July 2013

DCARCommunicator

Davis County Amateur Radio Club

Editor - Lon Stuart WM7E

The Pres Says:

Alan Malan
KB7YSP

ARRL Urges Denial of Petition to Permit Encryption of Some Emergency Communications

The ARRL is calling on the FCC to deny a Petition for Rule Making (RM-11699) seeking to permit the encryption of certain amateur communications during emergency operations or related training exercises. Don Rolph, AB1PH, of E Walpole, Massachusetts, petitioned the Commission in March to suggest an additional exception to ??97.113, which currently prohibits "messages encoded for the purpose of obscuring their meaning."

"While Mr Rolph has concisely stated his argument, it is ARRL's considered view that there is no factual or legal basis for the assumption that encryption of transmissions...is necessary in order to continue and enhance the utility of Amateur Radio emergency and disaster relief communications," the League said in its comments, filed today with the FCC.

The ARRL also turned away Rolph's assertion that the current prohibition in ??97.113 "has impacted the relationship of Amateur Radio volunteers and served agencies and significantly limited the effectiveness of amateurs in supporting emergency communications." The League said it's unaware of any evidence that served agencies have been reluctant to utilize Amateur Radio as part of their emergency or disaster relief communications plans because of the encryption restrictions in Part 97. The Amateur
Service rule is based on a similar prohibition in international telecommunication law, the ARRL noted.

The League characterized as "erroneous" and "unfounded" Rolph's assumption that encryption of certain information may be required under the provisions of HIPAA - the Health Insurance Portability and Accountability Act. "This mistaken assumption leads to the conclusion that the inability of Amateur Radio operators to encrypt the content of their transmissions in order to obscure the meaning of the transmissions renders Amateur Radio less (and decreasingly) useful to served agencies than it would be if encryption of those transmissions was permitted," the ARRL said. The League also said it was unaware of any instance in which state statutes have been cited by any served agency or group as a reason not to employ Amateur Radio for emergency communication.

Radio amateurs, the ARRL countered, are not "covered entities" under HIPAA, which applies only to health care providers, health plans and health care clearinghouses. And, the League added, there is no expectation of privacy in Amateur Radio communications.

The ARRL said it's not possible to determine the validity of the claim "that health care agencies subject to HIPAA are or might be unwilling or reluctant to utilize Amateur Radio in emergency communications and disaster relief planning" because of any lack of privacy inherent in Amateur Radio. "Permitting encryption might remedy the concern as a practical matter, if the concern exists," the League continued, but "the complete dearth of even anecdotal evidence of the existence of that concern" makes it impossible to justify the proposed rule change on that basis.

"It is extremely important to insure that Amateur Radio mains useful to served disaster relief and emergency communications agencies, which include health care facilities," the League stressed. "It is just as important to insure that regulatory impediments to that volunteer work be minimized to the extent consistent with the nature of the Amateur Radio Service." Amateur Radio's utility to served agencies in supporting emergency communication, the ARRL continued, "is high indeed, and is at the present time unfettered by the inability to encrypt transmissions."

However, the ARRL said that should it become necessary in the future for radio amateurs to protect the privacy of individuals whose medical data may be transmitted by Amateur Radio during or after an emergency or disaster, "the Commission may be asked to revisit this matter." "It is urgent that Amateur Radio continue to be an essential component of disaster and emergency communications planning," and that served agencies, including medical facilities, perceive the utility of Amateur Radio as unhindered by regulations that prohibit encryption, the League emphasized.

Don't forget to come to the July DCARC Club meeting - Saturday, July 13, 2013, 10am in the Farmington Sheriff's Office Auditorium. See everyone you know and a few that you don't know, but would like to!!

Ham Gadgets Wanted for $$

Design News magazine, a professional publication and Web site for mechanical and electrical engineers, runs a regular fun "Gadget Freak" section that highlights interesting home-brew projects such as a gopher chaser, automatic pet feeder, clock drive for a telescopic camera (astronomy), Christmas-lights controller, wind generator, telephone-alert circuit, critter-tracking Nerf gun, and so on.

We could use more gadgets from hams, though. Your members can find more examples at: Design News pays $500 per published Gadget Freak project, which is nice money to have for ham gear, lab supplies, workshop tools, and so on.

The magazine editors consider GF submissions "open source" so others can recreate a project, adapt it, or use parts of it as they choose.

People should not submit commercial products, or patented/patent-pending designs. A project built from a schematic diagram or plans in QST wouldn't qualify either.

If people need more information, or want to submit a project—small or large—please send me an email with a short description and a photo, or call.

I contribute a monthly column on measurements and data analysis to Design News. The editors asked me to fill in temporarily for the editor who usually handles the Gadget Freaks section. He's recuperating from a long illness.

Cheers;
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The military salute is a motion that evolved from medieval times, when knights in armor raised their visors to reveal their identity.
If you get into the bottom of a well or a tall chimney and look up, you can see stars, even in the middle of the day.
When a person dies, hearing is the last sense to go.? The first sense lost is sight.

2013 DCARC Organization - *All Telephone Numbers are 801 Area Code.*

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The DCARCommunicator is written, typeset and printed in the good ole' US of A by the Davis County Amateur Radio Club. The club is an affiliate of the American Radio Relay League (ARRL) amd is incorporated in the State of Utah. The club meets on the second Saturday of each month, unless other circumstances dictate changes. The meetings are held at the Davis County Sheriff's Office, 800 W. State St., Farmington, UT. Dues are $15 per year individual; $20 per family; $10 Senior Citizen over 65 years and Free for 105-year-old geezers... Dues may be mailed to the address above or be paid in person at the club meeting. Typesetting **was** accomplished by a troop of Trolls, plying their trade, but the current financial melt-down has also melted the Trolls down into silly putty, pushed and squeezed into a small pieces and lovingly deposited in the muddy Jordan River to provide life-sustaining and proper sustinance for the local aquatic fish and bug population.

Caffeine increases the power of aspirin and other painkillers, that is why it is found in some medicines.
In ancient times strangers shook hands to show that they were unarmed.
Strawberries are the only fruits whose seeds grow on the outside.

July - The Month of Service

By Gary L Davis, KE7MQF, Davis Co ARES EC

This month is our annual Month of Service. We have labeled the month of July "Month of Service" because of all of the Public Service events around Davis County that we, as Amateur Radio Operators, support. From Fireworks Display in North Salt Lake, to a parade in Layton, and all in between, we volunteer much needed personel and communications support to the citizens of Davis County.

Please step forward and help your local Emergency Coordinator show support to the goals of Amateur Radio Emergency Service (ARES) and demonstrate to our neighbors and supporters, that we can do what we claim "to provide communications when needed for our neighbors in need."

ARRL Rocky Mountain Division Awards

By Brian Mileshosky, N5ZGT -- ARRL Director, Rocky Mountain Division

Congratulations to **Bret Mills, WX7Y, of Castle Dale, Utah**, Leonor Morrow, AE5UF, of Arroyo Hondo, New Mexico, and Joe Ostrowski KI5FJ of Dona Ana, New Mexico for being awarded the 2013 Rocky Mountain Division Ham of the Year, Rocky Mountain Division Young Ham of the Year, and Rocky Mountain Division Technical Achievement awards (respectively)! Twelve superb nominations were received for this year's Division awards.

Bret, WX7Y, has been licensed for 33 years and was nominated for the Division Ham of the Year award because of his long history of contribution to the amateur radio community, including: his co-organization of the Sinbad Desert Amateur Radio Club in 1980, serving as its president at least four times; his leadership and assistance with the design and build-out of the Sinbad repeater system, which blankets most of Utah, northern Arizona, and western Colorado. Bret is always willing to mentor new hams, teaches licensing classes, provides public service communications at events, is active in ARES and RACES, an active Volunteer Examiner, and enjoys using and instructing others about amateur radio's latest innovations.

Leonor, AE5UF, our Rocky Mountain Division Young Ham of the Year, was first licensed in 2009 and quickly emerged to Extra Class about a year later. An active ham at the age of 14, she has served in various capacities within the Taos Amateur Radio Club, including its Secretary. Leonor's assistance within the club helped it grow from six members in its beginning to nearly 50, plus five repeaters and an ARES presence. Leonor currently spearheads the development of a new radio club at Taos High School.

Joe Ostrowski, KI5FJ, has been licensed since 1963, and has authored a number of technical articles in amateur publications, the latest being published in the October 2011 issue of QST magazine ("A Remote Impedance Matching Network"). Another technical article written for QST is forthcoming. Joe is regarded as a go-to resource within the Mesilla Valley Amateur Radio Club and around the Las Cruces, NM area because of his willingness and ability to provide RF, electrical, and other technical instruction and advisement to club members and others within his local amateur community.

Bret, Leonor, and Joe will receive a great looking plaque recognizing their achievement and, if attending, will also be recognized at the 2013 ARRL Rocky Mountain Division Convention banquet... (www.hamconcolorado.org/wordpress/). Congratulations once again!

Ancient Roman, Chinese and German societies often used urine as mouthwash.
The Mona Lisa has no eyebrows.? In the Renaissance era, it was fashion to shave them off!
Each year 2,000,000 smokers either quit smoking or die of tobacco-related diseases.
Zero is the only number that cannot be represented by Roman numerals.
Kites were used in the American Civil War to deliver letters and newspapers.
The song, Auld Lang Syne, is sung at the stroke of midnight in almost every English-speaking country in the world to bring in the new year.
Albert Einstein was offered the presidency of Israel in 1952, but he declined.
Astronauts can't belch - there is no gravity to separate liquid from gas in their stomachs.
The banana cannot reproduce itself.? It can be propagated only by the hand of man.

A Go-Box Option

By Paul Zadonia, WD8CJN, Pinconning, Michigan

With the increased interest in operating on a portable basis, hams can find it difficult to transport their equipment in a secure container that affords not only insulation and protection during transit, but also in dealing with the space limitations of RV's.

Tote boxes work, but are big and bulky. A friend of mine, Louis Stempek, AB8YO, suggested the use of a tackle box (figure 1). The largest tackle box on the market is the Plano 758; it affords the room needed.


1


2


3

The first order of business was to remove the four tackle trays and fabricate new ones. I chose to use 1/4-inch laminated mahogany, but any 1/4-inch wood will work. I installed two shelves that were spaced far enough apart to hold the equipment and easily slide in/out affording easy removal to change, add or repair equipment.

In my version of the Go-Box (figure 2), the radio is located on the bottom shelf in the mobile bracket next to the LDG auto tuner. On the upper shelf of my Go-Box is the MFJ-862 UHF/VHF wattmeter, an MFJ-860 HF wattmeter and on the far right is the SignaLink USB digital interface sound card for PSK, RTTY, and other digital modes. The meters are held in place with Velcro strips glued to the wood tray. The top of the tackle box doubles as storage where I keep a 60-watt dummy load, hand mic for SSB, keys, pens, and the 7-inch TFT display that plugs into the IC-7000. The power cable for the monitor, video cable from the 7000 and a USB cable from the SignaLink is fed via three holes drilled in the bottom of the storage tray and lead down to the 7000, SignaLink and a 12-volt Anderson power block. The USB cable is used to connect a laptop while in digital mode. Being plastic, the box was easy to cut and drill.

The rear of my Go-Box features four connections; all are surface mount as I wanted to avoid snagging while in storage. Figure 3 shows the two surface mount SO-239's, one for HF and the other for VHF/UHF. The left side has two surface mount Anderson connectors, one for 12v and the other for ground (green). Both sides of the ground mount are soldered together inside so that no matter which side is used they go to ground. All ground connections inside the box — rig, tuner, coax, etc. — are tied to the Anderson ground terminal.

Power is provided by an external Jetstream JTP34BCM switching 35-amp supply. I chose this particular supply for the ease of connection as it has PowerPole connectors front and rear. The 12-volt surface mount on the back of the Go-Box is connected to an Anderson six port power block attached to the upper shelf and sitting behind the watt meters where there is ample space. An internal power supply can be used; however, consideration must be given for running 120v AC into the Go-Box. I did not want AC inside the cabinet. The Jetstream provides more than enough DC to do the job. A smaller supply could be used but I already had the Jetstream and avoided purchasing another.

Coax and power cabling needs to be kept as short as possible. There is not a lot of room behind the equipment and binding can take place when the trays are slid in. I had to cut a notch out of the bottom tray to allow for the microphone connection or use the connection on the rear of the 7000.The notch is visible beneath the VFO.

(See p. 6)

Drinking water after eating reduces the acid in your mouth by 61 percent.

Peanut oil is used for cooking in submarines because it doesn't smoke unless it's heated above 450 degrees F.

Eastern Massachusetts SM K9HI on Boston Marathon Tragedy and Response

By Phil Temples, K9HI, ARRL Eastern Massachusetts Section Manager

It's been an extraordinary past few weeks for the citizens of Massachusetts as well as for the entire country. The tragic events at the Boston Marathon on Patriot's Day and the weeks following will forever be seared into our collective memories. The bombings, subsequent violence, the lockdown, an historic manhunt, and the eventual capture of a dangerous fugitive not only shook us but led us to summon our most enduring and positive of human qualities. We listened and watched in awe to the stories of first responders (and ordinary citizens) who rushed into harm's way to aid the injured and dying. In the days afterward, we collectively grieved. Slowly, now, we collectively heal.

For the hundreds of Amateur Radio volunteers from across New England who came to serve that day, the Marathon was going to be a fun, routine public service event. Sure, operators at previous Marathons have endured hardships and weather-related challenges. Temperature extremes in years past have resulted in hundreds of requests for ambulance transport to area hospitals. One year, there was even a fatality. But in all of the thirty-plus years of Boston Marathons in which amateurs have served, this one was without precedent.

Amateur Radio volunteers performed admirably during the period where they were covering a normal public service event. BAA officials in Hopkinton successfully ensured a smooth and safe start, thanks in part to efficient communications provided by the hams that shadowed them.

Checkpoints and first aid stations were able to verify and obtain needed supplies, and later, coordinate the transport of runners. Red Cross officials who crisscrossed the course were kept in the loop always, thanks to their Amateur Radio shadows. But then ... 2:50 PM. Initially, rumors and vague reports surfaced. CNN texts and other media alerts began to light up smartphones. Phone call volume increased. In fact, in many locations along the course, cell phone service crashed under the strain. Soon, it was apparent to everyone that a major disaster was unfolding, and amateurs were caught up in the middle of it. The jarring directive went out over the amateur networks to halt all runners.

Stop the Marathon

The BAA's mission abruptly changed, and new priorities were quickly introduced. As Marathon volunteer Tim Carter, W3ATB of Meredith, New Hampshire succinctly puts it, "The bombs created a new set of problems. How do the runners stay warm? How do the runners get fed? How do the runners get to their belongings? How do the runners discover if their loved ones waiting at the finish are okay? How do the runners let their loved ones know where they are? How will thousands of runners be transported to who-knows-where?"

News coverage of the bombings and subsequent capture of the suspects has, of course, been non-stop and numbing. Soon, for the first time the behind-the-scenes story of Amateur Radio at this Boston Marathon will appear in the volunteers' own words in the pages of *QST.* I want to thank our Section Emergency Coordinator Rob Macedo, KD1CY, for helping to pull together much of the material that will appear in these stories. Some of the other contributors include: Paul Topolski, W1SEX, District Emergency Coordinator for Worcester County, Western MA; Steve Schwarm, W3EVE, DEC for Field Operations, Eastern MA; Tim Carter, W3ATB; Carl Aveni, N1FY, Assistant SEC; and Terry Stader, KA8SCP, DEC.

I'm proud of the actions of the section's ARES members and other Marathon Amateur Radio Communications consortium participants during this horrific event. When the shock hit, amateurs shifted gears seamlessly from public service event coverage to full-blown emergency operations. The fact that amateurs are trained and able to make such a profound transition so quickly ensures that our services will always be in demand. You have this Section Manager's sincere gratitude.

If you are left handed, you will tend to chew your food on the left side of your mouth.

To make half a kilo of honey, bees must collect nectar from over 2 million individual flowers.

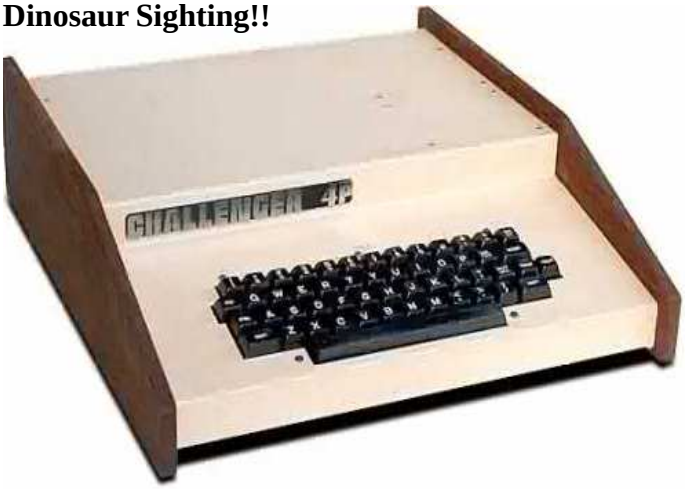
Heroin is the brand name of morphine once marketed by 'Bayer.'

Tourists visiting Iceland should know that tipping at a restaurant is considered an insult!

People in nudist colonies play volleyball more than any other sport.

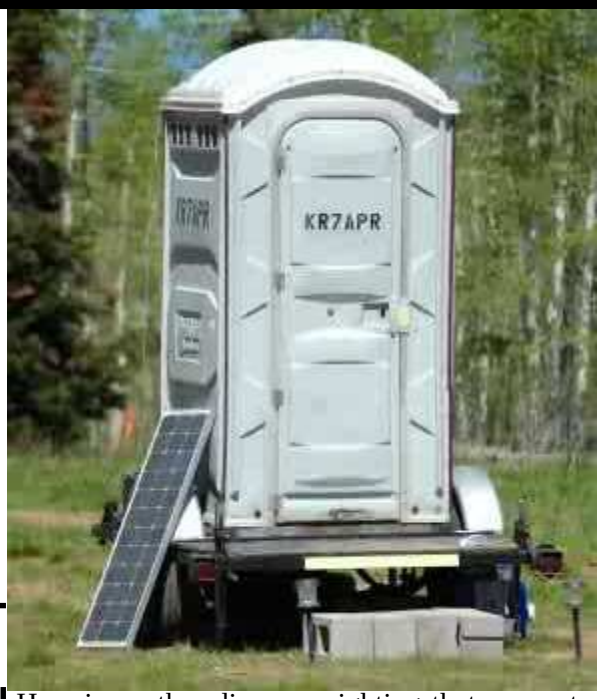
The roar that we hear when we place a seashell next to our ear is not the ocean, but rather the sound of blood surging through the veins in the ear.

Dinosaur Sighting!!



Anyone remember owning one of these dinosours? This is the Ohio Scientific 4P Computer, circa:(Who Knows??)

Nine out of every 10 living things live in the ocean.
Airports at higher altitudes require a longer airstrip due to lower air density.
The University of Alaska spans four time zones.
The tooth is the only part of the human body that cannot heal itself.
In ancient Greece, tossing an apple to a girl was a traditional proposal of marriage. Catching it meant she accepted.
Warner Communications paid $28 million for the copyright to the song Happy Birthday.



Here is another dinosaur sighting that seems to show up every year at Field Day...Who'd be without it, tho?? KR7APR....

Intelligent people have more zinc and copper in their hair.
A comet's tail always points away from the sun.
The Swine Flu vaccine in 1976 caused more death and illness than the disease it was intended to prevent.

(Go-Box Cont'd)

The IC-7000 runs hot in the digital mode, even at 25-watts and additional cooling should be provided as the temperature gauge will climb into the red after prolonged use. I increased cooling by cutting a 2-inch diameter hole in the top shelf behind the VHF watt meter directly above the rig and installed a muffin fan facing down on the IC-7000 heat sink. This proved not to be enough cooling for long winded RTTY running at higher power, so another 2-inch muffin fan was installed in an upright position behind the LDG tuner facing the rig heat sink. In addition to the internal fan, there are now two external muffins cooling the rig. This did the trick and overheating is no longer an issue. The fans are plugged into the power block so they can be unplugged if not needed. Since they are muffin fans, noise is not an issue and can be left on. If digital modes are not going to be used then one fan is ample to do the job.

There is no finite number of configurations available or rigs that can be used. If it fits it can be made to travel. My first version had an ICOM IC-2200H mounted in the mobile bracket in place of the SignaLink but I removed it as the IC-7000 has 2-meter capability. Two of my local friends use the ICOM IC-706 mkIIg with great success using an internal power supply.

What I have offered here is just food for thought and while this set up works for me it may not be what you want. I did not show pictures of the internal wiring as it is assumed the builder can figure out how to connect a piece of coax or plug in an Anderson Power Pole. Use your imagination, modify the tackle box to fit your needs and have fun whereever you go.