



November, 2014

Accurate, Reliable Emergency Communications for our Community Volume 14, Number 11

## On-Air Tribute to Veterans

### American Legion Amateur Radio Club

Amateur Radio operators who are members of the American Legion will honor the military services and their fellow veterans in a special on-the-air tribute on Veterans Day, Tuesday, November 11. Members of The American Legion Amateur Radio Club will be on the air as W9L from 1400 until 2100 UTC, from American Legion national headquarters in Indianapolis. Radio amateurs who contact the station or shortwave listeners who monitor it are eligible to receive an attractive full-color commemorative certificate.

“Veterans Day is more than just a holiday. It is a time for all Americans

to recognize the honorable nature of military service and the men and women who have sacrificed



so much in defending our nation through the years,” said TALARC President Marty Justis, W9WMJ. “This special event operation serves to underscore the importance of Veterans Day via the Amateur Radio community, to salute the men and women who have served our country honorably in uniform, and to recognize the contributions of so many military personnel.”

Justis also cited the contributions of MARS (Military Auxiliary Radio System) members, who arranged phone-patches that

**On-Air Tribute** *cont'd on page 2*

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!

## New Xcvr Feature !

Listen Up LIDS – Clean up your act!

Daily DX Release

It is not well known but for many years the major manufacturers of HF transceivers, have quietly fitted them with a special circuit that would cause your transceiver to internally combust should you use it to exhibit poor operating practices.

Like maintaining a nuclear deterrent, they have always lived in hope that they would never be forced to activate this circuit. However manufacturers have been concerned for some time with the poor behavior of many operators when using their equipment and what they have heard during the current Tromelin Island DXpedition has forced them to act.

Therefore on 0000z Saturday 15 November 2014 a coded message will be sent to all transceivers they have sold activating this circuit.

Once activated your transceiver will internally combust if you undertake any of the following:

A) Calling when the DX station is transmitting something other than your callsign – it can sense the DX station’s signal and what is sent



**New Features** *cont'd on page 2*

## ARES Activities

**Weekly Net Monday 7 PM 146.535 mhz (s)**

**Breakfast Saturday, November 8th**

**Digital Monday, November 10th**

### 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

## On-Air Tribute - cont'd from page 1

allowed soldiers in war zones, at sea, and in other overseas locations to speak directly with their families back home, especially in the pre-Internet era of the Korean and Vietnam wars.

While the Internet has changed things, Justis said, Amateur Radio still assists communities in many other ways, primarily in the event of emergencies and disasters. "Many of The American Legion Amateur Radio Club's 2000 members are committed to emergency preparedness as well as promoting the hobby, art and science of Amateur Radio to young and old alike," he said.

Special event station W9L will be on 20 meters SSB, 14.275 MHz  $\pm$ 5 kHz, IRLP Node 4816, or in Central Indiana to 146.46 MHz simplex or the 145.17 MHz repeater in Hamilton County. To receive a certificate send a 9  $\times$  12 self-addressed, stamped-envelop to The American Legion Amateur Radio Club, 700 N Pennsylvania St, Indianapolis, IN 46204.

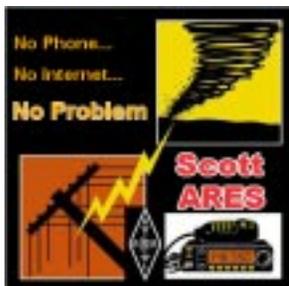
BREAK - OVER



**TUESDAY**  
**NOVEMBER 11th**

### Scott County ARES Contacts

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## New Features - cont'd from page 1

- B) Calling when you can't hear the DX station – it can also sense when the DX station's signal cannot be heard
- C) Tuning up on the DX station's frequency – if you send a tone for more than 50ms and the radio senses another signal on the frequency
- D) Sending or saying "up" or "down" on a frequency occupied by another signal
- E) Sending strings of dits or dahs, using profane language, going "ah ah ah" or broadcasting music or anything else recorded
- F) Calling if the DX op is asking for a region other than yours – the circuit can sense which region you reside in (Note only works if you are in NA/JA/EU)

This list is not exhaustive and can be remotely adapted as poor operating practices change.

It has also been acknowledged there is a risk that people will blow up their rigs simply because they inadvertently forget to put the split button in. Therefore the manufacturers are prepared at their cost to install a big flashing red light on top of your rig as a visual reminder but of course the risk of detonation remains with you. It should also go without saying but any attempt to remove the circuit will cause the rig to explode.

On a more positive note it appears manufacturers are also jointly working on a new innovation for your transceiver to transmit a signal which blows up plasma TVs within a one mile radius of your house. This is expected to be a sure fire sales winner.

You can stay up to the minute on DX activity with the Daily DX News. You can find out more and sign up for a trial subscription here: <http://www.dailydx.com>

BREAK - OVER

## United States Citizenship!

Have you ever thought about your United States citizenship? Probably not since that Civics course a long time ago! Foreigners who want to become a United States Citizen must pass a short exam that covers some key concepts important to America. Test your knowledge on the citizenship test.

Check next month for the answer to this month's question.

What is the name of the Speaker of the House of Representatives now?

- A. Hillary Clinton
- B. Barack Obama
- C. Joe Biden
- D. John Boehner
- E. Nancy Pelosi

## October Citizenship Exam Answer

The Federalist Papers supported the passage of the U.S. Constitution. Name **one** of the writers.

C James Madison

## ARRL November Sweepstakes SSB Ahead

Nov. 15-17, 2014

Operators in the US and Canada will exercise their vocal cords November 15-17 to compete in the 2014 ARRL November Sweepstakes SSB event. The action gets underway at 2100 UTC Saturday and runs through 0259 UTC Monday (Sunday evening in continental US time zones). Many operators hope to get a “Clean Sweep” by working stations in all 83 ARRL and Radio Amateurs of Canada (RAC) sections.

A humongous station is not required to have a lot of fun in the Sweepstakes — modest antennas and 100 W will do just fine. Since only one contact per station is needed and not one per band, you can stay on your best band and work stations that tune by. Give the other bands a try, too, and you will probably be surprised at how well you do.”

The exchange goes like this: Call sign of the station worked, consecutive serial number, starting with 001, a precedence — a letter that indicates your operating category; see the rules), your call sign, a check — the last two numerals of the year you were first licensed, and the two-letter abbreviation of your ARRL or RAC section (SEC).

Many stations will use phonetics for clarity, since logging accuracy is paramount in any contest. For example, if W8EXK — a Class A station in West Virginia — works W1MSW as his 15th contact, it would sound something like this: “W1MSW, number 15, alpha, from whiskey eight echo x-ray kilowatt, check six-three, West Virginia.” The log entry would look something like this: W1MSW 015 A W8EXK 63 WV. All popular logging programs include a template for ARRL November Sweepstakes.

Logs are due 15 days after the event is over. SSB logs are due by 0300 UTC on Tuesday, December 2, 2014. ARRL still accepts paper logs, but electronic Cabrillo logs submitted via e-mail are preferable. Send paper logs to: ARRL November Sweepstakes, 225 Main St, Newington, CT 06111. WA7BNM’s online Cabrillo converter lets the operator manually enter hand-logged data to create a Cabrillo file. Submitting logs electronically enhances the quality of the log-checking process and permits more rapid publication of results.

You can find the contest details here: <http://www.arrl.org/sweepstakes>

BREAK - OVER



## 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. Here is this month’s sample:

1. What is the approximate maximum distance along the Earth’s surface that is normally covered in one hop using the E region?  
A. 180 miles  
B. 1,200 miles  
C. 2,500 miles  
D. 12,000 miles
2. What happens to HF propagation when the Lowest Usable Frequency (LUF) exceeds the Maximum Usable Frequency (MUF)?  
A. No HF radio frequency will support ordinary skywave communications over the path  
B. HF communications over the path are enhanced  
C. Double hop propagation along the path is more common  
D. Propagation over the path on all HF frequencies is enhanced
3. What makes HF scatter signals often sound distorted?  
A. The ionospheric layer involved is unstable  
B. Ground waves are absorbing much of the signal  
C. The E-region is not present  
D. Energy is scattered into the skip zone through several different radio wave paths

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

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*“No one is in charge of your happiness except you.”*

Ella Quince

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## October General Pool Answers

1. What does MUF stand for?  
B. The Maximum Usable Frequency for communications between two points
2. What is the approximate maximum distance along the Earth’s surface that is normally covered in one hop using the F2 region?  
C. 2,500 miles
3. Where on the Earth do ionospheric layers reach their maximum height?  
A. Where the Sun is overhead



## Test Your NIMS Knowledge

This month we will continue our review of ICS-700a: National Incident Management System (NIMS) An Introduction. Check your recall of the course material with this question.

The credentialing process involves an objective evaluation and documentation of an individual's:

- Current certification, license, or degree,
- Training and experience, and
- \_\_\_\_\_.

- A. Security clearance level.
- B. Supervisory expertise.
- C. Competence or proficiency.
- D. Compensation amount.

*Check next month's ARES Communicator for the solution*

## September NIMS Knowledge Solution

Which of the following statements is FALSE?

- D. NIMS specifies how resources will be allocated among jurisdictions.



## NBEMS Current Versions

The current version of the Fldigi manual is available at NBEMS Info page at [www.scottares.org](http://www.scottares.org). Look under the 'Help Sheets' heading.

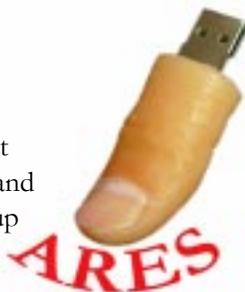
Be sure to check to make sure you have the current software on your thumb drive.

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](http://www.w1hkj.com/download.html) and <http://www.scottares.org/NBEMS.htm>

Here are the most recent releases as of October 20, 2014.

Software	Version
Fldigi	3.22.01
Flwrap	1.3.4
Flmsg	2.0.5
Flamp	2.1.02

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.



## My DX Summit Goes Live

Radio Arcala, Oulu, Finland, Oct.31.2014  
by Martti Laine, OH2BH

DX Summit once changed the DX hunt. Today hardly anyone is using the traditional Search & Pounce approach. Everyone is connected to a DX cluster locally or over the Internet. Easy to use and operated by Radio Arcala (OH8X), DX Summit maintains its position as one of Amateur Radio's largest web portals but it will now be refreshed - big time!

DX Summit is modernized for a second time around, and MY DX SUMMIT will now go online today for limited dedicated pre-user testing. We will welcome some 200 pre-users who are prepared to try it out and provide immediate feedback to the development team. The aim of this exercise is to serve as the final debug phase and to enhance user experience to maximum satisfaction before tens of thousands suddenly fire their browsers to help them in their future DX hunt.

We ask you if would you like to be one of the few to have this experience today? If you say "yes", please kindly be prepared not only to test but to provide a timely response. Send a note to <[radioarcala@gmail.com](mailto:radioarcala@gmail.com)> and we will give you guidance to get started.

What to expect? Adding to the traditional spot functions you can create own cluster view to monitor a selected callsign or multiple callsigns real-time for band and mode specific spots. Or you can exclude everything from your DX Summit view you're not interested in. Also you can open several of those windows and you can have past and current spots showing together. Basically you have full flexibility to customize your DX Summit easily to show exactly what you're interested in.

Additionally, an advanced propagation tool powered by VOACAP is laid out in such a way that it tracks your location as a starting point, and when clicking a spot it shows your propagation to that location as of that moment but also for an entire period of 24 hours on all bands. You can instantly understand whether your best chances for a QSO are gone or just coming up. This will also be a great educational tool for those wishing to gain insight into the total propagation picture, including the existing radio propagation.

Additionally, a DX News section is integrated for your viewing pleasure while spending your time at MY DX SUMMIT. Just send us a note and you will be part of a new phase in the DX Hunt!

MY DX SUMMIT can be found on: <http://new.dxsummit.fi/>

*BREAK - OVER*



## What time is it ?

DST, CST, GMT, UTC, Zulu ???

Does anybody really know what time it is? The Chicago Transit Authority began asking the question in 1970. (That was a great album.) Some people today don't know the answer so if you are unsure, you have company!

Twice each year we monkey around with our clocks for Who knows why. And, Who isn't telling. The switch from standard to Daylight Savings time seems to cause confusion for some people who deal with the time of day outside their immediate geographical area.

Lets take a look at our central standard time and see if we can figure out how it relates to Coordinated Universal time (Greenwich Mean Time - GMT for you/us old-timers).



Central Standard Time (CST) is six hours behind GMT. Remember we are always one meal behind the Brits. When it is 6am in Minnesota and we are enjoying a breakfast cup of coffee, the folks in Greenwich England are sitting down to lunch. See how that works? We are one meal behind. Lunch time here means a relaxing supper at the end of the day in England. Supper here is a mid-night snack for a Brit with sleeping problems.

Okay, we have a handle on the clock time, remembering one-meal-behind. Now how about the calendar date? Remember, our supper time, 6 pm or 1800 hrs, is midnight, 12 midnight or 0001 hrs, for the Brit in Greenwich. The troubled English sleeper rips a day off the calendar before heading back to sleep.

So what? Well for Minnesotans, the GMT date becomes tomorrow after that 6 pm supper, in the GMT scheme of things.

Okay, let that sink in for a minute or two. Got it? Good, now let's move the clock an hour!

In the spring when we begin DST we move the clock AHEAD one hour. Six o'clock now becomes seven o'clock. Now we are only 5 hours behind GMT. Think about that for a minute. Remember there isn't any GMT Daylight Saving Time!

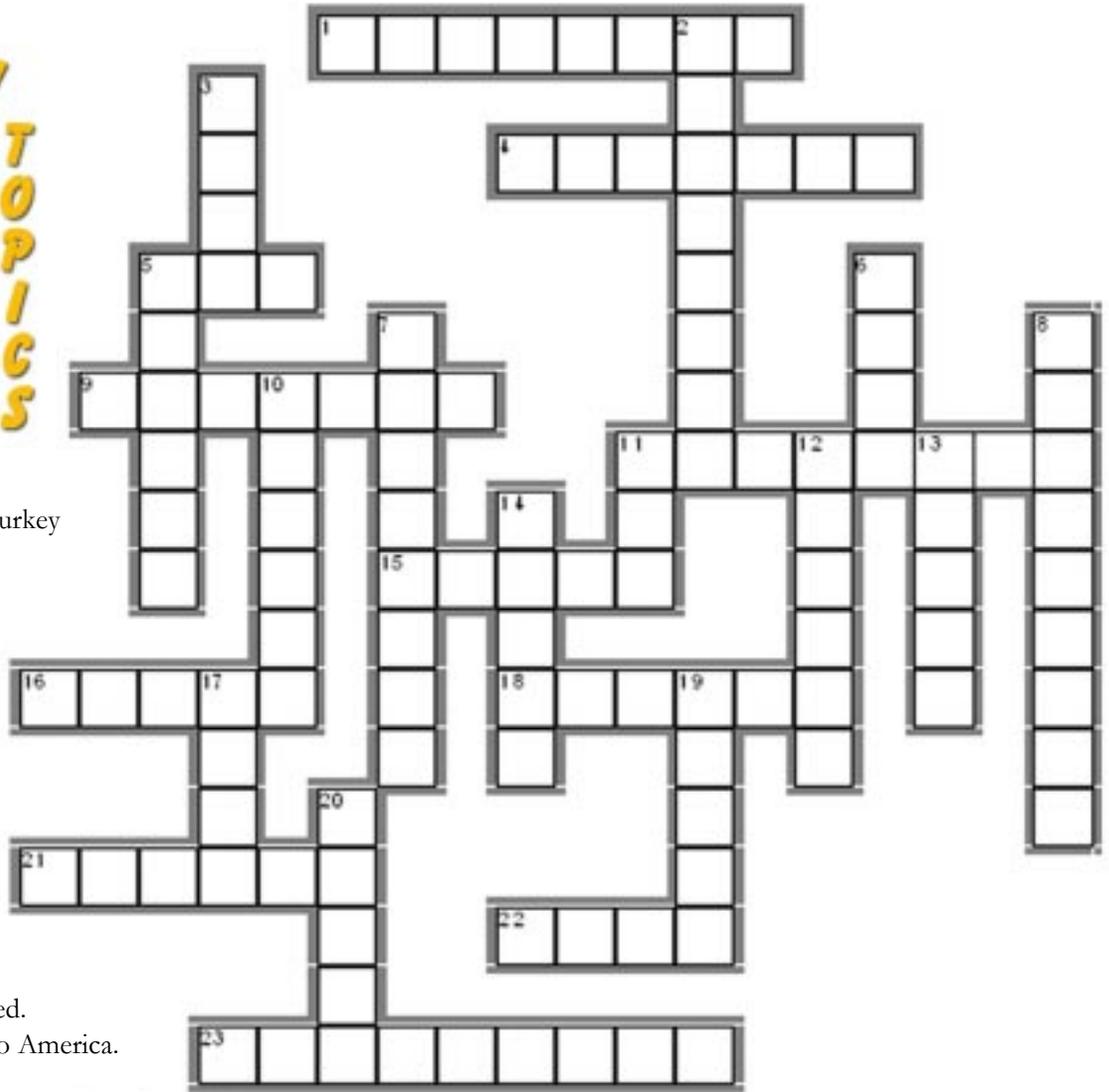
Now, when does the calendar date change? Under central daylight time, CDT, our 6 pm, 1800 hrs, supper comes at 11 pm, 2300 hrs, in Greenwich England. Too soon to flip the calendar. The GMT calendar date doesn't change until we pass 7 pm, 1900 hrs, central daylight time.

Still confused? Okay, just tune in WWV on 5mHz or 10 mHz and listen to the ticking clock and the nice man will tell you the time. Sorry, you are on your own to figure out the calendar.

Well, you could always set your computer's clock to the GMT time zone - and get really confused!

BREAK - OVER





**Across**

- 1. Something cooked inside the turkey and served at dinner.
- 4. Gather the crops.
- 5. \_\_\_\_\_ the table before dinner.
- 9. A large orange vegetable.
- 11. Another way to say thankful.
- 15. \_\_\_\_\_ a turkey in the oven.
- 16. Have a \_\_\_\_\_ of pumpkin pie for dessert.
- 18. A long journey over the ocean.
- 21. The evening meal.
- 22. A place where things are baked.
- 23. The ship the pilgrims sailed to America.

**Down**

- 2. The month of thanksgiving.
- 3. \_\_\_\_\_ a pie in the oven.
- 5. An odd shaped vegetable that resembles a pumpkin.
- 6. \_\_\_\_\_ thanks for the food we eat.
- 7. The people on board the Mayflower.
- 8. Americans \_\_\_\_\_ Thanksgiving in the autumn.
- 10. A festival with bands, people wearing costumes and floats marching down the street.

- 11. Families \_\_\_\_\_ together on Thanksgiving.
- 12. A large bird eaten on Thanksgiving.
- 13. A large dinner celebration.
- 14. Use a knife to \_\_\_\_\_ a turkey.
- 17. A yellow vegetable that was grown by Native Americans.
- 19. The nut of an oak tree.
- 20. A sauce that is poured over the turkey.

## Measuring Coax without a Tape

Hamgenuity in action!

Tower Talk reflector post

“Some years back, I purchased a 500' reel of Belden 9913 and used a bit here and there over the years. Now I needed four 70' runs to the base of my tower but didn't know how much 9913 remained on the reel.

“ My DVM can measure capacitance so I connected it to the free end of the reel and measured 6300 pF. Belden says that 9913 capacitance is 24.6 pF/ft so dividing that into 6300 pF

*cont'd col. 2*

implied that I had 256 ft remaining.

“That was enough for three 70' runs but not enough for four, oh well.

‘I cut three 70' lengths from the reel, 45' of cable remained.  $(3 \times 70) + 45 = 255$ . That is just 1 ft less than what was predicted by the capacitance measurement !!! Isn't it nice when the numbers work out so well. Will I rely on that technique in the future? Nope, gotta see it work out like that a few more times first!”

*BREAK - OVER*

## EOSS Ham Radio Balloon

ARRL Letter Oct31, 2014

An Edge of Space Sciences (EOSS) balloon flight, launched on October 25 by students from Colorado and New Mexico, and carrying three ham radio payloads into near-space surpassed its planned altitude. The mission, designated EOSS-202, took off under a clear sky from Deer Trail, Colorado. The Douglas County, Colorado, STEM School and STEM Academy and Spartan Amateur Radio Club, AB0BX, sponsored and coordinated the balloon flight.

“It was awesome,” said Paul Veal, NOAA, a Rocky Mountain Division Assistant Director and AB0X trustee. “It was simply the best weather any of us could have hoped for.

According to EOSS, our flight reached one of the highest altitudes they’ve had in years — nearly 104,000 feet!”



Veal said the only major snafu involved the onboard Go-Pro cameras, which were equipped with 8 GB cards. “We really needed 32 GB [cards], so we got awesome pictures but only up to around 80,000 feet,” he explained.

Veal said a parent-led chase team convoy was able to see with the naked eye the sun’s light reflecting from the balloon when it was more than 84,000 feet up.

“This included several parents and students who tagged along in 13 vehicles — around 50 of us altogether.” The balloon traveled more than 70 miles, 19 more than predicted.

“The farming-ranching community in and around the recovery area near Cope, Colorado, gladly helped us to recover the balloon on private land,” Veal said. “All payloads were recovered with no serious damage.”

“Data from the various experiments, along with photos and videos from EOSS and spectators, will be collected in the next few weeks,” said Veal. “I am hoping that the school can create a student team to formulate a digital book to count toward credit.” As a result of the balloon project, he said, several project-based lesson plans for grades 6 through 12 can be formulated along STEM standards.

BREAK - OVER



Volunteers prepare AB0BX Spartan Space Sciences mission payloads on launch day.

Veal said a large number of young students participated “with great enthusiasm throughout the morning cold at sunrise throughout the heat of the day.” Several of the more than 2 dozen students taking part in the project are radio amateurs.

The “AB0BX Spartan Space Sciences” mission carried seven student-designed payloads aloft. All payloads were retrieved after the balloon burst, at first tumbling and then descending gently to Earth borne by a parachute. Video from the ground was able to capture the balloon’s burst as it attained its maximum altitude. The onboard ham radio payloads served to track the balloon during flight and recovery and also transmitted telemetry during the mission.



PACIFIC OCEAN Cmdr. Ken Bridgewater, commanding officer of crew 104 aboard the littoral combat ship USS Fort Worth (LCS 3), explains the capabilities of the MQ-8B Fire Scout unmanned helicopter to an official visitor from the Japan Maritime Self-Defense Force destroyer Teruzuki.

## WinHeist

### Organize your Junque Box

WinHeist (Windows Hobbyist Electronic Inventory System) is an electronics component organizer database that was developed by a programmer with an electronic habit. It has developed over the years from a personal application used by the author into the full blown application that it is today.

WinHeist is a fairly straight forward and easy-to-use application that provides the ability to store, organize, view and filter your inventory of electronic components. It started out small with the design goal of being intuitive to use while providing an option to enter detailed information.

Over the course of a year, the programmer, Mike Hankey, tried different functionalities until he felt he had developed a pretty good product that others might be interested in. He added a download link on his website and after a while it caught on. Mike started getting feedback from users and integrating their suggestions. The program blossomed into what it is today and has been downloaded by approximately 10,000 people since its conception.

The application was designed to perform two very important and basic functions: manage component data according to classification, and provide a way to view and search through the data once it has been entered.

Let's say you need six 2K ohm 1/8 watt resistors for a project. Now as you rummage through your Junque Box (repository of unique electronic component treasures and modules) you can't recall how many 2K resistors you had the last time you looked.

You could stop at the local supplier or fire off an on-line order but that would take a couple of days. If you had a little organization to the inventory you could spend more time building and less time searching and waiting! WinHeist might help with its searchable component database.

A component's classification is accomplished by breaking down its category, subcategory, value and/or description. You decide how you how you want components defined to fit the way you work. Let's take a 2K ohm resistor as an example. The resistor category could be sub-divided into, say, fixed or variable. Fixed could be further divided by type, carbon composition or wirewound and further divided by wattage.

If you want to include information about the vendor and cost there is a database option for that data.

Maybe you want to get some control over the Raspberry Pi and Arduino board and sensor inventory. The component entry for that PIR Motion sensor or the Ultrasonic Ranging module could include a link to the supplier site and the datasheet! How about that LCD display? Wasn't there something on the site about the specific pin out of this module? The supplier and reference notes could be real timesavers.

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## F-35C Hooked

### Sea Trials Begin With First Landing

On Monday, November 3, 2014, at 12:18 pm PDT off the coast of San Diego, California, the F-35C Lightning II made its first arrested landing on a carrier aircraft. Taking place on the first day of a two-week sea trial, the landing of the F-35C test aircraft CF-03 on the flight deck of the nuclear-powered supercarrier USS Nimitz (CVN 68) with test pilot commander Tony Wilson at the controls marked a major step towards the carrier variant of the Joint Strike Fighter entering operational service.



The F-35C making its first carrier landing.

Part of the most expensive weapons system purchase in United States history, the F-35C is one of three variants of the fifth-generation combat aircraft being developed by prime contractor Lockheed Martin. The F-35A is conventional takeoff and landing fighter intended primarily for the US Air Force and the RAF, and the F-35B is a Vertical Takeoff and Landing (VTOL) fighter for the US Marine Corps and the Royal Navy. The F-35C is a carrier variant designated for the US Navy's strike aircraft carriers. Aside from a marinized construction to withstand sea conditions, it is built for catapult launching and has a tail-hook for arrested landings.

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The main grid (screen) shows how this classification system is implemented and the means by which the data is filtered. You can sort or filter to your heart's content.

If you are interested in learning more about the program, you can view the help page files here: <http://jaxcoder.com/HelpHostPage.aspx?id=100>

WinHeist was discovered through the Jameco Electronics email newsletter. The price for controlling your inventory is just right: FREE! You can download the software here: <http://jaxcoder.com/Products.aspx?id=1#captcha>

*BREAK - OVER*

## Sappy Cell Signals!

### Sap Interferes With Cell Reception

#### A Sherlock Ohms Mystery

When I put a metal roof on my house, the cellphone reception went from marginal to nearly nonexistent, so I bought a cellphone booster. My house is in a low area surrounded by trees. The system recommended by the manufacturer had an omnidirectional antenna. The installation instructions emphasized the importance of locating the outside antenna far from the inside antenna, so I put the antenna on the far end of the garage. The system ended up with 130 feet of co-ax from the outside antenna to the amplifier.

The inside reception was now a little bit better than the outside reception, but still marginal. The location was well within the reception area on the Verizon coverage map. When I called Verizon customer service they said that I was in a marginal reception area. So I went to the Verizon store. The salesman said that my make and model phone was not the best for reception in weak areas so I bought one of the phones he recommended. Reception was slightly better, but still marginal. I called the cellphone booster company and got nowhere.

Then winter came and reception improved slightly. At about that time, a co-worker got his amateur radio license, specializing in the 900 MHz band. That band is right next to one of the cellphone frequency bands, so I started picking his brain, after which another 900 MHz ham operator joined in. The signal loss in the 130 feet of co-ax was greater than the antenna gain. Based on their advice, I bought a directional antenna and mounted it closer to the amplifier. The new cable run was only 30 feet. They introduced me to the OpenSignal app, from which I found the direction to the nearest tower.

Cellphone reception was now excellent until spring. When the temperature rose above freezing, the reception became marginal again. I went back to the ham radio operators. The finger of suspicion pointed toward a red pine tree in front of the antenna. This tree had needles slightly over six inches long, exactly the right length to be half wave absorbers for 900 MHz radio waves. We figured that the sap was liquid and conductive in summer, frozen, and nonconductive in winter. So I cut the tree down and the problem was solved. I now have excellent cellphone reception in summer.

This was an interesting problem — in that it had multiple causes — all of which had to be solved in order to get to a final solution.

BREAK - OVER



## Happy Thanksgiving

## Public Service Events



Grab that HT and have some fun!

*(Editor's Note: Contact the individual listed with each event for more info or to volunteer.)*

**December 6<sup>th</sup>, Saturday - Arlington-Arlidazzle Parade -**  
Need 20+ Operators for 5K Run at 9 AM, Closing & Maintaining safety on Main street from 11 am til 7 pm & Parade at 5:30 PM. Operations will be on Green Isle UHF Repeater. Volunteer contact info: [KC0QNA@yahoo.com](mailto:KC0QNA@yahoo.com) or cell phone 612-578-7561.

BREAK - OVER



**ARES Breakfast**  
Saturday December 13th  
7:30AM  
Perkins Restaurant  
Savage, MN

## NECOS Schedule November 2014

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](http://147.165/765 PL 107.2)

Nov 10	WA0DGW John
Nov 17	KD0UWZ Chad
Nov 24	KC0YHH Tony
Dec 1	KB0FH Bob
Dec 8	WA0DGW John
Dec 15	KD0UWZ Chad
Dec 22	KC0YHH Tony
Dec 29	KB0FH Bob