

SPECIAL POINTS OF INTEREST:

- Tom N8CWF
- HappyHolidays

INSIDE THIS ISSUE:

Spotlight

Weird :

Science

November 4

Minutes !

Dec. QST 6

December 7

Sponsors 8

YOTA 9

For Sale 10

Solar Roads | |

ARRL 12

Who We Are 13





NOARS LOG

VOLUME 52, ISSUE 12

DECEMBER 2016

Jane-Waves



Season's Greetings! It is a magical time of year

when on Christmas Eve, we hear the jingling bells and look into the snowy, nighttime sky and see a vision of Santa calling to his reindeer, "Now Diawa! Now Diamond! Now, Yaesu and Velleman! On, Comet! On, Cushcraft! On Icom and Bussmann!" (With apologies to Major Henry Livingston Jr.)

It is the season of sharing and good cheer.
NOARS has ended the year on a high note, due to members unselfishly sharing their time, talent and ideas to sustain nearly sixty years of serving the Northern Ohio Ham Radio community.

In 2016 Carl W8KRF modernized the repeaters, NOARS website and email system. Dave KY8OSU and Tom N8CWF stepped up as first-time officers of the club, while Tom W8KYZ as Treasurer and Dee KA8VTS as Hamfest chair, continue to provide continuity and depth. All of our meetings were well attended, showing support of the incredible speakers we were graced to have.

Our treasury has increased, and our scope of support and breadth of outreach to other clubs have grown. All in all, it has been a good year for NOARS.

And, 2017 will be a good year as well, under the experienced leadership

of Clark N8PZD as President.

Clark and Dave KY8OSU have agreed to jointly take over the NOARS Log newsletter, so expect a change in format, not substance.

I thank each one of you for your help in making this past year as President a memorable experience. I'll continue to be an active member of NOARS, but really had to step down to attend to some long-neglected projects. I may even be able to get on the air once again!

I do hope each of you are treated kindly by Santa. May you experience great happiness, health and fortune in 2017.

73, Jane/K8JGR K8JGR@ARRL.net 216-570-8500

Member Spotlight - Tom N8CWF



Name, Call Sign, License: hams?

Tech, N8CWF my family.

Family Members who are What would you like to

Thomas Dolan, I am currently the lone ham in RTTY, PSK31 and finally

learn most about?

learning the Code.

How long have you been a ham?

I received my Tehcnician license from the FCC on the 4th of January, 2016, and upgraded to General a few months later.

What modes of operation do you like best?

I use FM and SSB Voice, both my home HF station. wire and repeater, but wish to expand my experience when finances allow.

Current projects?

Attempting to finish building

How long in NOARS?

I was recruited by Tom W8KYZ to join NOARS the day of my exam and have been participating ever since. Yaesu.

Most memorable contact?

I will never forget field day 2016, when I made my first HF contact with the assistance of KD8VTX and his

What line of work are you in?

I am an apprenticed Industrial Pump Mechanic working toward a Pump Technician's position specializing in three phase electric motors.

What/who got you interested in amateur radio?

I was originally inspired to become a ham when I attended what I later learned was a Field day when I was about eleven. I was there with my father helping to provide food and beverages to the Salvation Army Emergency Disaster Services team, of which I was a member.

Awards, activities, nets?

ARIES, SKYWARN, the Burning River Traffic Net, the NOARS net, the Shop and Swap and various nets around.

Favorite rig(s)?

The mobile Kenwood TM-V71A is used most, but I aspire to acquire an Icom 706 MKII G.

Other Hobbies?

Music (listening to and performing), RC hobbies such as airplanes, helicopters and high-end cars, photography and far too many more to list.

What would you like to see in NOARS?

I would very much like to see more use of the NOARS repeater. I have considered starting various nets throughout the day to attempt to drum up more activity.

Weird science: 3 win Nobel for unusual states of matter

How is a doughnut like a coffee cup? The answer helped three British-born scientists win the Nobel prize in physics Tuesday. Their work could help lead to more powerful computers and improved materials for electronics.

David Thouless, Duncan Haldane and Michael Kosterlitz, who are now affiliated with universities in the United States, were honored for work in the 1970s and '80s that shed light on strange states of matter.

"Their discoveries have brought about breakthroughs in the theoretical understanding of matter's mysteries and created new perspectives on the development of innovative materials," the Royal Swedish Academy of Sciences said.

Thouless, 82, is a professor emeritus at the University of Washington. Haldane, 65, is a physics professor at Princeton University in New Jersey. Kosterlitz, 73, is a physics professor at Brown University in Providence, Rhode Island, and currently a visiting lecturer at Aalto University in Helsinki.

The 8 million kronor (\$930,000) award was divided with one half going to Thouless and the other to Haldane and Kosterlitz. They investigated strange states of matter like superconductivity, the ability of a material to conduct electricity without resistance.

Their work called on an abstract mathematical field called topology, which presents a particular way to describe some properties of matter. In this realm, a doughnut and a coffee cup are basically the same thing because each contains precisely one hole.

Topology describes properties that can only change in full steps; you can't have half a hole.

"Using topology as a tool, they were able to astound the experts," the academy said. For example, in the 1970s, Kosterlitz and Thouless showed that very thin layers of material — essentially containing only two dimensions rather than three — could undergo fundamental changes known as phase transitions. One example is when a material is chilled enough that it can start showing superconductivity

Scientists had thought phase changes were impossible in just two dimensions, but the two men showed that changes do occur and that they were rooted in topology.

"This was a radically new way of looking at phases of matter," said Sankar Das Sarma, a physicist at the University of Maryland in College Park.

"Now everywhere we look we find that topology affects the physical world," he said.

Haldane was cited for theoretical studies of chains of

magnetic atoms that appear in some materials. He said he found out about the prize through an early morning telephone call. "My first thought was someone had died," he told The Associated Press. "But then a lady with a Swedish accent was on the line. It was pretty unexpected."

Kosterlitz, a dual U.K.-U.S. citizen, said he got the news in a parking garage while heading to lunch in Helsinki. "I'm a little bit dazzled. I'm still trying to take it in," he told AP.

Nobel committee member David Haviland said this year's prize was more about theoretical discoveries even though they may result in practical applications. "These theoreticians have come up with a description of these materials using topological ideas, which have proven very fruitful and has led to a lot of ongoing research about material properties," he said.

Haldane said the award-winning research is just starting to have practical applications. "The big hope is that some of these new materials could lead to quantum computers and other new technology," he said.

Quantum computers could be powerful tools, but Kosterlitz was not so sure about the prospects for developing them.

"I've been waiting for my desktop quantum computer for years, but it's still showing no signs of appearing," he said. "At the risk of making a bad mistake, I would say that this quantum computation stuff is a long way from being practical."



Associated Press: Malcom Ritter and Karl Ritter, 10/4/2016

Associated Press writers Keith Moore in Stockholm, Matti Huuhtanen in Helsinki and Shawn Marsh in Trenton, New Jersey, also contributed

Past Program



A hearty "thank you" to

Dean Lioli KW7XX,

who captivated us at our

November 21st Membership Meeting with stories of

his exploits as a DXpeditioner on distant, palmlined islands.

An RF Junkies' Charter Member, Dean is originally from Cleveland, Ohio and now resides in the small town of Custer, Washington, located 100 miles north of Seattle - along the border with British Columbia.

It was very nice of Dean to find time for NOARS while on a visit with family back here in Ohio. We are fortunate that he still retains

an active membership in NOARS.



Dean KW7XX

Roll Call: November Meeting

30 Members and Guests in Attendance:

AA8S * K8AGW * K8IC

K8HRD * K8JGR and

Kevin * K8KIZ *

K8WON * KA8VTS and

Debbie * KB8WVA *

KB8ZUN * KD8MUF *

KD8TCZ *KE8BRC *

KE8CWD * KE8DIF *

KF8PM * KW7XX *

KY8OSU * N8CWF *

N8PZD * WIAFC *

W8GWD * W8KFJ *

W8IMO * W8KRF *

W8KYZ * W8NNC *

W8RET



Call Signs Heard on NOARS Nets

November 2016
Tuesday & Thursday Nets

K3KGX/8 - K8AGW -K8JWL - K8RTR -

K8RWC - KA8BPU -

K8WON - KC8FQV - -

KD2HCE - KD8PHL -

KD8VIQ - KD8VTX -

KE8ETO - KE8NN -

KE8CWD - KF8PM -

KG6NFJ - KY8OSU -

N8CWF - N8CX - N8WS

NC8X - W8BHJ -

W8KRF - W8KYS -

W8KYZ-W8RET-

WB8UPA

November Meeting Minutes

Minutes of the November 21st, 2016 General Meeting

Submitted by Tom Dolan N8CWF, Secretary The meeting came to order at 7:00pm, 30 Members and Guests present.

Secretary's Report: President, Jane K8JGR called for a motion to suspend the reading of the October minutes as published in the November NOARS Log.

Motion - Dave W8KFJ, Second - Bill K8IC

Discussion: None Corrections: None

Approved as on the website. Motion carries by majority vote.

Treasurer's Report:

Tom W8KYZ gave the Treasurer's Report.

Motion - Bob W8RET, Second - Mark K8WON

Discussion: None

Motion carries by majority vote, report approved as read.

President's Report:

President, Jane Reed K8JGR had Jeff report on the Joint Lorain County wireless and NOARS 2016 Field Day statistics. NW8S placed 1st in Ohio for 5A, 1st in 8th Region for during the 5A and 5th Nationally for 5A!

Jane also mentioned the suggestion of merging the Winter HAM Fest into the Summer NOARSfest. Club members should contact her or Tom Porter, W8KYZ with opinions, positive or negative. Jane will compile a summary of profitability of the 2016 Hamfests from the Treasurer's reports to distribute to the members to assist in the decision.

- Jane also reported that the Banquet will be held December 3, from 5:30 to 8:30 PM, at Sugar Creed in Sheffield Village. The cost is \$18.50 per person. A minimum of 25 reservations are necessary to hold the Banquet.
- Jane also reported that she took a week-long technical workshop on solar power systems and passed her exam, making her an ETA Certified Photovoltaic Installer, Level 1!

Old Business: There being no old business, new business was called.

New Business: A simple voice vote was taken to confirm the 2017 slate of officers—all of whom ran unopposed - and passed by a simple majority vote. President: Clark Beckman N8PZD; Vice President: David Fisher KY8OSU, Treasurer: Thomas Porter W8KYZ; and Secretary: Tom Dolan N8CWF. Congratulations to all.

Adjournment: .

Motion to adjourn - Clark N8PZD, Second - Mark K8WON, and passed by a simple majority vote.

Meeting adjourned at 7:17pm.

50-50 Raffle: Winner, Jane K8JGR, \$21.00, Club \$21.00

Program: Dean Lioli KW7XX on Preparing for DXpeditions

If there are

any errors or

corrections to

the minutes,

please

mention

next General

Meeting

NOARS Special Service Club Renewal



Joint NOARS & LCWO Field Day 2016 Results

The results for the 2016 ARRL Field Day have been published in the December issue of QST.....

NW8S placed 5th nationally for the 5A class!

NW8S placed 1st in 8th Region for 5A!

NW8S placed 1st in Ohio for 5A!

Although we have finished 1st in Ohio and 8th in Region several times in the past, this is the highest national score for us yet. Our former national best was 8th. One of the goals, since we put the Field Day team together, was to break the top 5 for 5A.

Thank You!!! I think I speak for all the founders of Lorain County Wireless Operators when I say that. LCWO was organized to be a non denominational group. The 2016 Field Day performance was the result of just that, TWO CLUBS and several out of state visitors. Some of it planned, some by luck and some by fate. Any way you look at it, it was a success! You all deserve a pat on the back for a job well done.

Again, THANK YOU! None of us could have pulled this off alone. It took each one of you to make this a success.

So, what's in store for Field Day 2017...... Stay tuned, it's gonna be a party!

73,

Jeff Evans KB8ZUN

[Ed note: NOARS members have to decide to be autonomous or merged in a joint Field Day for 2017.]

December Calendar

Happy December Birthday to the following members:

K8WON + KB8ZUN + KD8VIQ + KD8VTX + NQ8T + W8KYZ + W8SSE + WA8THF

Please let Carl W8KRF know if your birthday is this month and your name doesn't appear here. There is a good chance that it's not in our database!



January 16, 2017: General Membership Meeting:

Held 7:00pm sharp at the North Ridgeville Branch of the Lorain Public Library, 35700 Bainbridge Rd., North Ridgeville, Ohio 44039.

Doors open 6:30pm. Coffee and donuts will be available. The Program will follow the meeting.

December 2016

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				<i>I</i> 2M Net 8p NCS:W8RET	2	3
4	5	6 10M Net 8p NCS: NC8X	7 BRTN 9:30p	8 2M Net 8p NCS: W8KYZ	9	10
11	12	13 10M Net 8p NCS: W8KYZ	14 BRTN 9:30p	15 2M Net 8p NCS:KD8VTX	16	17
18 VE Testing ARC	19	20 10M Net 8p NCS: NC8X	21 BRTN 9:30p	22 2M Net 8p NCS:N8CX	23	24
25	26	27 10M Net 8p NCS: W8KYZ	28 BRTN 9:30p	29 10M Net 8p NCS: W8KYZ	30	31

"All the leaves are brown And the sky is grey, I went for a walk On a winter's I'd be safe and warm, If I was in L.A, California dreamin, On such a winter's day.' Mammas and Pappas, California Dreamin

NOARS Sponsors

The DX Engineering Retail Showroom

More products on the shelves—get hands-on with the newest radio gear!



The DX Engineering Retail Showroom
Inside the Summit Racing Retail Super Store
1200 Southeast Ave., Tallmadge, Ohio

Open from 9 am to 9 pm, seven days a week

Plus:

Friendly service
Expert tech advice from active Hams
Open-box deals
Free product brochures
Easy return processing

In-person customer support 9 am to 5 pm, Monday-Friday 9 am to 2 pm, Saturday





Please support these businesses

R&L Electronics

1315 Maple Ave HAMilton, Oh 45011 http://randl.com email.sales@randl.com Local/Tech 513-868-6399 Fax 513-868-6574 800-221-7735

Daily Specials at www.randl.com

December Youngsters on the Air Event

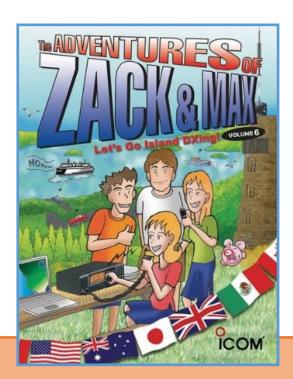
The annual Youngsters on the Air (YOTA) event takes place during the entire month of December, with YOTA stations attempting to contact many other young radio amateurs around the world. The event offers an excellent opportunity for get radio amateurs in their teens and early 20s to get together on the air.

"The idea of this is to show the Amateur Radio hobby to youth and to encourage youngsters to be active within the hobby," said International Amateur Radio Union Region 1 (IARU-R1) Youth Working Group Chair, Lisa Leenders PA2LS. "Consider giving a demonstration at a school or local club, gather together with your friends, grab a pizza, and make some QSOs, or enjoy a great pile-up. Let's show this great hobby to the world!"



This is not a formal contest but a way to get young people on the air with their peers. Numerous participating stations, primarily in Region 1, will be sporting YOTA call sign suffixes.

ARRL 11/29/2016





All Ad Submissions must be sent to noarslog@noars .net or to: NOARS Log 161 Herrmann Drive Avon Lake, OH. 44Ø12 The deadline for submissions is the third Tuesday of each month. All must include: asking price, sellers name, call sign and phone number. Ads from current **NOARS** members (or paid advertisers) will have priority on a space available basis! Notice: all ads will be removed (unless updated) after three months (as space is needed)! NOARS

reserves the right to

refuse ads

For Sale



Bencher BY-1 Key \$60.00



Yaesu YSK-7800 Separation Kit New in box. \$30.00

Clifford Industries Power Supply .3amp \$5.00



Drake TV-42-LP Low Pass Filter \$5.00



WWII ANB-H-1 Cushioned Headphones \$30.00



Pyramid PS-14KX 12amp Power Supply \$30.00

Battery Float Charger with AC adaptor \$3.00

VOCOM Telescoping HT Antenna \$3.00

Tom W8KYZ 440.930.9115

YOUR AD HERE FOR FAST RESULTS!

For Sale

For Sale: FlexRadio 5000A

Excellent condition. Does NOT have the 2nd Receiver or the ATU

DOES come with the DJ Controller as show.

\$1500.00

Ken: 440-452-9765





Solar-Panel Roads to Be Built on Four Continents Next Year

Electric avenues that can transmit the sun's energy onto power grids may be coming to a city near you.

A subsidiary of Bouygues SA has designed rugged solar panels, capable of withstand the weight of an 18-wheeler truck, that they're now building into road surfaces. After nearly five years of research and laboratory tests, they're constructing 100 outdoor test sites and plan to commercialize the technology in early 2018.

"We wanted to find a second life for a road," said Philippe Harelle, the chief technology officer at Colas SA's Wattway unit, owned by the



Wattway's solar road in Tourouvre

French engineering group Bouygues. "Solar farms use land that could otherwise be for agriculture, while the roads are free."

As solar costs plummet, panels are being increasingly integrated into everyday materials. Last month Tesla Motors Inc. surprised investors by unveiling roof shingles that double as solar panels. Other companies are integrating photovoltaics into building facades. Wattway joins groups including Sweden's Scania and Solar Roadways in the U.S. seeking to integrate panels onto pavement.

To resist the weight of traffic, Wattway layers several types of plastics to create a clear and durable casing. The solar panel underneath is an ordinary model, similar to panels on rooftops. The electrical wiring is embedded in the road and the contraption is topped by an anti-slip surface made from crushed glass.

A kilometer-sized testing site began construction last month in the French village of Tourouvre in Normandy. The 2,800 square meters of solar panels are expected to generate 280 kilowatts at peak, with the installation generating enough to power all the public lighting in a town of 5,000 for a year, according to the company.

For now, the cost of the materials makes only demonstration projects sensible. A square meter of the solar road currently costs between 2,000 (\$2,126) and 2,500 euros. That includes monitoring, data collection and installation costs. Wattway says it can make the price competitive with traditional solar farms by 2020.

The electricity generated by this stretch of solar road will feed directly into the grid. Another test site is being used to charge electric vehicles. A third will power a small hydrogen production plant. Wattway has also installed its panels to light electronic billboards and is working on links to street lights.

The next two sites will be in Calgary in Canada and in the U.S. state of Georgia. Wattway also plans to build them in Africa, Japan and throughout the European Union.

"We need to test for all kinds of different traffic and climate conditions," Harelle said. "I want to find the limits of it. We think that maybe it will not be able to withstand a snow plow."

The potential fragility joins cost as a potential hurdle.

"We're seeing solar get integrated in a number of things, from windows in buildings to rooftops of cars, made possible by the falling cost of panels," Bloomberg New Energy Finance analyst Pietro Radoia said. "On roads, I don't think that it will really take off unless there's a shortage of land sometime in the future."

Join the ARRL

Are you joining the ARRL? Did you know that NOARS will receive a commission if you do your transaction through us?



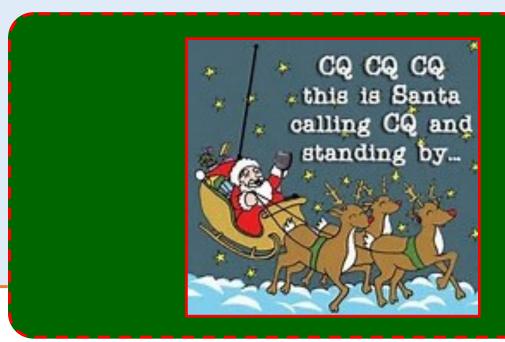
Commission Terms

ARRL Affiliated Clubs receive a commission for every new ARRL membership they submit to ARRL Headquarters.

Clubs retain \$15 for each new membership OR lapsed membership (of two years or more). A NEW MEMBER is defined as any individual who has never been a member of ARRL or any individual who has not retained a membership for two or more calendar years prior to the application submission.

If you are not an ARRL member, please consider joining now. As an affiliated Club, we are required that 51% of our membership be active ARRL members. If you are joining, contact Tom Porter, W8KYZ. This is important. You will gain benefits provided by being a member of the ARRL, and NOARS will receive some income to help support our activities and events, as well as our repeaters.

Note: We are no longer processing renewals because of a poor cost/







Northern Ohio Amateur Radio Society

NOARS
161 Hermann Drive
Avon Lake, Ohio 44012

NOARS is a Public Service Organization with the purpose and goal to enhance the Amateur Radio Service through Public Service, Education, and Fellowship.

Our 51st year serving the Amateur Radio Community of Northern Ohio

- Meetings are held at 7:00 pm sharp on the third Monday of every month at the North Ridgeville Branch of the Lorain Public Library, 35700 Bainbridge Rd, North Ridgeville, OH. The meetings are open to the public and all are welcome.
- Regularly scheduled NOARS nets are every Tuesday night at 8 pm on 28.370 MHz, and every Thursday night at 8 pm. for the rag chew and technical discussion net on 146.700 MHz. NOARS FUSION Repeaters can be heard at 146.700 (-) PL 110.9 & 444.800 (-) PL 131.8 in Elyria, OH, as well as, 145.150 (-) PL 110.9 in North Royalton, OH. 3-minute TOT. EchoLink K8KRG/R or Node #502546
- Our repeater will be used by Burning River Traffic Net (BRTN) on Wednesdays at 9:30 pm.
- All licensed amateurs are welcome. NOARS membership is not necessary to participate. In fact all participation is encouraged and appreciated.



NOARS

2016 Elected Officials

President: Jane Reed K8JGR **V.P.** Dave Fisher KY8OSU

Treasurer: Thomas Porter W8KYZ **Secretary:** Tom Dolan N8CWF

Committee Heads for 2016

Membership:

Carl Rimmer W8KRF

Newsletter: Jane Reed K8JGR

DX/Field Day:

Al Moriarty N8CX

Net Mgr: Robert Tome W8RET

Hamfests:

Darlene Ohman KA8VTS

Website: Carl Rimmer W8KRF

e-Mail noars@noars.net

ARRL VE Team:

Joseph Cebula W8GWD

Steve Hill NQ8T

Bill Isenberg K8IC

Brian Kellison AC8RV

David O'Connor II KD8MXE

Joe Oney W8SSE

Tom Porter W8KYZ

Jane Reed K8JGR

Carl Rimmer W8KRF

Photographer: Robert Tome W8RET **Sunshine:** Darlene Ohman KA8VTS

Parliamentarian:

Robert Tome W8RET

K8KRG License Trustee:

Al Moriarty N8CX

Repeater Upkeep:

Carl Rimmer W8KRF

Clark Beckman N8PZD

Bill Isenberg N8IC

Tim Allen NC8X

Tom Porter W8KYZ

NOARS

is

K8KRG