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IMPORTANT DATES

(GO TO WEBSITE OF MORE INFO)

Oct. 23—General Meeting. Plymouth Library. .

Nov. 11—W8F Special Event. Dossin Museum, Belle Isle.

Nov. 13—Board Meeting via ZOOM.

Nov. 15—VE Session. Livonia Police Dept. EOC. Contact Mike N8MR.

Nov. 27—General Meeting. Downtown Plymouth Library. TOPIC: RFI.

UP FRONT

◆ The next **General Meeting** will take place on **Monday, October 23rd at 7:00 PM** at the Downtown [Plymouth Public Library](#). Socializing begins at 6:30 PM. There will be two presentations. Michael Fluegemann, KE8AQW, President of the Ford Amateur Radio League (FARL), will discuss JOTA (Boy Scouts of America - Jamboree on the Air). Next, Zach, K8ZRY, will outline working on W8F, the special event station commemorating the Sinking of the Edmund Fitzgerald, our annual event at the Dossin Great Lakes Museum on Belle Isle State Park. See Page 2 for more info on W8F.

◆ Please join fellow LARC members any Saturday around 8:00 AM for **breakfast** at the **Senate Coney Island**, 34359 Plymouth Road, Livonia, between Farmington and Wayne Roads. We are located in the backroom to the right of the entrance. Sometimes we even talk about ham radio.

◆ **SAVE THE DATE:** Our 52nd Annual **Swap ‘n Shop** has been confirmed for Saturday, February 17, 2024 at the Monahan Banquet Center on Farmington Road, north of Seven Mile, the same location as last year.

◆ LARC membership **renewals** for calendar year 2024 are now being processed. You can renew quickly and easily via the “Join/Renew” tab at www.livoniaarc.com. Here’s a one-stop link: <https://livoniaarc.com/renew-membership/>

◆ The Livonia Amateur Radio Club acknowledges the generosity of Silent Key **John Mathey, K8AZT**, who passed away in December of 2022. His estate donated \$2,300 to LARC in appreciation for the friendships, good times and radio knowledge shared through the Club. The Board is researching projects to best utilize his gift.

LIVONIA REPEATERS ♦145.35 PL 100HZ ♦ 444.875 D-STAR (GATEWAY 89C)♦ ECHOLINK K8UNS-R [NEW]

LARC 2-METER NET EVERY THURSDAY ♦ 8:00PM LOCAL TIME

WEBSITE: [HTTP://WWW.LIVONIAARC.COM](http://WWW.LIVONIAARC.COM). AND, JOIN US ON [FACEBOOK](#)

EMAIL: info@livoniaarc.com

EDMUND FITZGERALD SPECIAL EVENT STATION—W8F



The Edmund Fitzgerald sank during a storm while in route from Superior, WI to Detroit, MI. 29 crew members were lost when the vessel went down in 530 feet of water 17 miles northwest of Whitefish Bay, near the twin cities of Sault Ste. Marie, MI, and Sault Ste. Marie, Ontario, Canada.

On the 2nd Weekend in November each year, the Livonia Amateur Radio Club operates Special Event Station W8F commemorating the sinking of the "Mighty Fitz". This year's event will take place on **Saturday, November 11th**, at the Dossin Great Lakes Museum at the Belle Isle State Park in Detroit. Operations begin around 10:00 AM with equipment and antenna setup and end at 3:30 PM. We encourage members to come to the Dossin museum and take part in operating the special event station on the air.



This year we have been granted use of the W8F callsign for an extended period Nov. 1-Nov. 12, 0000Z-2359Z) Club members are authorized and encouraged to operate as W8F from their QTH during this time. On the Club Website are 2 documents to help you in your W8F operations, a basic script for what to say on air, and a contact log. [Edmund Fitzgerald Special Event Station – Livonia Amateur Radio Club \(livoniaarc.com\)](http://livoniaarc.com)

Zach, K8KRY will be presenting information about our Special Event Station at the October General Meeting.



If you make any contacts from your shack, please forward the ADIF logs to Zach, K8ZRY. As you are operating, please identify with your own callsign at least once every 10 minutes (i.e., "This is W8F with operator Bill, AD8WA"). As always, this year's goal is to get as many members on the air (CW, SSB, digital, etc.) and as many contacts as possible.



LITHIUM BATTERY FIRE RISKS: SORTING IT OUT

BY CHRIS WARREN

Exponential market growth!

Lithium battery technology has made exponential market penetration in the last decade or so. Once an exotic and expensive platform, today nearly every battery-powered device uses lithium. Along with increased market acceptance comes attention, both good and bad. Most of the bad news circulating about lithium batteries relates to their fire risk. Is the danger real, or a big [nothing burger](#)? What concerns about lithium battery fires should off grid hams have and what can be done to mitigate the risks? It's not a nothing burger, but let's keep it in context.

The U.S. [Occupational Safety & Health Administration \(OSHA\)](#) states that there are over 5000 lithium battery related fires in the U.S. every year...and that is a 2018 statistic. It's become such a large problem that the City of New York recently [enacted legislation](#) requiring lithium batteries to meet certain minimum safety standards

While I could not find more recent information on how many lithium battery fires occurred in the entire United States, we can reasonably conclude that, nationwide, incidents well exceed the 2018 numbers.

But let's keep things in context. In 2021, the most recent full-year reported, [there were 1.353 million fires \(by all causes\) in the USA](#). That includes everything from simple trash can fires all the way up to multi-square mile wildfires. So while several thousand fires from lithium batteries is not "nothing," they represent a small fraction of a percent of all fires. (Refer to chart on Page 4.)

Outsized representation and reputation.

Although lithium batteries account for a very small portion of all fires, they "make up for it" in the sense that a lithium battery fire is never a small affair. Once a lithium battery begins to combust, it's difficult to extinguish. Due to the principle of [thermal runaway](#) and the internal chemistry of lithium batteries, a fire can burn

hot and long. For example, a standard five-person fire crew can usually put out fires in traditional internal combustion-powered cars in a matter of minutes or even seconds. If a battery powered car catches fire, it's almost always a major-response incident [requiring several thousand gallons of water](#).

If you're thinking, "I just have a few small lithium batteries. That's not comparable to a Tesla". Well, you're right, but you're missing the point. The takeaway is that if your lithium batteries catch fire, no matter how small they are, it's going to be intense.

I postulate that lithium battery fires receive media attention disproportional to their comparatively low occurrence for several reasons. A) lithium batteries are still a relatively new product, B) the fires are particularly fierce and hard to put out, and C) the media loves to stir up drama.

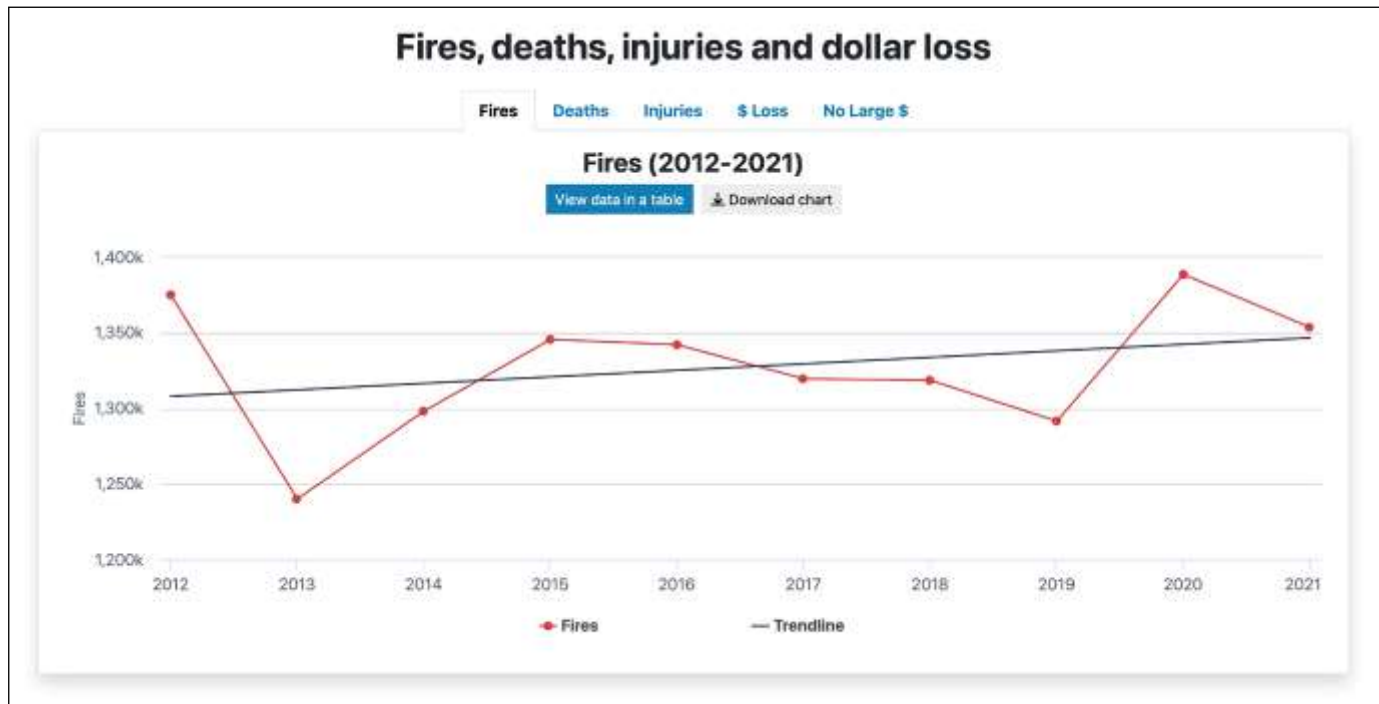
What you can and should do.

Lithium batteries are generally regarded as safe, but there are things an off grid ham can do to minimize the risk.

- Never operate a lithium battery that is visibly damaged: cracks, loose terminals, etc.
- Charge batteries within their specified charge parameters and with the proper charger.
- Any battery that is excessively hot, discolored, bulging; making hissing, ticking, or boiling sounds; or discharging smoke, liquid, or weird smells is an immediate emergency concern. If possible, move the battery and/or device to a safe place where it will not set fire to surrounding materials. If this is not possible and no appropriate fire extinguisher is available, evacuate the area and call the fire department.
- If a lithium battery is removed from service, for any reason, store it in a place where it is not a combustion hazard to other materials. Do not keep decommissioned batteries in your possession for extended time periods even if they are

*(Continued on page 4, **Lithium**)*

(*Lithium*, Continued from page 3)



GRAPHIC COURTESY OF FEMA.GOV

safely stored. Bring them to a proper recycling facility as soon as possible.

- Store batteries in a metal or other fireproof enclosure away from flammable material. Use only batteries from known, reputable sources.

Fire extinguishers....it's complicated.

Regarding fire extinguishers, you'll first need to know what type of batteries you have. Lithium batteries and lithium-ion batteries are not the same thing. They cannot be treated the same for fire fighting purposes. Lithium ion battery fires are considered B-class fires so ordinary household ABC-class extinguishers or water will be effective on these fires.

Only D-class fire extinguishers are certified for metallic fires, which includes lithium (not ion) batteries. If you've never heard of a D-class extinguisher, it's probably because they are specialty items used mostly in the aerospace, automotive, and metalworking industries. They are not available off the shelf at your local home improvement store. D-class extinguishers are only sold by fire suppression specialists & industrial product suppliers.

If you feel you need a D-class fire extinguisher, brace yourself for eye-popping sticker shock. D-class extinguishers can cost over \$1500.00 USD and you're unlikely to find a good one for less than \$800.00 USD. Be sure to read the data sheet carefully and fully understand what you are buying because some D's are certified for lithium (the metal) but not lithium batteries.

Don't overthink the fire extinguisher issue. Very few amateurs legitimately need a D-class unit.

Battery management systems (BMS).

Lithium batteries typically have a battery management system (BMS). A BMS is built-in electronics that monitor & control charging, balancing, and other parameters. Many hams mistakenly think having a BMS means their batteries can never be overcharged or overheat due to excessive current. The BMS does somewhat provide a layer of safety, but it is not itself a safety device. Never assume the BMS will "save" you and prevent conditions that may incite a fire.

(Continued on page 5, *Lithium*)

ODDS & ENDS

Club Repeater Being Serviced

Dan Suputo, K8PLW, is continuing to investigate noise problems associated with our repeater that do not appear to be related to our new antenna. The repeater may be offline for short periods of time during testing, and/or the back-up repeater may be online with lower power output.

Our active sun and a once-in-century solar storm

The sun is getting more active than it has for a decade — and it could lead to power outages, grounded flights, and stunning auroras. See <https://www.businessinsider.com/sun-more-active-solar-storms-auroras-poweroutages-grounded-flights-2023-2> and a once-in-century solar storm could fry power grids and knock out satellites.

Here's why scientists worry it could happen soon.

See <https://www.businessinsider.com/rare-solar-storm-blast-power-grids-chancehigher-next-years-2023-8>

W8F Military Artifacts, Anyone?

A new friend of the Club has a small pile of old military radios he would like to **give away**.



If you are interested, or know someone who would be, contact:

Dave Smith, KC8BWX; QTH—Livonia, MI.
dsmith6185@gmail.com

Battery Type	Fires involving <i>Batteries Only</i>	Fire involving <i>Batteries and Other Materials</i>
Lithium (metal) Primary, Non Rechargeable	Class D extinguishing agent. DO NOT USE WATER.	Use an ABC dry chemical extinguisher or water hose stream . Fight the fire based on the fueling material (for example, paper, plastic, solvent, etc.).
Lithium Ion Secondary, Rechargeable	Use an ABC dry chemical extinguisher or water hose stream . Fight the fire based on the fueling material.	Use an ABC dry chemical extinguisher or water hose stream . Fight the fire based on the fueling material.

GRAPHIC COURTESY OF FEMA.GOV

(Lithium, Continued from page 4)

The bottom line.

This article is not meant to scare anyone away from lithium batteries! Frankly, there is no realistic way to avoid them anyway. The statistics show that lithium battery fires are uncommon when compared to all fire incidents. With a little knowledge and forethought, anyone can use them safely and without incident.

Resources:

[Here is a short, very informative PDF](#) with general information about lithium battery safety.

[This article](#) from the National Fire Protection Association (NFPA) is a wealth of information.

[An obscure document](#) from the United States Antarctic Program outlines safe lithium battery protocols.

Reprinted with permission. [Off Grid Ham - Keeping amateur radio on when the grid is gone](#)

ANOTHER SUCCESSFUL LARC IN THE PARK

A great time was had by all at LARC in the Park on October 14th, despite the wet weather.

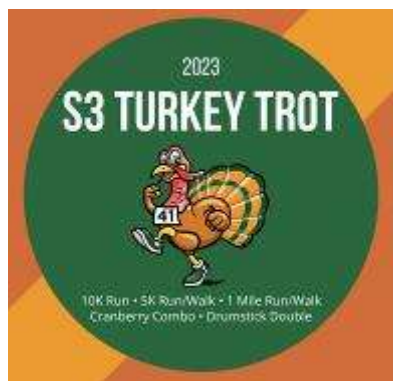
John Hopkins, K8YYZ, organized the outings as a "Portable HF Antenna Shootout." A number of portable antennas were on site to evaluate and discuss.

Antione, KE8ZGA, our newest technician, attended. We were able to get him on 10m making contacts in Texas and Finland! Antione has been an Associate Member since June, and receiving his call sign bumps him to "Full" member status.

While not part of LitP activity, we've learned that longtime member K8YYZ has honed his Morse Code skills and finally made his first CW contact this week. Good job, John.



SAVE THE DATE FOR THE THANKSGIVING TURKEY TROT



Once again, the Strategic Staffing Solutions Turkey Trot 5K and 10K races are looking for radio operators to provide safety on the Downtown Detroit course on Thanksgiving morning, November 23rd. Earn high-fives and

kudos from thousands of runners and walkers. Plus, you get a pretty nifty long-sleeve t-shirt. And, you'll be home in time for lunch.

What will you do as Emergency Communications volunteers? Simply, hams **"Observe & Re-**

port." Licensed Amateur Radio Operators are stationed at key intersections on the race course and communicate any safety issues back to the Command Center. You may be called upon to assist when necessary. We'll even provide the handheld if you need one.

John Dudek, KC8CRK, a frequent operator on our Thursday 2-meter net, is the Command Center Manager for this event.

JOHN DUDEK, KC8CRK

Emergency Communication Captain

johntigger@wowway.com:

313-318-9202

Contact John directly to volunteer, or find out more information.

A REMINDER: THE 10 BEST FEATURES OF AMATEUR RADIO

1. **Communication:** Amateur radio allows for two-way communication across the globe, enabling operators to connect with people in different countries and even in remote locations

2. **Public service: Amateur radio operators** often provide valuable assistance during emergency situations. Organizations like Amateur Radio Emergency Services train members to work with emergency organizations, set up communication centers, and assist in rescue efforts

3. **Wireless experimentation:** Amateur radio provides a platform for enthusiasts to experiment with different radio technologies, antennas, and transmission modes

4. **Self-training:** Amateur radio operators continuously learn and improve their knowledge of radio technology, regulations, and operating principles

5. **Private recreation:** Amateur radio is a hobby that offers personal enjoyment and recreation. Operators can engage in activities like contesting, DXing (making long-distance contacts), and participating in awards programs

6. **Radiosport:** Amateur radio operators can participate in various radiosport activities, such as radio contesting, where they compete to make the most contacts within a specified time

7. **Frequency bands:** While amateur radio operators are limited to specific frequency

bands, they have the flexibility to transmit on any frequency within those bands using various communication modes, including voice, text, image, and data

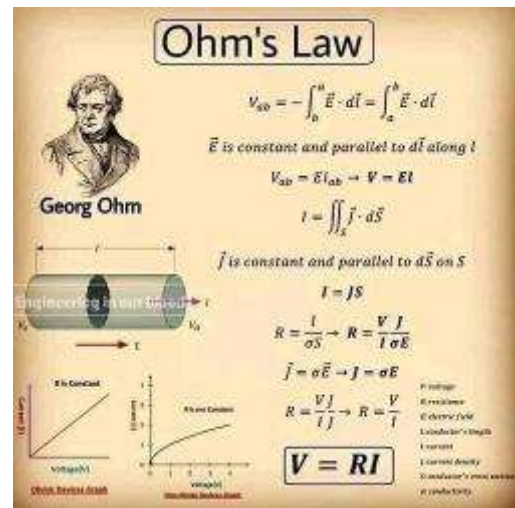
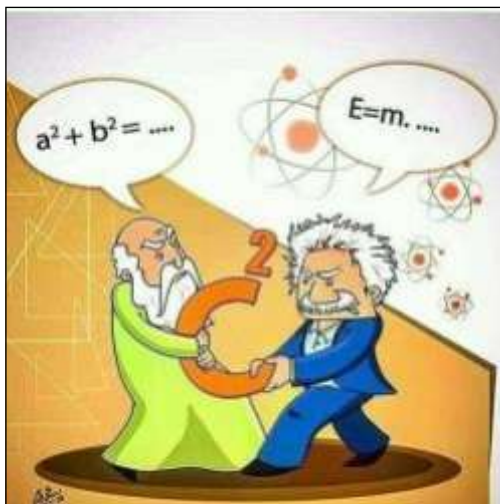
8. **Community involvement:** Amateur radio fosters a sense of community among operators. They can join local clubs, participate in hamfests (gatherings of amateur radio enthusiasts), and collaborate on projects .

9. **Portable and affordable:** Ham radio equipment can be portable and relatively affordable, allowing operators to set up stations in different locations and engage in the hobby without significant financial investment

10. **Friendship and convenience:** Amateur radio provides an opportunity for operators to connect with like-minded individuals, fostering friendships and social interactions. It also offers the convenience of wireless communication without relying on the internet or smartphones

Amateur radio offers a unique combination of communication, public service, experimentation, and recreation, making it a fascinating and rewarding hobby for enthusiasts worldwide.

Reprinted with permission from *The Communicator*, a bi-monthly journal about amateur radio and other topics published by Surrey Amateur Radio Communications (SARC). <https://ve7sar.blogspot.com/search/label/>



AMATEUR RADIO/COMPUTER SWAP

SUNDAY, DECEMBER 3, 2023

L'ANSE CREUSE AMATEUR RADIO CLUB 50th ANNUAL SWAP & SHOP



Balkan American Community Center

1451 E. Big Beaver Road
Troy, MI 48083

8 AM – Noon

(Vendors with Pre-Paid tables get in at 6:30 AM
For set up only. No pre-sales will be allowed to
be fair to all Swap attendees)

SWAP TICKET: \$10.00

(Kids under 12 Free)



NEW & USED EQUIPMENT:

- *RADIOS – Amateur, Commercial, CB*
- *ELECTRONICS & COMPONENTS*
- *COMPUTERS AND SOFTWARE*
- *ACCESSORIES*

DOOR PRIZES:

(deposit swap ticket at club table)

- *1st \$ 100, 2nd \$50, 3rd \$25*
- *ARRL GIFT CERTIFICATES*

SWAP FEATURES:

- *FREE PARKING*
- *FOOD & DRINKS*
- *VE TESTING*
- *Talk-In: ECHO Repeater 147.08+ 100hz*

Radio Raffle

Icom 7300



- HF/50 Mhz Transceiver
- Real-time Spectrum Scope

Raffle ticket: \$10. Available at the club table/advanced reg.
Winner will be drawn before the end of swap
(You do not need to be present to win!)

FCC EXAM SESSION:

VE Testing: Doors open at 9:00 AM. You will need to bring \$15.00 cash, copies of existing licenses or CSEs, (originals will not be accepted), two pieces of ID (one must have a photo).

You must provide an FRN by registering in the FCC CORES system **before** exam day.

Questions: Contact Gregg, n8geo@arrl.net

For Additional Information Contact:

Russ Price / N8HAR
LCARC Swap Chairman
40565 Shakespeare Dr.
Sterling Heights, MI 48313
n8har1977@gmail.com - Please put 'LCARC Swap' in subject.

Please see reverse side for advanced registration form

SOME POPULAR LOCAL NETS

Net	Day	Time	Frequency	PL Tone	Link
Michigan Traffic Net	Daily	7:00 PM	3.952 MHz	None	MITN
Michigan Net	Twice Daily	6:30 PM 10:00 PM	3.563 MHz	None	QMN
Southeastern Michigan Traffic Net	Daily	10:15 PM	146.76 MHz	100 Hz	SEMTN
Wolverine SSB Net	Daily	2200 UTC	3.935 MHz	None	WSSBN
Michigan ARPSC Net	Sunday	5:30 PM	7.232 MHz	None	MIARPSC
Garden City ARC	Sunday	9:00 PM	146.86 MHz	100 Hz	GCARC
Salvation Army Team Emerg. Radio Net	Monday	7:30 PM	147.18 MHz	100 Hz	SATERN
U of M ARC	Sunday	8:00 PM	145.230	100 Hz	W8UM
ARROW ARC	Monday	8:00 PM	146.96 MHz	100 Hz	ARROW ARC
ARROW DMR	Monday	9:00 PM	443.5/448.5, TG 312654, color code 1, time slot 1		
Utica Shelby Emerg. Com Slow Code	Monday	9:00 PM	147.18 MHz	100 Hz	USECA
Motor City ARC	Tuesday	9:00 PM	147.24 MHz	100 Hz	MCARC
Wayne County ARPSC Net	Wednesday	9:00 PM	145.330 MHz	100 Hz	WA8EOC
Hazel Park ARC Kids	Thursday	7:00 PM	146.64 MHz	100 Hz	HPARC
Oakland County ARPSC Net	Thursday	8:00 PM	146.900 Hz	100 Hz	W8OAK
LARC 2 Meter Net	Thursday	8:00 PM	145.35 MHz	100 Hz	Livonia ARC

LARC LIBRARY DISPLAY



Thanks to Keith, KD8ZSK for providing material and assistance. Keith is the ARES Emergency Coordinator and RACES Radio Officer for Wayne County.



Check out the LARC, ARPSC and amateur radio information display at the Livonia Civic Center Library, thru October. It was coordinated by Chuck, WV8A, our Public Information Officer.



ABOUT LARC



LIVONIA AMATEUR RADIO CLUB
 P.O. Box 51532
 LIVONIA, MI 48151-5532
info@livoniaarc.com



The Livonia Amateur Radio Club, founded in 1969, has been a long-standing part of the Livonia, Michigan community.

Our club has wide and varied interests -- Special Events, DX, Contesting and more.

LARC has been affiliated with the ARRL since February 7, 1976.

LIVONIA AMATEUR RADIO CLUB OFFICERS & COMMITTEE CHAIRS

President - Mike Cononie, KE8CEH— president@livoniaarc.com

Vice President - Gordon Scannell—KD8COJ

Treasurer - Bill Allen, AD8WA

Recording Secretary - Mike Hammerberg, K8AGY

Public Information Officer - Chuck Reti, WV8A

Club Directors—Keith Mavin, KE8AUO; Mike Rudzki, N8MR; Zach Raubinger, K8ZRY

Membership Manager - Bill Allen, AD8WA

Trustee of Record for K8UNS—Mike Hammerberg, K8AGY

Trustee of Record for N8LPD—Bill Allen, AD8WA

Technical Trustee for Club Repeaters—Dan Saputo K8PLW

Technical Trustee for Livonia EOC—Bill Allen AD8WA

ARRL VE Liaison—Mike Rudzki, N8MR

Information Technology Manager —Zach Raubinger, K8ZRY

LARC in the Park Coordinator—Joe Mattia, KE8DOU

Public Service Manager—Bill Allen, AD8WA

Repeater Maintenance - Dan Saputo, K8PLW

Swap-N-Shop—Mike Rudski, N8MR, Gordon Scannell, KD8COJ—swap@livoniaarc.com

Field Day Coordinator—Bill Allen, AD8WA; Mike Rudzki, N8MR

2-Meter Net Manager - Hiro Wakamatsu, AD8AE

Equipment Manager - Mike Rudzki, N8MR

Volunteer Examiners - AC8ND; AD8AE; AD8GD; AD8WA; AK9TX; K8RKT; K8TXM, KB8DGC; KD8ZPX; KE8AUO; KN8B; N8DXZ; N8MR; N8RI; W2EQX; W6AQT; W8PAS; WV8A

Repeater Newsletter Editor - Sandy Allen, AK8KA — spallen17@gmail.com