



# ARES COMMUNICATOR

## Information for Scott County Amateurs



February, 2015

Accurate, Reliable Emergency Communications for our Community

Volume 15, Number 2

### AERO Operator Classes

Saturday March 14<sup>th</sup>

The Association of Emergency Radio Organization (AERO) announced that it is holding its Basic Emergency communication class, AERO 1, on Saturday March 14<sup>th</sup>, 2015 at Grace Church, 9301 Eden Prairie Rd, Eden Prairie, Minnesota.

The class will begin at 8:30 AM conclude by 4:00 PM. Pre-registration is required for this class.

You can register via email by contacting the instructor, Dan Peitso, N0PIY, at [N0PIY@arrl.net](mailto:N0PIY@arrl.net). You can register by phone by calling Dan at 763-755-3262.

Registration MUST be completed by Thursday March 12<sup>th</sup>, 2015. E-mail registration is preferred because to allow easier access to directions to the free class and frequencies that will be used in class for our practice emergency nets.

A prerequisite for the class is FEMA incident command course IS-100.b. The free online course can be taken at <http://training.fema.gov/IS/NIMS.aspx>

AERO will also be conducting the class AERO 2, a NET Controller's Class, also on March 14<sup>th</sup>. The AREO 2 class will also be held at Grace Church, 9301 Eden Prairie Rd, Eden Prairie, Minnesota.



The class will start at 9:00 A.M. conclude by 4:00 P.M.

Pre-requisites for this class are the completion of the AERO 1 class and IS-100.b. Registration procedure is the same as the AERO 1 class listed above.

Former AERO 1 and AERO 2 graduates who want to practice their net skills are also invited to come and practice their skills on Saturday, March 14<sup>th</sup>, 2015 from 1:00 PM to 4:00 PM.

Graduates can register for this Graduate School refresher by contacting Dan using the class registration process above. Let Dan know you are a graduate and want to get some additional practice.

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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!

### SKYWARN Training Time

Spring can't be too far away when Metro SKYWARN announces their spring schedule of training sessions. Can it? The Metro Skywarn requires that you must attend a training session every two years to remain an active spotter.

Two new hosts for classes - City of Minneapolis Emergency Management and the City of Richfield CERT / Richfield Amateur Radio Club have been added for the 2015 training sessions.

Some classes require registration to help the trainers plan. It is not required for most classes, but keep your eye out for the classes that require pre-registration. Consult the detailed class schedule contained on the Metro SKYWARN website: <http://metroskywarn.org/class-schedule> Metro SKYWARN is responsible for scheduling and conducting spotter training classes for the Twin Cities metro area.

The National Weather Service, Chanhassen, is responsible for spotter training in Minnesota outside the metro area. The NWS Chanhassen site lists a lot of Skywarn information including maps of the VHF repeater network, spotter's Guides, and class schedules statewide: <http://www.crh.noaa.gov/mpx/?n=skywarn>

A partial listing of the metro area classes located closest to Scott County are shown in the following list.

SKYWARN cont'd on page 2

### ARES Activities

Weekly Net Monday 7 PM 146.535 mhz (s)

Breakfast Saturday, February 14th

Digital Monday, February 16th

#### 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

## 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.

This month we take a look at the last question on the exam. If you have been following along, you should be able to pass the test! Just in time for April 15th!

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

What are the **two** parts of the U.S. Congress?

- A the Senate and House of Representatives
- B the House of Representatives and the courts
- C the House of Lords and the House of Commons
- D the Senate and the courts
- E the Supreme Court and the Cabinet

## January Citizenship Exam Answer

Why did the colonists fight the British?

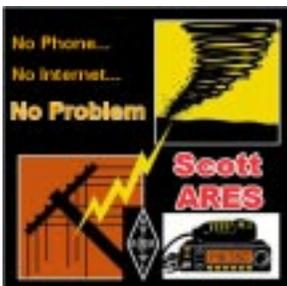
- D all of these answers
  - because they didn't have self-government
  - because of high taxes
  - because the British army stayed in their houses
  - the colonies were in debt to Britain and the Crown wanted the debt repaid

BREAK - OVER



### Scott County ARES Contacts

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**Skywarn** - cont'd from page 1

## Skywarn South Classes

### Sat March 14th

9:30AM - 1:30PM

Ridgedale Public Library - RHR Room

12601 Ridgedale Dr Minnetonka, MN

Earl Jarosh [earl@jarosh.org](mailto:earl@jarosh.org) 763-545-3275

Pre-registration recommended. Walk-ins accommodated as space permits. <http://www.signupgenius.com/go/30e0c4ca8ac2aa75-tcfmc2>

### Wed March 18th

6 PM – 10 PM

Carver County Gov Center

600 East 4th Street

Chaska, MN Walk ins welcome

Pre-Registration Preferred. <https://www.eventbrite.com/e/carver-county-2015-metro-skywarn-spotter-training-tickets-15434172024>

### Sat March 21st

8 AM – Noon

Bloomington Fire Station #1

10 West 95th St.

Bloomington, MN

Walk ins welcome, but to pre-register <https://www.eventbrite.com/e/city-of-bloomington-2015-metro-skywarn-spotter-training-tickets-15434196096>

### Thurs April 9th

6 PM-10 PM

Richfield Municipal Center

Bartholomew Room

6700 Portland Avenue

Richfield, MN

Walk ins welcome, but to pre-register <https://www.eventbrite.com/e/richfield-2015-metro-skywarn-spotter-training-tickets-15433964403>

### Procrastinators Special Sat May 30th

9 AM - 1 PM

Ramsey County Public Works

Marsden Room

1425 Paul Kirkwold Dr.

Arden Hills, MN

Walk ins welcome, but to pre-register <https://www.eventbrite.com/e/arden-hills-2015-metro-skywarn-spotter-training-tickets-15548843008>

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## Amateur Radio License Exam

Now that you have done the work to study for your upgrade, here is where to find a convenient exam session near you. There is a VE exam search engine at: [http://www.arrl.org/exam\\_sessions/search](http://www.arrl.org/exam_sessions/search)

Walk-ins allowed at most sessions however it is always best to check the details at the specific session you are planning to attend.

Below is a list of scheduled sessions close to Scott County.  
Good Luck!

### Feb 11 2015 Wednesday, 7:00 PM

Lakeville MN

Contact: James C. Rice

(612) 384-7709 [jrice@danpatch.org](mailto:jrice@danpatch.org)

Perkins Restaurant & Bakery

17387 Kenyon Avenue

Lakeville MN 55044-4459

### Feb 23 2015 Monday, 6:00 PM

Chanhassen MN

Contact: Dale A. Blomgren

(952) 402-2155 [kd0b@arrl.net](mailto:kd0b@arrl.net)

Carver County Library

7711 Kerber Blvd

<http://radiotestchanhassen.blogspot.com/>

Pre-reg requested.

### Feb 28 2015 Saturday, 9:00 AM

Bloomington, MN

Contact: Daniel J. Royer

(952) 888-9756 [dan-arrl@droyer.org](mailto:dan-arrl@droyer.org)

City Hall-Police Department

1800 W Old Shakopee Rd

<http://www.Bloomington-VE.org>

### Mar 11 2015 Wednesday, 7:00 PM

Lakeville, MN

Contact: James C. Rice

(612) 384-7709 [jrice@danpatch.org](mailto:jrice@danpatch.org)

Perkins Restaurant & Bakery

17387 Kenyon Avenue

Lakeville MN 55044-4459

BREAK - OVER



*“Courage is contagious. When a brave man takes a stand, the spines of others are often stiffened.”*

Billy Graham

## 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 does the term “critical angle” mean as used in radio wave propagation?
  - A. The long path azimuth of a distant station
  - B. The short path azimuth of a distant station
  - C. The lowest takeoff angle that will return a radio wave to the Earth under specific ionospheric conditions
  - D. The highest takeoff angle that will return a radio wave to the Earth under specific ionospheric conditions
2. What is a characteristic of HF scatter signals?
  - A. They have high intelligibility
  - B. They have a wavering sound
  - C. They have very large swings in signal strength
  - D. All of these choices are correct
3. What is normally meant by operating a transceiver in “split” mode?
  - A. The radio is operating at half power
  - B. The transceiver is operating from an external power source
  - C. The transceiver is set to different transmit and receive frequencies
  - D. The transmitter is emitting a SSB signal, as opposed to DSB operation

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



## January General Pool Answers

1. Why is the F2 region mainly responsible for the longest distance radio wave propagation?
  - C. Because it is the highest ionospheric region
2. Why is long distance communication on the 40, 60, 80 and 160 meter bands more difficult during the day?
  - C. The D layer absorbs signals at these frequencies during daylight hours
3. What is one advantage of selecting the opposite or “reverse” sideband when receiving CW signals on a typical HF transceiver?
  - C. It may be possible to reduce or eliminate interference from other signals

## Kilroy!

### He was Here!

Anyone born in 1913 to about 1950 is familiar with Kilroy. No one knew why he was so well known, but everybody seemed to get into it. *So who was Kilroy?*

In 1946 the American Transit Association, through its radio program, "Speak to America," sponsored a nationwide contest to find the real Kilroy, offering a prize of a real trolley car to the person who could prove himself to be the genuine article. Almost 40 men stepped forward to make that claim, but only James Kilroy from Halifax, Massachusetts, had evidence of his identity.

'Kilroy' was a 46-year old shipyard worker during the war who worked as a checker at the Fore River



Shipyards in Quincy. His job was to go around and check on the number of rivets completed. Riveters were on piecework and got paid by the rivet. He would count a block of rivets and put a check mark in semi-waxed lumber chalk, so the rivets wouldn't be counted twice. When Kilroy went off duty, the riveters would erase the mark. Later on, an off-shift inspector would come through and count the rivets a second time, resulting in double pay for the riveters.

One day Kilroy's boss called him into his office. The foreman was upset about all the wages being paid to riveters, and asked him to investigate. It was then he realized what had been going on. The tight spaces he had to crawl in to check the rivets didn't lend themselves to lugging around a paint can and brush, so Kilroy decided to stick with the waxy chalk. He continued to put his check mark on each job he inspected, but added 'KILROY WAS HERE' in king-sized letters next to the check, and eventually added the sketch of the chap with the long nose peering over the fence and that became part of the Kilroy message.

Once he did that, the riveters stopped trying to wipe away his marks. Ordinarily the rivets and chalk marks would have been covered up with paint. With the war on, however, ships were leaving the Quincy Yard so fast that there wasn't time to paint them. As a result, Kilroy's inspection "trademark" was seen by thousands of servicemen who boarded the troopships the yard produced.

His message apparently rang a bell with the servicemen, because they picked it up and spread it all over Europe and the South Pacific.

Before war's end, "Kilroy" had been here, there, and everywhere on the long hauls to Berlin and Tokyo. To the troops

**Kilroy** *cont'd on page 5*

## 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.

Who is the principal Federal official for domestic incident management?

- A. Senior Federal Law Enforcement Official
- B. Federal Coordinating Officer
- C. FEMA Administrator
- D. Secretary of Homeland Security

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

## January NIMS Knowledge Solution

A basic premise of the National Response Framework is that:

A. Incidents should be managed at the lowest jurisdictional level possible.



## 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 December 26, 2014.

Software	Version
Fldigi	3.22.03
Flwrap	1.3.4
Flmsg	2.0.6
Flamp	2.2.0

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.



## Kilroy! - cont'd from page 4

outbound in those ships, however, he was a complete mystery; all they knew for sure was that someone named Kilroy had “been there first.” As a joke, U.S. servicemen began placing the graffiti wherever they landed, claiming it was already there when they arrived.

Kilroy became the U.S. super-GI who had always “already been” wherever GIs went. It became a challenge to place the logo in the most unlikely places imaginable it is said to be atop Mt. Everest, the Statue of Liberty, the underside of the Arc de Triomphe, and even scrawled in the dust on the moon.

As the war went on, the legend grew. Underwater demolition teams routinely sneaked ashore on Japanese-held Islands in the Pacific to map the terrain for coming invasions by U.S. troops (and thus, presumably, were the first GI’s there). On one occasion, however, they reported seeing enemy troops painting over the Kilroy logo!

In 1945, an outhouse was built for the exclusive use of Roosevelt, Stalin, and Churchill at the Potsdam conference. Its’ first occupant was Stalin, who emerged and asked his aide (in Russian), “Who is Kilroy?”

To help prove his authenticity in 1946, James Kilroy brought along officials from the shipyard and some of the riveters. He won the trolley car, which he gave to his nine children as a Christmas gift and set it up as a playhouse in the Kilroy yard in Halifax, Massachusetts.



And The Tradition Continues...  
EVEN Outside Osama Bin Laden’s House!!!

BREAK - OVER

## Experimental Licenses

### FCC Issues New Research Callsigns

Ham radio operators have been using the shortwave (“high-frequency” or HF) bands for data communications for over 50 years, but the data rates are much less than those available with dial-up modems. HF communications have the advantage that they don’t depend on vulnerable satellites, don’t require line-of-sight, and can cover huge distances under the right conditions.

The FCC recently granted two companies experimental licenses to use HF bands for data communications at far greater bandwidths and data rates than have been used by amateur radio operators. While these communication systems are being developed for the military, it’s possible some of the techniques developed could be used for digital broadcasting in the AM band, or more likely for shortwave broadcasting where sky wave propagation is important.

Experimental license WH2XCI was granted to The MITRE Corporation to operate in eight 600khz to 1000khz slices of the HF spectrum at fixed locations in Bedford and Worcester in Massachusetts and Oneida and Rome in New York.

The goal, according to the application, is to obtain reliable communications at a data rate between 1 and 4 bits/Hz/s. MITRE said it will develop a 100 kHz bandwidth waveform that can achieve approximately 256 kbps with forward error correction (FEC) coding. MITRE will attempt to use both X and O modes to carry independent communications channels.

Experimental license WH2XMH was issued to The Boeing Corporation for a “new experimental operation in 14.60 – 15.10 GHz band for testing direct network waveform system” mobile at the Boeing facility in Kent, WA.

WH2XHA was issued to Frank K. Lotito “to operate in 460.00 - 480.00 kHz and 495.00 - 510.00 kHz to study of radio propagation fixed in Pittsburgh, PA.

Texas A&M University received license WH2XGN allowing operation on amateur radio bands 145.97 - 145.99, 436.23 - 436.27, 902.00 - 928.00 MHz for CubeSat testing.

BREAK - OVER



*“Amateurs sit and wait for inspiration; ARES volunteers just get up and go to work.”*

A. Nony Moose

## Sea Slice for Sale

### Experimental Naval Vessel for Sale

Any millionaire can buy themselves a fancy yacht, but if you want a conversation piece ... well, it helps if it has a story behind it, and the Lockheed Martin-built Sea Slice certainly does.

Launched in 1996 by the US Navy as a military support vessel, the experimental watercraft features a unique hull design that reportedly allows it to remain as stable as a conventional ship three times its size. It cost US\$15 million to design and build, but you can have it now for the low, low price of just \$180,000.

The Sea Slice utilizes a variation on the SWATH (Small Waterplane Area Twin Hull) design. A regular SWATH boat has two hulls, kind of like a catamaran. Whereas a catamaran's hulls resemble skinnier versions of a conventional single hull, however, a SWATH's are more like cylindrical pontoons that sit completely below the surface. The struts that connect those hulls to the rest of the boat are quite narrow, thus minimizing volume at the sea's surface, where all the wave energy is located. Because the hulls themselves sit deeper in the water, they're not affected much by the waves.

In the case of the Sea Slice, there are *four* shorter teardrop-shaped hulls – two on each side, one behind the other. Apparently this modification reduces waves caused by the boat, along with hydrodynamic drag. That drag reduction allows it to travel at higher speeds for a given amount of horsepower, as compared to other SWATH boats of a similar size and displacement.

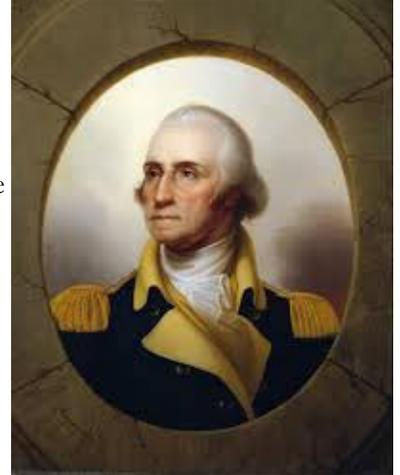


The 105-ft (32-m) long, 55-ft (17-m) wide, 180-ton (163-tonne) watercraft features two 3,480 hp diesel engines, two 180-kW Caterpillar diesel electric generators, and (if its specs are still the same as they were when it was first built) a top speed of 30 knots (56 km/h, or 35 mph). There's no word on how many people it can accommodate, although judging by the photos, there are at least six bunks. It also has a full galley, shower-equipped bathroom, plus a washer and dryer.

It's now up for sale, in its current home port of San Diego. You can find more pictures in the listing at <http://m.yachtworld.com/mobile/boats/1996/Lockheed-Martin-Swathboat—Support-Vessel-2547074/San-Diego/CA/United-States>

## President Washington Facts

The month of February, and its Presidents Day holiday, is a good time to share some facts about George Washington. Our first President was Master Mason and had a number of unusual quirks that were noted by his fellow lodge members. Here are a few Washington facts, as published in the Masonic Lodge newsletter of Washington Daylight Lodge #14 in Washington D.C.



- George Washington joined the British Navy at age 14.
- His education was provided by his father and his brother Lawrence.
- His father owned 10,000 acres of land in Virginia and was also part owner of an iron mine.
- George Washington was the only President to be elected unanimously.
- He never wore a powdered wig, which was the fashion of gentlemen at that time.
- George Washington never shook hands with anyone.
- George Washington was the first to travel to a foreign country as President (Barbados).
- George Washington had all of his teeth removed at age 57.
- He was employed by Lord Fairfax as a surveyor in Culpeper County, VA.
- His favorite foods were pineapple and Brazil nuts.

BREAK - OVER



CARIBBEAN SEA Information Systems Technician 3rd Class George Valentin lowers a communications antenna in preparation for flight quarters aboard the guided-missile frigate USS Kauffman (FFG 59).

## RFI Success

### The Dentist Detects the Problem

The following story was posted to a RFI reflector.

In the fall discovered that my noise level on 20 meters had increased by about 18 dB above my normal band noise. I suspected a grow light situation so I took a loop reading and headed east where there is a neighborhood with a lot of rental properties.

I had only walked a few hundred feet when I noticed the loop pointing more to the north. A few minutes later I had the RFI pin pointed to the south east corner of a commercial building just to the east of me.

The particular suite was a dentist office. I introduced myself to the receptionist, explained the situation, and left my contact information.

A few weeks later, having heard nothing, I revisited the office and left another message. After the third visit I contacted the building owner who said he would contact the dentist and have him contact me.

A month went by with no contact, so I called the building owner again. He told me that the dentist had emailed him back that he felt harassed. The building owner suggested that I email the dentist directly.

I spent about 30 minutes composing an email that was as diplomatic as I could make it emphasizing that we were neighbors and that I wanted to work with him to remedy the situation. A few hours later I received a very cordial email from the dentist suggesting a time when we could meet.

I met with him the next day and he was very nice and cooperative. Within about 10 minutes of walking around his office switching off light fixtures, I located two under the counter fluorescent fixtures which were causing the RFI.

He agreed to leave them off until he could get them fixed or replaced. My 20 meter RFI is gone. I guess the lesson learned here is to be patient and not assume an aggressive stance even when one might assume the other party is on the defensive.

BREAK - OVER



## ID ten T Computer Error

*This information recently hit the in-box from a reliable correspondent. While the error may not be as obvious as the infamous 'Blue Screen of Death' it is nonetheless a serious situation!*

“As we Silver Surfers know, sometimes we have trouble with our computers.

“Yesterday, I had a problem, so I called Georgie, the 11 year old next door, whose bedroom looks like Mission Control, and asked him to come over.

“Georgie clicked a couple of buttons and solved the problem. As he was walking away, I called after him, So, what was wrong?”

“He replied, ‘It was an ID ten T error.

“I didn’t want to appear stupid, but nonetheless inquired, An, ID ten T error? What’s that? In case I need to fix it again.

“Georgie grinned. ‘Haven’t you ever heard of an ID ten T error before?”

“No, I replied.

‘Write it down, he said, ‘and I think you’ll figure it out.

“So I wrote down:ID10T. I used to like Georgie, the little \$%#@!”

BREAK - OVER



**ARES Breakfast**  
Saturday February 14th  
7:30AM  
Perkins Restaurant  
Savage, MN

## NECOS Schedule February 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](http://147.165/765 PL 107.2)

### February 2015

- Feb 2 N0BHC Bob
- Feb 9 KD0UWZ Chad
- Feb 16 KC0YHH Tony
- Feb 23 KB0FH Bob

### March 2015

- Mar 2 N0BHC Bob
- Mar 9 KD0UWZ Chad
- Mar 16 KC0YHH Tony
- Mar 23 KB0FH Bob
- Mar 30 WA0DGW John