

# The Eclipse Edition

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#### THE TECHNICAL COORDINATOR

Jeff Kopcak – TC <u>k8jtk@arrl.net</u>

Hey Gang,

Yaesu and System Fusion. I've talked about it before and mentioned the DR-1X repeater promotion some time ago. My recent dealings are leaving me more disappointed in the quality of the offering. With the announcement of System Fusion II, I hope they take time to finally fix problems with their implementation.



Around the beginning of 2015, Yaesu, in an effort to get their digital mode into the ham

radio market, offered a promotional deal for their Fusion repeater at a cost of \$500 (~\$1,700 retail). The logic behind this is the shaver and blade principal: sell the repeater for cheap and make up the cost in selling radios. The repeater is dual-mode capable (C4FM digital and analog) featuring high power (50W) transmitter, switched commercial power and battery backup, integration with an existing repeater controller, all in a standard 2U rack unit. Not only could a club or individual purchase a digital repeater for cheap, it wasn't a requirement of the promotion to enable any of the digital Fusion features. This meant it could replace aging analog repeaters. I've even heard old tube repeaters were being replaced as a result. Now, I'm sure they hoped owners utilized the Fusion features but either way, the program ended up being a huge success. In the Cleveland area, there are about 10 in operation that I'm aware of. Yaesu brought affordable and a somewhathackable (AllStar, MMDVM) repeater package to the market.

Then came the complaints. First being the DR-1X is two FTM-400 mobile radios linked with a basic controller. For some reason, many are surprised by this setup and thought better radios should be used. This is a common design that D-STAR and DMR

commercial repeaters also rely on. However, this setup had a problem; the radios used were not designed to operate high power. Either through component design or improper cooling, the radios are not capable of operating 100% duty cycle at 50W. I have not heard of this being a wide-spread problem with D-STAR and DMR repeaters running high power. Yaesu updated their promotional form and website to say "Duty cycle is 50% at 50 Watts, 100% at 20 Watts in a climate controlled environment." To get 50 watts or more, external amplifiers are needed.

Automatic Mode Select was one of the great selling points – a single repeater could switch between digital and analog depending on the signal. But reports of repeaters in AMS where locking up in a transmit state. It was discovered when the repeater had a signal on the input (digital or analog), if another signal was detected of the opposite type, the repeater would lockup in transmit. To reset, the power had to be cycled. A work around was to set the repeater in either analog or digital only mode or install a remote power switch. To my knowledge, this was never acknowledged and was deemed to be "environmental site issues." That might be true or related to reports of poor selectivity on the front-end of the repeater. Filters and firmware upgrades helped solve some of these issues.



Other known problems include: external controller support is complicated - at best, receive PL decode problems, repeater identifications being cut-off, and the firmware. The firmware is absurd. There are three

firmware "channels" (or tracks) for the DR-1X repeater. Each completely separate and not compatible with the other – that is you cannot upgrade the repeater firmware from one channel to another. For reference, these are the 1.00b, 1.00f, and 1.10D channels. Upgrading to a newer version (on the same channel) requires taking the machine out of the cabinet, unscrew about 18 screws to access the data port inside, upgrade the firmware, and put it all back. It is nearly a two person job as the thing weights 22 lbs.

My club in Cleveland, LEARA, purchased a DR-1X. I got it on the air with some help from Bill K8SGX (a section TS). It was on the air at 20 watts in digital only mode. We didn't have any issues. One of the club members suggested "let's connect this to the internet." This is where my perception of Fusion got much worse. As confirmed by Yaesu support, to directly connect an HRI-200 Wires-X node, the DR-1X must have firmware 1.10J or later. Owners with 1.00-anything firmware **MUST** ship the DR-1X back to Yaesu for an upgrade at owner's expense. 22 lbs shipping plus box and insurance, it was not cheap. Specific situations may vary and return shipping is covered. They will not let you swap anything yourself because they felt upgrades where beyond most owners' ability. Owners on the 1.10D channel just need to apply firmware upgrades.

To be fair, an RF link to the repeater can be established with any firmware version. This entails setting up a HRI-200 on a Windows PC with an additional FTM-100 or FTM-400 radio at a location with a strong signal into the repeater. This setup acts like a local user of the repeater. Transmissions from the Internet are transmitted on the repeater's input. Local repeater transmissions are relayed to the Internet by listening to the repeater's output frequency. LEARA decided to directly link the HRI-200 Wires-X device to the repeater. Other devices like an OpenSpot or MMDVM could be used but would not provide Wires-X access as it is a closed network.

I haven't followed the radio issues too closely. There have been 2<sup>nd</sup> generations of two Fusion radios this far. The FT1-DR was replaced by the FT1-XDR and FTM-400 by the FTM-400XDR because the GPS chip used had problems locking on to signals. I have the FTM-400XDR and picked up a FT2DR at Dayton. Both radios work and get the job done but I'm not blown away by either radio.



To put the 400 over the top, it would need to operate Fusion from both A & B sides of the radio, at the same time. I'm underwhelmed by the FT2 screen as it's not very sharp. I've always found Yaesu menu groupings and labeling confusing. The much-loved bank link feature of their analog radios, such as the VX-8, is missing.



Word of warning to anyone using Yaesu Fusion radios and is especially important for repeater owners and Wires-X node operators, **keep up-to-date with firmware and program updates!** It has been confirmed in the Yahoo Group, every time an FT-70 radio is keyed on a Wires-X node with software version v1.2 or earlier, the Wires-X node will crash.

In addition to all these issues, no full specification has been released for Fusion or Wires-X. Meaning if Wires-X gets shutdown, all nodes are offline. With an open source specification, a new network could be developed or rolled into the FCS reflector or YSFReflector networks. In true hacker fashion, much of Fusion has been reverse engineered so it's probably more of a reality than I know.

A Reddit posting appeared proclaiming "System Fusion II" is coming with an accompanying info graphic and FAQ posted on the Yaesu System Fusion Yahoo Group. The info graphic states 'firmware upgrades will enable System Fusion II compatibility with all existing C4FM products.' I gather this doesn't mean the radio needs to be sent back to Yaesu. The FT1-(X)DR is discontinued but the FAQ reiterates all existing radios will receive a Fusion II firmware upgrade.

At the center is the new DR-2X repeater – which supposedly resolves most problems of the 1X – and includes many new features.



Originally, Wires-X was not supported at all on the DR-2X. This was stated many times by Yaesu. The FAQ indicates the 2X will support the HRI-200 (direct connect) **OR** IMRS (Internet Multi-site Repeater link) option. It will not support both. The IMRS option sounds a lot like DMR IP Site Connect where repeaters are linked over the Internet using Talk group-like functionality. There is another promotional program offering a trade-in path from a DR-1X to a DR-2X for \$300 without the site linking option and \$500 with site linking. See the Yahoo Group as I don't see this promotion information anywhere else.

DSQ (Digital Squelch, squelch code) is replaced by DG-ID (digital group ID). DSQ has caused controversy even locally because it is a global setting in the radio, not per channel. This is a real pain if two repeaters in the area choose different DSQ codes. I left it disabled on LEARA's allowing any Fusion user to use the repeater. A DG-ID use-case example on a repeater: use the repeater locally might be DG-ID 71. To use two IMRS sites might be DG-ID 90, and all sites DG-ID 99. A DP-ID is a priority override or used for remote control of the system on the 2X only.

Fusion up to this point seems rushed, untested, and like most companies today, driven by marketing. The mentality being: 'get it out now, fix it later.' I really hope Yaesu gets their act together soon if they want Fusion to survive. This will likely require drastic business and management changes within the company.

As I see it, Fusion survival requires fixing its perception, fixing the software issues, producing better quality devices/radios including extensive testing, and showing commitment to the community and developers by releasing protocol specifications or open-sourcing the technology.

Reddit post: <a href="https://www.reddit.com/r/amateurradio/comments/6t8t5z/yaesu\_system\_fusion\_ii/">https://www.reddit.com/r/amateurradio/comments/6t8t5z/yaesu\_system\_fusion\_ii/</a>

Yahoo Group (membership requires approval): <a href="https://groups.yahoo.com/neo/groups/YaesuSystemFusion/info">https://groups.yahoo.com/neo/groups/YaesuSystemFusion/info</a>

Thanks for reading and . . .

73, de Jeff – K8JTK

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### THE AFFILIATED CLUBS COORDINATOR

Tom Sly, WB8LCD - ACC tomsly29@gmail.com

Greetings from Portage County Ohio!

I hope you and your ham radio club are having as much fun as you possibly can this summer. I'm going to give you a short list of activities you can put on your club's agenda to make sure you're out there DOING HAM RADIO!

Fall is usually considered Ham Radio "Contest Season" - lots of big ones between now and the end of the year. We've got the OH QSO Party coming up the last weekend of this month (August 26-27). Get some of your members together and get a couple of stations on the air! You're big advantage here is YOU are the station all the others want to



get in their logs! Your CQ's will not go unanswered. The QSO party is a fun event, but its not as competitive as say ARRL Sweepstakes (November 4-6 CW; November 18-20 Phone). Sweeps is kinda' like a "Free For All" and it's a lot of fun! Not uncommon to work all 50 states in a weekend.



Another very casual contest coming up is Ohio State Parks On The Air (OSPOTA) on Saturday September 9th. Work it from home, or get a few of your club members together and head out to a park! Picnic has got to be part of the plan. It's a short contest, so you'll be out and back in the same day, leaving Sunday for family (or mowing the lawn). By the way, the Findlay Hamfest is the next day if you really want to make a weekend of it! Next to Hamvention, Findlay is one of my favorite Fests. Need a bigger challenge?

CQ World Wide (CQWW) is coming up too (October 28-29 Phone; November 25-26 CW). Anyone, anywhere is fair game here! Working 100 DX entities in a weekend is a real possibility here. If you want to get started on chasing DX – this would be a good weekend to do it.

Even if you've done them all before, try something different. QRP? Portable? Why not invite a new ham from the club to your shack for one of these events?

Even if you don't have an operation as a club, you could all snap some photos, put it all into a power point, and at your next club meeting take a look at everyone's set up to see what worked and what didn't. That's an easy club meeting to get set up because you don't need an expert from afar to come and talk to you!

On August 17th, PCARS will have it's annual "Amateur Radio Cruise In" at the A&W Root Beer Stand in Ravenna, OH. We usually have a short operating contest and prizes for the best (and ugliest) mobile installations. Come on out and check it out! Or, better yet, why not do it with your club? Maybe even come up with something similar, but different? This type of an event can be very family friendly. Yeah, you could always go out and play Putt-



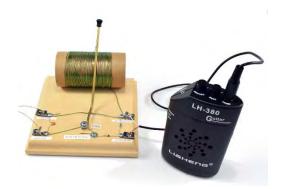
Putt or go Roller Skating as a group – but let's try to keep the main theme here "Amateur Radio" related. Balloon launches have been popular lately, and Fox Hunting is also something the family and friends can get involved in.



I've noticed that more of the new hams coming into the hobby seem to be the ones who always wanted to do it as a kid, but never really got around to it. Why not cater to that group (and anyone else interested) and do some kind of an "Open House" to give some exposure to all the different kinds of activities Amateur Radio has to offer. Maybe do it someplace where you could have a couple stations set up and operating so they can see firsthand how the MAGIC of Radio works! Another thing I've noticed is that through the years, a lot of hams got licensed, but never really got active on the air, even though they have kept their license active. We know who most of the active hams in our area are, but we don't necessarily know who the inactive ones are. Go out to QRZ.com and search for all the hams in your zip code or your county. I'm pretty sure you might be surprised at how

may actual licenses exist for people you don't know, or didn't know they were licensed. Make sure these folks get invited to your open house! They're already licensed, they just need someone to show them all the things they could be doing and help them get started.

How about some short activities, say for a Saturday morning? Most hams like to build things, but, many newer hams really don't know where to start. Start at the beginning. You can get a bunch of IN913 diodes on eBay really cheap. That and some wire and you could be building crystal radio sets. Sometimes simple things like that can be really impressive to the uninitiated. Most people today under the age of 30-35 have probably never seen a crystal radio set. Another thing that new hams don't get exposed to as much anymore is making their own cables. Think about sponsoring a workshop where everyone is taught how to install coax connectors (even the new crimp-ons) and



after the presentation makes a 2 - 4 foot patch cord to take home and use in the shack. You could do the same thing with power pole connectors – maybe even both at the same workshop. ANY antenna project will be a winner. Whereas most radios are complex and pretty tough to build, there are hundreds of different antennas that could be worked into a club project, and if done right, everyone goes home with an antenna that they built for themselves and can use! If you want to get into actual radio gear, start looking at the QRP builders.

Lots of good ideas and kits to be had from QRP clubs online. Some of them offer projects that have already been "kitted up" so all you need to do is order the kit and start building!

These are meant to be some ideas to get you thinking. Look at other clubs, read their newsletters, see what they're doing. Then do some brainstorming with your own club members to come up with activities that are your own! When you do, make sure to drop me a note telling me about them. I'll be compiling lists of activities, projects, meeting ideas, then posting them in a centralized spot to make them easier to find.

Hope to hear you on the air!

73, de Tom wb8lcd

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#### THE SECTION EMERGENCY COORDINATOR

Stan Broadway, N8BHL - SEC broadways@standi.com

### Can You Respond?

This is the season of events, and amateur radio can certainly stand proud for all the public service we're providing our communities! But there are some common threads in our activities which should show us we could use a little more practice. Can we respond if we're activated? Here are some questions, brought about by circumstances we've all seen at these events.

- Is your handheld programmed?
- Is your handheld actually working?
- Do you have battery resources for a long engagement?
- Are you familiar with area repeaters that would likely be used in an activation?
- If you're using DMR or one of the digital modes, are you comfortable with operating?



In the days of the faithful little Icom 2AT (dating myself here) it was sublimely simple: ratchet up a frequency and talk. With the advent of Chinese handhelds (and others) with convoluted menus and aversion to being programmed on the fly, we can no longer assume we can function without really thinking about it. WiresX turned on, ID tones spurting from Baofengs, and all nature of beeps and bumps can aggravate net control and disrupt a net. The simple truth is we have to operate our radios (hand and mobile) to be proficient. This means that marking onto a repeater, chatting in a roundtable, and even checking into those nets all should be something we look at to increase our ability to just operate our own radios. Besides, that's the fun of the bobbytalking to someone! I personally am not a fan of the traditional "go-box" were a stash of nice radios sit in a corner until it's "go time". I would much rather you ~use~ the radios- stay familiar, make sure they're working and exercised.



I won't detail the rest of the question above, except to remind you that your own personal supplies and accessories need to be at the ready as well. For a public service event, bug spray, a hat, sun tan lotion, paper, pen, clipboard, that kind of stuff should be within a quick reach before you leave. Being ready is the whole point.

# **Ohio Responds**

Once you get your four required FEMA courses down, please take a few minutes to log in to "Ohio Responds" and register as a volunteer for amateur radio. You don't necessarily need to enter your training (we have the courses in our own state database) but you do need typical profile information. Being registered imposes NO additional responsibility on you - you will not need to worry about someone calling you to travel to Camden for a week. This simply retains our names for protection from liability which is provided by the Ohio Revised Code. Worth your time and effort, if it should ever turn to @\$#% around you!!



Ok.. Here's the latest update on Ohio Responds. We now have 157 persons approved!! Let's keep this going. We have over 560 with all their certificates on file. Let's get everyone to get moving and sign up for Ohio Responds.

How do I know if I'm on the list or not? Here's the link to the list.

<a href="http://arrl-ohio.org/SEC/special/nims\_roster.html">http://arrl-ohio.org/SEC/special/nims\_roster.html</a>
Don't see your name on the list? Contact Scott, N8SY@n8sy.com and let him know.

# **ARES Leadership Team**

The ARES Leadership Team, made up of DEC's, ASEC's Eldon from OHDEN and a couple others, has begun monthly conference calls. I have emailed the minutes of the meeting we held on the first week of August-your EC has been asked to distribute so if you would like to read the results, ask! I have been participating in FEMA Region V Auxcom teleconferences this summer, and it's good for Ohio to be represented!



# The Sarge

We are stuck in the quagmire of "state time" which can expand one single minute to stretch over decades, it seems, when we talk about getting the new W8SGT station on the air. I have high hopes that we will be on the air with the new radios and amps this month!

#### **OSERP**

A new update of the OSERP is on the <a href="www.arrl-ohio.org">www.arrl-ohio.org</a> website. I have emailed copies to all EC's (there are some further changes but not worth re-sending). I have included 60 meters! We really would like to move toward 60 meters as a standard channel for Ohio ARES. I have also included a reference to DMR. With the Ohio Channel, and the availability of "clustering" several repeaters together for wide area coverage, I think we just have too much to offer not to take advantage. So, I encourage you to consider DMR, or perhaps a linked digital mode reaching into the DMR system, as a strong option.



Keep watching email for further updates to our SET plans! As of this writing, we have IL, ~ALASKA~, CT, IA and FEMA/SHARES committed to help along with the Severe Storms Forecast Center. It's gonna be another good one, folks!

You can view the SEC's monthly reports on the website.. <a href="http://arrl-ohio.org/SEC/default.html">http://arrl-ohio.org/SEC/default.html</a>

73, Stan, N8BHL

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### THE PUBLIC INFORMATION COORDINATOR

John Ross, KD8IDJ - PIC john.ross3@worldnet.att.net

### **Repeating Good News**

Good News is worth repeating and in case you missed it...here are the winners of the 2017 Ohio Section Newsletter Contest:

First Place...Radiogram...Portage County Amateur Radio Service.

Second Place...tie...The **Spirit of '76 and '88**, Lake Erie Amateur Radio Association and the **Wave Bender**, the Western Reserve Amateur Radio Association.

Third Place...The **Mike & Key**, Greater Cincinnati Amateur Radio Association.

Honorable Mention...tie...**ATCO Newsletter**, Amateur Television In Central Ohio Group...**CARA Communicator**, Cambridge Amateur Radio Association.

It was very difficult for the judges to pick the winners this year...and that's a good problem to have!! The best comment I heard all night...and it came pretty early...was, "These are all good!"

There had been some concern that once more newsletters began appearing on-line the printed newsletters would have to "catch up". Well, they did that nicely and the bottom line is the newsletters, and their editors, are doing a great job keeping the clubs informed and up-to date. Nice job everyone.

This year's First Place winner will now go on to the Great Lakes Division Newsletter Contest to compete for the Joseph L. Phillips, K8QOE Newsletter Award with the very best from Michigan and Kentucky. Good luck to everyone...can't wait until the October announcement!

# **More Good News to Repeat**

Dennis Moriarty, K8AGB, from the Canton Radio Club has been awarded the 2017 Phillip J. McGan Memorial Silver Antenna Award for Excellence in Public Relations on behalf of Amateur Radio. This is a big deal from the ARRL Board of Directors.





I talked with Dennis a few days ago, and he is a living history lesson for all things Amateur Radio...and all other radio as well! First licensed at 13 years old he also holds a commercial FCC license. He's worked on commercial 2-way radios, as a broadcast engineer and some pretty important stints with AT&T and AEP!!

Dennis has been the public relations contact for the Canton Amateur Radio Club sending out news releases and letters to the media, universities, schools, and many other organizations in the Amateur Radio Community. He also been at the Canton's Club Field Day booth for over a decade.

Congratulations Dennis...Amateur Radio is alive and well because of your efforts and dedication.

# **Future Follow Ups**

I'm just about out of newsletter DETOX and I've got some follow-up to do on several stories.

I'll take as second look at our Amateur Radio Veterans, follow up with the great Bethany Relay Station near Cincinnati, and look at the XYL's of Amateur Radio!!



I'm the luckiest guy in Amateur Radio. I get to read all of the newsletters and get to be on the front lines of Amateur Radio. Not a bad gig.

That's it for this month.

73, John, KD8IDJ

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### THE SECTION TRAFFIC MANAGER

David Maynard, WA3EZN - STM wa3ezn@att.net



Congratulations to Mike Hayward, KC8WH the OSSBN 2017 Garlock Award Recipient.

The award was presented by last year's Garlock award winner John Lehman WA8MHO who mentioned that this was the 50th year for the Garlock award. He mentioned that he had presented the award the first year to Garlock,

K8BYR. This year he was able to present the Fiftieth award to this year's recipient. Mike KC8WH is the net manager of the Ohio Single Sideband Net and can be reached on the net to offer your congratulations.



Pictures and the minutes the August semiannual meeting of the OSSBN can be found on their website <a href="http://www.ossbn.org/">http://www.ossbn.org/</a>. There also are links to helpfull information on how to write and deliver a radiogram plus a handy Traffic Handlers Guide.

The Ohio Single Sideband Net (OSSBN) meets three times a day to handle traffic on 3972.5 at 10:30 AM, 4:15 PM and 6:45 PM. They are always looking for stations new and old to check in and send or receive radiograms (traffic). Special needs are stations in the Dayton area, south central and eastern sections of the state. Sometimes radiograms for these areas must be delivered using cellphone due to the lack of operators from these areas.



Gust front "shelf cloud" (or "arcus") on the leading edge of a derecho-producing convective system. The photo was taken on the evening of July 10, 2008 in Hampshire, Illinois as the storm near the Chicago metropolitan area. The derecho had formed around noon in southern Minnesota. (Courtesy of Brittney Misialek)

What is a derecho and why am I writing about it here? Derecho is a line of intense, widespread, and fast-moving windstorms and sometimes thunderstorms that moves across a great distance and is characterized by damaging winds.

According to AccuWeather Meteorologist Meghan Mussoline, "A derecho is often referred to as an inland hurricane, in terms of ferocious wind and torrential rain."

A derecho is capable of downing many trees along its path, as well as damaging or destroying weakly-constructed buildings, damaging roofs and overturning high-profile vehicles.



More specifically, the Storm Prediction Center (SPC) describes a derecho as a complex of severe thunderstorms that must travel along a path of at least 240 miles with widespread and long-lived, straight-line wind damage resulting from wind gusts of 58 mph or higher; the key is that the 58 mph or higher wind gusts must be consistent along much of the path of the severe storms. Straight-line winds refer to non-tornado-produced winds.

"The danger with derechos is that they are not only fast-moving like some tornadoes, but they are widespread, unlike tornadoes," AccuWeather.com Senior Meteorologist Alex Sosnowski said. "They have the potential to do a great deal of damage over a broad area." Making them even more dangerous, derechos often last well through the night.

"While meteorologists have tools to detect storms including tornadoes and derechos, 24 hours a day, people lose the ability to 'see' severe weather coming at night, other than flashes of lightning," Sosnowski said. "People may sleep through warnings or not hear the storm coming until the last minute."

As derechos unfold, it is important to keep a weather radio nearby to keep aware of severe storm warnings. At night, keep the volume turned up, so you can hear these crucial severe weather warnings.

On June 29, 2012, an infamous derecho slammed a 700-mile swath from the Midwest to the mid-Atlantic. Washington, D.C., was among the cities hit hard by the derecho. Millions of people were without power for a week or more due to the widespread damaging wind gusts, which were higher than 80-90 mph in several communities.

A couple of years prior to the 2012 derecho, another destructive event slammed the Midwest on June 18, 2010. The Chicago area was ransacked by the violent storms. There were 340 wind reports with widespread winds over 70 mph. A couple of tornadoes touched down, and hail up to the size of tennis balls fell from the strongest storms.

The Weather Service has an excellent web page all about derechos at <a href="http://www.spc.noaa.gov/misc/AbtDerechos/derechofacts.htm">http://www.spc.noaa.gov/misc/AbtDerechos/derechofacts.htm</a>. This website has pictures similar to the one above, radar images of derechos and a list of noteworthy events with information and images of specific derechos.

Here are some neat links to more information and videos about derechos:

 $\underline{https://www.accuweather.com/en/weather-news/severe-storms-squall-line-derecho-wind-damage-flooding-minnesota-indiana-kentucky/50236640}$ 

https://www.accuweather.com/en/us/severe-weather

https://www.accuweather.com/en/weather-news/deadly-super-derecho-strikes-m/67383

https://www.accuweather.com/en/weather-news/what-is-a-derecho/28089245

https://www.youtube.com/watch?v=lBoIESuUI3w

https://www.youtube.com/watch?v=bx8xY-2Zs7U

https://www.youtube.com/watch?v=Fs0SntiRskM https://www.youtube.com/watch?v=nLCJza8pl5w

OK, why am I bringing up this subject. Simple answer is Blackswan2017. Matt, KD8TTE Ohio Assistant SEC is the director of BLACK SWAN 17 which for the upcoming Simulated Emergency Test (SET) is set to take place in October. Matt has been working hard on developing a scenario for SET which will be a derecho over many states in a wide area.



In Matt's own words the BLACK SWAN 17 Communications Exercise (COMEX) purpose is to test the ability for volunteer, NGO, and government agencies to communicate across services in emergency conditions through amateur radio. The exercise will serve as the annual Simulated Emergency Test (SET) for the Ohio Section of the American Radio Relay League. Controllers will remain active for the first fifteen days of October, allowing any ARES or traffic organization to operate in the period of "intense activity" of October 7-8, or during any other 48-hour period convenient for the organization.

# SYNOPSIS (Draft)

Strong and occasionally severe weather in the Iowa-Illinois-Indiana-Ohio region in the first week of October causes some localized damage and response. The situation intensifies during the weekend of 7-8 October, leading to full activation of emergency management partners. EOCs regain normal function as the week of 9 October begins, and throughout the week, normal service is restored to the area, leading to gradual stand-down of participating forces.

A critical element of the exercise is that during the high-intensity period, there will be injects to the scenario from sim cells in the area, bringing traffic, bulletins, and other information from responding agencies and organizations—including interaction with federal stations on 60M.

#### **RATIONALE**

Amateur Radio, and especially the various services within it (e.g., ARES, NTS/RRI) are not islands. Amateur Radio fulfills its public service mandate only to the degree that it actually is able to support the public and the agencies that support the public in times of emergency. This exercise is designed to exercise emergency communications function in and related to Amateur Radio.

We want ARES, RACES, and Traffic Handlers all to participate, and want for a master scenario to provide the superstructure for participants to have local activities complement the activities of other participants in the area.

Scenario injects and traffic will be brought to the system from simcells that are working in the master scenario, including traffic from government agencies and NGOs. Further, by having a two-week period of exercise activity, we'll be able to simulate the development of a situation, and to address response that includes providing an outlet for Welfare traffic. Using this period of time should also allow more to participate, even if they cannot during the high-intensity period where most activity will take place.



We specifically want this to be more than activating ARES stations who go to various EOCs, stand up a net, and exchange signal reports with everyone, then go home and proclaim victory. The ExPlan will include specific and measurable objectives against which we'll assess performance. (Hence the need for planners, controllers, and evaluators who are not players.)

Matt plans on having the full operational scenario available by September 1. There is further information available at <a href="https://sites.google.com/view/blackswan/2017">https://sites.google.com/view/blackswan/2017</a>

I do not know anything further at this time as to the involvement of the OSSBN, NTS or local VHF traffic nets. I expect a lot of traffic for the nets and I am asking that the local nets that meet once a week during the week to discuss the possible need for weekend nets specifically for SET to assist with delivery incoming traffic. I expect that further information is forth coming from Matt on or about September 1.



You can view the STM's monthly report on the website.. <a href="http://arrl-ohio.org/stm/stm.html">http://arrl-ohio.org/stm/stm.html</a>

73,

David WA3EZN

TOP ^

# OUT AND ABOUT Lyn Alfman, N8IMW - ASM lynalfman@aol.com

July was very busy with family, friends, and vacations, but I still managed to fit in Amateur Radio! I was not able to attend Field Day activities this year due to a family wedding out of state; however, I did manage to compile and submit Cambridge Amateur Radio Association (CARA) Field Day results. I also participated in an amateur radio volunteer exam session.

Aside from the weekly Thursday amateur radio lunches and checking into weekly area nets, I also attended the CARA officers' and business meetings. Plans for the CARA Picnic in the Park were discussed. It will be August 27 at 1 PM in Jackson Park's large pavilion in Byesville.



It is open to anyone who wishes to join us. Attendees are requested to bring place settings, non-alcoholic beverages, and a covered dish to share.

There are a lot of amateur radio related activities occurring in August. First there is the Ohio Section Conference on August 5 in Grove City. Then there is the International Lighthouse Lightship Weekend, the Total Eclipse Special Event Stations, and the Ohio QSO Party. Now would also be a good time to plan your club's activation for the Ohio State Parks on the Air.

Remember to be "Radio Active"!

'73 Lyn, N8IMW

TOP ^

#### ARES TRAINING UPDATE

Jim Yoder, W8ERW – ARES Data Manager w8erw@arrl.net

Training has slowed during the summer as I am sure many of you have taken advantage of the school break and are enjoying some time off with family. I have not done so yet, but am planning on a trip towards the end of the month. The last two months have had me rather busy unpacking and getting moved into my new location here in Fremont and the slowdown in training submissions came at the perfect time allowing me to get a lot accomplished.



I don't have an exact date for when we began to log and catalog training data. As near as I can recall, I have been collecting certificates and maintaining the database for approximately 5 years now.

The information was being kept for some time prior to my involvement as well. During my tenure however, we have more than tripled our numbers and we continue to grow regularly.

The process of getting all of our ARES members trained in the 4 NIMS core courses remains a top priority.

Here are the current numbers which certainly will have grown further by the time you read this. These numbers represent 81 of Ohio's 88 counties and a few of our neighbors in adjoining states who participate with an Ohio ARES organization.

Active Members in the Database: 769Members who are NIMS complete: 574Total Training classes taken: 5,139

Technicians: 71Generals: 182Advanced: 13Extras: 302

# **Emergency Management Institute**



This Certificate of Achievement is to acknowledge that

J Q Citizen

has reaffirmed a dedication to serve in times of crisis through continued professional development and completion of the independent study course

IS-00802 Emergency Support Function (ESF) #2 Communications

O LACET CEU

of May, 2016
Tory Russil
Supernited the Management Insist

Generally, when I receive training certificates, I get a name and call associated with them. Often that works very well and I can gather any additional information from QRZ.com. QRZ doesn't always reflect accurate information however. I have often found the county you reside in to be incorrect and if your ARES activity is associated with a neighboring county, that will not be identified in QRZ.com. I do populate both fields in the database, residence county and serving county. Mostly they are the same and if they are different, please let me know so that we can find you accurately and report that information for publication on the <a href="www.arrl-oho.org">www.arrl-oho.org</a> website. Training data is maintained and associated with your call sign and your residence county.

Publication is associated with the county your serve with. If either of those happens to change, you may not be reflected in reports or lists correctly.

Please let us know if you change your Call, have relocated to another county or are serving with another ARES group outside of your residence county. QRZ.com does a fantastic job and is a valuable resource to all of us. I certainly appreciate the ability to look up accurate information on our members. However, the data is only as accurate as what is input. When I moved back to Ohio, I noticed that my county remained in Texas. You may want to take a minute to ensure that your information is correct and make any changes as necessary.

I am more than happy to enter any changes or corrections to your training records. Please let me know when these changes or errors occur and I will update your information accordingly. Additional training beyond the NIMS core courses is also welcome. Please also update your local EC with these changes and additions. Information on FEMA NIMS and the required courses is available on the ARRLOHIO.org website along with a wealth of other information of interest to all Ohio Hams. I encourage you to visit the website often to keep up to date on what's happening in Ohio and nationally.

The Findlay Hamfest will be here very soon. I look forward to seeing many of you there again this year. This is one of the last Hamfests before it gets cold outside and is perhaps our last chance to gather any materials for an antenna or other project before winter. I know I hope to have some more metal or wire aloft before I give up for the season. Findlay like all Hamfests is a great time also to renew old friendships, attend one of the forums and gather some additions to your shack or latest project. Findlay happens this year on Sunday September 10. See you there.



I will close this for another month with a sincere thank you for your continuing efforts to complete your NIMS training and report it for inclusion in our database. You indeed are making our Ohio Section shine. We are leading the way for the entire country in getting our ARES members NIMS trained and keeping that data available for when it may be needed.

If I can help you in any way, please don't hesitate to let me know. All of us who serve and support the Ohio Section are here to assist you. Your questions, comments and concerns are always welcome.

73 and Thank you,

Jim W8ERW

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#### LET'S TALK

Scott Yonally, N8SY - SM n8sy@arrl.org

Hey Gang,

Wow.. August is really flying by fast! I'm healing up pretty good, but I still have a few sore spots that just are going to take some time to heal. I'm starting to get back on schedule and hope to see everyone at their hamfest or club meeting soon. Thanks so much for all the great emails and cards, I really appreciate it.



Are you ready for the total solar eclipse today? Just remember not to look directly at

the sun during the eclipse. It will ruin your eyesight for sure. There's many really easy ways of viewing the eclipse without looking into the sun. If you've purchased the filter glasses make sure that they have the ISO 12312-2:2015 marking on them. If they don't, DON'T USE THEM.

Oh, by the way.. Were you aware that this coming February 2018 there will be NO FULL MOON for the entire month? It's true, like the eclipse that's happening today, every so many years this phenomenon happens when January will have 2 full moons, and because February only has 28 days, there's not enough days to have a full moon in February. Wow.. now it's that interesting, guess the crazies will just have to

give up coming out in February.

Have you registered for the "Handbook Giveaway" drawing for this month yet? If you haven't, go to: <a href="http://arrl-ohio.org/handbook.html">http://arrl-ohio.org/handbook.html</a> and get registered. You never know, you just may be the next winner! Just look for the Big Red Arrow on the left side of the main page to know when the Give Away is on.



There's another NEW – one question – questionnaire on the Ohio Section Website! This question ties into the one that we just did about how many hamfests you attend

each year. I was somewhat surprised at the response last week. 91% of you said that you attend just 1 to 4 hamfests a year. I would have thought that you attended lots more hamfests than that since we have so many hamfests all around the state! This new question digs a little deeper into why you go to these hamfests. It will

only take 2 seconds for you to answer it, and you can see how your answer stacks up with others instantly. Go to: <a href="www.arrl-ohio.org">www.arrl-ohio.org</a> and look on the left side of the page. I really do want to hear from you on these questions. And, if you have a question that you'd like to see on our questionnaire, please send it to me!



Are you a member of the ARRL? Have you let your membership lapse? Want more information on how to join, or rejoin? Here's the link: <a href="http://www.arrl.org/membership-levels">http://www.arrl.org/membership-levels</a>. There's even a 90 day FREE trial that you can apply for if you've never been a member..



Got questions about becoming a member or your current membership? Send me an email <a href="massy@n8sy.com">n8sy@n8sy.com</a> I'll be happy to call or write to you. We can even meet and have coffee if you'd like, and I'll buy!!



I'm sure all of you have heard me say that I'm always available for you, whether you're an ARRL member or not. It's true, and you can feel free to write or call me anytime. If you have any questions, concerns, or would just like to sit and chat awhile over a cup of coffee or something cold to drink, feel free to call or write me (419) 512-4445 or n8sy@n8sy.com

That's going to do it for this month. I sincerely hope that you have enjoyed reading all about what's happening within the Ohio Section Cabinet this month. I am looking forward to seeing all of you at the many hamfests, club meetings that I attend, or even on the air!

73, Scott, N8SY

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# THE OFFICIAL OBSERVER COORDINATOR John Perone, W8RXX - OOC

w8rxx@arrl.net

The hard working OO's in Ohio monitored a total of 1079 hours in July.

They send no cards good or helpful.

The OO program seems to be a hot topic on eHam. Here are some thoughts:

An OO notice is just an advisory. The hope is that after receiving a notice a station will take the time to investigate the situation mentioned to see what can be done. If a person believes the OO notice is in error, or doesn't understand why it was issued, a respectful note or e-mail inquiring to the OO might be answered providing more insight into the matter (although OOs are not



		calling			
Radio:	your call was heard working			at	UTC.
Date:	20	Frequency:	MHz. Mod	c: Your R	ST:
1     FREQUENC 7     BROAD SIG	TY INSTABILIT	est of maintaining Amate: y 2 [   CHIRP 3 [ ISI STORTED AUDIO 9 NGUAGE 13 [ ] CAUS	PURIOUS 4[]HARM []OVERDEVIATION	ONIC 5] ] HUM 6] 10] ] OUT OF B	KEY CLICKS
tors or operating plant. The intension dersigned ARRL	practices might has find this notice is to Official Observe Thank you for yo	CFR 97 ave contributed to this ap- alert you to the above or thas fulfilled this helping our attention and any coop- ride.	parent departure from the sted operating condition. crole by simply alerting	rule or the good amate NO REPLY IS NECE you, and is not required	sur practice stan- SSARY. The un I to reply to any

encouraged to continue on-going communications with disgruntled people, I think most would be glad to answer sincere questions or provide further information).

If anyone receiving an OO notice feels it is out of line or not in keeping with the standards of the program they should send the card to their ARRL Section Manager, or ARRL HQ.

Getting an OO notice does not identify someone as "one of the bad guys". Once the card is sent the situation is finished.

A summary of notices issued is sent to ARRL HQ and kept on file for a year or so. Nothing is sent to The FCC except in very serious cases of deliberate interference, or perhaps something on-going and repeated that continues to be a problem situation. The ARRL tracks the numbers of different infractions to identify areas where more education may be in order.



Hams with technical problems have praised the program and were happy for the help, while those receiving notices for operating problems have

been critical and seem to have taken it personally. But, notices for operating procedures should be investigated just like a technical one. It is up to the station receiving the notice whether the notice is something positive that may help them become a better operator, or whether they will just take offense and continue on perhaps repeating the infraction brought to their attention.

Overall, the OO program is something positive for amateur radio, and OOs in general are doing service for the hobby. Would it really be better to have the FCC doing maintenance monitoring on a continuous basis?

73, John, W8RXX

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# Revised NCVEC Form 605 Must Be Used at Exam Sessions Starting on August 21 (from ARRL Bulletins)

RINT LAST NAME	COMPLETED BY	APPLIC	ANT				
	SUFFIX (Jr., Sr.)	FIRST NAME		INITIAL	STATION CALL SIGN (IF ANY)		
AILING ADDRESS (Number and Str	reet or P.O. Box)				SOCIAL SECURITY NUMBER (SSN) or (FRN) FCC FEDERAL REGISTRATION NUMBER		
ITY			STATE CODE   ZIP CODE (5 or 9 Numbers)		E-MAIL ADDRESS (OPTIONAL)		
AYTIME TELEPHONE NUMBER (Inc	clude Area Code) OPTIONAL	FAX NUMBER (Include Area Code) OPTIONAL		AL	ENTITY NAME (IF CLUB, MILITARY RECREATION, RACES)		
Type of Applicant: Individu	Amateur Club	Military RACES Recreation (Modify Only)			CLUB, MILITARY RECREATION, OR RACES CALL SIGN		
HEREBY APPLY FOR (Make an X in the appropriate box(es))				Ciny)	SIGNATURE OF RESPONSIBLE CLUB OFFICIAL (not trustee		
	for upgrade of my licemse to		ame /	Applicar	GE my station call sign systematically nt's Initials:  AL of my license grant.		
Former Name		ame) (MI)			TE of my morne grant.		
Former Name: (La	ast name) (Suffix) (First r						
	nse application on file	PURPOSE	OF OTHER APPLICATION		PENDING FILE NUMBER (FOR VEC USE ONLY)		

With a revised FCC Form 605 — Quick-Form Application for Authorization in the Ship, Aircraft, Amateur, Restricted and Commercial Operator, and General Mobile Radio Services — soon going into effect, the National Conference of Volunteer Examiner Coordinators (NCVEC) has updated its unofficial NCVEC Form 605 that's used at volunteer examination sessions. The revised NCVEC Form 605 must be used at exam sessions starting on August 21. Both the new FCC and NCVEC forms ask applicants if they have been convicted of a felony in any state or federal court.

This conforms with FCC requirements to evaluate an applicant's qualifications to hold any FCC-issued license. The FCC has been asking "the felony question" on other forms, and its omission on Form 605 was an apparent oversight.

An applicant's response and explanation to the felony question — now included on NCVEC Form 605 — will be used to determine eligibility to be a Commission licensee. If the answer to the felony question is "yes," the applicant must submit to FCC — separately from NCVEC Form 605 — a statement (the FCC calls it an "exhibit") explaining the circumstances. Such applications will be held for a basic qualification review, something the FCC already does for other licensed radio services. The FCC's Wireless Telecommunications Bureau has said that an affirmative answer to the felony question does not mean that an application will be denied automatically.

An applicant's answer to the felony question and their exhibit will be publically viewable via the Universal Licensing System (ULS). The applicant can request that all or part of the exhibit be kept confidential, and it will not be visible to the public.

VECs will not handle exhibits and confidentiality requests; these must be filed with the FCC by the applicant. Applicants must answer the felony question only when filing NCVEC Form 605 or FCC Form 605 for a New, Amendment, Modification (upgrade or call sign change), or Renewal/Modification (changes at renewal time). The question does not have to be answered if the applicant is filing a renewal or an administrative update (change of address, name, e-mail address, etc).

New <u>NCVEC 605 Forms</u> and an <u>Applicant information sheet</u> for use at ARRL Volunteer Examiner Coordinator exam sessions starting on August 21 have been published. VEC teams should discard all existing versions of the NCVEC Form 605; they no longer will be valid and cannot be used going forward.

The FCC has indicated that all VECs *must* begin submitting this additional data starting on September 7. NCVEC decided to make August 21 the effective date to accommodate mail schedules and the Labor Day holiday.

NCVEC Form 605 has not been revised since the Commission restructured Amateur Radio license classes 17 years ago.

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# **Ohio ARES Serves NAACP Annual Convention and Republican National Convention** (from the ARRL 2016 Annual Report)

The NAACP convention drew more than 5,000 people and ran from July 16 - 20 in Cincinnati. Ham volunteers from Hamilton County ARES were stationed adjacent to the lobby of the Regional Operations Center (ROC) and maintained contact with the Ohio State Emergency Operation Center-Joint Dispatch Facility (EOC-JDF).

The Republican National Convention, held in Cleveland July 18 – 21, was the first National Special Security Event (NSSE) ever conducted in Ohio. Members of Cuyahoga County ARES took additional FEMA courses in order to serve at the event, which involved the Cuyahoga County EOC being active 24 hours a day.

Want to see the full report? Here's a link:

http://www.arrl.org/files/file/About%20ARRL/Annual%20Reports/ARRL%202016%20Annual%20Report.pdf

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#### SPECIAL EVENTS STATIONS

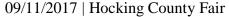
09/08/2017 | Centennial of Lorain, Ohio Lighthouse

Sep 8-Sep 10, 1800Z-1200Z, W8HN, Lorain, OH. Medina 2 Meter Group. 14.275 all freqs. + or - qrm contacts phone only 7.210 3.810 146.520. QSL. EQSL, send e-mail to kkoyan@ncwcom.com, Lorain, OH 44052. 100 years of the Lorain Ohio Lighthouse, sponsored by The Lorain Lighthouse Foundation Inc. We are encouraging boaters to dock & stop in for a small donation in support of lighthouse maintenance. Event runs from Friday 09/08/2017 6 pm EST ending Sunday 09/10/2017 12 pm EST. www.grz.com/w8hn

09/09/2017 | Celebration of the Opening of Burr Oak State Park

Sep 9-Sep 10, 1600Z-1600Z, KC8AAV, Glouster, OH. Sunday Creek Amateur Radio Federation. 28.400 7.245 3.800. Certificate. Russ Ellis N8MWK, 8051 Kochis Road,

Glouster, OH 45732. This special event is in conjunction with the Ohio State Parks on the Air contest. <a href="mailto:iamkc8aav@gmail.com">iamkc8aav@gmail.com</a>



Sep 11-Sep 17, 1900Z-0200Z, N8H, Logan, OH. Hocking Valley Amateur Radio Club. 28.405 21.380 14.275 7.270. QSL. HVARC, 52 E. Second St., Logan, OH 43138. On air 1900Z to 0200Z Daily. <a href="www.qsl.net/k8lgn">www.qsl.net/k8lgn</a>

09/16/2017 | Johnny Appleseed Festival 50th Anniversary

Sep 16-Sep 17, 1200Z-1400Z, K8GQB, Lisbon, OH. Lisbon Area Amateur Radio Association. 14.260 7.180. Certificate. Scott Dunn, 9168 Steubenville Pike Road, Lisbon, OH 44432. Times are daily. info@k8gqb.com or <a href="https://www.k8gqb.com">www.k8gqb.com</a>

09/23/2017 | VOA Bethany Relay Station 73rd Anniversary

Sep 23, 1300Z-2100Z, WC8VOA, West Chester, OH. West Chester Amateur Radio Association. 14.275 14.250 7.285 7.225. QSL. West Chester Amateur Radio Association, 8070 Tylersville Road, West Chester, OH 45069.

10/07/2017 | Michelson-Morley Experiment 130th Anniversary

Oct 7, 1200Z-2200Z, W8M, Cleveland, OH. Case Amateur Radio Club of Case Western Reserve University. 21.280 14.230 14.050 7.230. Certificate & QSL. Case Amateur Radio Club, W8EDU, Glennan Building 9A, 10900 Euclid Avenue, Cleveland, OH 44106. Case Amateur Radio Club will be on the air discussing the Michelson-Morley Experiment with amateur radio operators around the world. Alumni are welcome to visit, get on the air with W8EDU, and learn about the Michelson-Morley Experiment. Tours of Glennan amateur radio station will also be available. www.w8edu.wordpress.com

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#### OHIO HAMFEST CALENDAR



08/27/2017 | 9th Annual Cuyahoga Falls ARC Tailgate Hamfest

Location: Stow, OH

Sponsor: Cuyahoga Falls Amateur Radio Club Website: http://www.cfarc.org/tailgate.php

09/10/2017 | Findlay Hamfest

Location: Findlay, OH Sponsor: Findlay Radio Club

Website: http://www.findlayradioclub.org

**SPECIAL NOTE:** Goose, W8AV tells me that he will be available to check DXCC cards (he can also do VUCC and

*WAS cards if time permits)* 

09/23/2017 | OH-KY-IN ARS Hamfest

Location: Cincinnati, OH

Sponsor: OH-KY-IN Amateur Radio Society

Website: http://www.ohkyin.org

09/24/2017 | Cleveland Hamfest and

Computer Show Location: Berea, OH

Sponsor: Hamfest Association of

Cleveland

Website: http://www.hac.org

10/07&08/2017 | Great Lakes Division Convention

Great Lakes HamCon

Location: Brooklyn, MI

Sponsor: Great Lakes Amateur Radio Association

Website: http://GLHamCon.org

10/07/2017 | Scioto Valley ARC Hamfest

Location: Chillicothe, OH

Sponsor: Scioto Valley Amateur Radio

Club Website:

http://www.qsl.net/w8bap/SVARC.html

**SPECIAL NOTE:** Tom, WB8LCD – is one of the forum speakers. He will be speaking at 11am on Saturday

10/15/2017 | Conneaut ARC Hamfest

Location: Conneaut, OH

Sponsor: Conneaut Amateur Radio Club

Website:

http://www.facebook.com/pg/W8BHZ/events/?ref=page internal

10/29/2017 | Massillon ARC Hamfest

Location: Massillon, OH

Sponsor: Massillon Amateur Radio Club

Website: http://www.w8np.org

We now have a complete listing of upcoming hamfests in Ohio on the website.

Go to: <a href="http://arrl-ohio.org/hamfests.html">http://arrl-ohio.org/hamfests.html</a> to see everything that is currently scheduled, including the Great Lakes Division Convention!

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# **Internet Access to ARRL Headquarters to be Disrupted on Tuesday, August 22** (from ARRL Bulletins)

Internet access to ARRL Headquarters in Newington, Connecticut, will be disrupted for up to 6 hours on Tuesday, August 22 (0400-1000 UTC). Affected systems include, but are not necessarily limited to e-mail, bulk mail, reflectors, Logbook of The World (LoTW), DXCC, National Parks on the Air (NPOTA), and the ARRL Development page.

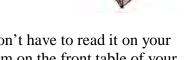
The outage is necessary for AT&T maintenance, and ARRL has no control over the time or length of the outage, which could be very short. We regret any inconvenience.

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#### A final – final...

Amateur Radio is exciting and a lot of FUN. It's also a learning experience for everyone! Share your enjoyment and learning experiences with those just coming into Amateur Radio!!

Know someone that's not getting these Newsletters? Please, forward a copy of this Newsletter over to them and have them "Opt-In" to start receiving them. Heck, just have them send me an email <a href="n8sy@n8sy.com">n8sy@n8sy.com</a> and I'll get them added to the Ohio Section Emailing list. I urge all of you to make sure that everyone, regardless of whether they are a League member or not, gets signed up to receive these Newsletters. You can always "Opt-Out" at any time if you feel this is not what you were expecting.



This newsletter is written in a format that will allow you to print it out so that you don't have to read it on your computer screen only anymore. Consider printing out several copies and leaving them on the front table of your next club meeting. What a great way of spreading the news!

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