



NOARS LOG

VOLUME 52, ISSUE 5

MAY 2016

SPECIAL POINTS OF INTEREST:

- Member Spotlight is on Chet K8KIZ
- Win a Yaesu Digital Transceiver
- Disaster Support from Space

INSIDE THIS ISSUE:

Member Spotlight	2
Raffle	3
Minutes	4,5
April	6
NVIS/Earth Day	7
May	8,9
ARES Field Day	10 11
FEMA/ARRL in Space	12 13
For Sale	14
Join ARRL	15
Who We Are	16

Jane-Waves



We welcome Tom Dolan KE8CWF, as Secretary Pro Tem, to the NOARS

Board. Tom will be filling in for Darlene KA8VTS who is battling illness. However Darlene will be active in her Chairperson duties as much as possible.

I attended the National Weather Service Basic Skywarn Training Class in Elyria on March 23rd. Since becoming a webinar format instead of a live presentation there was some confusion about registration. There was no sign-in table and no SkyWarn Spotter certificates were handed out. But overall it was generally informative.

Congratulations

Welcome to our NEW NOARS member:

Dave (sorry, did not hear your last name) just passed the Technician Exam and was grandfathered in as a General Class licensee.

The Dayton Hamvention is May 20-22 at the Hara Arena



Complex. It's a great place to browse or purchase that antenna or radio, run into friends, check out the Exhibits or earn interesting things in the Forums.

Field Day is coming up in June. Let AI N8CX know if you are interested in helping out. Now is the time to test your gear, check your list and round up any needed sup-

plies, batteries and other necessities to make this year's Field Day one of the best.

For those of you studying for the Extra Class exam, be advised that the current ARRL *Extra Class License Manual* expires July 1, 2016. (The new edition is not available yet.) So, plan on sitting for the exam before then at one of the various exam testing sites in NE Ohio. Regular testing sessions are held at the American Red Cross, 2929 W. River Road North, Elyria, Ohio 44035. Walk-ins are allowed. More info on <http://www.w8hf.com/>.

Happy Spring!

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

Congratulations to our UPGRADES:

Mark Lewis KD8WON passed the Extra Class Exam!





Chet Roberts K8KIZ

"One person holds a cell phone to their ear and **calls** a friend. A ham holds a HT to their ear and **makes** a friend."



"Amateur radio is a wonderful world of technical expertise coupled with the fun of new contacts."



Member Spotlight - Chet K8KIZ

Name, Call Sign, License:

Chet Roberts, K8KIZ, Extra

How long have you been a ham?

Received my Novice license in 1957. Used a Hallicrafters SX-99 receiver and built a Heathkit DX-40 transmitter.

Added a Heathkit VF-1 after passing my General. Long hiatus after college. Back into the hobby in 2010. Got my Extra in 2015

How long in NOARS?

5 years

What/who got you interested in amateur radio?

I loved the concept of generating radio signals that could cross the globe, I loved the look of the equipment and enjoyed every switch and pilot light I could activate or tune. I spent many a quiet evening with just the glow of the tubes and pilot lights to light my shack. It was a wonderfully exhilarating and yet peaceful experience. Even the Russian jamming stations on 40 meters came to be familiar friends!

What modes of operation do you like best?

PSK, SSB, and CW. I am trying to get my code speed up to a reliable 21 wpm. I use one of the many amazing code programs for the iPod. For just a couple of bucks I have a tutor who teaches me with the Koch method so I can finally master the art of CW.

Favorite rig(s)?

I have a Kenwood TS-2000. I took a long time deciding what rig I would like to get back into the hobby with and I am really pleased with the TS-

2000. It's a miracle in a box. I also use an ELAD FDM S-2 connected to the TS-2000. It's an awesome combination.

Current projects?

Exploring the thrill of QRP with the MFJ 9296 CW SDR rig.

Also building my own version of the Buddipole.

What would you like to learn more about?

I'm still fascinated about the actual process that allows a radio wave to leave a wire and go off into space. I understand the explanation of collapsing electrical and magnetic fields, but I still don't understand why it actually works.

What line of work were you in?

Behind the scenes in broadcast television: photographer, videographer, producer, writer, graphic artist, editor, director.

Awards?

Awards in my professional career (Broadcast television at WEWS-TV and WJW-TV) include 6 local Emmy's and 4 national Telly's. Some of those awards are for animation which was extremely difficult to do on videotape back in the day.

What would you like to see in NOARS?

Every meeting having a learning session. If nothing else, show a YouTube video of some aspect of our hobby or the theory that underlies it. Maybe only 15 minutes or so, for a chance to not only socialize but become familiar with new concepts and better understanding of old ones.

Other Hobbies:

Live Steam Railroading - built a 1/8 actual size steam locomotive modeled after the Wabash Cannonball. It's a true steamer that uses coal to make a fire, water to make steam, and pistons to make it go. I am a member of the Lake Shore Live Steamers and oftentimes help give free rides to the public at the Lake Metroparks Penitentiary Glen in Kirtland. I also recently completed a modified F-7 diesel locomotive that is electric powered.

Model Radio Controlled Airplanes - My mini air force includes a T-28 Navy Trainer, a Sportsman S+ high wing, and a twin engine C-47

I am also one of a handful of people around the globe who still make sundials that actually work! The sundials you see in stores are typically for decoration only -- they cannot tell time. Because our rotating planet earth is in a unique relationship with the sun, a sundial must be calibrated for an exact latitude and longitude. Additionally the gnomon (the triangle piece on top that casts the shadow) must be set for the exact latitude. I have a website:

www.ncrsundials.com that shows some of my work.

Each sundial pattern is unique and cut on a homemade CNC router. The foam pattern is then turned into aluminum using a homebuilt foundry. Final machining is done on a 16" Southbend lathe (made in 1942) and a Rockwell mill.

Win a Digital Transceiver



NOARS is offering a chance to win a **Yaesu FTM-400XDR** C4FM FDMA/FM 144/430 MHz Dual Band Transceiver for a donation of \$5.00 per raffle ticket. **Only 200 tickets will be sold.** The drawing will be held at the first NOARS General Meeting after 200 tickets are sold.

The Yaesu FTM-400XDR digital transceivers are the first mobiles to be fully compatible with the Yaesu System Fusion Dual Mode Analog/Digital communication systems as used by NOARS.

Contact Alex N8QL at raffle@noars.net for more information or if you wish to make arrangements to purchase tickets. Cash or Checks made out to **Northern Ohio Amateur Radio Society** will be accepted.

To date we have more than half sold. Don't delay!

Enter to win! Tell your friends!

The raffle winner will be contacted and announced in the *NOARS Log* newsletter.

NOARS FTM-400XDR Raffle				
Northern Ohio Amateur Radio Society				
FTM-400XDR Raffle				
C4FM FDMA / FM				
144/430 MHz DUAL BAND TRANSCEIVER				
Drawing will be held once 200 tickets are sold				
DONATION \$5.00				
Thank you for your support!				

No 00001

Name _____

Call _____

Address _____

Phone _____

Email _____

SAMPLE

No 00001

April Meeting Minutes

Minutes of the April 18th, 2016 General Meeting

Submitted by Tom Dolan KE8CWF, Secretary Pro Tem

The meeting came to order at 6:58pm, 32 Members and guests present.

Secretary's Report: President, Jane K8JGR called for a motion to suspend the reading of the March 21st minutes as published in the April NOARS Log.

- Motion – Carl - W8KRF, Second – Bob - W8RET
Discussion: None
Corrections: None
Approved as on the website. Motion carries by majority vote.

Treasurer's Report:

- Bal of end of March \$3998.57
- Expenses – 3 checks went out to first second and third prize for the Winter Hamfest.
- Paid \$200.00 to VFW for the balance due.
- Bought food supplies for the breakfast \$95.95
- March refreshments \$12.32
- Second repeater sent back to Yaesu – shipping needed to be paid \$75.74. This repeater has been updated and returned – the return shipping was free.
- Host gator – continuing a one year subscription – site lock with host gator – \$15.00, lock \$14.99
This site lock was added to prevent hacking into the website in the future – due to past events.
- Club insurance – \$200.00 due soon. Hannover Insurance – ARRL approved insurance.
- Motion: N8WS, Second: Clark N8PZD
- Motion to approve report -
Motion: Mark - W8RET, Second: Dave - W8RFJ
Discussion: Covers liability, medical, fire damage, coverage for tower work
Discussion: None
Motion Carries by majority vote

President's Report: Board meeting March 29th, topics will be covered in Committee Chair Reports.

- Skywarn class was 3/23/16 – With a “civilian” approach – (non ham)
- Bob Woodsworth WD8PVB Silent Key 4/9/16.
- Library letter from Foundation of the Lorain Public Library System – To benefit the reading program.
Motion for the club to donate \$50.00 to the Lorain Public Library.
Motion: Carl W8KRF, Second: Bill N8WS
Discussion: None
Motion carries by majority vote.
- Board appointment: Tom Dolan KE8CWF to fill position as Secretary Pro-Tem

Standing Committee Reports:

Field Day: June 25-26 2016, **Summer NOARSFest:** July 16, 2016, **Picnic:** August 15, 2016

Banquet: December 3, 2016 – How many would attend a banquet at a new venue? Looking for creative energetic chair for a FUN banquet – new venue, entertainment, white elephant gifts, music.
Volunteer: Clark N8PZD

New Business: Bob W8RET encouraged members to buy NOARS embroidered hats and jackets from Pat, listed on our NOARS website.

Announcements

1. April 23rd is Ohio ARES NVIS (Near Vertical Incidence Skywave) Antenna day. Figure out your best antenna and attempt to make as many DX's as possible. Metro Park Indian Hollow.
2. Cuyahoga County ARES looking for volunteers. Matthew Nickleson Cleveland Marathon and 5K Run in Shaker Heights.
3. Dayton Hamvention May 21st.

Adjournment:

Motion – Dave W8FGJ, Second – Clark N8PZD

If there are any errors or corrections to the minutes, please mention during the next General Meeting

Meeting Minutes - Continued

50-50 Raffle: Generated \$26.00 for the club and \$26.00 for the winner, Jane K8JGR

Program: Carl W8KRF gave an instructive lesson in setting up Wires-X in your shack.

Circuit Components as Art



Italian Artist, **Leonardo Ulian**, depicts the center of the universe as a microchip, expanding outward with resistors, capacitors, inductors, and transistors.

His art represents Hindu or Buddhist mandalas. A **mandala** is a spiritual and ritual symbol in Indian religions, representing the universe. In common use, "mandala" has become a generic term for any diagram, chart or geometric pattern that represents the cosmos metaphysically or symbolically; a microcosm of the universe.

Each mandala takes two weeks to create and his largest works, up to 5 feet across, requires as many as a thousand parts, mostly purchased from Russian sellers on Ebay. They're meant to trigger deeper questions about our relationship with technology. "People nowadays almost worship electronics," he says, "I wouldn't be surprised to hear that someone has created a religion based on microchips."

See <http://www.leonardoulian.it/> for more examples of his work.

Past Program: April

Carl Rimmer W8KRF presented our April 18th Program on Yaesu's digital Wires-X (Wide-coverage

Internet Repeater Enhancement System). He encourages the full use of NOARS' Yaesu System Fusion re-

peaters with digital capabilities. Thank you to Carl for an informative presentation.



Roll Call: April Meeting

32 Members and Guests in Attendance:

K3KGX/8 * K8AGW *
K8HRD * K8IC * K8JGR
K8KIZ * KA8WLI *
KB8WUA * KB8ZUN *

KD8WON * KD8VIQ *
KE8CWF & Lily & Willow
KF8PM * KY8OSU *
N8CWF * N8PZD *
N8QL * N8WS * NC8X
W1AFC * W8GWD *

W8IMO * W8KFJ *
W8KRF * W8KYZ *
W8RET * WB8WAA*
WD8ASY



Call Signs Heard on NOARS Nets

APRIL 2016
Tuesday & Thursday Nets

K8AGW - K8IC -
KB8WUA - KC8FQV -
KC8VZZ - KD8FJD -
KD2HCE - KD8RNF -
KD8TNF - KD8VIQ -

KD8VTX - KD8WON -
KD8WPE - KD8ZRL -
KE8CTB - KE8CWD -
KE8DHG - KE8DNQ -
KF8PM - KY8OSU -
N8CWF - N8PZD -
N8WS - NC8OS -

NC8X - NQ8T -
W1AFC - W8FAN -
W8GWD - W8KRF -
W8KYS - W8KYZ -
W8RET - WA8ERA -
WA8FYW - WB8UPA -
WD8OSJ

NVIS Day - Earth Day 2016



April 23rd, at Indian Hollow Reservation. **Lorain County ARES** folks, Eric N8AUC, Tim NC8OS, NOARS member Dennis WB8WAA and several others setting up their Near Vertical Incidence Skywave (NVIS) antennas early in the morning.



Parma Radio Club President, Hal K8CMD (on mic), at their joint NVIS/ Earth Day installation that was 100% solar powered. It was held at the Sterns Homestead, a historical site in Parma. In the spirit of "roughing it," the operators shared the room with a cage of chirping baby chickens!

May 16, 2016 Program



Jane Reed K8JGR

Riding on Light Rays: Planes, Trains, Automobiles and More - Solar Power in Transportation

will be presented by **Jane Reed K8JGR**. This is a informative, non-technical program that will identify some exciting past, planned and present uses of solar power used to transport humans across the neigh-

borhood, the continent or the globe. By seeing how large solar energy projects are transporting people, the hope is to excite more hams into thinking about using solar power to transport radio waves across the world.

The topic of solar energy will then be extended at our June 20th General Membership Meeting with Jack Wendling KD8QMU demonstrating how to set up a basic solar panel system to power your radios.

Jane has been a member of NOARS since early 2014, and licensed as an Extra since 2005.

As a retired college professor and current business owner, Jane's enthusiasm for learning and sharing is part of her DNA!

She learned to fly a single-engine plane when she was 20, has a respectful fear of trains and has logged over three-quarter of a million highway miles, none of which was in a solar powered vehicle!

Pennsylvania Hamfest Invitation

The **Breeze Shooters** will once again be having their **Hamfest on June 5, 2016**. This will be our 62nd Annual Event.

As in the years past, we are offering to the local radio clubs in Pennsylvania, Ohio, New York and West Virginia two free admission tickets to our Hamfest at our new location: The BIG Butler Fairgrounds, on US Rt. 422 in Prospect, PA (north of Pittsburgh). These can be given away at your May club meeting.

For Hamfest Flyer downloading and more information regarding our Hamfest, please see: www.breezeshooters.org

Throughout 2016, Amateur Radio will be helping the National Park Service celebrate their 100th anniversary. Hams from across the country will activate, promote the National Park Service and showcase Amateur Radio to the public.

National Parks
ON THE AIR

2016

May Calendar Events

Happy May Birthday to the following members:

K8AGW + K8VJG + KB8MIS + KD8NGE + N8COI + N8QL + W8RET

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!

May General Membership Meeting:

Held 7:00pm sharp on May 16th 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.

June 20, 2016 Program:

John "Jack" Wendling
KD8QMU, a member of the Parma Radio Club, will demonstrate the basics of using solar panels to power communications out in the field.

"The world's favorite season is the spring. All things seem possible in May."
 Edwin Way Teale

May 2016						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3 10M Net 8p NCS: NC8X	4 BRTN 9:30p	6 2M Net 8p NCS: NC8X	6	7
8	9	10 10M Net 8p NCS: NC8X	11 BRTN 9:30p	12 2M Net 8p NCS: NC8X	13	14
15	16 NOARS Meeting 7:00pm	17 10M Net 8p NCS: NC8X	18 BRTN 9:30p	19 2M Net 8p NCS: NC8X	20 DAYTON	21 DAYTON
22 VE Testing ARC DAYTON	23	24 10M Net 8p NCS: NC8X	25 BRTN 9:30p	26 2M Net 8p NCS: NC8X	27	28
28	30	31 10M Net 8p NCS: NC8X				

ARES UPDATE



The **Amateur Radio Emergency Service® (ARES)** is the ARRL arm of emergency services. ARES consists of licensed amateurs who have voluntarily registered their qualifications and equipment, with their local ARES leadership, for communications duty in the public service when disaster strikes.

From Cuyahoga County ARES: If anyone is interested in working the RNC in July:

Please Note: *Per Cuyahoga County, you will need to have all ICS courses completed* [FEMA ICS Courses 100, 200, 700, 800, 802] to work in the EOC.

Any updates for Lorain County Ohio ARES local involvement, will be sent out promptly.

All, The county office of emergency management is asking for a list of volunteers who will be working the RNC. If you haven't already done so, please sign up to indicate your availability to help.

I will create a list of available shifts for everyone to sign up for at a later date.

We are staffing the following at this time, more assignments may follow later as well as standby assignments:

- County EOC, July 17 to July 23 3:00 PM to 3:00 AM each day.
- American Red Cross, Euclid Ave times to be determined.

Again, please sign up ASAP. <http://goo.gl/forms/TZlyNeQE30>

Mathew Nickoson KC8NZJ
 Emergency Coordinator
 Cuyahoga County Amateur Radio Emergency Service

From Ashtabula ARES:

It is with a heavy heart that I type this email. One of our long time members and pillars of support has gone silent key. For those who have not heard... Bob Woodworth WD8PVB, passed away over the weekend. He will be missed more than I can explain. He was a trusted Elmer, a dear friend, one heck of an operator, and the driving factor behind the success of so many of our club events. He was the "go to" guy for so many things!

April 23rd brought out this year's NVIS drill, which started as a hometown event designed by none other than Bob. It has since gained popularity and grown to be a state wide happening for ARES! Bob was never one to brag about this accomplishment, he was modest in all facets of his life, but this year's drill was a great tribute to him!



Bob Woodworth
WD8PVB
 Oct 2, 1941 -
 Apr 9, 2016

Lovejoy,NC8OS
 Emergency Coordinator-Lorain County, Ohio nc8os@arrl.net

NOARS FIELD DAY

Saturday, June 25 &
Sunday June 26, 2016

(Set-up on Saturday at 9:00am, many arrive earlier)

Indian Hollow Reservation – Shelter #1
38744 Parsons Road, Grafton, Ohio 44044

Bring yourself, your family, fellow hams,
friends and neighbors to see NOARS in action!

Info Contact: Al, N8CX, Field Day Chairman, n8cx@arri.net,
Carl, W8KRF, w8krf@w8krf.net or Tom, W8KYZ, tporter161@oh.rr.com

We are looking for trained operators, equipment, loggers, riggers and helpers to make this the BEST Field Day for NOARS. If you are willing to help NOARS get the maximum number of points, please contact Al N8CX who is coordinating all field stations.

Benefits for Field Day workers include bragging rights, unlimited coffee and bottled water, Hot Dog Lunch on Saturday at 12 noon followed by a 1:00pm pre-contest briefing, Pizza Dinner on Saturday night, and a Sunday Morning Breakfast Run to McDonalds. Remember: NO ALCOHOLIC BEVERAGES OR FOUL LANGUAGE IS PERMITTED IN THE PARK.

Band assignments:

Our entry category **4A**

75 and 10 meters SSB

40 meter SSB and Digital

20 meter SSB and Digital

15 meter SSB

6 meter SSB and FM

Bonus Points:

100 points - per transmitter if only using emergency power

100 points - news media publicity

100 points - setup in a public location

100 points - public information table

Bonus Points - Continued:

100 points - message to section manager

100 points - satellite contact

100 points - alternate power

100 points - copy the W1AW bulletin

100 points - educational-related activity

100 points - site visit by elected official

100 points - visit by ARES served agency

50 points - entry submitted through website

20 points - per participant - youth operators

100 points - social media promotion of activities

100 points - safety officer check list

Also: message handling and GOTA bonuses

FEMA: Supporting Disaster Communications from Space

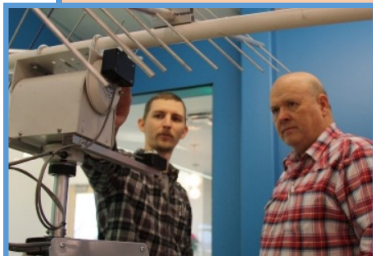
Conventional lines of communication can be impacted after a disaster. This we know. Phone lines can go down, cell service can be overrun with calls, texts, and emails and it can be difficult for survivors as well as first responders to get in touch. This isn't a far-fetched scenario or intellectual exercise. It's a reality we've seen happen over and over during disasters small and large.

Enter Amateur Radio—or what those involved in the hobby refer to as "ham radio."

Amateur radio enthusiasts—or "hams" as they're often called—often step in during emergencies to help bridge communication gaps between first responders to keep people safe when smartphones, cell towers, and internet technologies we rely on every day go down. Volunteer hams also serve as a valuable source of information during the initial states of an emergency. Often, hams provide this public service in association with volunteer groups like Community Emergency Response Teams, who are always ready to spring into action quickly and effectively.¹

We owe it to these volunteers to do everything we can to support their work to help communities bounce back when disaster strikes. That's why we've partnered with the American Radio Relay League and researchers from Virginia Tech's *Ted and Karyn Hume Center for National Security and Technology* in Blacksburg, Virginia—one of the leaders in amateur radio technology—to develop a new communications satellite that will help amateur radio operators transmit radio signals across the United States 24 hours a day, 365 days a year. After all, disasters can happen any place and any time.

With this new satellite, scheduled to launch in 2017, Hams involved in supporting disaster communications will have a more reliable connection and a new level of capability in their communications.² Right now, radio signals used by amateurs must often be bounced off the ionosphere to accommodate communication over long distances. Unfortunately, this type of radio propagation isn't reliable because signal reach and quality can be impacted or even halted by space weather events like solar flares and geomagnetic storms.² This satellite is unique because it will provide another layer of support for emergency services—by providing a dedicated communications hub for hams orbiting above the U.S. in geosynchronous orbit every day. It will help emergency managers deployed to disasters support long-term communications for first responders on the ground—and become another invaluable tool at their disposal.²



Hume Center Director of Research Robert McGwier (right) and research associate Zachary Lefke are building radio antennas that will be used in the Virginia Tech Ground Station. Photo Credit: Virginia Tech

Amateur radio operators have come to the rescue on more than one occasion—like during Hurricane Sandy—when landlines and cell phones were left out of commission throughout New York and New Jersey.

Hams also made a difference in 2013, when Colorado was hit with historic flooding. As floodwaters ravaged areas across the state, they threatened a wastewater plant that served over 80,000 people. Volunteers from the Amateur Radio Emergency Service—the American Radio Relay League's disaster communications arm—leapt into action, creating a network to monitor the situation and collect data. As a result, they were able to take remote control of the facility and helped prevent any wastewater from spilling out with the floods.³

This new partnership with hams will help make our communities more resilient, and we look forward to a successful launch.

Source: FEMA Blog 03/07/2016

Thank You to a Sponsor

NOARS thanks MFJ Enterprises for their continued support of our Winter Hamfest and NOARSfest by providing catalogs, bags, and door prizes.

When considering purchases of equipment or accessories, please check out the inventory at MFJ.

MFJenterprises.com

MFJ

ARRL: First Geosynchronous Orbit Amateur Radio Payload Could Aid Disaster Communication

Well-known AMSAT figure and Virginia Tech researcher Bob McGwier, N4HY, says the Amateur Radio payload planned to go into geosynchronous orbit in 2017 will be like “a new ham band” for the Americas, available every hour of every day. McGwier, a research professor in Virginia Tech’s Bradley Department of Electrical and Computer Engineering and the Director of Research for the Hume Center for National Security and Technology, said the satellite’s geosynchronous orbit also makes it viable for emergency and disaster communication. AMSAT-NA announced in April that Amateur Radio would be a “hosted payload” on the geosynchronous satellite that Millennium Space Systems (MSS) of California is under contract to design, launch, and operate for the US government.

“It will allow rapid deployment to disaster areas and support long-haul communications for first responders,” McGwier allowed in a December 22 Virginia Tech News report. McGwier, a former AMSAT director and Vice President for Engineering, has said the Amateur Radio payload must be delivered for testing and integration by next spring.

According to AMSAT Vice President-Operations Drew Glasbrenner, KO4MA, the satellite’s potential footprint would extend over the US from the Mid-Pacific to Africa.

The Hume Center team that’s building the ham radio payload met with Federal Emergency Management Agency (FEMA) Administrator Craig Fugate, KK4INZ, in September to discuss the project. At last summer’s ARRL National Centennial Convention, Fugate and ARRL President Kay Craigie, N3KN, signed an agreement outlining how the two organizations will work together to provide disaster relief.

McGwier pointed out in the Virginia Tech News article that transmitting emergency communications via the geosynchronous satellite would be much more dependable than HF, allowing Amateur Radio volunteers to provide more reliable communication support. With a geosynchronous, the satellite would always be within a band of longitudes over the Americas, continually accessible to any Amateur Radio operator there. That would include the students and researchers at the Virginia Tech Ground Station.

MSS will operate the satellite on behalf of the US Air Force, while AMSAT will manage the Amateur Radio payload, being designed and built by Virginia Tech students.

According to the article, the Hume Center team is designing a ground terminal that emergency personnel could use to relay their own communication channels through the satellite. “This setup could be deployed through the American Radio Relay League and the Radio Amateur Satellite Corporation as a key part of a robust national emergency response system, allowing trained operators to reliably mobilize to disaster areas in the first critical hours after a devastating event,” the article suggested.

Source: ARRL.org 12/24/2015

All Ad Submissions must be sent to noarslog@noars.net or to: NOARS Log 161 Herrmann Drive Avon Lake, OH. 44012 The deadline for submissions is the third Tuesday of each month. All must include: asking price, sellers name, call sign and phone number. Only ads from current NOARS members (or paid advertisers) will be accepted! Notice: all ads will be removed (unless updated) after three months (as space is needed)! NOARS reserves the right to refuse ads.

For Sale



Hy-Gain T2X Tailtwister Rotor with manual and con-

trol box with manual. Has been repaired and updated by cats rotor doctor. **\$500**



Kenwood TL-922 Linear Amplifier

with manual, new band switch and updated by Don Kessler. Has a pair of 3-500z, 160 thru 10 meters. **\$800**

Contact: Dwaine
K8ME@sbcglobal.net

Antenna Specialist



Kurt R. Dix, President Plum Creek Systems, Inc. 2920 Plum Creek Parkkway. Medina, Ohio 44256

Microwave Specialist (unlicensed bands). Indoor/Outdoor Systems. Initial Assessments, Surveys, Troubleshooting, Service, Installation. 18yrs experience. 1000's of links. Indoors to 30+ miles.

Structured Cabling. Custom Video Surveillance Systems (based on Blue-Iris NVR).

Please contact him kurt@plumcreeksystems.net if you need assistance.

Note: Kurt is the person who climbed our tower and repaired the antenna)

For Sale

Kenwood Transceiver TS-830S

Good Working Condition
New power supply
Caps and Glitch protection installed one year ago.
\$600.00 Firm

William Adams WD8OSJ
wd8osj@wd8osj.com
440-522-4622 (text only)



Numechron Tymeter 24-hr Clock, Model 100 #67.

Perfect working condition. No light, but it is unknown if it has one. It does have a tell-tale minute "squeak!"

\$55.00 Chris KD2HCE
216-759-3488 or kdhce@arrl.net



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/benefit ratio.





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

e-Mail noars@noars.net

2016 Elected Officials

- President:** Jane Reed K8JGR
V.P. Dave Fisher KY8OSU
Treasurer: Thomas Porter W8KYZ
Secretary Pro Tem: Tom Dolan KE8CWF

Committee Heads for 2016

- Program:** Alex Pasini N8QL
Membership:
 Carl Rimmer W8KRF
Newsletter: Jane Reed K8JGR
DX/Field Day:
 Al Moriarty N8CX
Net Mgr: Robert Tome W8RET
Hamfest:
 Darlene Ohman KA8VTS

Website: Carl Rimmer W8KRF

Education: Alex Pasini N8QL

ARRL VE Team:

- Joseph Cebula W8GWD
 Steve Hill NQ8T
 Bill Isenberg K8IC
 Brian Kellison AC8RV
 David O'Connor II KD8MXE
 Joe Oney W8SSE
 Alex Pasini N8QL
 Tom Porter W8KYZ
 Jane Reed K8JGR
 Carl Rimmer W8KRF

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

Photographer: Robert Tome W8RET

NOARS is K8KRG