



# CAARA Newsletter



AFFILIATED CLUB

OCTOBER ISSUE- 2013



## President's Desk

by Stan-W4HIX

September 2013

I just returned from three weeks in Rome. Sandy and I planned the trip for our 30<sup>th</sup> anniversary because we really love Rome and wanted to spend time there. Let me tell you, the three weeks flew by. We'd seen the major sites in trips before, so we were able to concentrate on places that don't have long lines of visitors waiting to get in. We rented an apartment and literally lived there instead of just visiting. At the end of the three weeks we weren't ready to come home.

Speaking of coming home, there's lots to do at CAARA. It looks like we have enough money raised to start some of the exterior renovation work, but we still have a fair amount to raise for the whole job. We'll be exploring corporate donors, but we haven't really hit the club membership yet. Please consider making a donation—it will make a big difference.

The next item is the purchase of 6 Stanwood by CAARA. The membership voted to purchase the building from the City as negotiated by the Board of Directors at the Annual Meeting. The subject of the sale of the property comes before the Planning and Development committee for review and recommendation on Wednesday, October 2<sup>nd</sup> at City Hall. This is the same night as the members' meeting that votes on the budget for next year, so yours truly will be at City Hall for the evening and Jake K1LDL will be running the show at CAARA. We are pretty

much on track, but as with most thing related to government, it takes time.

Tech in a Day is coming up on October 19<sup>th</sup>—if you know anyone who is interested in getting their Tech license, have them e-mail me at [techinaday@caara.net](mailto:techinaday@caara.net). Deadline for registration is Wed. October 16<sup>th</sup>.

The club seems very active and vibrant these days—and that's a good thing.

73 de Stan, W4HIX  
[w4hix@caara.net](mailto:w4hix@caara.net)

### CAARA HOLDS ANNUAL MEETING !!

The Cape Ann Amateur Radio Association held its ANNUAL meeting on Wednesday September 4th at 7:30 PM at the clubhouse on 6 Stanwood Street. Ther were 19 members in attendance including Jon Cunningham K1TP which watched the meeting in the comfort of his home on Skype! The first order of business was a great powerpoint presentation of the "State of the club" address by CAARA President Stan Stone W4HIX. We should be able to get that presentation on either the newsletter or club website soon. The main focus was the potential purchase of the clubhouse and the finances to do so. Then club Treasurer Hank McCarl W4RIG gave another powerpoint presentation of the "Financial State of the Club" with the help of Dick Ober K1VRA. Then there was a brief discussion period which included why the building should be purchased and the opporunity that exists to do so. The meeting then concluded with the Board of Director and Offier elections. Roger Smith KB1YTJ was elected as clerk and Pete Chadbourne K1LJO was elected as a new Director, both for a 2 year term. This meeting did not include a Constsitutional Convention and no changes were made to the clubs Constitution at this meeting. The meeting the adjourned at 9:00 PM.

**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

**Board of Directors- 2012-13**

President: Stan Stone W4HIX  
Vice Pres: Jake Hurd K1LDL  
Treasurer: Hank McCarl W4RIG  
Clerk: Dean Burgess KB1PGH

**Directors:**

Ross Burton W1RAB  
Paul Anderson, KA1GIJ  
Jon Cunningham K1TP  
Bill Poulin WZ1L  
Larry Beaulieu AJ1Z  
Dick Ober, K1VRA  
John Graves WA1JG

## Welcome to CAARA:

CAARA, an ARRL affiliated club, operates the 2 meter W1GLO repeater on 145.130 MHz (PL 107.2) with antennas located on the ATT 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 (no PL) located at the CAARA Clubhouse with a very limited range. The former W1RK 443.700 (no PL) repeater with antenna at the CAARA Clubhouse in Gloucester, Massachusetts has a 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 features multiple HF station's with rotatable 10-20 meter beam, G5RV wire antenna, and 2 HF vertical antenna's along with a 2 meter packet station and multiple 2/220/440 MHz transceivers. CAARA also has an impressive collection of older tube radios.

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.



CAARA ANNUAL MEETING: Stan gave a State of the Union address to explain the club's financial picture for the vote on purchasing the club building from the city. There was tremendous support for the purchase of the club which will bring stability to CAARA in the future.



- ### Committees
- House committee (maintenance, grounds)
  - Equipment (Automotive/Infrastructure)
  - Fundraising (fundraisers, other events)
  - Contest Operations
  - Operating Stations
  - EmComm Trailer
  - Gloucester EDC Support
  - Emergency Preparedness
  - Training/Education
  - Programs (Member Mgt)
  - Field Day

## Puddles by AA3JE, Dr. Curtis Wright

We have a dog. Two dogs, actually. One is a bog goofy Labrador named “Beau” who is warm, affectionate, and eats anything. Beau’s theory is that if it is inedible, it will come up or go through quickly, and spending any time considering if a given item is food is a waste of good sleeping time.

This behavior has made me an expert in biological decontamination. It has also deeply offended our other dog, named Daisy, who is a fastidious Scotty-Poodle mix (AKA small yippy mutt), who finds Beau’s behavior deeply offensive. Daisy will not even eat if you are looking at her, and as for excretory functions, they are deeply embarrassing to her, and you have to turn your back to give her privacy when you walk her.

This ingrained delicacy leads to the occasional domestic problem. If I leave the basement door open, Daisy would much rather just toddle on down there, relieve herself, and run back upstairs rather than go through that demeaning (to her) business of begging to be walked. This means that if I have to go down to the shop, and are not looking carefully where you are stepping, well, you know the rest.

So, early one Sunday morning, I walked down to the shop to get a screwdriver, in my bare feet, and I found the carpet on the landing, well, moist is the best term. I looked, and saw a small puddle. I went up, criticized the dog, and got the carpet shampoo, but decided to wait till later before I fired it up. It makes a noise like a 747 on final landing approach, and it was still early. When I went down later, the puddle was larger.

Puzzled, I looked up, and was lucky to see a small drop of water descend from the cold water pipe. Now to those who do not know me, the sensible thing to do would be to wrap it in a rag, put a bucket under it, and call the plumber on Monday. If you add the fact that SHE WHO MUST BE OBEYED’s mother was visiting, and we had a family dinner with much cooking planned, this was the only sensible idea. It was not, unfortunately, my plan.



I inspected carefully, and found a pin-hole in the pipe, spraying a fine mist at about a quart an hour. It was in the clear, well, mostly in the clear, and it looked like a simple repair. A foot of half-inch copper pipe, two sleeves, a little flux and solder, and I was home free.

So I drove to ACE, who know me by my first name by now, and bought what I thought I needed. I alerted the women, and got the predictable response.

“I’ll pay for it. I’ll empty the bucket, PLEASE DON’T DO THIS!”

It is a sad thing when your family loses faith in you. So I got the draining bucket, cut the main water, and drained the system. Now I knew it was a long process, but when the water was still draining out half an hour later, I realized I had a problem. At this rate, the system would be dry in two days. So I thought, and in a moment of inspiration, I connected the wet-dry vacuum to the drain hose, and fired her up. If you have occasion to do this, a small tip. Make SURE the vacuum is empty first. After removing the fifteen gallons of wet sawdust, sludge and

metal filings from the vacuum, I tried again.

**SUCCESS!**

So I cut the offending piece out, and cleaned the ends up, fluxed, and fitted the repair piece. Now for a second tip.

When fitting copper pipe, there must be enough flex or slack to fit the couplings. It does not take much, perhaps a half inch, or so. I had about a quarter of an inch to work with. Figuring that a little flex was OK, I crammed it in, and soldered it up.

Tip #3. Soldered copper fittings must be under NO stress when soldered. If you have them under stress, a channel forms, the solder does not fill it, and when you turn the water on, a solid stream of water jets out and soaks a considerable area, mostly my wife’s things, so no harm done.

I was sweating now. I had less than an hour left, and had no idea what to do. So, back to ACE.

“What went wrong?” said the helpful hardware man. “Er, babble, stress, solder.... Leak, babble, bad leak, time running out....wife..... mother in law.....”

“Calm down, focus, find your happy place, now try again.” This man was good.

“No room, bad length of pipe, both ends fixed. No slack.”

“You need a pipe union.”

Turns out a pipe union is a neat, specially made piece for just this situation. It screws together with zero clearance and doesn't leak. Armed with two sleeves, more pipe, two unions and a pep talk, I went back home.

Tip #4. When stressed, and using a torch in tight places, spray the beams with water before soldering. This avoids unfortunate small fires that create domestic disturbance. DO NOT USE FEBREEZE to put out the fire. The smell is very bad. It also tends to draw wives and mothers in law. Their comments are not suitable for a family publication.

After I calmed down, I cut out the first repair, prepped the ends, re-fluxed, sprayed the beams down, and soldered it up. I then found that it is important to make sure the solder does not run all over the nut on the union, as the wrench won't fit. Fifteen minutes with a file removed the excess, and I bolted it up. Oh yes, when filing on an overhead piece, wear safety goggles. It keeps the little metal bits out of your eyes. With fifteen minutes to go, I turned on the water. No leaks.

Please be advised that it is ESSENTIAL to let the water run for a while, AND NOT TO RUN THE WASHING MACHINE till the water runs clear. (Details available on request along with tips on removing rust stains from mother in law's clothing). So there we have it. A simple job done on time and on budget. I specifically do not recommend the application of the \$1.65 rubber sleeve and clamp made for this problem mentioned by the plumber. It looks simple, easy and cheap, but it leads to sloth, and loss of moral values. America was built on adversity, not ease.

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### **The question is: .... “Explain amateur radio?”**

Seems to be a pretty simple question, but think about it, do you have the right answer or answers?

Dare say most of us would not be able to succinctly give an answer.

That is, without saying what we did, and even a few who would slip into jargon and ham-lingo to give some sort of a reply.

As every good salesperson learns it is essential to know about the product or service on offer to have a

hope of clinching a deal with a customer. So it should be with amateur radio, if we are to be successful in recruiting new people into our ranks. Unless we have the right messages and can communicate them, true success is not realised.

The Wireless Institute of Australia (WIA) in the lead-up to its **PR4AmateurRadio Expo** in April will help clubs or groups maximise their involvement in this publicity drive.

And as an ‘explain amateur radio’ **Ed VK2JI** says it's time to

”Wake up and smell the roses!” it's a kind of Ham Radio 101 primer.

How often do we hear each other saying this or that was good “Back in the day”?

Well I've been around the traps a few times and agree the 70's and 80's were great for Amateur Radio and its importance in the world. But STOP and take a look around. You may not have realised it but it's GREAT to be in Amateur Radio again.

With regular contacts to the space station  
With Amateur Radio providing an essential service in many, many disaster situations around the world.  
With great contests and DXpeditions in many cases to places not possible before.  
With new construction kits letting even a newcomer build a complete stable transceiver in a few nights work.

With portable operation being at its highest for a long time with Summit and Park activation award schemes.  
With the use of QRP both portable and with new data modes that were never around “Back in the day” allowing communications below the noise level.

With Digital and Analogue repeaters allowing a handy talkie to talk around the world.

With tracking and data comms via APRS.

With balloon launches to the outer layers of the Earth's atmosphere.

We are seeking more young people to join our fantastic hobby - we now have so many more things to offer them than we had “Back in the day”.

So PLEASE the next time someone says to you - “So what's this ham radio thing about” Don't say “well it used to be good but now it's just a bunch of us old folk chatting to each other” - while that's important there are so, so, many other facets to the hobby today that simply didn't exist years ago.

**WAKE UP AND SMELL THE ROSES!**

The Amateur Radio hobby is **BACK IN BLOOM** and leading technology as always.

# Product Review

by Dean-KB1PGH



## Military Ready to Eat Meal (MRE) Review

I guess I've been watching too many "Doomsday Preppers" show on National Geographic. I was curious to try out one of those military "Ready to Eat" meals that I have been seeing around. I also got to thinking that maybe they could come in useful say if the CAARA Emergency Communications Group or CERT was called out and I wasn't able to get a meal for a while for some reason. I also thought that these would be great for anyone's 72 hour disaster kit or for an Emergency Operations Center. So I went online and ordered one from [www.thereadystore.com](http://www.thereadystore.com). I ordered a full meal for \$10.50, though can also order just the entree or snack part of the meal as well. Now these are the actual meals that they give to the United States Military and they have a 5 year shelf life as long as you keep them in a cool dry place. Any sort of heat will greatly affect the shelf life. Just remember that if you order one of these full meals they will ship you one of 6 entrees and you'll never know what one you'll get. As you can see in the photo I got the Spaghetti with Italian Style meat sauce.

In the next photo you can see all the contents laid out on the table. It comes with a airtight sealed packet of spaghetti with sauce, a packet with an oatmeal cookie, a packet with 2 crackers and a pouch with peanut butter. It also comes with some Peanut M @ M's, a pouch of vanilla dairyshake powder and a small pouch of lemonade mix. They also throw in a packet of pepper and a spoon. Do you notice the bigger green sleeve and the white pouch? That's how the meal is

heated and well get to that in a moment.

In the next photo you can see that long green sleeve and the white pouch I was talking about. You can also see a cardboard sleeve as well. What happens is that I put the spaghetti entree pouch into that long green sleeve. At the bottom of the sleeve is a chemical pack. Now that white pouch is filled with water with some salt mixed in. So to heat the spaghetti pouch I put the pouch into the bottom of the long sleeve, the



poured the white salt water pouch into the long green sleeve pouch and what happens is the salt water reacts with the chemical pouch on the bottom of the sleeve and it creates a lot of heat. Now I fold the top of that long sleeve pouch in half so the heat won't escape and put it into that cardboard sleeve which opens up with a flat bottom so the pouch doesn't tip over while heating. Then I let it sit for about 5 to 10 minutes and my meal is fully heated! Now for the big question, how does it look and taste! As you can see in the photo the spaghetti doesn't look that bad, considering it's been lying inside a pouch for

2 years since I bought this MRE. You can also see the oatmeal cookie and the crackers. After trying all 3 foods I was impressed! I was scared and had my phone ready to call 911 to have my stomach pumped but after trying the spaghetti it wasn't bad at all! It tasted better than any canned spaghetti out there and it was perfectly fresh! No sort of funny taste to it at all! The next item was the crackers and they were fresh as well! I figured that they would be stale or soggy or flat tasting but they were great! Now for the dessert, the oatmeal cookie. I was expecting the same sort of problems as the crackers, either dry or bland but no problems at

all.If you put these items in a store shelf today no one would no the difference. Now I didn't eat this whole meal.This whole meal is 1460 calories and can be easily split into two meals.It contains 48% of your fiber,57% of your carbs,45 Grams of protien and 69 Grams of fat.If you think about it if your a Marine fighting the enemy all day long eating this meal is no problem and that's what it is designed for. So I highly recommend these MRE's made from APACK company.Don't be scared to try them out.I survived and was actually pleasantly surprised. I have one stored in my CERT kit. These could also be used for camping and any other situations were you don't have to worry about fuel for cooking a hot meal since this full MRE already does it for you! This definitely isn't you fathers MRE's!



**CAARA provides comms for Lone Gull 10k !** *courtesy Dean-KB1PGH*

Several members of the Cape Ann Amateur Radio Association provided public service communications for the Lone Gull 10 K roadrace on Sunday September 15th.

Over 1200 runners participated in this fundraising event for the Beverly School for the Deaf. The race course consisted of starting by Good Harbor beach and running the back shore and Eastern point of Gloucester. The race started at 9 AM and ended around 11:30 AM. CAARA members donated 15 hours of volunteer time providing safety communications to the runners and to the community. CAARA also donated the use of its repeater system for this event, as in all public service events, which the repeater was purchased using private donations of CAARA members.

The following hams helped out in this event:  
Ross Burton- W1RAB,  
Curtis Wright -A3JE, Nate Dewolf- KB1VST, Jon Cunningham- K1TP, Bobby Spanks- WA1UCG and Dean Burgess- KB1PGH.

**Nate Dewolf KB1VST and Curtis Wright AA3JE in the tail car following the last runner.**



**Pack of runners coming up Farrington Ave and making the turn onto Atlantic Ave.**





# Sponsored by the Twin State Radio Club – W1FN

*Don't drive or fly! Save money and arrive rested and refreshed. NO TSA hassles!*

**May 15 - 18**

**\$250 per person round trip charter, plus hotel**

- Luxury Premier air-conditioned coach with DVD and Wi-Fi
- The final driver will be Steve, KA1NYP
- Deeply discounted group hotel rates (not included in \$250 bus cost)
- Open to all hams in the region
- Plenty of room in the cargo holds for your treasures coming home
- Early morning departure from Lebanon Airport with a pickup stop at Rutland, VT
- Free parking at both pickup sites

## **Transportation Costs**

- \$50 bus deposit must be received before February 1, 2014. Don't delay – the bus could fill up fast at this price.
- Balance of \$200 must be received by February 30<sup>th</sup>
- Our minimum is 35 people – if we don't reach that number by February 30<sup>th</sup>, the trip will be cancelled and all funds returned.

No refunds after February 30<sup>th</sup> unless the trip is cancelled for any reason.

## **Hotel**

A block of 35 rooms has been set aside at a reduced group rate at an excellent Ramada hotel. Once your deposit has been received, we will provide you with the hotel reservation information, and you must make your own reservation. The hotel rate is not bundled with the bus costs to give you the flexibility to share your room with one or more friends to save money. Hotel reservations can be cancelled up to May 13th.

## **Send in Your Deposit!**

Mail a deposit of \$50.00 per person to Twin State Radio Club, PO Box 5078, Hanover, NH 03755. Clearly mark the check "Dayton Hamvention." An email to Bob Harris [k9udx@omiss.net](mailto:k9udx@omiss.net) would be appreciated so we can be watching for the deposit check. Questions may also be directed to Bob.

**[www.w1fn.org](http://www.w1fn.org)**

## The Information Desk

by Dean-KB1PGH

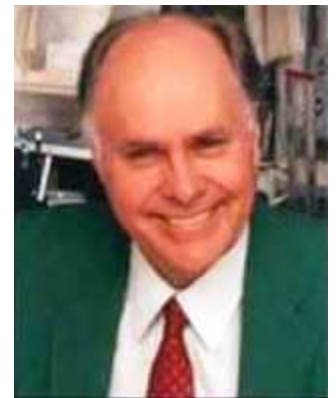


Greetings to all who are reading this month's edition of the CAARA Newsletter. My name is Dean Burgess KB1PGH and I am a Public Information Officer for the Amateur Radio Relay League in Eastern Massachusetts. This month I am starting a new column called "The Information desk" and hopefully throughout the following months I can pass along some thoughts and ideas of what amateur radio is. Now I'm going to assume that if you're reading the CAARA Newsletter that you're a licensed amateur radio operator and that the chances are that you are also a member of the A.R.R.L. of the Amateur Radio Relay League. If you are now I would recommend at least taking some time to think about becoming a member. The ARRL website is [www.arrl.org](http://www.arrl.org) if you want to take a closer look. If you are a member here's a friendly reminder to not forget to renew your yearly membership. Now many have asked what's my purpose of being a PIO for the ARRL? That's exactly why I wanted to start to at least write a monthly column on amateur radio. One of my duties is to at least try to educate the public on what amateur radio is. It's gotten so bad that at one time a person said to me, "You guys still do that?" Well at least he knew what ham radio was - I'll give him that. With all of today's technology and social media it's easy for any hobby to get lost in all the noise. You know what will happen if you try to talk about ham radio to today's kids. You'll first get this lost stare, then if you at least get their attention ham radio to them will seem like some sort of old relic form of communicating akin to smoke signals. If you said to a teenager - "I'll either buy you an iPad or an Icom 7800" you know they'll go to the iPad. The competition for instant communications in today's world is brutal. Let's face it, in today's world we have the instant gratification of Twitter and the throwaway mentality of just getting a new cellphone in a blister pack when my old one craps out. All this doesn't mean that there is something wrong with ham radio, it's just merely on a different stage where it doesn't have to compete for anything. Of course when we love any hobby we want everyone else to love our hobby just the same as we do and that's understandable. With ham radio we just to find ways to

be smart about how we grab the attention of others and make them at least understand and appreciate what we do. Amateur radio is just like any other "Technology Hobby" and if we can't at least get people amazed at how we can transmit tiny electrical/magnetic energy and launch it 30 to 50 miles into the earth's atmosphere and receive it thousands of miles away, I don't know what else we can do. We just have to transmit our passion for the physics and engineering of it all to others. I alone as your Public Information Officer can't do it alone. Every amateur radio operator has to be passionate and spread the word to others. So hopefully I can give you ideas of how to do that. The last tidbit I have this month is that the SWL Magazine "Monitoring Times" is going out of print. The last issue will be the December issue. They are shutting down due to all the information that is now on the internet and the decline in advertising. Monitoring Times has been in print for over 30 years. That's it for now and I'll see you in November!

## Ham Radio Publications Pioneer, Visionary, Iconoclast Wayne Green, W2NSD, SK

Wayne S. Green II, W2NSD ("Never Say Die"), of Hancock, New Hampshire, died September 13. He was 91. A well-known and often outspoken figure during what some consider Amateur Radio's golden years in the 1950s and 1960s, Green helmed *CQ Magazine* for 5 years before becoming the self-proclaimed "El Supremo and Founder" in 1960 of *73* magazine, which he published until 2003.

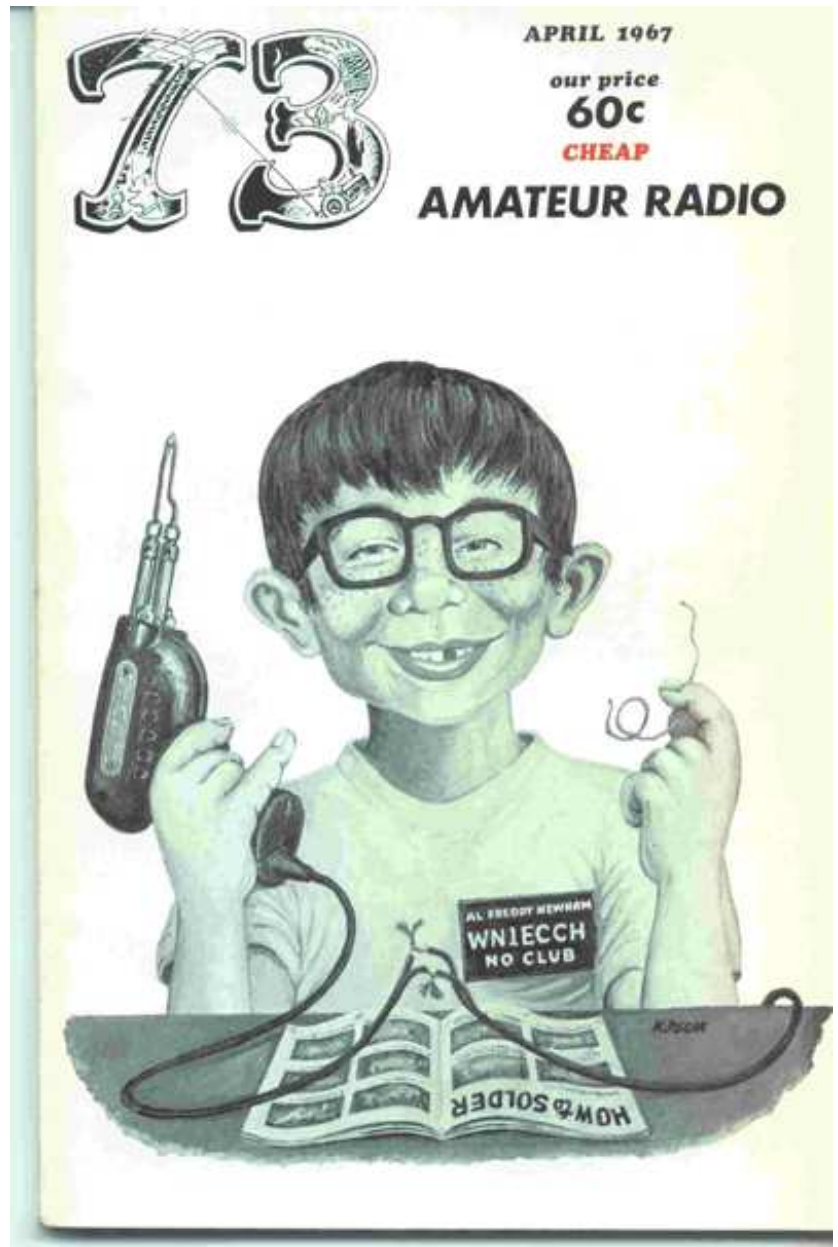


"The purpose of [73] at that time was to get more hams building equipment," Green recounted in a **radio interview** several years ago. A hallmark of *73* was Green's iconic, rambling, and wide-ranging "Never Say Die" editorials, in which he rarely missed an opportunity to tweak the ARRL and his magazine competitors for their perceived shortcomings. In 2012 Green contributed back issues of *73* to **Internet Archive**. "Wayne will be remembered in many different ways

by many different people, but he will be long remembered,” said ARRL CEO David Sumner, K1ZZ. “He maintained his membership in the ARRL despite being a persistent critic. In the early days of packet radio he gave me some good advice as to how the ARRL should promote the new technology: ‘Talk about it as if everybody’s doing it, and eventually they will be.’” Indeed, Green often was ahead of the curve in promoting such technologies as single-sideband phone, solid-state, FM, and the marriage of computers and ham radio, and he went on to found and publish *Byte* and other computer-oriented publications. “I live mostly in the future,” Green was quoted as saying.

Former ARRL Contributing Editor Stan Horzempa, WA1LOU, once wrote in his “Surfin’” web column, “We take computers and the Internet for granted today. I first became interested in computers when Wayne Green, W2NSD, started writing about them in 73 magazine in the 1970s. Back then, you had to build your own from scratch or from kits.”

Green maintained a larger-than-life presence, even in the years after he faded from the Amateur Radio spotlight, and he never did really retire. “Hey old buddy, I will miss you,” radio talk show host Art Bell, W6OBB, posted to Wayne Green’s **blog**. “NEVER SAY DIE is a phrase that will be with me till it’s my time.” Green was an occasional guest on Bell’s “Coast to Coast AM” overnight talk program. There hardly was an issue that Green would not confront, and he expounded a variety of unconventional science, health, and medical theories — from cold fusion and the moon landing to AIDS and cancer cures. He continued to **write** and speak frequently on these topics and others, as well as on public policy, even at hamfests where he was a guest. The “Final” in his blog sums up Green’s overarching philosophy. “Wayne Green passed away September 13, 2013 in a peaceful, painless transition from this life on Earth. An eternal optimist, and one who loved to share his never-ending zest for life, he was a friend to many and will be missed greatly. Wayne was not afraid of dying and was very much ready to embark on his next great adventure to the afterlife.”



## **Introducing Yaesu 'System Fusion': from Dennis Motschenbacher K7BV**

Yaesu's complete System Fusion C4FM / FDMA Amateur Radio Digital Communication System was introduced to North America ham radio operators yesterday late afternoon at the 32nd Annual ARRL and TAPR Digital Communications Conference in Seattle, Washington.

Yaesu's FT 1DR Handheld and FTM 400DR mobile digital and analog dual band transceivers, already available, were discussed as well as a new key system component, the new DR-1 Dual Mode Repeater.

This conference is an international forum for radio amateurs to meet, publish their work, and present new ideas and techniques.

Presenters and attendees have the opportunity to exchange ideas and learn about recent hardware and software advances, theories, experimental results, and practical applications.

Attendees frequently are Amateur Radio individuals experimenting at the very leading edge of the kinds of new technology that keeps Amateur Radio constantly moving forward.

It was our intent to show our respect to these individuals by launching the new Yaesu System Fusion C4FM / FDMA Amateur Radio digital communication system during their proceedings.

Yaesu encourage all interest parties to download the attached Yaesu Product Bulletin as well as our new System Fusion Product Brochure to acquaint themselves with its full capabilities.

We are certain that many will applaud the fact that System Fusion is "FM Friendly" meaning both Analog and C4FM Digital users can share one repeater and communicate with each other.

With this one hugely important feature, Yaesu has shown their deep appreciation for their customers who for years and years have purchased their VHF and UHF Conventional FM Analog products.

Yaesu's System Fusion provides an opportunity for a

smooth transition to Digital for hams choosing to make that change without having to lose contact with their friends who may not be making the change at the same.

Yaesu will release additional purchasing and availability information to their North American Dealers in the next few weeks.

We fully expect there to be a large number of System Fusion repeaters on-the-air widely serving the Amateur Radio community by year's end!

Please join us as we celebrate this very important day in Amateur Radio history!

Thank you.

Best regards,

Dennis Motschenbacher K7BV  
Executive Vice President Amateur Radio Sales

## **Maine QSO Party is September 29!**

We inadvertently omitted the Maine QSO Party from the Radiosport listing in The ARRL Letter for September 26. Sponsored by the Wireless Society of Southern Maine, the event runs from 0000 UTC to 2359 UTC September 29. Bands and modes include 160, 80, 40, 20, 15, and 10, CW, and phone (SSB, FM, AM). Maine stations exchange signal report and county (16 in all). Others send signal report and state or "DX" if outside the US. Logs are due October 15. (ARRL Website)

## **SCIENTISTS ADMIT SOLAR CYCLE 24 LOW IS PUZZLING**

Predictions that 2013 would see an upsurge in solar activity and geomagnetic storms have proved to be a false alarm.

Instead, the current peak in solar cycle 24 is among the weakest for a century. Amateur Radio Newslines's Stephan Kinford, N8WB, takes a look at what scientists are saying:

Subdued solar activity has prompted controversial comparisons with the Maunder Minimum. The Maunder

der Minimum, also known as the prolonged sunspot minimum, is the name used for the period starting in about 1645 and continuing to about 1715 when sunspots became exceedingly rare, as noted by solar observers of the time. These minimums supposedly coincided with the coldest period in the last millennium.

But Giuliana DeToma, a solar scientist at the High Altitude Observatory in Colorado says that the unusually low number of sunspots in recent years is not an indication that we are going into a Maunder Minimum, but added that researchers do not know how or why the Maunder Minimum started. As such, they really cannot predict the next one.

Other solar experts think the downturn is linked a different phenomenon called the Gleissberg cycle. The Gleissberg cycle, named after Wolfgang Gleissberg, is thought to be an amplitude modulation of the 11-year Schwabe Cycle which predicts a period of weaker solar activity every century or so. If that turns out to be true, the sun could remain unusually quiet through the middle of the 2020s. However, as scientists still do not fully understand why the Gleissberg cycle takes place, the evidence is, at best, inconclusive.

The bottom line appears to be that the sun has gone unusually quiet and no one really knows why or how long this lull in activity will last.  
(Macedoniaonline.eu)

### **BREAKING DX NEWS: VIETNAM COMING TO THE AIR IN OCTOBER**

Vietnam will be on the air in a few weeks. This with word that N00DK will be operational from Ho Chi Minh City as 3W2DK between October 17th and the 24th. He will then travel to Phu Quoc Island and be operational from there using the call XV4MN between October 24th through the 29th.

His operations will be on 20, 17, 15 and 10 meters from both locations. After his Phu Quoc Island operation, he will return to Ho Chi Minh City and will again be on the air from there until November 2nd. If you work this rare one, QSL via N00DK, direct, by the Bureau or Logbook of the

World.

And we will have more DX related news for you later on in this weeks newscast. (OPDX)

### **RESCUE RADIO: CONGRESSIONAL LAWMAKERS ASK WHY NAVY YARD RADIO FAILED DURING SHOOTING**

Two California lawmakers are calling on federal regulators to investigate reports that first responder radios failed during the recent shooting at Washington's Navy Yard. The newspaper The Hill reports that Representatives Henry Waxman and Anna Eshoo sent a letter on Monday, September 23rd to the heads of the Federal Communications Commission and the Commerce Department's National Telecommunications and Information Administration, urging them to work with other federal and local officials to investigate the problems.

In their letter of inquiry, the two lawmakers reportedly stated that it is imperative that lawmakers understand what happened to these communications systems and why. They also urged the officials to ensure that FirstNet, which is a planned nationwide wireless network for first responders, avoids similar communications breakdowns.

The newspaper had previously reported that some federal firefighters and police officers were unable to communicate using their radios during the Navy Yard attack. According to union officials for first responders some equipment stopped working as officers entered buildings and at least one officer was forced to rely on his cellphone. There were also widespread reports of battery problems that prevented the some of the radios from working. More on this story is on the web at [tinyurl.com/Washington-shooting-radio-fail](http://tinyurl.com/Washington-shooting-radio-fail).  
(The Hill)

### **RADIO LAW: FCC SAYS NO TO ENCRYPTED HAM RADIO COMMS**

Encrypted communications won't be coming to ham radio anytime soon. This as the FCC dismisses a rule making request from a Massachusetts ham who had asked the regulatory agency to amend the Part 97 Amateur Service rules to permit the encryption of certain amateur communications during emergency operations or related training exer-

cises.

**RM-11699 was filed earlier this year by Don Rolph, AB1PH.** In it, he had asked the regulatory body to add an exception to section 97.113 so as to permit limited encryption during crisis communications or training exercises related to readiness for such events. He argued that communications when participating in emergency services operations or related training exercises which may involve information covered by medical privacy requirements or other sensitive data required such encryption.

However in denying Rolph's rule change request the FCC concluded that while the proposal could advance one purpose of the Amateur Radio in its value to the public that it would at the same time undermine other characteristics and purposes of the service. Therefore the FCC says that it agrees with those who filed comments opposed the concept of encryption and turned away the request.

Among those who filed in opposition to RM-11699 was the American Radio Relay League. As we go to air we have not heard if AB1PH will appeal the Commission's decision in this matter. (FCC)

#### **ENFORCEMENT: ATLANTIC CARE ISSUED \$4000 FINE FOR UNAUTHORIZED OPERATION**

The FCC has issued a \$4000 Notice of Apparent Liability to Atlanticare Medical Center E-M-S of Egg Harbor Township, New Jersey. This for operating radio transmitting equipment on 154.4825 MHz from an unauthorized location in Hammonton, New Jersey.

In its September 23rd release, the FCC said that on October 17, 2012, the Enforcement Bureau's Philadelphia Office received a complaint of interference from Sunshine Communications in Philadelphia, Pennsylvania, alleging that an unidentified digital transmitter was causing harmful co-channel interference on 154.4825 MHz. Agents from the Philadelphia Office monitored radio transmissions immediately after receiving the complaint. They then tracked it to a mobile relay station operating from a water tower in Hammonton, New Jersey. The agents conducted an

inspection of the radio transmitting equipment, which was located inside the Water Tower. With the assistance of a Town of Hammonton employee, the agents soon confirmed that Atlanticare was operating a mobile relay station on the frequency 154.4825 MHz from that location.

After the inspection, the agents searched the Commission's records and found that Atlanticare holds a license for Private Land Mobile Radio Station WQME366, but that it did not authorize operation of a mobile relay station from the water tower.

Now, in issuing its decision, the FCC says that pursuant to the Commission's Forfeiture Policy Statement and Section 1.80 of the Rules, the base forfeiture amount for operating on an unauthorized frequency is \$4,000. As such, Atlanticare was given the customary 30 days to pay the proposed fine or to file an appeal. (FCC)

#### **VOYAGER 1 ENTERS INTERSTELLAR SPACE** NASA's Voyager 1 spacecraft is now officially the first man made object to venture into interstellar space.

New data indicates that the Voyager 1 spacecraft has been traveling for about one year through plasma, or ionized gas, present in the space between stars. The 36-year-old Voyager is about 19 billion kilometers from our sun in a transitional region immediately outside the solar bubble, where some effects from our home star are still evident.

Voyager 1 first detected the increased pressure of interstellar space on the heliosphere in 2004. That's the bubble of charged particles surrounding the sun that reaches far beyond the outer planets. It was at that point in time that scientists then ramped up their search for evidence of the spacecraft's interstellar arrival, knowing the data analysis and interpretation could take months or years.

Voyager 1 does not have a working direct plasma sensor, but does carry a plasma wave instrument. As luck would have it, a massive burst of solar wind and magnetic fields that erupted from the sun in March 2012 provided scientists the data they needed. When this energy from the sun eventually arrived at Voyager 1's location on April 9th of this year

the plasma around the spacecraft began to vibrate causing the plasma wave instrument to detect the movement. The pitch of the oscillations helped scientists determine the density of the plasma. The particular type of oscillations meant the spacecraft was bathed in plasma more than 40 times denser than what they had encountered in the outer layer of the heliosphere. This was to be expected and was the confirmation astronomers needed to prove that Voyager 1 had entered into interstellar space.

Voyager 1 and its twin, Voyager 2, were launched 16 days apart in 1977. Mission controllers still talk to or receive transmissions from the twin Voyager probes daily though the signals are currently very faint. Data from Voyager's instruments is transmitted to Earth typically at 160 bits per second, and captured by NASA's Deep Space Network receiving stations. Traveling at the speed of light, a signal from Voyager 1 takes about 17 hours to travel to Earth. (Space and Science)

### **HAM RADIO IN SPACE : DIGITAL ATV FROM ISS COMMISSIONING TO BEGIN**

According to a note from ARISS Europe chairman Gaston Bertels, ON4WF, the new Digital ATV transmitter on board the International Space Station, will soon be installed in the Columbus module and commissioned. This will be done in several steps, each during a full pass of the ISS over the Matera ground station. It is not yet known if these passes will be chosen in close succession, or if they will cover several weeks.

ARISS has proposed to the European Space Agency to operate so called "blank" transmissions during the commissioning period. If this is accepted, it means that Ham Video will transmit permanently without camera. The camera will not be used because it is fed on batteries and servicing it would require a prohibitive amount of crew time. Transmitting recordings is part of a future project, but not available presently.

Although ground stations will receive a black image without audio, these so called blank transmissions will contain all information needed for the setting up and the fine tuning of

the station. Collected data will be used for a performance study of the ARISS L/S-band antennas as well as for an evaluation of the global system. (ARISS Europe) like alcohol or drugs.

## **History This Week**

*Monday, 30 September, 2013*

**1452** First printed book published, Johann Guttenberg's Bible

**1608** Hans Lippershey offers Dutch gov't a new invention, the telescope

**1846** Dr William Thomas Green Morton first public use of ether.

**1859** Lismore Post Office was opened.

**1889** Thomas Edison shows his first motion picture

**1906** The second international conference on wireless telegraphy in Berlin adopted "SOS" as the international distress signal, replacing the call sign CQD.

**1908** Henry Ford introduces the Model T car (costs \$825)

**1913** US Federal Income Tax signed into law (at 1%) (Oh wish!!)

**1927** "Jazz Singer," first movie with a sound track, premieres (NYC)

**1952** First video recording on magnetic tape, LA, Ca



## HAM ARRESTED IN INDIANAPOLIS FOR ALLEGEDLY IMPERSONATING A POLICE OFFICER

News of the death of an Indianapolis police officer shot and killed while responding to a domestic dispute made headlines all last week. But, on the afternoon of his funeral another man in uniform stole the headlines. As law enforcement officers, friends, family and media gathered at the cemetery another man in blue was arrested for impersonating a police officer.

As it turns out these two men had more in common than first thought. They are both Indianapolis based Amateur Radio Operators. Arrested is 38 year old Minh Nguyen, callsign KB9WDY. He was arrested as he waited with Westside residents and other police officers as the miles long funeral procession neared the west side district headquarters when deceased officer Rod Bradway was assigned.

Rod Bradway was killed last week while attempting to save a woman and her child from an armed domestic partner. Bradways Amateur Radio call sign is KC9PFW. Authorities don't believe the two men knew each other. The police badge and uniform was the common link to this sad commentary.

According to the arrest report, Police say Nguyen was taking photographs from a black 2012 Dodge Charger equipped with a siren, flashing lights and a two-way radio. Police found an AR 15 rifle in his car and later found guns, police uniforms and police equipment at his the home.

Police say he has had prior arrests on similar and other unusual behavior. The report said Nguyen also had "property stolen from the city of Indianapolis," including property room slips and envelopes that the public does not have access to.

Minh Nguyen faces felony charges of impersonating a public servant and theft, which carries a sentence of six months to three years in prison. A conviction could also lead to revocation of his Amateur Radio license by the FCC if they choose to review the case.

The public and law enforcement officers were not aware of the Nguyen arrest until after Officer Rod Bradway, KC9PFW, was laid to rest following a full honors ceremony at Crown Hill Cemetery on Indianapolis north side. (ARNewline, W8ISH)



## **NIKOLA TESLA MONUMENT UNVEILED IN NEW YORK**

The president of Serbia has traveled to the United States where he recently unveiled the Nikola Tesla Monument at Tesla's former laboratory in Long Island. In a press statement prior to the actual ceremony, Serbian President Tomislav Nikolic said that it was the strength of Tesla's vision is what influences how the public speaks about Nikola Tesla with respect some 70 years after he died.

Nikola Tesla who passed away on January 7, 1943 was a Serbian-born and later inventor, electrical engineer, mechanical engineer, physicist, and futurist. He is perhaps best known for his contributions to the design of the modern alternating current electricity supply system.

For decades The Tesla Science Center has been trying to set up a commemorative museum at the site of Nikola Tesla's old laboratory, Now those behind the project and who managed to raise over a million dollars in an internet crowd funding campaign can celebrate the fact that their goal is finally starting to become a reality. (IntelliHub)

## **RADIO HAPPENINGS: NEW RCA EXHIBIT AND STUDY CENTER TO OPEN AT NJ COLLEGE**

A new exhibit highlighting the Radio Corporation of America's rich history across the 20th century will open shortly at the College of New Jersey, in Ewing Township. The display will draw from the more than 6000 artifacts that the college inherited after the David Sarnoff Library, which at one time was RCA's main technical archive and museum, closed in 2009. The new exhibition covers the development of radio, television, and broadcasting, as well as RCA's work in liquid-crystal displays, electron microscopy, solid-state physics, and computers. The Institute of Electrical and Electronics Engineers Foundation funded the new Sarnoff Study Center which is connected to the exhibition. The Center will serve as the central educational component of the Sarnoff Collection. More is on the web at [tinyurl.com/rca-exhibit](http://tinyurl.com/rca-exhibit) (Artscom NJ)

## **EMERGING TECHNOLOGY: THE INDESTRUCTIBLE LDMOS FET**

A new Laterally Diffused Metal Oxide Semiconductor or LDMOS type Field Effect Transistor designated as type BLF578XR has been developed by NXP Semiconductor. This for use as an RF power amplifier in broadcast and industrial applications.

The new device is rated at 1400 Watt output, 50 Volts DC with a gain of 23.5 dB and an efficiency of 69%. Even more amazing, it is designed to survive a 125 to 1 or higher VSWR and as such it is literally almost indestructible.

The current priced of a single unit BLF578XR transistor is 230 Euros or about 300 U-S dollars but like most semiconductors, it should come down in price over time.  
(SARL)

## **NAMES IN THE NEWS: GB2RS MANAGER TO RETIRE**

Some names in the news. First up this week is Gordon Adams, G3LEQ whom after 35 years of unbroken service, is to retire as manager of the Radio Society of Great Britain's GB2RS bulletin broadcast service. The Society says that GB2RS has always been a much valued part its news service and every week nearly 100 volunteer newsreaders give of their time to broadcast the material to all parts of the UK. According to the RSGB, Adams has agreed to continue in post until a successor is found. (RSGB)

HF Interoperability Exercise 2013 in full swing

The HF Interoperability Exercise 2013 started Friday 04 October and ends on 14 October.

Amateur radio operators all over the world are participating on the air during the 10 days of this international communications preparedness exercise, using Automatic Link Establishment (ALE).

The innovative ALE system uses a digital selective calling method to enable radio users to ring each other up on High Frequency shortwave using their callsigns like a phone number.

"HFIE-2013" as the radio exercise is known, is sponsored by HFLINK.COM <http://hfink.com> and the Global ALE High Frequency Network (HFN) <http://hfink.net>

Thousands of stations have registered and many of them will be on-the-air with their Single Sideband (SSB) radios talking by voice or texting. The exercise is intended to provide training and maintain proficiency for HF Interoperability; an important issue these days, because of the new standards for government and non-governmental organizations in emergency and disaster communications. After completing the exercise, participating radio stations are issued Certificates and Wallet Cards.

They also keep track of each other using an internet-connected chat room with a map feature that tracks their operating signals on the following frequencies.

Primary ALE Frequencies -International Amateur Radio Service Channels and open nets for all ALE ham ops.

## **GLOBAL ALE HIGH FREQUENCY NETWORK (NETCALL= HFN)**

---KHZ---SSB-----COMMON USE------(NOTES)---  
03596.0 USB ALE DATA/SOUNDING International

05371.5 USB ALE DATA/SOUNDING (NALE no sounding North America)  
07102.0 USB ALE DATA/SOUNDING International  
10145.5 USB ALE DATA/SOUNDING International  
14109.0 USB ALE DATA/SOUNDING International  
18106.0 USB ALE DATA/SOUNDING International  
21096.0 USB ALE DATA/SOUNDING International  
24926.0 USB ALE DATA/SOUNDING International  
28146.0 USB ALE DATA/SOUNDING International

INTERNATIONAL ALE SSB VOICE NET (NETCALL= HFL)

---KHZ---SSB-----COMMON USE------(NOTES)---

03791.0 USB ALE VOICE-SSB International  
03996.0 USB ALE VOICE-SSB North America  
05371.5 USB ALE VOICE-SSB (NALE North America)  
07185.5 USB ALE VOICE-SSB International  
07296.0 USB ALE VOICE-SSB North America  
14346.0 USB ALE VOICE-SSB International  
18117.5 USB ALE VOICE-SSB International  
21432.5 USB ALE VOICE-SSB International  
24932.0 USB ALE VOICE-SSB International  
28312.5 USB ALE VOICE-SSB International

<http://hflink.com>

## **GOVERNMENT SHUTDOWN AFFECTS THE FCC**

With the government shutdown that came into affect on October 1st, one of the many agencies affected is the FCC. Amateur Radio Newslines's Bill Pasternak, WA6ITF, is in the newsroom and takes a look at how this will affect the United States world of Amateur Radio:

Until the government shutdown actually occurred on October 1st, no one was quite sure which FCC services required by Amateur Radio would be affected.

A widely circulated FCC shutdown plan suggested only essential personnel mandated by law would remain on duty until the budget situation is resolved.

Automated services such as license processing and address changes were unavailable as anyone who attempted to access the FCC's Website on October 1st were quick to learn,

The landing page at FCC.gov said in part: "We regret the disruption, but during the Federal Government-wide shutdown, the FCC is limited to performing duties that are immediately necessary for the safety of life or the protection of property. FCC online systems will not be available until

further notice."

After giving a short list of links to cancelled meetings and actions, the statement continued:

"If you need to contact the FCC to address an emergency situation, please call: (202) 418-1122 or email: FCCOPCenter@fcc.gov."

The Network Outage Reporting System remains open for telecommunications providers to report network outages.

There is no way to access the U-L-S pages; no way to file license applications, updates or changes or report rules violations. Simply put, the physical and electronic doors to the FCC are closed -- and won't re-open until Congress ends the budget impasse.

Commission employees who remain on call are ready to act should there be an actual crisis. As many as 16 have been retained to handle emergencies, including staffing the FCC Operations Center and 8 others to conduct emergency level interference detection, mitigation and disaster response operations.

So if you are waiting for a license or other paperwork from the FCC to show up in your mailbox, you will simply have to keep on waiting.

For the Amateur Radio Newslines, I'm Bill Pasternak, WA6ITF, in Los Angeles.

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## **PROPAGATION: SOLAR ERUPTION HURLS CME INTO SPACE**

On September 29th, a long magnetic filament in the sun's northern hemisphere erupted producing what some observers are calling a magnificent Coronal Mass Ejection. NASA's Solar Dynamics Observatory or SoHo photographed the C-M-E leaving the sun at a speed of close to 2 million miles per hour. Although the event was not aimed at our planet, it was expected to receive a glancing blow from the plasma cloud beginning on or about October 3rd. Keep an eye on [spaceweather.com](http://spaceweather.com) for the latest updates on this and other solar events that could impact on radio communications here on planet Earth.

(Published news reports)

## **RESCUE RADIO: FAULTY RADIO COMMUNICATIONS MAY HAVE LED TO DEATHS OF 19 FIREFIGHTERS IN ARIZONA**

An investigation into the deaths of nineteen firefighters in Arizona on June 30th has found that inadequate communication may have played a significant role in their fate. The dead men, all members of an elite unit called the Granite Mountain Hotshots died when they were overrun by a wildfire near the town of Yarnell. Amateur Radio Newline's Mark Abramowicz, NT3V, takes a look at what the report has to say:

It is a sobering and detailed report that investigators put together to try to ascertain what happened, why it happened and to prevent a tragedy like this from happening again.

Because there were no survivors, investigators relied on recordings of radio transmissions, eyewitness accounts of fire incident managers and neighboring crews, including pilots flying tankers dropping flame retardant and helicopter pilots.

The report's key findings on communications:

"Radio communications were challenging throughout the incident. Some radios were not programmed with appropriate tone guards. Crews identified the problem, engaged in troubleshooting, and developed workarounds so they could communicate using their radios.

And, this telling conclusion:

"Radio traffic was heavy during critical times on the fire."

Did it mean the Hot Shots trying to escape to what they thought was a nearby safe zone - a ranch - weren't able to cut in on the traffic?

Here's more, quoting from the 122-page investigation report:

"Although much communication occurred among crews throughout the day, few people understood Granite Mountain's intentions, movements, and location, once they left the black."

The black is considered a safe zone.

Quoting again from the report:

"The Team believes this is due to brief, informal, and vague

radio transmissions and talk-arounds that can occur during wildland fire communications.

"Based on radio conversations, Operations and other resources had concluded the Granite Mountain IHC was located in the black, near the ridge top where they had started that morning. This resulted in confusion about the crews actual location at the time of search and rescue."

Finally, the investigative team made some key recommendations to the state of Arizona and the National Wildfire Coordination group.

Among them, increasing resource tracking, communications and real time weather information.

And, putting together an interagency task force to conduct a further analysis of what happened, as well as examining the human factors and wildland fire communications.

The report describes radio communications during the time of the fire as being very challenging. (K7DB, Yarnell Hill Fire Investigation)

## **CAARA IN DIRE NEED OF EXTERIOR WORK!**

As you can see, CAARA is a worn building with little exterior maintenance done in the last few years. The main reason for no repairs was the uncertainty of us ever owning the building as well as the many repairs in the interior of the building we had completed. There is only so much money we can put in major repairs without raising money thru fundraisers.

We need your help! We have estimates for over \$12k for reshingling the front and left side of the building and painting the entire exterior. We have raised over half of the money needed thanks to many generous hams in the club that see the need to keep CAARA alive and well.

We provide complete services for the ham community and emergency services to the city and civic organizations....can you help us?

