHz, All Mode, 75 Watts**

RF Output 10-75 Watts OEM Spec.

FM / CW / SSB; N-Connector - 50 ohms

Power requirements - 13.8V DC, Current drain RX - 1.1-1.3 A, TX - Max 20 A

Dimensions (w×h×d) - 241 × 95 × 239 mm (9.49 × 3.74 × 9.41 in)

Weight - 6 kg (13.2 lbs)

Form factor - Desktop but with the 12Volt application this radio can be mobile.

Purchased it and never used it.

Ran well at time of purchase and never took it out of the box.

Comes with the OEM Hand Mic.

In original box and manuals

Asking \$550.00 firm

Wanted:

#### **Battery Cover, Digital Calipers, Mitutoyo**

I am looking for a Battery Cover for a Mitutoyo 8" Caliper,

Model # CD-8 - code # 500-322

The Battery Cover part number I do not know.

I believe the Covers are the same for the 6", 8" and 12" but the older style.

If you have one please let me know the price shipped to 01930.

Make an offer, 10% donation to the club after sale of each item.

More will be posted as available.



On Saturday October 19th several members of CAARA and the city of Gloucesters CERT (Civilian Emergency Response Team) teamed up to provide important safety information to the public! There were 21 people split up into 7 teams of 3 which canvassed parts of North Gloucester which included Annisquam and Lanesville. Over the course of the morning these volunteers went to over 750 buildings and passed out nearly 1000 door hanging flyers which informed the citizens that their house numbers should be clearly marked and seen from the street for quicker response of police and fire. These flyers also stated that homeowners should check to see if every floor in their homes has a working smoke detector and carbon monoxide detector as well.

CAARA helped provide communications as Curtis Wright AA3JE ran net control to the separate teams. Each team member carried a FRS (Family Radio Service) handi talkie which was programmed by CAARA member Ross Burton W1RAB and then they reported to the ham radio operator in each team which reported back to net control. Net control had CERT members plotting out a coverage map as the morning progressed so there was no double coverage and to make sure everyone had enough flyers.

A big thanks goes out to Ross Burton W1RAB who spent many hours preparing for this combination volunteer service/ communications exercise. Ross also lent the use of his north Gloucester 440 repeater which covered the blank spots on that side of town. One other note is that all of the door hanger flyers were designed, created

and completely paid for by Russel, a member of Gloucester CERT Team. Gloucester Mayor Carolyn Kirk was also in attendance to help kick off this event! Let's see, 21 people times 4 hours is 84 hours of community service towards the city of Gloucester and its citizens and we haven't even gotten to all of the volunteer planning hours.



## Help Wanted

by Dr. Curtis Wright- AA3JE

I have a confession to make. I am an older person. What I mean by that is that my life spans the period from “BT” (Before Television) to “AC” (After Cable). Like so many of my peers, I grew up with the evolving medium of the video arts. Some of that is gone away now, and good riddance, but some things I miss.

One of those things is the “Native Bearer”.

You know those guys. There was the hero, and the girl, and the wise best friend/ brainy scientist, and then there was “MGOMBI”, some guy spray painted brown (evidently a shortage of actual brown skinned people in Hollywood in those days), who carries the rifle, spear, death ray, club, food, tent, or whatever the hero might need. If it was a Western, you substituted a grizzled old guy with a mule for the brown guy.

I always wanted to have a native bearer. That meant I could walk along, pick things up.

Hand them to the native bearer, enjoy myself, and never have to worry about the “stuff”.

Then I got married, and I discovered that to a wife, a husband makes a perfect “native bearer”. When walking, shopping, going to the health clinic, or just anytime you want, you just have to hand the item over, saying “WOULD YOU PLEASE HOLD THIS FOR A MOMENT FOR ME?”, and not have to worry about whatever it was for the rest of the day.

This means that your spouse ends up carrying your purse, shopping bag, cell phone, car keys, binoculars, lunch, beach shoes, and several pounds of very attractive rocks. Please be advised that this appears to be a genetic thing, as female children and grandchildren quickly learn “HOLD THIS GRAMPIE” and “DADDY, PLEASE WATCH MY STUFF” as well.

Now the faith of these people is amazing. They appear to have absolute faith that:

1. Your weight carrying capacity is infinite.
2. You never tire.
3. You can be so careful that the owner can put beach rocks in the same bag as ornamental glass, and both will survive intact.
4. You never have to go to the bathroom.

This last is important. Please remember this is Massachusetts. People in this state NEVER publicly

admit to any excretory function, and even go so far as to deny the presence of a toilet on the premises. This is because no native will ever to admit to ever having cleaned a bathroom. The consequences for you are that if you EVER put anything down on the floor of a public rest facility in Massachusetts, just leave it there. It’s gone. No one wants it back. Even if you wash it.

So now you have a problem. What do you do?

I have developed several poses to resolve this. The most effective is the “flying X”, where you cross your feet, wedge the purse, purchases, or lunch bag between you ankles, flexing the knees slightly, trapping the

stuff between your calves and freeing up your hands to attend to other matters. If you are able to find a “child friendly” rest room, put the gear on the changing table, and watch it the WHOLE time you are otherwise occupied. The other alternative is to try to hang the various items off a shoulder to



free up your hands. This never really works.

**DO NOT EVER BE TEMPTED TO PUT THE HANDBAG IN THE SINK.** This is because they have automatic faucets now that will gently, and silently fill up your wife’s purse with water. This is bad for cell phones and worse for you.

**I DO RECOMMEND HERNIA SURGERY.** If you slip the doc five bucks, he will write out that you are not allowed to carry anything over five pounds for six months. Since no woman alive has a purse that weighs less than five pounds, you are off the hook for half a year.

Failing that, I recommend a native bearer. Applications available at the club, good wages, light duty, 401K possible. Slight risk of being savaged by tigers.....

## Where NOT to Economize

by Dr. Curtis Wright-AA3JE

Different areas of the country have different standards of conduct. In the East, especially the urban East, it is the height of status to have people do things for you. You can have dog walkers, hair dressers, barbers, pedicurists, lawn mowing services, all kinds of people doing things for you the less fortunate have to do themselves. I honestly believe there is a future for a new kind of health club where for a fee you can stop by and get hooked up to a ventilator, so you can have somebody else breath for you for a while.

Much the same can be said for the far West, the costal states, and for urban Colorado, but for the Midwest, the big area between Los Angeles and New York, where they grow corn and stuff, the rules are different. If you have a Midwestern heritage, you NEVER, EVER pay for something you can do yourself. You just don't do it. Even if you don't have the skill or knowledge, you try first, then pay to have it fixed by the professional.

I have learned, over the years, that while the "CAN DO" Midwestern attitude is admirable, there are a few things you need to pay for. Just suck it up and pay for it, it will cost you less in the long run.

As an example, take my brother's Mercedes. Back in the day, my brother bought a 190 SL, a really nice convertible, not new, but not more than ten years old. He drove it around with his wife riding shotgun, both wearing a sporty ensemble, and feeling rather grand. Then he got a job as corporate counsel for a mutual fund in Dallas Texas. He was startled to find out that the company would pay for his move, for moving his car, for moving his wife's car, but not for moving his sport's car. They recommended a professional car moving service, which at that time cost about \$900. Now this made no sense for my brother. It was 1500 miles, at a time when gas was \$1.00 a gallon, and the minimum wage was \$1.25 an hour. Assuming a 30 hour trip, that was \$75 for gas and \$38 in pay, with a \$25 charge for a cheap motel room. Airfare back was a foolishly low \$130. All told, if he could find a driver, he would pay about \$275 to have the car driven out there, a savings of \$625. He just needed someone who would drive halfway across the country for minimum wage.

Like his little brother.

Now I was no dummy. Even I knew that a ten year old car might need repair before making such a trip. So I

insisted that my brother have it checked out. He reported that he had done so. Later I found out that this meant he had checked the oil and put air in the tires. So, one fine summer day, I threw my clean jeans and a pair of mostly clean underwear in the trunk, and took off.

In truth, even now, I have to admit that the first day was lovely. I drove that little sports car through the mountains of Pennsylvania, down the Blue Ridge, and across Tennessee. I stopped for the night in a motel where I learned the first lesson of the trip. Pay more than the minimum price for a motel room. Or bring ear plugs, or bug spray, or both. But I was young, and it was the sixties, and there was nothing I could catch that could not be treated by antibiotics and topical insecticide.

The real test came in Arkansas. Somewhere after Little Rock, I noticed that the temperature was a little high. I stopped, and I looked under the hood. On that model car, there are little rubber hoses, perhaps an inch to two inches long, that run from cylinder head to cylinder head, carrying vital coolant. On this occasion, they were not carrying much, as they were dry rotted. So I sat by the side of the road, and wondered what to do. This was before they gave 17 year olds credit cards, and all I had in my pocket was the \$50 I had been given for expenses.

They I remembered something my dad, my dear, sainted dad, had told me. He had been stuck with the same problem in his father's Model A, and had gotten to help by letting the motor cool down, starting the engine, accelerating to top speed, then shutting the motor off, and coasting as far as he could, letting the motor cool off, then doing it again till he got to help. It seemed a good idea, so I started the engine, accelerated up to 110, and shut off the key. What I did not know was that on that model car, when you shut off the ignition, the steering wheel locked. Thus, I found myself going about 100 MPH, in a car with a locked steering wheel. I tried to unlock it, but must have been upset, and I kind of snapped the key off in the lock. Now I was going 90 miles an hour in a car with an unlock able, locked steering wheel.

The gods look out for 17 year olds, and the road had a slight left hook, so that after inspecting a few semi's really closely, I coasted off to the shoulder. With a screwdriver I got the steering unlocked, and I found that if I took off the wires, and tied them together with my shoelace, I could get going again. Naturally, the

local gas stations did not have imported car cylinder head hoses, but with hose clamps and baling wire and pieces of garden hose I ended up with a cooling system that could make it a few hundred miles before having to be re-filled and rebuilt.

The car had stopped starting easily and was running a little rough, so I limped into Dallas late the second day, and pulled the car into my brother's new driveway, untied the shoelace, and went to bed. I briefed him on the trip the next morning, and we had a chilly ride to the airport. I later found out that he needed the cylinder head resurfaced, the steering column replaced, a new lock, and, of course, all new hoses. I believe the total bill was about \$1500. Sometimes, just spend the money.

*October 23, 2013*

## **Editorial: House numbers game a real matter of public safety**

### **Gloucester Daily Times**

— — The placement of address numbers on houses and businesses across Gloucester and the rest of Cape Ann might not seem like the day's most pressing issue. But don't tell that to anyone who's had to place an emergency call to police or the Fire Department, and then had to wait while an ambulance crew or other responders had to waste valuable time trying to find the house.

And especially don't tell it those emergency responders themselves, who face enough issues when answering a frantic call for help without having to hunt and determine which, indeed, is the right house because numbers are poorly displayed – or not displayed at all.

That's what makes the Gloucester effort now underway toward raising awareness of that problem so important.

Volunteers from Gloucester's Community Emergency Response Team, or CERT, started making the rounds of Bay View, Annisquam and Lanesville last weekend, joined by the likes of Pathways for Children, the Gloucester TRIAD Council, the Gloucester Council on Aging, the **Cape Ann Amateur Radio**

**Association**, and Cape Ann Chamber of Commerce president Ed Collard, among others.

As it is, Gloucester's landscape can pose a number of

problems for responders. The city, for example, has an Atlantic Street and an Atlantic Avenue — each a couple of miles from Atlantic Road. And let's not forget that many of the city's courts and "squares" essentially duplicate names of larger streets — as in Prospect Court and Prospect Square, both packed closely off Prospect Street, but different addresses nonetheless.

All of those are reasons why public safety and other Gloucester officials quickly nixed any notion of including the city under the Essex County regional dispatch center. Then, of course, there is the continuing status of Gloucester's fire stations, with Magnolia always shut down and Bay View's station open more than in the recent past, but still not on a 24/7 schedule.

With all of that in mind, the least that homeowners and business operators can do is give emergency crews a clear look at their address numbers, whether through a clearly placed sign on a building, or with a definitive sign at the end of the driveway along the road or street. It's not just a matter of looks, it's a matter of public safety, guiding responders to your house or perhaps your neighbors as well.

And, yes, it can indeed be a matter of life and death.



Stan-W4HIX helping mark the streets that have been completed during Saturday's safety exercise

## OCTOBER 19 CAARA TECH IN A DAY RESULTS!



We finished our Tech in A Day program with 15 Candidates and 13 earning a Tech License. We had candidates from the following communities: Salisbury MA, Henniker NH, Merrimac MA, Rockport MA, Lowell MA, Magnolia MA, Manchester MA, Methuen MA, Lynn MA, Haverhill MA, Middleton MA and North Reading MA. Thanks to all of the VE's that attended the session.

**RADIO SHACK HISTORY:** The company was started as Radio Shack in 1921 by two brothers, Theodore and Milton Deutschmann, who wanted to provide equipment for the then-nascent field of amateur, or ham, radio. The brothers opened a one-store retail and mail-order operation in the heart of downtown Boston at 46 Brattle Street, near the site of the Boston Massacre. They chose the name "Radio Shack," which was the term for a small, wooden structure that housed a ship's radio equipment. The Deutschmanns thought the name was appropriate for a store that would supply the needs of radio officers aboard ships, as well as "ham" radio operators. The term was already in use — and is to this day — by "hams" when referring to the location of their stations.

The company issued its first catalog in 1939 as it entered the high-fidelity music market. In 1954, Radio Shack began selling its own private-label products under the brand name Realist, but was subsequently sued and consequently changed the brand name to Realistic. After expanding to nine stores plus an exten-

sive mail-order business, the company fell on hard times in the 1960s. Radio Shack was essentially bankrupt, but Charles Tandy saw the potential of Radio Shack and retail consumer electronics and bought the company for \$300,000.

**LAFAYETTE RADIO HISTORY:** Established in the 1920s, Lafayette Radio Electronics (LRE) became a thriving mail-order catalog business; the electronic components it sold were useful to amateur radio operators and electronic hobbyists in areas where such components were not available in local retail outlets. Lafayette's main competitors were Radio Shack, Allied Radio, Heathkit, and "mom and pop" (independent) radio dealers throughout the United States. Early Lafayette Radio stores were located in Jamaica, N.Y. and Manhattan in the mid-1950s. The electronics kits were produced in the Jamaica facility.

Lafayette advertised heavily in major U.S. consumer electronics magazines of the 1960s and 1970s, particularly Stereo Review, High Fidelity, Audio, Popular Mechanics, and Popular Electronics, among others. The company offered a free 400-page catalog filled with descriptions of vast quantities of electronic gear, including microphones, tape recorders, speakers, and other components

### Retail stores

Until the 1960s, many independent retailers in some markets became Lafayette Radio "Associate Stores", which were displaced when the company expanded. These stores were supported from headquarters at 111 Jericho Turnpike in Syosset, NY and a warehouse in



Hauppauge, NY. A limited selection of product was stocked, with full access to a catalog with a wide variety of parts, tubes, cameras, musical instruments, kits, gadgets and branded gear that could be ordered and delivered through the local store. The company made major investments in what were called sound rooms to demonstrate hi-fi equipment, using custom switch panels and acoustic treatments in an attempt to duplicate a home listening environment and offer fair comparison with an assortment of branded hi-fi gear.

Managers were rewarded for maximizing gross profit margins and inventory "turns", which led to frequent out-of-stock situations, often remedied by frequent cross-town inter-store transfers. Each store had a repair shop on site with a part-time technician. Some locations had multiple full-time service technicians. Others had service departments that operated independently of the store but under the same ownership. Stores ranged in size from 2000 to 5,000 square feet (460 m2).

By the late 1970s, Lafayette expanded to major markets across the country, struggling to compete with Radio Shack, which was purchased by Tandy Leather Co in 1963. Lafayette ran into major financial difficulty when the FCC authorized a new Citizens Band ("CB") spectrum with 40 channels. Lafayette's buyers had firm commitments to accept delivery of thousands of the older design units, and were not able to liquidate the inventory without taking a serious loss. Eventually, all of the old CB radios were sold for under \$40

With fewer than 100 stores, far fewer than the aggressively expanding Radio Shack's thousands of local outlets, Lafayette Radio remained more of a dedicated enthusiasts' store than a mass marketer. The company was also hurt by the advent of electronics retailers relying on aggressive marketing techniques and competitive pricing in the late 1970s. Many experienced managers departed. Formerly a national chain, the remaining Lafayette stores in the state of New York closed by the end of 1981.

Some local Lafayette stores remained open until 1981. For example, the Long Branch, New Jersey, store finally closed in the Fall of 1981. Unsold inventory was literally shovelled into dumpsters overnight to vacate the store. One store in the Trenton, NJ area went on independently to become known as "Laraco Electronics". Laraco had one retail location that served the area on Business Route 1 in Lawrenceville, NJ until its closing in late 2002.

Several Lafayette stores were purchased by Circuit City of Richmond, VA. In order to keep the Lafayette name, which was popular in New York, Circuit City changed the store names to "Lafayette-Circuit City". However, these store locations were much smaller than a standard Circuit City, and did not carry major appliances, which Circuit City carried at the time.



# RadioShack Gets \$835 Million Financing Amid Net Loss

RadioShack Corp. (RSH) posted a seventh straight quarterly net loss and said it received commitments for \$835 million in new five-year financing to boost liquidity amid a turnaround effort.

The consumer-electronics retailer's net loss widened to \$112.4 million, or \$1.11 a share, in the three months through Sept. 30, trailing the average loss of 37 cents anticipated by analysts. RadioShack said in a statement that it ended the fiscal third quarter with total liquidity of \$613 million.

Chief Executive Officer Joe Magnacca had sought new financing to give vendors the confidence to supply him with exclusive products to distinguish RadioShack's offerings from rivals' merchandise. The retailer's sales have declined as it lost customers to Best Buy Co. and Amazon.com Inc. and a stockpile of unwanted inventory forced it to sell merchandise at steep discounts.

The results "do not provide much reason for optimism," Anthony Chukumba, an analyst at BB&T Capital Markets in New York, wrote today in a note. He recommends holding the shares and said the new financing gives the company "adequate liquidity to make it through the upcoming holiday selling season and attempt to execute" Magnacca's turnaround plan.

RadioShack's gross margin narrowed to 30.1 percent from 38 percent a year earlier.

The shares sank 18 percent to \$2.89 at the close in New York for the biggest decline since July 25, 2012. The stock has gained 36 percent this year, compared with a 23 percent advance for the Standard & Poor's 500 Index.

## New Financing

The new financing will comprise \$585 million in a new asset-based lending facility and a \$250 million secured term loan, RadioShack said. The lenders include GE Capital, Salus Capital Partners LLC, CIT Group Inc. (CIT) and RBS Citizens NA. It will provide \$175 million in additional liquidity, the company said.

RadioShack continues to have "ample liquidity," with the new financing giving "us the time we need to complete our work" including remodeling stores, Magnacca told analysts today on a conference call. The financing was arranged at competitive rates, interim Chief Financial Officer Holly Etlin said.

The company also today said it named Paul Rutenis chief merchandising officer. Rutenis, who previously served as senior vice president for the home division at J.C. Penney Co., will be in charge of improving assortments of name brands and private brands in stores. Janet Fox, a former Under Armour Inc. senior vice president, joined RadioShack as senior vice president for global sourcing.

## Slow-Selling Goods

During the quarter, the retailer accelerated its effort to reduce slow-selling and duplicate merchandise, leading to an increase in costs of goods sold. A year earlier, the company posted a loss of \$47.1 million, or 47 cents a share.

At the heart of Magnacca's turnaround strategy is "Let's Play!" — an effort to make the retailer "a neighborhood technology playground." Prototype stores have a cleaner look, a change from the tangled collection of cables, cords, adapters and batteries that many customers associate with RadioShack. Magnacca plans to reduce the number of stocked items at stores to 3,000 from 4,000.

Earlier this year, Magnacca, RadioShack's fourth CEO in three years, hired turnaround adviser AlixPartners LLP where interim CFO Etlin is a managing director.

RadioShack began life in 1921 as a Boston-based mail-order retailer serving radio officers aboard ships and amateur ham operators. It opened the first U.S. audio showroom in 1947 and sold the first mass-produced personal computer, the TRS-80, in 1977.





Above: Member's of the CAARA ARRL VE Team grade 14 Technician Class Amateur Radio License exams during fall Tech in a Day Course which was run by club President Stan Stone W4HIX on Saturday, October 19 at the Lanesville Community Center in Gloucester. We had 12 out of 14 pass their exams. This course has produced over 110 Technician Class operators with a 90% pass rate in the past 3 years.

Below: Ross Burton W1RAB, Jake Hurd K1LDL and Dave Robertson KD1NA listen on 20 meters SSB on Dean KB1PGH's portable HF station demo during the Tech in a Day session.



A series of dashes and dots run vertically down the two center divider columns of the manual scoreboard. They symbolize the initials of former team owners Thomas Austin Yawkey (TAY) and Jean Remington Yawkey (JRY) written in morse code. Mr. Yawkey's initials are on the left. In 2004 Nike, in a TV ad honoring the Red Sox championship, used Morse Code to spell out its corporate slogan, "Just Do It", in the margins surrounding the screen.



## CubeSat to test new battery technology

Radio amateurs **Professor Sharlene Katz, WB6FFE**, and **Professor James Flynn, WB9AWX**, describe their CubeSat project, **CSUNSat1**, which aims to test new technology to extend battery lifetime

Space has captured the human imagination and curiosity since the dawn of time. While much has been discovered about this beautiful abyss, space is still in many ways the final frontier, and California State University Northridge's Department of Electrical and Computer Engineering is part of this expedition.

CSUN is home one of the 13 university teams NASA has selected for collaborative projects to develop and demonstrate new technologies and capabilities, and spur innovation in communication, navigation, propulsion, science instrument and advanced manufacturing for small spacecraft. The goal of these efforts is to transform a small spacecraft, some of which are only a few kilograms in weight, into powerful but affordable tools for science, exploration and space operations.

Electrical and computer engineering professors Sharlene Katz, WB6FFE, James Flynn, WB9AWX and David Schwartz applied for a NASA SmallSat Technology Partnership Grant. The grants were given to universities working in partnership with a NASA center. CSUN is working with the Jet Propulsion Laboratory in Pasadena.

"The project is to construct a 'CubeSat,' called 'CSUNSat1,'" Katz said. "A 10-centimeter-by-10-centimeter-by-20-centimeter satellite, roughly the size of a shoe box and weighing about 2.25 kg, to carry a J.P.L. energy storage experiment into low Earth orbit, or about 800 km above the Earth's surface. Over the course of several months, the satellite will downlink data from the experiment to a ground station on the roof of Jacaranda Hall. The CSUN team is responsible for the mechanical construction of the satellite, the design of the radio, sensor electronics and power system, along with all the satellite's main computer programming."

Testing of the completed satellite will be carried out by the CSUN unit.

“The team is also responsible for the design, construction and operation of the ground station,” Katz said. “The J.P.L. is responsible for the design and construction of the experimental payload. NASA will launch the satellite as part of their CubeSat Launch Initiative, which piggybacks small satellites from educational institutions onto commercial and government satellite launches around the world – at no cost to the educational institution.”

The CSUN team includes 20 students from the electrical engineering, computer engineering, mechanical engineering and computer science departments.

“Senior and graduate students were selected based on their interests, course performance and an interview with the faculty,” Flynn said.

“Their work on the project will fulfill their senior or graduate project requirement. Sophomore and junior students are beginning to take part by volunteering to help with the project on a regular basis. That gives the faculty a chance to see how they work and determine if they can assume a major role in the project during their senior year.”

The experiment involves a new development in power storage for spacecraft. Current systems consist of solar cells and batteries, or some other power source and batteries.

“Unfortunately, the batteries do not work well at the extremely low temperatures found in space far away from the sun or when the spacecraft is the earth’s shadow,” said Flynn.

“Up to now, the batteries were equipped with heaters, but these consume precious energy and add weight to the vehicle. In addition, current battery systems involve rapid discharging and recharging of the batteries. This can wear out batteries very quickly and shorten the life of a mission. The new JPL technology eliminates the need for heaters and protects the batteries from the rapid discharge/charge cycles. Both aspects will allow longer missions farther from the sun.”

Katz looked to the future. “The flight of the CSUN/J.P.L. satellite “will verify and validate this new system, making it available for use on future missions,” she said. “In addition, the mission will validate the CSUN satellite design and allow for future missions using this spacecraft.”



# WREN a Ham Radio Slow Scan TV PocketQube

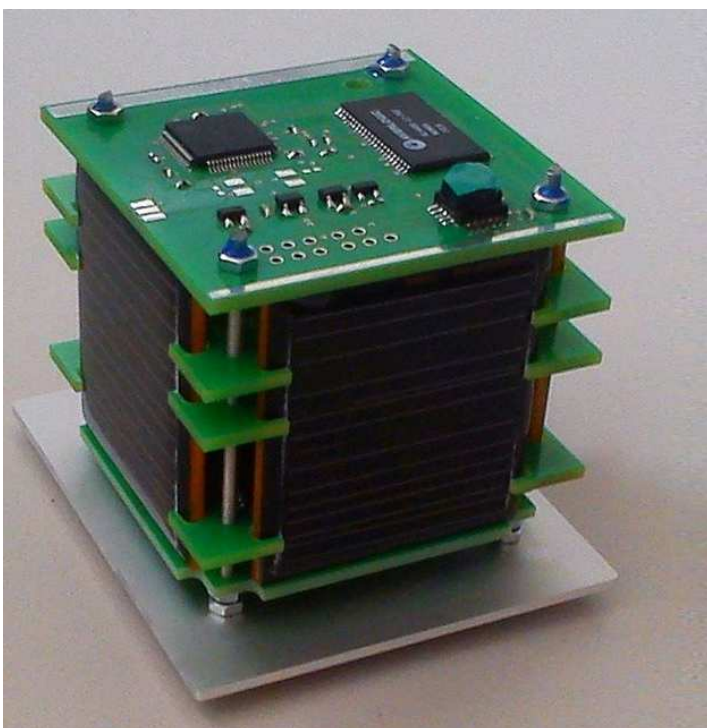
The PocketQube satellite **WREN**, just 5x5x5 cm and weighing 250 grams, aims to transmit amateur radio Slow Scan TV (SSTV) pictures using the Martin-1 format

Despite its small size WREN is equipped with a camera, a gyro, a magnetic field sensor, momentum wheels and pulsed plasma microthrusters.

The communications uplink and downlink will take place on the IARU coordinated frequency of **437.405 MHz**.

WREN is flying in a bigger satellite called UNISAT-5 that will be launched in late November, 2013 on a Dnepr rocket from Dombarovsky near Yasny. UNISAT-5 will deploy WREN one month later so we may expect to hear the SSTV signal in January 2014.

Paul Kocyla and Sacha J. Tholl presented the working engineering model of the Wren PocketQube satellite Wren to the public at the Maker Faire in Kerkrade in the Netherlands. In this Video they are sending live pictures during the faire via SSTV amateur radio, just as WREN will do in orbit.



## FCC SAYS NO TO EXPANDING TECH PRIVILEGES ON 10 METERS

The FCC has dismissed a Petition for Rule Making from the Toledo Mobile Radio Association that sought to expand Technician class operating privileges on 10 meters. This to permit holders of Technician class tickets access to the FM portion of the band from 29.52 to 29.7 MHz Under current rules, Novice and Technician licensees may operate from 28.0 to 28.5 MHz but are limited to CW, RTTY and other data modes from 28.0 to 28.3 Mhz. They also have limited SSB phone privileges from 28.3 to 28.5 MHz. Last June the Toledo Mobile Radio Association had asked the Commission to expand the spectrum available to Technician licensees on 10 meters to include operating privileges in the FM portion of the band. It asserted that that amending the rules would bring Technician voice privileges on 10 meters in line with technical advancement that had taken place since those rules were put in place. But in its October 17th decision denying the rules change request the FCC said that the Toledo Mobile Radio Association had not presented any new evidence to warrant the Commission revisiting the question of Technician class licensees operating privileges. The regulatory agency went on to note that Technicians can already transmit through repeaters licensed to a General class or higher licensee that have an output channel in the 29.52 to 29.7 MHz segment. The caveat is that the input of the repeater must have an input on 2 meters or above and be under the control of a higher class licensee. In other words, a cross-band linked system or remote-base rather than a conventional 10 meter in-band repeater. Also that contrary to Toledo Mobile Radio Association assertion, the FCC says that its rules do not prevent Technician Class licensees from taking advantage of such technological developments as IRLP or Echolink. Nor does it prevent them from exchanging voice communications with other stations in the 29.52 to 29.7 MHz segment of the 10 meter band but again as long as the Technician operator is using spectrum allowed to that license class.

## **Last Man Standing - Friday November 22nd "Thanksgiving"**

This comes direct from the Last Man Standing producers:

Attached is a still frame from "Last Man Standing" Episode 8, "Thanksgiving".

The episode features Tim Allen as Mike Baxter (KA0XTT) in his basement ham shack.

Mike finally (but briefly) talks on the radio! In response, we hear a pile-up created using real hams voices that were sent in to the production.

"Mike" appears with his grandson "Boyd", played by Flynn Morrison.

The "Thanksgiving" show airs Friday, November 22nd on ABC at 8 EST & 7 CST.

## **A series of dashes and dots run vertically down the two center divider columns of the manual scoreboard.**

They symbolize the initials of former team owners Thomas Austin Yawkey (TAY) and Jean Remington Yawkey (JRY) written in morse code. Mr. Yawkey's initials are on the left. In 2004 Nike, in a TV ad honoring the Red Sox championship, used Morse Code to spell out its corporate slogan, "Just Do It", in the margins surrounding the screen.....

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## **NAMES IN THE NEWS: ERIN KING AK4JG NAMED ONE OF THE WORLDS 50 SMARTEST TEENS**

And congratulations to 2012 Amateur Radio Newline Young Ham of the Year award winner Erin King, AK4JG, who has been named one of the 50 smartest teens in the world by TheBestSchools.com.

King was selected for this honor based on her early acceptance to the Massachusetts Institute of Technology and her then hacking of her acceptance letter tube. This she converted into a spacecraft payload that she flew to over 90,000 feet. Once recovered using A-P-R-S tracking Erin took the video captured by the onboard Go Pro camera and produced a stunning documentary of the creation of the payload and the actual flight itself.

This past summer recess she spent with Google working on their Project Loon. This is a communications experiment that looks to use a global network of high-altitude balloons to connect people in rural and remote areas of the world who currently have no Internet.