ARES COMMUNICATOR

Information for Scott County Amateurs

September, 2015 **Accurate, Reliable Emergency Communications for our Community** *Volume 15, Number 9*

Amateur Radio Parity Act

ARRL President Kay Craigie, N3KN, expects to see the list of cosponsors for the US House version of the Amateur Radio Parity Act of 2015 — H.R. 1301 — top 100 soon after Congress reconvenes following its August recess. As of August 27, the measure had attracted 94 cosponsors. A US Senate version of the bill — S. 1685 — also has been introduced. President Craigie again encouraged ARRL members to urge their congressional delegations to cosponsor the bills. Summertime ARRL conventions have also been affording more members a chance to make their voices heard.

"Success doesn't happen by magic," President Craigie said this week. "Offices on Capitol Hill have told us that without constituent expressions of support, co-sponsorship — and, eventually, votes — will not happen."

The identically worded Amateur Radio Parity Act of 2015 measures would direct the FCC to extend its rules relating to reasonable accommodation of Amateur Service communications to private land-use restrictions. It would require the FCC to amend its Part 97 Amateur Service rules to apply the three-part test of the PRB-1 federal pre-emption policy to include homeowners association regulations and deed restrictions, often referred to as "covenants, conditions, and restrictions" (CC&Rs). At present, PRB-1 only applies to state and local zoning laws and ordinances, and the FCC has been reluctant to extend the same legal protections to private land-use agreements without direction from Congress.

President Craigie said ARRL staff members and officials have helped members to generate well over 4000 letters to Senators and Representatives at ARRL conventions this summer. Local radio clubs have held letter-signing events at their meetings as well. This week, the ARRL forwarded more than 1000 such letters for hand delivery to Capitol Hill.

"But we need a lot more member action now, to push our bills ahead," she added. "We need letters, phone calls, e-mails from every ARRL member to our Senators and Representatives. We need every ARRL member to urge our friends in our clubs, on our nets, and on our social media, to take 5 minutes today to do something critically important for the future of Amateur Radio."

AMSAT is also encouraging its members to urge lawmakers to cosponsor the two bills. The satellite organization has pointed out that reaching orbiting spacecraft via an appropriate ground station is something that may be denied to satellite enthusiasts living in neighborhoods where outside antennas are restricted or prohibited.

The Amateur Radio Parity Act of 2015 page on the ARRL website has complete information on how to become involved.

"Capitol Hill needs to hear from every friend of Amateur Radio by the end of August," President Craigie said. "Every voice, your voice, makes a difference."

ARRL Info Page: http://www.arrl.org/amateur-radio-parity-act

BREAK - OVER

The ARES COMMUNICATOR is published for the benefit of Amateur Radio Operators in Scott County and other interested individuals.
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Reader submissions encouraged!

ARES Activities

Weekly Net Monday 7 PM 146.535 mhz (s)
Breakfast Saturday, October 10th
Digital Monday, October 12th

ARES Nets

MN ARES Phone Net
6:00PM Sunday Freq: 3.860 mhz
ARRL MN Phone Net
12:00p, 5:30p CST Daily Freq: 3.860 mhz
ARRL MN CW Net
6:30p, 9:50p CST Daily Freq: 3.568 mhz

NETS WITH OUR NEIGHBORS

North Dakota:	Daily 3.937 mhz	6:30pm
South Dakota:	Daily 3.860 mhz	6:00pm
Wisconsin:	Daily 3.985 mhz	5:30pm
Iowa:	Daily 3.970 mhz	12:30/5:30pm

NAiLed $8K

The FCC has proposed levying an $8000 fine on a Cincinnati, Ohio, radio amateur, Daniel R. Hicks, KB8UYZ, who, at one point, had volunteered to track down the interference he was causing on a number of primarily VHF repeaters. In a *Notice of Apparent Liability for Forfeiture* (*NAL*)released on August 20, the FCC Enforcement Bureau asserted that Hicks intentionally interfered with other Amateur Radio operators' communications and failed to identify properly. According to the *NAL*, an agent from the Bureau's Detroit office first responded to multiple complaints of interference on various repeaters in April 2014.

"The agent, working with a local amateur group which included Mr Hicks, was unable to locate the source of the transmission," recounted the *NAL*, signed by FCC District Director James Bridgewater. Nearly a year later, in response to continued interference complaints, an agent from the Bureau's Detroit office returned to the Cincinnati area to take another crack at finding the source of the transmissions.

"This time, the agent did not advise the local Amateur Radio group that he was in the area," the *NAL* stated. "The agent used mobile direction-finding techniques to locate the source of the transmissions to…the address of record for Mr Hicks' amateur station, KB8UYZ."

ARRL Great Lakes Division Vice Director Tom Delaney, W8WTD, in his role as a spokesperson for the Greater Cincin-

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Metro Skywarn Information

Repeaters

Primary

146.700 Neg Offset PL 127.3 http://www.wc0hc.org/
147.210 Pos Offset PL 100.0 http://www.tcrc.org/
147.000 Pos Offset NO PL http://www.k0ltc.org/

Backups

146.670 Neg Offset PL 114.8 http://www.anokaradio.org/
146.760 Neg Offset PL 114.8 http://tcfmc.org/
146.925 Neg Offset PL 107.2 http://www.co.ramsey.mn.us/em/volunteer.htm
147.120 Pos Offset NO PL http://www.qsl.net/w0mr/
145.170 Neg Offset PL 100.0 http://www.magicrepeater.net/

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nati Local Interference Committee, said at first the interference, which began in early 2014, was a nuisance, but later turned obscene and racist. He said his group was able to track the signals to a particular neighborhood, but group members were surprised to learn who was behind the interference.

"We did not know, until the FCC actually caught him, who it was," Delaney told ARRL. "We had our suspicions. We were very close to finding the source but were not quite there, but that helped the FCC." He said Hicks employed a "sophisticated" synthesized voice and very short transmissions across several repeaters to make him difficult to pin down.

According to the *NAL*, the agent monitored transmissions emanating from Hicks' station for about an hour and heard the station transmit several recorded messages. "These transmissions prevented other amateur licensees from communicating over the frequency," the *NAL* said. "During the monitoring period, the agent did not hear Mr Hicks transmit his assigned call sign. The transmissions used the call sign of another licensee." Delaney said the holder of that call sign had no idea why Hicks used it.

The FCC said it has determined that the evidence in the case was sufficient to establish that Hicks caused willful and malicious interference and failed to identify using his assigned call sign.

The Commission proposed a base forfeiture of $7000 for causing malicious interference and $1000 for failing to identify properly. Hicks has 30 days to pay the fine or to seek a reduction or cancellation of the proposed fine.

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Write, NOW!

The ARRL is working hard on behalf of ALL amateurs to level the field on antenna restrictions. The ARRL can only accomplish so much as the National Organization for Amateur Radio.

Amateurs all need to take the initiative to contact their own Congressman and Senators and request their support of the legislation. The two bills are; in the U.S. House - H.R. 1301, and in the U.S. Senate - S. 1685.

You will find example copies of a letter to both a Congressman and Senator on the Scott Ares website (www.scottares.org/Legislative.htm). The letters are in both WORD and PDF formats. You need to take four very simple steps to build momentum for the legislation:

1. Download the sample letters.
2. Insert the name of your Congressman and Senator(s) in the appropriate spots.
3. Insert you name, callsign, and address and sign the letter.
4. Send the letter either by Email or USPS.

You can find the contact information for your Congressman here: www.house.gov/representatives/find/ and your Senator(s) here: www.senate.gov/senators/contact/

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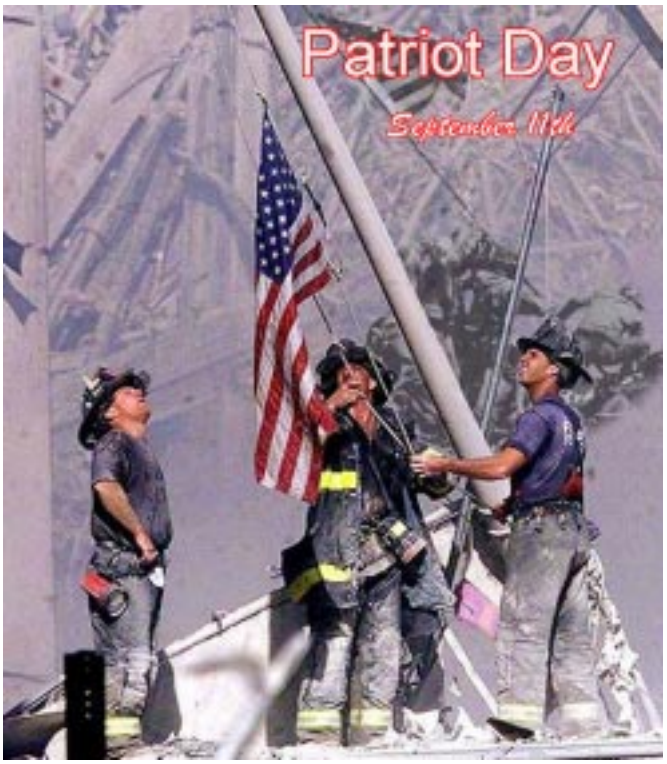


Take a Dip in the General Pool

Time to test your knowledge of the information covered by the General Class license exam. Each month we'll take a look at a selection from the question pool.

Strap on your thinking cap and see what you can recall. Here is this month's sample:

1. What is Near Vertical Incidence Sky-wave (NVIS) propagation?
A. Propagation near the MUF
B. Short distance HF propagation using high elevation angles
C. Long path HF propagation at sunrise and sunset
D. Double hop propagation near the LUF

2. What is one reason to use the attenuator function that is present on many HF transceivers?
A. To reduce signal overload due to strong incoming signals
B. To reduce the transmitter power when driving a linear amplifier
C. To reduce power consumption when operating from batteries
D. To slow down received CW signals for better copy

3. What item of test equipment contains horizontal and vertical channel amplifiers?
A. An ohmmeter
B. A signal generator
C. An ammeter
D. An oscilloscope

(Check next month's issue of the ARES Communicator for the answer.)

August General Pool Answers

1. Which of the following antenna types will be most effective for skip communications on 40 meters during the day?
B. Horizontal dipoles placed between 1/8 and 1/4 wavelength above the ground

2. What is the correct adjustment for the load or coupling control of a vacuum tube RF power amplifier?
D. Maximum power output without exceeding maximum allowable plate current

3. Which of the following is a common use for the dual VFO feature on a transceiver?
C. To permit ease of monitoring the transmit and receive frequencies when they are not the same

Test Your NIMS Knowledge

This month we will begin our review of ICS-800: National Response Framework. The purpose of the National Response Framework is to ensure that all response partners across the Nation understand domestic incident response roles, responsibilities, and relationships in order to respond more effectively to any type of incident. The Framework focuses on response and short-term recovery instead of all of the phases of incident management.

. Check your recall of the course material with this question.

Which Incident Command System element provides a command structure to enable agencies with different legal, jurisdictional, and functional responsibilities to coordinate, plan, and interact effectively on scene while maintaining their own authority, responsibility, and accountability?

A. Unity of Command
B. Area Command
C. Unified Command
D. Unity of Effort

Check next month's ARES Communicator for the solution

August NIMS Knowledge Solution

When developing protocols that promote situational awareness, priority should be given to:

Providing the right information at the right time.
Improving and integrating national reporting.
Linking operations centers and tapping subject-matter experts.

_____.

A. Standardizing reports.

NBEMS Current Versions

The current version of the Fldigi manual is availale at NBEMS Info page at www.scottares.org. Look under the 'Help Sheets' heading.

Now is a good time to check to your digital software to make sure you are running the newest versions. You can find the most recent versions posted at both: www.w1hkj.com/download.html and http://www.scottares.org/NBEMS.htm

Here are the most recent releases as of July 24, 2015.

Software	Version
Fldigi	3.22.13
Flwrap	1.3.4
Flmsg	2.0.11
Flamp	2.2.02

The Monday evening training net is a great place to have your digi questions answered and problems solved! Join the Scott ARES group on 146.535 mHz simplex at 7:00pm on Monday evenings.

Pi Touchscreen

Apple isn't the only fruity company with big news in the touchscreen device sphere. Turning your Raspberry Pi into a tablet just got easier thanks to a newly-released official 7-inch touchscreen display for the little computer that could. It's available to purchase now, and will set you back from US$60.

The display features a 10-point capacitive touchscreen and 24-bit color, RGB 800 x 480 display at 60 fps. Viewing angles are rated as 70-degrees, and the actual viewable screen size dimensions are 155 x 86 mm (6 x 3.3 in). The screen is fitted with a metal rear and mounting holes, and it connects to the Pi using a ribbon cable running to the DSI port. An optional perspex frame to hold your Pi is also available in several bright colors.

Thanks to its official support, users will be able to simply update their Raspbian OS to the latest build to grab the required drivers for full 10-finger touch.

Officially, only the Raspberry Pi 2 Model B, B+, and A+ are supported. However, more advanced tinkerers should note that the display *will* actually work with the earlier Model A and Model B boards, but the mounting holes won't line up.

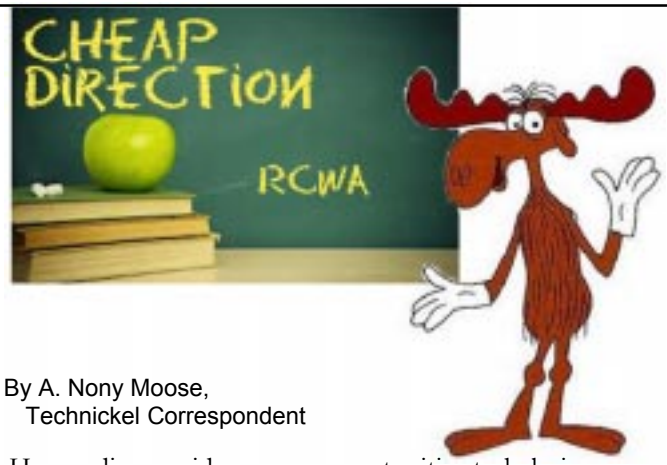
Users will be able to simply update their Raspbian OS to the latest build to grab the required drivers for full 10-finger touch. An on-screen keyboard will be integrated into the OS to allow full touchscreen functionality without requiring an additional keyboard or mouse.

More advanced details, including power supply and compliance information, are available on the Raspberry Pi blog, and for those looking for a screen that draws far less power, the recently crowdfunded PaPiRus E Ink display might be worth a look.

BREAK - OVER

"Be kind, for everyone you meet is fighting a battle you know nothing about."

Wendy Mass



By A. Nony Moose,
Technickel Correspondent

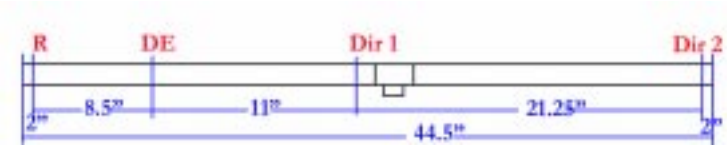
Ham radio provides many opportunities to help improve our community by providing communications support to various groups. One annual activity is the Sweet Aspen Loppet that runs from West Antler across some of the best marshes and bogs to a Loppet-ending celebration in Split Hoof.

The communications group had problems linking the snack stations along the route to keep HQ informed or the browser's progress. My buddies, brothers Bull and Alces Moose, were the leaders of the communications effort and asked yours truly for help. They needed something directional to make the most of the lower power radios available. I just about choked on my lichens when the 'Cheap Yagi' was discovered!

Last month's report contained the basic dimensions of the four element antenna. You can find info for scaling the design for other bands on-line. Just search for 'Cheap Yagi'.

When people hear Yagi they think of big aluminum jobs on top of a tower that look huge even from the ground! Fear not communicator. We are talking about a directional VHF antenna that can be transported in a tube about 45" long by 1" diameter, more or less. You can set the antenna up for either vertical or horizontal polarization. Communications for public service type events are generally among mobile units with vertical antennas. Well, unless you consider the time Bull ran off the road and ended up nearly sideways in the ditch. His antenna wasn't quite horizontal but close enough!

Let's start with the boom for the antenna. Having some PVC pipe left over from the Co-linear project, that was the first choice. Chop off a piece of ¾" PVC pile 44 ½ " long. Next, mark the location of the four elements on the boom starting 2" from one end. Consult the scratchings below for more detail.



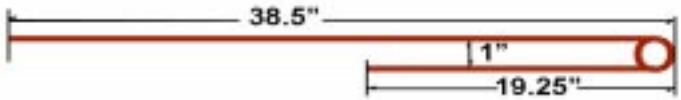
This shows the layout of the elements along the boom. Keep the holes for the elements aligned so the elements are all parallel and plumb.

We have to make some allowance to attach the boom to some type of mast. We don't want to run a metal pipe through the array of our vertically polarized beam so let's plan more PVC. Insert a PVC Tee fitting as close to the balance point of the boom as practical. You can see the approximate location in the scratching above.

Let's talk elements. To make a portable version, #10 romex is the bees knees! You might as well start with a 6 foot (72") piece of 10/3 romex (10/2 WG) which will provide enough wire for the four elements. Strip the insulation from the wires – remember that old velocity factor problem? The driven element consists of a long segment about 38 ½" long with a U-turn that returns for 19 ¼", spaced 1" from the longer portion of the element. Plan on using a piece of wire about 60" long when cutting your #10 for the driven element. The remaining element lengths are as follows:

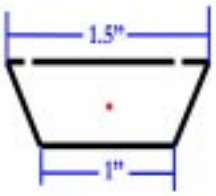
Element	Length
Reflector	42"
Director 1	37½"
Director 2	33"

Here is a diagram of the driven element. Hmm, looks like a ¼ wave J-pole with a ¼ wave matching stub!



The feedpoint for the driven element is located in the middle of the longer leg (coax center conductor) and the end of the short 'J' portion (coax braid). Try to maintain the 1" spacing on the hairpin section

To mount the elements to the boom, drill a hole sized for a close fit for the wire, all in the same plane spaced as in the diagram. Use a clamp and drill press or portable jig to keep the holes in line. Now, how to deal with the short leg of the driven element and maintain the 1" spacing? Slice off a 1½" piece of PVC and angle the ends to provide clearance for mounting holes for a couple of # 6 x 3/8" sheet metal screws to attach to the boom. Drill a hole sized for the element centered as shown in the diagram below. Attach the short piece of pipe to the boom aligned with the hole for the driven element to accept the short end on the "J" of the driven element.



This is the mount for the short end of the driven element. The black velcro tiewrap holds the coax close to the boom when the driven element is installed on the boom. The tiewrap is attached with a #6 screw.

Now, how do we get a signal into this pile of wire and pipe? Thanks for asking! This is the easiest part of the whole project! Cut off about 48" of RG58 and separate the braid and center conductor for one inch on one end. Solder the center conductor to the center of the long leg of the driven element and solder the braid to the shorter leg just before it enters the PVC. You may as well install a PL259 on the other end of the short feedline.

To use the beam for portable operation, you can slide a 1" piece of the insulation you removed back on the reflector and directors, using it as a stop to keep the elements sliding through and centered in the boom. A drop of super glue holds the insulation sleeve in place on the element. Alternatively you can wind a single turn of smaller wire, # 20 for example, around the element and solder it in place to position the element. Now for the driven element. One approach is to use some Velcro wire wrap ties to hold the coax to the boom at the driven element and another at the Tee as a strain relief. Attaching the velcro strips with a # 6 x 3/8" sheet metal screw works well. As a bonus, the velcro ties work well to secure the driven element and coax to the boom for transport. You can slip the other three elements inside the boom. Probably should invest in a pair of PVC pipe caps to keep the elements in the tube.

The completed antenna is compact and portable. Three elements slip inside the boom and the driven element 'J' is attached, along the 4ft coax feedline, using the red velcro tiewrap and slips through the driven element support. No, you do not have to use a red tiewrap!

Time to tune it up. Check the SWR and trim ¼" (maximum) at a time to make the antenna resonant at your preferred frequency. Don't trim more than ¼" at a time because it is really tough to 'cut it longer' once you pass 'GO'! Do not ask this Moose how he acquired this tidbit of knowledge.

You can use any remaining PVC pipe as a short mast to avoid anything metal running through the center of the antenna. Good luck with your special event communications. If you ever happen to work the Sweet Aspen Loppet, use caution when moving the slow-pokes out of the bog and back on the trail. You do not want to be caught between a Moose and his munch!

BREAK - OVER

Lick the Drips!

There are few things that go as well together as an ice cream cone and a hot summer's day, but it can be a race against the clock to get the sweet treat down before it turns into a sticky mess cascading over your hands. Such disasters could become a thing of the past thanks to scientists in Scotland who have discovered a naturally-occurring protein that can be added to ice cream to make it melt more slowly.

Researchers from the Universities of Edinburgh and Dundee discovered that a protein called BslA can bind together the air, fat and water in ice cream, thereby slowing the melting process and creating a smooth texture and consistency like that found in expensive ice creams. The protein is a bacterial hydrophobin, which is a family of cysteine-rich proteins expressed by filamentous fungi – aka mold.

That may not sound like something you'd want added to a serving of Rocky Road, by the researchers have found a way to produce the protein using "friendly bacteria." When added to ice cream, the protein adheres to fat droplets and air bubbles, resulting in a more stable mixture that takes longer to melt.

Because of this, the researchers say the protein, which can be produced from sustainable raw materials and processed without loss of performance, would result on energy savings for manufacturers and suppliers as the ice cream would not require the same level of refrigeration throughout its supply chain.

The protein could also allow for the development of ice cream with lower levels of saturated fat and prevent the formation of ice crystals that get bigger and crunchier with every partial melt and re-freeze that currently occurs when you pull the tub out of the freezer for a serve and put it back in.

The researchers believe slow-melt ice cream made with the new ingredient could be in store freezers within three to five years.

BREAK - OVER

"Don't tell me the sky's the limit when there are footprints on the moon."

Paul Brandt

USCGA Anniversary Event

The U.S. Coast Guard Auxiliary will recognize their 76th anniversary with a nation-wide on-air Special Event on October 16-18, 2015.

Members of local USCG Auxiliary units will on the air to make contact with other amateurs to publicize the anniversary. One station will be located in northern Minnesota and would welcome your calls! Listen for N0B on the HF bands the third weekend in October.

A partial list of other planned stations is: K2N, W1H, N7Z, N4U, K6A, W2V, K2L, N9U, N7B, W8S, w8v, W8R, W2A, W0M, K3G, N7M, K7D, K4C, W8E, W8N, W4U, W2K, K6T, W4W, K9A, K1G, W5A, K1A. You can find complete information about the 1 x 1 callsigns used for special events at this site: http://www.1x1callsigns.org/index.php/search

When the Coast Guard "Reserve" was authorized by act of Congress on June 23, 1939, the Coast Guard was given a legislative mandate to use civilian volunteers to promote safety on and over the high seas and the nation's navigable waters. The Coast Guard Reserve was then a non-military service comprised of unpaid, volunteer U.S. citizens who owned motorboats or yachts.

Two years later, on Feb. 19, Congress amended the 1939 act with passage of the Auxiliary and Reserve Act of 1941. Passage of this act designated the Reserve as a military branch of the active service, while the civilian volunteers, formerly referred to as the Coast Guard Reserve, became the Auxiliary.

February 19 is formally recognized as the birth of the Coast Guard Reserve while June 23 is recognized as birthday of the Coast Guard Auxiliary.

On Dec. 7, 1941, Lt. Cmdr. Frank D. Higbee ordered the Auxiliary to duty in the 11th Naval District (Calif.) and told them in effect: "Come back with your shield, or on it!" When America entered World War II, 50,000 Auxiliary members joined the war effort. They guarded waterfronts, carried out coastal picket patrols, rescued survivors from scuttled ships and did anything else they were asked to do. Many of their private vessels were placed into service.

After the war, Auxiliarists resumed their recreational boating safety duties. The Auxiliary's four cornerstones—Vessel Examination, Education, Operations and Fellowship—were established and remain the Auxiliary's pillars today.

Today's Auxiliary members continue to be a vital part of the

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Parity Act Facts

Critics of the Amateur Radio Parity Act are mounting a campaign to spread misinformation and distortions of the actual legislation working it's way through the U.S. House and Senate.

The ARRL has taken steps to address these objections and concerns recently raised by representatives of community associations about the Amateur Radio Parity Act of 2015 — H.R. 1301 and S. 1685. A statement released on August 28, "Clarity on Amateur Radio Parity," makes it clear that the bill would not create new federal policy with respect to outdoor amateur antennas.

As it points out, the FCC already recognizes a strong federal interest in effective Amateur Radio communication from residences and has adopted a limited preemption of state and local regulation of Amateur Radio antennas. The Amateur Radio Parity Act of 2015 would extend the limited preemption to private land-use restrictions.

"Congress and the FCC already have acted to prohibit restrictions that prevent the installation of direct-to-home satellite dishes, TV antennas, and customer-end wireless broadband antennas," the statement said.

The legislation also does not prohibit community associations from reviewing proposed ham radio antenna installations or from having final approval; it limits restrictions to those necessary to accomplish an association's legitimate purposes — such as safety and aesthetics.

The bill does not mandate that a particular size of antenna be permitted, as long as size and placement restrictions do not prohibit, but reasonably accommodate, Amateur Radio communication.

"Claims that the bill will do any of these things are simply wrong, and are either misunderstandings of the plain language of the bill or deliberate misrepresentations," the ARRL statement asserted.

As introduced in both the House and Senate, the bill recognizes that the federal interest in effective Amateur Radio communication remains the same, whether a residence is subject to state and local regulations, to private land-use restrictions, or both.

BREAK - OVER

USCGA *cont'd from col. 1*

Coast Guard. Under legislation passed in 1996, the Auxiliary's role was expanded to allow members to assist in any Coast Guard mission, except direct law enforcement and military operations, as authorized by the Commandant.

Thus, Auxiliarists can be found examining commercial fishing vessels, flying in C-130 aircraft, working in Coast Guard offices, and crewing with regulars. The three components of the service–the active duty Coast Guardsmen, the Reservists, and Auxiliarists–truly constitute TEAM COAST GUARD.

BREAK - OVER

PHEW! Birthday Balloons Saved!

We may not be running out of helium after all

Helium is the second most abundant element in the Universe, but it's relatively rare on Earth – so much so that some have called for a ban on party balloons to ward off a worldwide shortage. However, a team of scientists led by Diveena Danabalan of Durham University conducted a new study that indicates that there may be vast new sources of the gas in the western mountain regions of North America.

First detected in the spectrum of the Sun, in a century and a half helium has become a key resource in our high-tech world. The noble gas is used in cryogenics, MRI scanners, semiconductor manufacturing, welding, deep-sea diving, and blimps and balloons – though the latter makes up a surprisingly small fraction of the demand.

The problem is that even though helium makes up almost a quarter of all matter in the Universe, it's very rare on Earth with the main supply coming from natural gas wells in North America. This is because helium is a very light element that, once it escapes into the air, floats off into space. Hydrogen is lighter, but it's common on Earth because hydrogen is captured in molecules of water or organic compounds. Helium, on the other hand, forms no compounds even with itself except a few highly unstable ones under extraordinary laboratory conditions.

Recent studies have pointed to a drastic decline in known helium reserves and no large discoveries to replace them. This being the case, the fear is that we may run out of helium so soon that some scientists, such as Cambridge University chemist Peter Wothers, are calling for an end to its use in party balloons.

For the new study, a team of scientists from Durham and Oxford Universities looked at natural gas regions in North America, where they subjected gas samples from 22 wells in the United States and Canada to mass spectroscopy. By analyzing the isotopes of helium, neon, and argon, they were able to gain a better understanding of how helium is produced, transported, and trapped in the Earth.

Most helium on Earth is helium-4 (^{4}He), which is produced by radioactive decay deep inside the planet. Over hundreds of millions of years, it migrates up to the crust, where it is released during periods of tectonic activity. By comparing the ratios of ^{4}He with neon-20 (^{20}Ne) in the helium-rich Hugoton-Panhandle gas field running through Texas, Oklahoma, and Kansas, the team found that released helium dissolves in groundwater, which transports it to natural gas deposits. According to Danabalan, This mechanism indicates that much more helium is waiting to be tapped than previously thought.

"This means that there are almost certainly reservoirs of helium which we had not anticipated. More importantly, understanding how and why helium arrives in these reservoirs means that we now know where to look for new helium resources."

BREAK - OVER

Talk Like a Pirate Day

Sep 19th

International Talk Like a Pirate Day is a day just for fun, a day to let out the inner pirate in each of us.

Practice up your "pirate-speak" in anticipation of this day. The conversation will be lively, and you don't want to be left behind. Today, everyone will be talking the talk, if not walking the walk. It is not a requirement to dress like a pirate today. Just talk like one.

Talk Like a Pirate Day originated with John Baur and Mark Summer who created the concept on June 6, 1995.

While playing racquetball, they began to talk to each other in Pirate-speak". After leaving the court, they decided that there was a need to create this day. After much thought, Mark Summers selected September 19th as the date. This was his wife's birthday. So, he thought it would be an easy date to remember. And so, International Talk Like a Pirate Day was born.

BREAK - OVER

ARES Breakfast

Saturday October 10th
7:30AM
Perkins Restaurant
Savage, MN

NECOS Schedule September 2015

The first Monday or the month the net is held on the WB0RMK repeater, Carver. You will find WB0RMK here: 147.165/765 PL 107.2

September	
Sep 14	**WA0DGW John**
Sep 21	**KC0YHH Tony**
Sep 28	**KD0UWZ Chad**
October	
Oct 5	**KB0FH Bob**
Oct 12	**WA0DGW John**
Oct 19	**KC0YHH Tony**
Oct 26	**KD0UWZ Chad**
November	
Nov 2	**KB0FH Bob**