



SVARA Harmonic

A monthly publication of the
Saginaw Valley Amateur Radio Association

December 2017

- **SVARA Meeting Presentations**

We are still looking for ideas for meeting presentations. If you have an idea for a presentation or would like to do a presentation after one of our meetings, please contact Mike KD8MMH or any of the board members with your idea.

- **SVARA MONDAY NIGHT 2 METER NET**

Every Monday at 9:00 PM local time, on the Saginaw repeater – K8DAC 147.24, with a 103.5 PL tone or via Echolink. All are welcome and encouraged to join in.

Club Meeting Time and Place:

American Red Cross 1232 N. Michigan Ave. Saginaw
1ST Friday of the month at 7:00PM unless otherwise noted

Club Meeting Dates:

All dates are Fridays: April 7, May 5, June 2, July 7, August 4, September 1, October 6, November 3, December 1* meeting held at the Saginaw Wesleyan Church, 2125 Shattuck Rd.

Club Breakfast Dates (at IHOP on Tittabawassee St.):

A club breakfast is held monthly on Saturday morning after the meeting, 8:30 a.m. at IHOP
All dates are Saturdays: April 8, May 6, June 3, July 8, August 5, September 2, October 7, November 4, December 2

Board Meeting Dates (at Biggby Coffee, 3085 Bay Rd.):

The Board of Directors meets monthly on the 2nd Thursday following the general membership meeting, 7:00 p.m. at Biggby Coffee on Bay Rd. Changes in meeting dates are post on the club website.
All dates are Thursday: April 20, May 18, June 15, July 20, August 17, September 14, October 19, November 16, December 14

ARES Members:

Ares training for will be a . Visit the Ares website for more information. Ares training for will be .

Weekly Nets Please join us. All licensed operators are welcome.

District 3 Net 145.310 Sunday 6:00 PM	SVARA (Saginaw) 147.240 Monday 9:00 PM	MARC (Midland) 147.000 Thursday 9:00 PM
D3 Digital Training Net (Olivia 8/500) Seasonal 3.586 MHz USB Sunday 8:00 PM	BAARC (Bay City) 145.310 Tuesday 9:00 PM	MI Digital Traffic Net (Olivia 8/500) 3.583 MHz USB Tuesday, Thursday, Saturday 8:00 PM

Saginaw Valley ARA meeting minutes for November 3, 2017

The meeting was called to order at 7:07pm by Brian K8HY, who lead the pledge of allegiance with 13 members present and 2 guests joining us later.

Gordy KC8YVD, made a motion to accept last month's meeting minutes as published in the harmonic news and was seconded by Janet KD8MMJ. The motion passed.

Horst KD8ZXR, made a motion to accept the treasurer's report and was seconded by Dave W8DW. The motion passed.

Dave W8DW, relayed an update from the grant project group. The plan and goal is to have the new .24 machine on the air by Christmas. This includes the 6m repeater. The 220 repeater issue has been investigated and the radio is not repairable. Cost of a replacement is estimated to be around \$1000. Dave also reported on upcoming contests and mentioned the Ares group has completed their project of adding a new folded dipole HF antenna to the 911 building.

Jim Wade will be joining us for the Holiday in the Heart of the City event again this year. The cost of his accommodations was discussed and Doris KD8MMG, made a motion to approve Jim's hotel stay for \$115, a \$50 gas card and the cost of Jim's dinner. The motion was seconded by Horst KD8ZXR, and passed.

Brian K8HY, has come into possession of several older ubiquity networks mesh notes if individuals are interested in experimenting with wireless networking. Brian has also learned how to set up a mesh network that shares and Internet connection. Please contact Brian if you'd like to know more or have an interest in setting up a mesh node.

Early as it is the Midland club has expressed interest in joining us again for Field Day. Notes from this year's event indicate the need for additional logging computers and an easier way to connect standard wireless equipment to the mesh network.

A motion to hold the December meeting at the Saginaw Wesleyan Church at 2125 Shattuck Rd near Hermansau Rd. as well as approve \$75 to be donated to the church was made by Doris KD8MMG, this is the same location as last year's December meeting. The motion was seconded by Horst KD8ZXR. The motion passed.

Due to the poor service received at McDonald's the club will now be going to Tim Horton's after the regular meeting. This is the Tim Horton's located at the corner of Michigan and State Street.

Nominations for elections began with the position of president. Mike K8AVJ, nominated Mike Linton N8XPS for the position of president and he accepted. Randy KE8AHW, nominated Mike Elias or the position of president and he accepted.

Mike N8XPS, nominated Brian Kleinfeld K8HY, for the position of vice president and he accepted.

Mike N8XPS, nominated Mike Elias K8AVJ, for the position of secretary and he accepted.

Doris KD8MMG, nominated Mike Linton N8XPS, for the position of treasurer and he accepted.

Mike K8AVJ, nominated Tom Schmidt N8EUI, for the current board position and he accepted.

Nominations were closed and the motion to adjourn was made by Gordy KC8YVD, and seconded by Horst KD8ZXR.

Nominations at the conclusion of the meeting are as follows:

President	Mike Linton N8XPS	Mike Elias K8AVJ
Vice President	Brian Kleinfeld K8HY	
Secretary	Mike Elias K8AVJ	
Treasurer	Mike Linton N8XPS	
Board member	Tom Schmidt N8EUI	

Saginaw Valley ARA board meeting minutes for November 16, 2017

The meeting was called to order at 7:00pm by Duane KD8AUY, with Mike N8XPS, Dave W8DW, Mike KD8MMH, Doris KD8MMG, Tom N8EUI, Brian K8HY, Horst KD8ZXR, Anne KB8AWE, and Mike K8AVJ, present.

Dave W8DW, made a motion to accept last month's board meeting minutes as published in the harmonic news and was seconded by Mike N8XPS. The motion passed.

President's Report

Mike KD8MMH, reported that everything was set for holiday in the heart of the city at the Saginaw children soup as well as Mr. Wade's accommodations. The need for a "Santa Gram" sign was mentioned by Duane KD8AUY. Mike also mentioned that he received an email containing a PDF file containing paperwork from the grant project group. Included are invoices and receipts that break down the line items given in the previous paperwork.

Vice President's Report

Brian K8HY, mentioned the mesh nodes he has that are available.

Secretary's Report

Mike K8AVJ, presented the members' welcome pack that was printed. Mike asked that the board get some paper folders for the welcome packs. The board agreed and Mike was then tasked with this responsibility.

Treasurer's Report

Mike N8XPS, reported that everything was all set for the December meeting at the Saginaw Wesleyan Church.

General Discussion

Mike KD8MMH, brought a printed copy of the PDF he received from the grant project group which was passed around and discussed. The purchase of replacement and additional 2 m antennas was also discussed.

Tom N8EUI, reported that the press release had been submitted to several local news organizations, including WSGW. The board think Tom for his great work as Public Information Officer.

The board then discussed nominations and the potentially vacant positions. At which time Mike K8AVJ, withdrew his name for consideration for the position of president. Mike also expressed his willingness to fill the treasurer's position if a replacement Secretary can be found. Currently Mike N8XPS, is nominated for both the position of president and treasurer and is running unopposed. At this time, it is unclear if the club constitution permits an individual to hold both of these positions concurrently.

Dave W8DW, brought up the accessibility of the Red Cross during club meetings and the former position of door greeter was discussed.

The motion to adjourn was made by Anne KB8AWE, and seconded by Doris KD8MMG.

Respectfully submitted,
Mike Elias K8AVJ
Secretary

Current nominations are as follows:

President	Mike Linton N8XPS
Vice President	Brian Kleinfeld K8HY
Secretary	Mike Elias K8AVJ
Treasurer	Mike Linton N8XPS
Board member	Tom Schmidt N8EUI

ARRL News

SKYWARN Recognition Day is Saturday, December 2

A heads up: [SKYWARN](#)™ Recognition Day (SRD) will take place this year on Saturday, December 2 from 0000 until 2400 UTC (starts on the evening of Friday, December 1, in US time zones).

During the SKYWARN special event, ham radio operators will set up stations at National Weather Service (NWS) offices and contact other radio amateurs around the world. Participating Amateur Radio stations will exchange a brief description of their current weather with as many NWS-based stations as possible on 80, 40, 20, 15, 10, 6, and 2 meters plus 70 centimeters. Contacts via repeaters are permitted.

SRD was developed jointly in 1999 by the NWS and ARRL to celebrate the contributions SKYWARN volunteers make to the NWS mission -- the protection of life and property. Amateur Radio operators, which comprise a large percentage of SKYWARN volunteers, also provide vital communication between the NWS and emergency managers, if normal communications become inoperative.



Microwavers Report Successful US-Canada Contacts on 78 GHz

Microwave enthusiast Mike Seguin, N1JEZ, has reported several successful 78 GHz contacts between the US and Canada on November 9. "We believe these contacts may be the first W/VE on 78 GHz," Seguin said in a post to several VHF/UHF/microwave-oriented reflectors.



N1JEZ's 78 GHz setup, aimed at Canada.
[Mike Seguin, N1JEZ, photo]

"We hope to extend distances before winter sets in here in the northeast and mountaintop access is limited." On the Canadian side were Rene Barbeau, VE2UG, and Ray Perrin, VE3FN. On the US side were Henry Ingwersen, KT1J, and Seguin. The first contacts were between FN35ja and FN34jx -- a distance of 5 kilometers (3.1 miles), "primarily to test systems," Seguin said.

"Contacts were easily made in SSB with huge signals on both ends," he reported. Next, N1JEZ and KT1J moved to FN34lt -- extending the distance to 27 kilometers (16.7 miles), and again easily made contact with the Canadian crew.

The Amateur Radio allocation in that part of the spectrum is 76-81 GHz. Amateur operation at 76-77 GHz has been suspended, however, until the FCC can determine that Amateur Radio operation will not interfere with vehicular radar systems deployed in that frequency range. -- *Thanks to Mike Seguin, N1JEZ*

MESH Training Held in Utah Focuses on Emergency/Disaster Communications

A MESH Training seminar was held on Saturday, October 28, at the Miller Public Safety and Education Building, Sandy, Utah, conducted by MESH pioneer David Bauman, KF7MCF. [Amateur Radio MESH is an over the air computer network of nodes with broadband capabilities conducted on the amateur microwave bands for high-speed networking in various modes - television, imaging, text and others.] Session 1 covered Basic MESH -- what is it, how does it work, and what can it do. Session 2 addressed Advanced MESH -- How to make AREDN (see below) work in the real world; and the three issues that AREDN has that will bring the network to a screeching halt, and how to solve or get around them. Session 3 covered tools and programs to help set up and run MESH, the three step method to make sure a link will work, and what can you do on the MESH pipeline. A MESH equipment show and tell was presented, with examples of hardware, and also hardware available to be purchased on site.

Bauman said "we always seem to be lucky enough to fill the room, and attendees hung around asking questions and getting equipment." "We provide MESH Go-Kit starter equipment at lunch money prices along with the training," he said. "The seminar was a success." Basic Go-Kit equipment is now in the hands of over 100 hams in the Salt Lake Valley and surrounding areas.

Bauman reported "now what we are doing is training them in the use of the hardware and software that we will use in an emergency/disaster response deployment; several MESH training sessions have already been held, with more to come."

The MESH group is currently working on a project to link the Mayor's office and Emergency Communications Center (ECC) of a small city to their three fire stations, the

Police dispatch center, and the local hospital with a high speed digital MESH network, "you might say our own private ham Internet," Bauman said. "This is the third local city that has shown interest in using MESH deployed by hams to back up and augment their existing emergency communication avenues with high speed digital capability."

The group has been asked to demo the system to the city council and Mayor at an upcoming meeting. Bauman said "we will demo high speed file transfer of messages (used by the Red Cross to send Well Messages from shelters) to a collection point and then upload them to an HF radio system and network." "We can transfer pictures and other files, along with real time video and audio, even a repeating streaming audio or video message to tell hams signing on how and where they are needed, and what to do."

VoIP and the above mentioned capabilities are available on laptops connected to the group's network, and also the ability to use real old style phones (some of the city residents are much more comfortable with a simple old style phone with a number to call for the Police, Fire and the hospital rather than a push to talk radio).

The group's demo will show officials that they can use real-time video, pictures (of damaged roads, overpasses, or buildings for the City Engineer), or of injured individuals at a shelter for the hospital to assess/triage) and text messages and live audio one to one, one to all, or to just a select group (Police to all fire stations, for instance). "We can show them how the E-com center can monitor all conversations, text messages, and file transfers and even e-mail inside our network, and outside also, if somewhere on the network we can tap into a satellite Internet link when regular Internet access is down," Bauman said. Several hams are spearheading this effort: Jerry Spillman, W0HU; John Hurst, KF7NQW; Grant Gardner, KC7HOU; Robert Jelf, KG7OHV; Charles Gray, KE6QZU; Edward J. Sim, N7RTA; Brad Rupp, AC7BR; and David T. Bauman, KF7MCF.

This is the same group that for years has been using high speed digital networking to augment the packet system used by hams for the local Wasatch 100, arguably the toughest 100 mile race in the country - a race up and down over mountains. This is not only extremely difficult for the runners, but setting up line of sight radio communications in rugged mountains is very challenging. "Our team made it work!," said Bauman.

The Amateur Radio Emergency Data Network (AREDN)

From its literature, the AREDN™ Project's focus is on emergency/disaster response communications. It seeks to provide hams a means to implement this technology in practical ways to support local and regional emergency communications needs. To that end, the project's objectives are to enable hams to put up a mesh node with minimal expertise and effort; configure the mesh network automatically so that advanced network knowledge is not needed; use low-cost, reliable commercial equipment; define standards for internetwork integration; support those in the process of designing and implementing emergency/disaster communications networks; and refine the software to make implementation easier, more reliable, and more manageable.

See YouTube video on AREDN at <https://www.youtube.com/watch?v=fkl5Nbnz24Y>.

Do you need help programming your HT? Come to the next meeting, bring your HT, any manuals you have and we will do our best to help. Don't have a manual? We'll still give it a try.

2016 SVARA Officers

President	Mike Dougherty KD8MMH	Board Member	Tom Schmidt N8EUI
		Term expires 2017	
Vice-President	Brian Kleinfeld K8HY		
Secretary	Mike Elias K8AVJ	Board Member	Anne Elias KB8AWE
		Term expires 2018	
Treasurer	Mike Linton N8XPS	Board Member	Doris Miles KD8MMG
		Term expires 2019	

2016 SVARA Appointments

Newsletter Editor

To subscribe or submit articles, please send requests to
 Mike Elias K8AVJ ke8avj@gmail.com

Emergency Coordinator

Ron Huss, KC8YVF 989-799-2679 kc8yvf@rhuss.cncfamily.com

Public Info Officer

Tom Schmidt N8EUI 989 245-7429 tschmidt50@charter.net

Repeater Committee

Ron Huss, KC8YVF
 Dave Paquette, W8DW (Trustee)
 Brian Kleinfeld. K8HY
 Jeff Metiva, KB8SWR

SVARA Elmers

General Questions	Joe Turner, K8CQF	k8cqf@arrl.net
CW (Morse Code)	Dave Paquette, W8DW	w8dw@qsl.net
Contesting	Dave Paquette, W8DW	w8dw@qsl.net
Hamnet/Meshnet	Mike Elias, K8AVJ	ke8avj@gmail.com



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