



ARES COMMUNICATOR

Information for Scott County Amateurs



JFebruary, 2017

Accurate, Reliable Emergency Communications for our Community

Volume 17, Number 2

Skywarn Training Time

Spring time is near! The annual Skywarn spotter training classes begin on Saturday, Feb 25th and run through May 17th.

If you did not attend class last year, in order to remain a spotter, you must attend a class this year. This is a National Weather Service requirement.

Don't delay attending as those last few classes get very full. Last year, we had people sitting on the floor and had to pull in chairs and couches in from the lobby in the Blaine class!

Spotters are encouraged to pre-register for the class session of your choice. Do not print tickets. This pre-registration helps trainers plan for copies, etc. We always keep a few spots open for walk ins but don't press your luck!

If you have any questions about training, please email Training@MetroSkywarn.org.

A list of southern Twin City training locations is below. Note, if you plan to come to the Chaska class, please allow 10-15 minutes to get through security.

Please review the specific webpage calendar for any special registration requirements. Walk-ins are available for most classes, but pre-registration is encouraged.

If you would like to review the slide presentation used in training: <https://metroskywarn.org/spotter-resources/nws-training-presentation>.

Don't miss the 2017 Annual Spotters Report available on-line at: <https://metroskywarn.org/documents/2017-annual-spotter-report>

Spotter Training *cont'd on page 2*



COOL DX

RI1ANN - the Russian Antarctic station "Progress"

By Yuri Zaruba, UA9OBA
President of Russian Robinson Club

Oleg Neruchev (ZS1OIN, UA3HK), has moved from the Russian Antarctic base "Molodezhnaya" to the station "Progress" located in coordinates 69*22'S, 76*23'E recently. Oleg managed to work RI1ANA from seasonal base "Molodezhnaya" on bands 21, 14, 7 and 3,5 MHz. Now he will be active on air call signal RI1ANN from the "Progress" station where will stay only till February 22. Then evacuation on the research vessel (RV) "Academik Fyodorov" to Cape Town (Republic of South Africa) is necessary.

QSL via ZS1OIN.

Establishment of radio communications with RI1ANN - a good opportunity for performance of conditions of the diploma RABA ("Russian Antarctic Bases Award"), which is issued for QSO/SWL with the radio stations, located in the territory of the Russian Antarctic stations and bases. With conditions of the diploma and an award RABA - Honour Roll can get acquainted on RRC website - www.robinsons.ru.

Published in The Daily DX - for a two week free trial go to: www.dailydx.com/trial.html

BREAK - OVER

ARES Activities

Weekly Net Monday 7 PM 146.535 mhz (s)

Breakfast Saturday, March 11th

Digital Monday, March 13th

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

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

EDITOR: Bob Reid, Scott County Emergency Coordinator

Snail Mail: 13600 Princeton Circle
Savage, MN. 55378

E-Mail: N0BHC@aol.com

Phone: Home 952-894-5178 Portable 612-280-9328

Spotter Training - cont'd from page 1

Sat 2-25-17 10:30 AM - 3:30 PM, Stillwater

Includes 1 hour break for lunch (on your own),
Stillwater Amateur Radio Association
Stillwater Public Library
Margaret Rivers Room A and B - 3rd Floor
224 3rd Street North, Stillwater, MN,
Facility info: Bob Jensen 612-802-2269
bobajensen@comcast.net,
75 Walk ins welcome, To pre-register: [https://
metroskywarn.org/class-schedule](https://metroskywarn.org/class-schedule).

Sat 3-11-17 9:30AM - 1:30PM , Minnetonka

Twin Cities FM Club
Ridgedale Public Library - RHR Room
12601 Ridgedale Dr , Minnetonka, MN
(Behind Ridgedale Shopping Center),
Facility info: Earl Jarosh earl@jarosh.org 763-545-3275,
100 Walk ins welcome, To pre-register: [https://
metroskywarn.org/class-schedule](https://metroskywarn.org/class-schedule).

Wed 3-15-17 6 PM – 10 PM, Chaska

Emergency Operations Center
Carver County Gov Center
606 East 4th Street, Chaska, MN
This is a secured facility, so please allow extra time to go
through a security screening.,
Facility info: Mark Jones jozu.jones@gmail.com,
80 Walk ins welcome, To pre-register: [https://
metroskywarn.org/class-schedule](https://metroskywarn.org/class-schedule).

cont'd col. 2

Scott County ARES Contacts

Emergency Coordinator
Bob Reid N0BHC
13600 Princeton Circle
Savage, MN 55378
952-894-5178
N0BHC@arrl.net

Asst Emergency Coordinator
Chad Palm KD0UWZ
Chaska, MN
[KD0UWZ at scottares.org](http://KD0UWZ.at.scottares.org)



Sat 3-18-17 9 AM – 1 PM, Bloomington

Bloomington Emergency Communications
Bloomington Fire Station #1
10 West 95th St., Bloomington, MN,
Facility info: Brian at bmesmay@gmail.com,
100 Walk ins welcome, To pre-register: [https://
metroskywarn.org/class-schedule](https://metroskywarn.org/class-schedule).

Thurs 4-6-17 6 PM-10 PM, Richfield

Richfield CERT and Richfield Amateur Radio Club
Richfield Municipal Center
Bartholomew Room
6700 Portland Avenue, Richfield, MN,
Facility info::Grant at cert@gartlandmn.com,
40 Walk ins welcome, To pre-register: [https://
metroskywarn.org/class-schedule](https://metroskywarn.org/class-schedule)..

Sat 4-29-17 9 AM - 1 PM, Burnsville

Twin Cities Repeater Club
Open Circle Church
2400 Highland Dr, Burnsville, MN,
Facility info::Brett n0bak@arrl.net,
40 Walk ins welcome, To pre-register: [https://
metroskywarn.org/class-schedule](https://metroskywarn.org/class-schedule).

BREAK - OVER

DX Now!

P2 - Papua New Guinea -

JA1XGI, Haru, is heading to Rapopo, New Britain Island (OC-008) where he will be QRV as P29VXG from April 6-12. His primary focus will be to Europe on JT65. [http://
island.geocities.jp/P29vacation/](http://island.geocities.jp/P29vacation/)

HR - Honduras -

Next week during his vacation VE3VSM, Dave, will be active as VE3VSM/HR9 from Roatan Island (NA-057). He'll have an FT-891 running 100 watts into dipoles for activity on 20 and 15 Meters from February 28 to March 5. He'll be mostly on CW with some SSB in the ARRL DX SSB Contest. QSL via VE3VSM direct or LoTW.

KP2 - U. S. Virgin Islands -

N2TTA will again be QRV as NP2P in the ARRL International DX SSB Contest, March 4-5. This will be a single-op effort. QSL via LoTW.

The Daily DX: for a 2 week trial - [http://www.dailydx.com/
trial.html](http://www.dailydx.com/trial.html)

BREAK - OVER

Amateur Radio License Exam

Want to become a ham? Want to upgrade your license? You can find information and resources to success in ham radio at this page: <http://www.scottares.org/License Info.htm>

If you want to ask questions or find a local Elmer (Mentor) just drop an email to: newhaminfo@scottares.org

The hams in Scott ARES gather for breakfast the first Saturday of the month at the Perkins Restaurant in Savage. Bring you ham radio questions and talk to local amateur radio operators.

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.arrrl.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!

February 27, 2017 Monday 6:00 PM

Sponsor: SMARTS

Dale A. Blomgren (952) 402-2155

Email: kd0b@arrrl.net

Location: Carver County Library

7711 Kerber Blvd

Chanhassen MN 55317

Walk-ins allowed, Pre-reg requested

March 4, 2017 Saturday 10:00 AM

St Paul Radio Club

Leon H. Dill (651) 688-9964

Email: w0cof@arrrl.net

Location: Ramsey Co Library Maplewood

3025 Southlawn Dr

Saint Paul MN 55109-1577

Walk-ins allowed, Pre-reg requested

March 8, 2017 Wednesday 7:00 PM

Sponsor: VARC

James C. Rice (612) 384-7709

Email: jrice@danpatch.org

Location: Perkins Restaurant & Bakery

17387 Kenyon Avenue

Lakeville MN 55044-4459

Walk-ins allowed, Pre-reg requested

March 18, 2017 Saturday 7:00 PM

Sponsor: Bloomington Off/Emergency Mgmt

Daniel J. Royer (952) 888-9756

Location: Perkins Restaurant & Bakery

City Hall-Police Department

1800 W Old Shakopee Rd

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

Bloomington MN 55431

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. How close to the lower edge of the 40 meter General Class phone segment should your displayed carrier frequency be when using 3 kHz wide LSB?
 - A. 3 kHz above the edge of the segment
 - B. 3 kHz below the edge of the segment
 - C. Your displayed carrier frequency may be set at the edge of the segment
 - D. Center your signal on the edge of the segment
2. Which of the following most limits the effectiveness of an HF mobile transceiver operating in the 75 meter band?
 - A. "Picket Fencing" signal variation
 - B. The wire gauge of the DC power line to the transceiver
 - C. The antenna system
 - D. FCC rules limiting mobile output power on the 75 meter band
3. What is impedance?
 - A. The electric charge stored by a capacitor
 - B. The inverse of resistance
 - C. The opposition to the flow of current in an AC circuit
 - D. The force of repulsion between two similar electric fields

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

BREAK - OVER



January General Pool Answers

1. What frequency range is occupied by a 3 kHz USB signal with the displayed carrier frequency set to 14.347 MHz?
 - A. 14.347 to 14.350 MHz
2. How close to the upper edge of the 20 meter General Class band should your displayed carrier frequency be when using 3 kHz wide USB?
 - A. 3 kHz below the edge of the band
3. Which of the following direct, fused power connections would be the best for a 100-watt HF mobile installation?
 - A. To the battery using heavy gauge wire

BREAK - OVER

BREAK - OVER

Amateur Radio Parity Act

On To The Senate!

ARRL Letter

Just 10 days after being introduced, the 2017 Amateur Radio Parity Act legislation, H.R. 555, passed the U.S. House of Representatives on unanimous consent under a suspension of House rules. The bill's language is identical to that of the 2015 measure, H.R. 1301, which won House approval late last summer after attracting 126 co-sponsors, but failed to clear the U.S. Senate last fall as the 114th Congress wound down. The new bill, again sponsored by Rep. Adam Kinzinger (R-IL), was introduced on January 13 with initial co-sponsorship by Rep. Joe Courtney (D-CT) and Rep. Greg Walden, W7EQI (R-OR), who chairs the influential House Committee on Energy and Commerce.

H.R. 555 can be found on the web at, <https://www.congress.gov/bill/115th-congress/house-bill/555?r=27>.

"The grassroots effort of Amateur Radio operators across this nation in support of the Amateur Radio Parity Act has been remarkable, nothing like we have ever seen before," ARRL President Rick Roderick, K5UR, said. "To all hams, keep going! Now is the time to charge forward with that same momentum to the Senate. We can do it!" The bill arrives in the U.S. Senate with ample time in which to garner its approval through an education campaign.

"We're very encouraged by the speed with which this bill made it through the House. It's amazing that this happened," said ARRL Hudson Division Director Mike Lisenco, N2YBB, who has been at the forefront of the legislative initiative. "With the help of ARRL members, we believe we can get this done," Lisenco continued. "We came within a hair's breadth last time, with 110,000 e-mails to members of both houses of Congress, as well as letters and telephone calls. Member participation in this final push is critical."

H.R. 555 calls on the FCC to establish rules prohibiting the application of deed restrictions that preclude Amateur Radio communications on their face or as applied. Deed restrictions would have to impose the minimum practicable restriction on Amateur Radio communications to accomplish the lawful purposes of homeowners association seeking to enforce the restriction.



Ham Numbers Growing!

Last year was another outstanding one for Amateur Radio licensing. So says ARRL Volunteer Examiner Coordinator (VEC) Manager Maria Somma, AB1FM.

In 2016 "New Amateur Radio licenses issued were up by 1% over 2015, and this is the third year in a row that the total number of new licenses has exceeded 30,000," Somma reported. She said 32,552 were granted in 2016, 32,077 in 2015, and 33,241 in 2014.

Somma said that while 2014 was a record-setting year for new licenses issued, ARRL VEC "continues to see an elevated interest in obtaining an Amateur Radio license."

The overall trend continues to be up, up, up! The total number of US Amateur Radio licensees has continued to grow each year since the FCC eliminated the Morse code exam requirement in 2007. Over the past decade, the net number of Amateur Radio licensees has risen by nearly 87,000, according to statistics compiled by Joe Speroni, AH0A, who is ARRL Pacific Section Manager.

As of December 31, 2016, the total number of licensees in the FCC database was 742,787, topping the 2015 total of 735,405, but down just slightly from the all-time high of 743,003 reached last November.

Somma said license upgrades were down by 5% compared to 2015 — 10,617 versus 11,224. "A new Amateur Extra class pool took effect on July 1, 2016, which may have impacted upgrade totals in the second half of the year," she speculated.

As of December 31, according to figures compiled by Speroni, there were 143,337 Amateur Extra licensees, 45,071 Advanced licensees, 172,807 General licensees, 371,560 Technician licensees, and 10,012 Novice licensees. The FCC no longer issues Advanced and Novice class licenses. The General and Technician licensee totals at the end of last year were all-time highs, and the Amateur Extra total was nearly so.

BREAK - OVER

Public Sleeping Day

Feb 28th

Catch a few winks or take a long nap in public to celebrate.

Celebration Ideas:

Clean off a spot on your desk so you don't wake up with a paper clip stuck to your face!

Get your favorite pillow and blanket and find a safe and clean place in public to take a nap.



BREAK - OVER

Surf's Up!

Surfing the web for interesting topics related to radio, building, computing, and anything else interesting along the way.

First Arduinos

https://www.youtube.com/watch?v=xorGiHYR_r0

Curious about the beginnings of the Arduino? Check out this interview with Massimo Banzi, one of the Arduino founders

QRP Guys

<http://qrpguys.com/>

Low cost, high enjoyment kits for the builder that can be assembled in an evening or two. The criteria for our kit designs, are items that are unique in some way, combine features not normally seen, low in cost, and provide satisfaction in completion.

BREAK - OVER

Test Your NIMS Knowledge

This month we begin our review of ICS-200. This course is designed to enable personnel to operate efficiently during an incident or event within the Incident Command System (ICS). ICS-200 provides training on and resources for personnel who are likely to assume a supervisory position within the ICS.

Check your recall of the course material with this question.

1. Which General Staff position conducts tactical operations, develops the tactical objectives and organization, and directs all tactical resources?

- A Finance/Administration Section Chief
- B Logistics Section Chief
- C Operations Section Chief
- D Planning Section Chief

Check next month's ARES Communicator for the solution

January NIMS Knowledge Solution

1. ICS Form 201:

C. Contains status information for briefing the incoming Incident Commander or team, or other resources

BREAK - OVER

GotTrees - cont'd from column 2

EZ Hang

<http://www.ezhang.com/>
Old favorite sling shot approach.



BREAK - OVER

Got Trees?

Antenna Launchers

Elevating antennas is always a topic of discussion among hams. One group, part of Contesting.com, held forth on the topic with some interesting methods. Placing a rope over the tallest convenient tree was the objective. The group members contributed several interesting methods involving projectiles.

No matter which method was used some helpful tips apply to all options:

1. Paint your weights with fluorescent paint. Makes them easier to find.
2. Tie a bright orange streamer to the projectile (not too long, or it will slow down the velocity).
3. Use braided kevlar/spectra fishing line for the launch, not monofilament.

Here is a round-up of a few of the methods discussed:

Air Boss



You can build the Air Boss or similar from parts at your favorite big box store and you will need a valve stem from the auto parts store. There are several options on this basic design.

Yahoo Group

<https://groups.google.com/forum/#!forum/antennalaunchers>

Joplin Amateur Radio Club

<http://joplin-arc.org/>

Innovative Technology

<http://www.kr4loairboss.com/>

Pneumatic Antenna Launching Systems

<http://www.antennalaunchers.com/antlaunching.html>

This a sexy application of the Spudgun option.



cont'd col. 1

ARES 2016 Annual Report

ARRL Letter

The Amateur Radio Emergency Service (ARES) has posted its 2016 annual report. The 2016 ARES Annual Report focuses on documenting the value that ARES provides to the nation, states, and localities in collaboration with partners at all levels.

The report features basic data drawn from Section Emergency Coordinators' reports, a breakdown of ARES figures by state and FEMA region, and a challenge for 2017.

According to the report, ARES membership in 2016 was 27,754 — up from 17,756 in 2015 — and the Service was active in 42 states and US territories. ARES volunteers responded to 33,136 events last year.

ARES Summary for 2016

- Total ARES Membership – 27,754
- Active in – 42 states and territories
- Total ARES Events – 33,136
- Total Volunteer Hours – 418,275
- Total Volunteer Value Provided \$7,947,225

“Sharing information about what ARES provides at all levels is critical to our work overall, as hard numbers provide better detail about our work,” ARRL Emergency Preparedness Manager Mike Corey, KI1U, said. “We all need to pitch in to ensure that our contributions are counted, and here at HQ, we will be sure to do our part.”

State / Region Summary for 2016

State	Members	Events	Hours	Value
Minnesota	602	1334	9154	\$173,926

FEMA

Region 5	5581	8933	131,194	\$2,492,686
MN, WI, OH, IN, IL, MI				

ARES volunteers will see changes in some reporting forms in 2017; all forms, starting in January 2017, have been updated and renumbered. According to the report, 76% of ARRL sections filed reports for 2016, a significant improvement over past years. The report challenges ARRL Section Emergency Coordinators to raise that number to 85% in 2017.

You can view the report here: <http://www.arrl.org/files/file/Public%20Service/ARES/ARES%202016%20Report.pdf>

BREAK - OVER

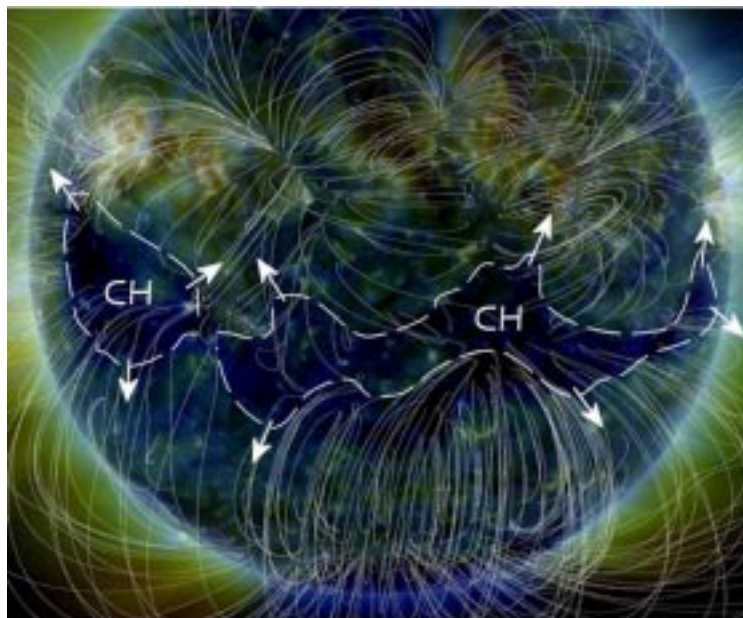


Coronal Hole

SpaceWeather.com

An unusually wide and sinuous hole has opened in the sun's atmosphere, and it is stretching like a gash across the sun's entire southern hemisphere.

This is a “coronal hole” (CH)—a region where magnetic fields open up and allow solar wind to escape. A fan-shaped stream of solar wind flowing from this broad hole will buffet Earth's magnetic field, off and on, during the end of February.



NASA's Solar Dynamics Observatory photographed the structure using false-color ultraviolet telescopes on Feb. 17th

Much of the material will pass to the south of our planet, mitigating its impact; this is not considered a major space weather event. Nevertheless, the sustained action of the glancing solar wind will keep Earth's polar magnetic field in an unsettled state through the end of February.

Overall, this is good news for Arctic sky watchers, for whom nightly episodes of auroras can be expected. In fact, the month could end with an impressive light show. Long-range forecasts by NOAA analysts suggest that G1- and G2-class geomagnetic storms are possible on Feb. 27th and 28th when Earth passes through the tail-end of the solar wind stream.

BREAK - OVER



*“Excellence is not a singular act; it's a habit.
You are what you repeatedly do.”*

Shaquille O'Neal

New Entry-Level License?

ARRL Seeks Opinions

ARRL Letter

An Entry-Level License Committee was established by the ARRL Board of Directors and appointed in September 2016. As part of its ongoing work, the committee is gathering member input and will make recommendations to the Board for possible rules changes to submit to the FCC.

The result could mean changes to the Technician license, but it could also be an additional, but simpler, license with privileges that would give a newcomer a taste of most facets of ham radio, from HF to VHF and UHF.

The committee has created an online member survey (www.arrl.org/license-1). Please complete and submit the survey no later than April 7, 2017. Survey results will be published.

cont'd col. 2

The Board received the Entry-Level Licensing Committee's interim report and endorsed its recommendation to work toward improvements in the current license question pools and seek aggregate demographic data from the FCC's Amateur Radio database. The Committee also recommended continuing the effort to examine public attitudes toward Amateur Radio, with a goal of better understanding how to reach out and attract new licensees.

The Board asked the Committee to work with ARRL Headquarters staff to gather ARRL member input regarding potential changes to the entry-level license, develop several different proposals for change to the entry-level license, and work toward bringing a final recommendation before the Board at its July meeting.

BREAK - OVER

Daylight Savings Time

**Spring Ahead
Sunday March 12th**



NBEMS Current Versions

The current version of the Fldigi manual is available 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 February 20, 2017.

Software	Version
Fldigi	3.23.21
Flwrap	1.3.4
Flmsg	4.0.1
Flamp	2.2.03

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.



ARES Breakfast

Saturday
January 14th 2017!!
7:30AM
Perkins Restaurant
Savage, MN

NECOS Schedule February 2017

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

February 2017

Feb 27th KD0UWZ Chad

March 2017

Mar 6th KB0FH Bob

Mar 13th WA0DGW John

Mar 20th KD0UWZ Chad

Mar 27th KB0FH Bob