



A Publication of the Dayton Amateur Radio Association

October 2019

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RF Carrier Articles are due:	
Issue	Due Date
Nov/Dec	10/18/2019
January 2020	12/13/2019
February 2020	1/17/2020
March 2020	2/14/2020
April 2020	3/20/2020
May 2020	4/17/2020
June 2020	5/22/2020
Submit articles in Word format. Send pictures in separate graphic files	

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It's Raspberry Pi Time!

Dara club member Dave Schwab KE8DOC will presenting the Raspberry Pi4. This new expanded version of an inexpensive Linux computer has some interesting features and is great for several radio applications. Come hear how Dave is using it to get some great examples. Please remember due to maintenance that we are not meeting in our normal Kettering Rec Center room. The one we have available is slightly smaller and unfortunately noisier at it is the gym. Be prepared to be "friendly" with your fellow hams as we squeeze in there.



Address Change & Membership

Dues are payable July 1st of each year. Regular membership dues are \$10 per year, with \$3 additional per family member living in the same household. Contact the Membership Chair Jeff DeVoe K8JTD or the Assistant Chair Will Serrato W8CAN at PO Box 44, Dayton, OH 45401. to pay dues, change your address or to update any personal information appearing in the DARA Directory.

If you have any questions about your membership or key fobs, you can contact Jeff or Bill at membership@w8bi.org

DARA Membership Renewal

Member ID: _____ Dues Amount: \$ _____ Check No: _____
 Name: _____ Call Sign: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone Number: _____
 License Class: _____ License Expires: _____
 ARRL Member: _____ Email Address: _____

Form: DMR0817



Words From the President...

Ron Cramer KD8ENJ



Several members of our club have been busy over the summer. One of the many projects came out of the theme of Dayton Hamvention 2019 on Mentoring the Next Generation. Gene Fischer brought up the idea of creating a new 4-H Project Radio Club at the Greene County Extension Office located at the Greene County Fairgrounds and Expo Center. He has done the footwork and has been able to collect money to fund the project. He is working with Rebecca Supinger, 4-H Educator with the Ohio State University Extension. She is helping to write the 4-H Radio Program and has collected a grant to help with building an antenna tower at the fairgrounds. There are plans to have a radio room where the students can learn and work with radios. The project should become a reality yet this fall and we will be needing volunteers to help with the mentoring. There will be the 4-H program project along with training to take the FCC License Exam. Volunteers will come from DARA and XWARN, as well as parents of the club members. A few have already expressed an interest in becoming involved but we will need additional help as the class grows. If you are interested in helping, please contact Gene Fischer or Ron Cramer.

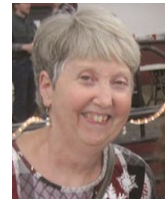
Two of our members, Gary Mullins and Janese Brooks have lost their mothers in the last few weeks. Please keep them in your thoughts through this very sad time.

On an even more disturbing note, I have recently heard about one of our members disrespecting a volunteer at the last membership meeting. Volunteers are working for the club, (that is everyone in the club) and they do not deserve to be cussed out for doing their job. If it were not for our volunteers, we would not be able to enjoy the many perks the club offers. Please thank our many hard working volunteers for their time and efforts. In fact, if you haven't been doing your part, please think about where you might want to volunteer in the future. There are many tasks that we are having trouble finding volunteers to complete. Our club works only through your volunteer time.

See you at the next meeting!



The Secretary's Corner



Board of Trustees Minutes of the Meeting

August 20, 2019

Board Members:

President Ron Cramer KD8ENJ Vice President Jim Storms AB8YK Secretary Nancy Krodel KC8RMT
Treasurer Michael Kalter W8CI Sr. Trustee Jeff DeVoe K8JTD Jr. Trustee Jim Tiderman N8IDS
Hamvention General Chairman Jack Gerbs WB8SCT

Guests: Rick Allnutt WS8G, Mike Buehler N8XGA, Tom Pugh WV8GAJ, Carl Rose K8CPR, Chris Jebens KZ8XU, Joe Brassard KA8C, Charles Kaiser KD8JZR, George Ewing WD8NHI and Rob Lunsford KB8UEY.

President Ron Cramer opened the meeting at 7:10 p.m with the Pledge of Allegiance and Introduction of attendees

The guests were excused and the board went into executive session at 7:11 pm. Regular board meeting resumed at 7:21 pm.

Hamvention: Jack Gerbs presented the Hamvention contract for the board to vote on. Jack made a **motion** to accept the five year agreement. Jim Storms seconded the motion. The board voted to accept the agreement.

The first Hamvention 2020 chair meeting will be held September 10.

Secretary: The minutes of the July 2019 board meeting were reviewed. Jack Gerbs made a **motion** to accept the amended minutes. Jim Tiderman seconded the motion. The board approved the motion. DARA made donations to the Alzheimer's Association in memory of Steve Schoemann, a donation to Wounded Warrior in memory of Chris Geib and a monetary gift to the Dayton Humane Society in honor of Barbara Hobbs.

Member of the month selections were determined for August, September, October and November.

Treasurer: Michael Kalter gave the current cash balance on hand. He renewed the registration for the organization and took care of insurance.

Sr. Trustee: Jeff DeVoe reported the budget work is in progress. Rob Lunsford is awaiting a response from the company to work on the ADA door. The emergency lighting batteries are going to be changed by Rob Lunsford. The roof cap pieces which blew off need to be replaced. The TNG group purchased a 3D printer and some other items from Chris Geib's estate.

Jr. Trustee: Jim Tiderman has received about fifteen pages of email from Glenn Hochwalt and it contains a lot of history about the installation of the towers, who worked on them, the people who gave permission for the work to be done and the modifications that were made. The D-Star system is up and running.

Vice President: Jim Storms stated there are two bills left to be paid at R & L. Vouchers were just given to the treasurer who wrote checks for them. The speaker for the September membership meeting is Frank Beafore. The October speaker will be Dave Schwab and Carole Perry will be our speaker for the November meeting. Our December holiday party will be held at the Greene County Fairgrounds.

Additions from the floor:

Chris Jebens presented an idea proposed by Bob Neben, K9BL. The objective is to encourage the growth of licensed amateur operators, to encourage those already licensed to increase their knowledge, and perfect the art and science of our radio hobby. A congratulatory one-year membership to DARA, like the program already in place for new licensees would be offered to all those that successfully participate in a DARA sponsored class and the next test session resulting in a new license or upgrade. The program would be administered by the Education Committee and signed off by the Ed. Committee Chair and Testing Coordinator.

Jim Storms made a **motion** to accept the idea. Jack Gerbs seconded the motion. The board approved the motion.

DARA Picnic: Mike Buehler thanked all the board members for serving at this event. Thanks to Tom Holmes for the setup of the Fox Hunt.

The next board meeting will be on September 17, 2019 at the DARA Clubhouse on Bellefontaine Road.

The meeting adjourned at 8:07 pm.

Respectfully Submitted,
Nancy Krodel KC8RMT
DARA Secretary

August Picnic Door Prize Winners



Renee Geib KC8ATL
External Speaker



Eric Weisel KD8FWO
Coax Switch



Mark Erbaugh N8ME
Power Meter



Gene Fischer KX8GCD
\$50 Gift Cert



Gail Fischer KA8DQR
\$50 Gift Certificate



Rezra Rahmani NN8N
50 Ft Coax



Nancy Krodell KC8RMT
Power Supply



Michael Braun KB8ZYE
\$100 Gift Certificate



Jim Howell W8LWD
\$100 Gift Certificate



Leo Schaf KD8SI won the top
prize, a triband mobile radio

Why I do Public Service Events

Have you ever wondered why we should participate in public service events on a regular basis? Or why we should check into local nets? Or why we should volunteer to be net control on those local nets occasionally?

Let me help with those questions...

On the evening of May 27, 2019, I was out and about, but I was aware the area was expecting a bit of severe weather. So, when I got home, I quickly prepared for a weather net. I delayed starting a weather net until it was obvious the National Weather Service (NWS) would soon be issuing a severe thunderstorm warning for Greene County. I was watching WHIO TV and NWS radar. At 9:50 pm I began taking check-ins. It became clear to me I was not the only one who was aware the weather was beginning to look dangerous. I had 20 initial check-ins.

As the evening wore on and reports began to come in of large trees down, large hail, funnel clouds, and tornadoes on the ground I realized Greene County was in trouble. I began to think of my family that go to bed early and would not be aware of the situation. While taking reports on the net I called some family members to ensure they were awake and aware of the situation. I soon realized the best thing I could do to ensure the safety of the residents of the County, including my family, was to get the reports of funnel clouds and tornadoes to the NWS in a timely manner so warnings could be issued and people would have time to get to a safe place.

Over the next few hours, I had 10 more check-ins from around Greene County. I had three separate liaisons working with me to get the information to Dayton Skywarn. The first two liaisons had to leave the net. One had wind damage at his home and the other to help the Beavercreek Fire Department. Due to the weather conditions there were several issues with quality of transmissions at times, not to mention the Dayton Skywarn weather net was almost overloaded with reports. This presented an issue with transmitting important and sometimes urgent information to Skywarn and thus on to the NWS.

After speaking with several folks I knew were listening that night, even if they didn't check in, I realize one thing we didn't do that night was to remember to keep all transmissions, including mine, as short as possible. We reported unnecessary items, such as heavy rain, lightening, thunder, etc.

So why should we participate in public service events? To practice proper radio protocol and to learn to listen to instructions from net control. The time to practice radio skills is NEVER during an actual emergency. If not for volunteering for many public service events I would not have been ready for the speed with which some of those reports came. I could have been completely flustered and overwhelmed. But because of my training with public service events I was able to accept the reports and give precise, clear, information to the liaison to pass to Dayton Skywarn and thus onto the NWS.

Why should we check into local nets? Again, to practice radio protocol, to become familiar with our radios, and to learn to listen to instructions from net control.

Why should we volunteer to be the net control operator on the local nets? By now this should be familiar theme. PRACTICE, PRACTICE, PRACTICE!!! But not just radio protocol... Practice learning how to control a net. Generally, the local nets are scripted for the net control operator but still give you an opportunity to practice taking quick, concise, accurate notes. Local nets provide an opportunity for practicing passing information to others.

By doing these three things to PRACTICE your radio skills you will be ready to give accurate information in the event of an emergency. You will feel confident in your abilities as a "Professional" Amateur Radio Operator. And hopefully, you feel confident in running a net, not just for a local check-in net, or even a public service net, but for any kind of disaster or emergency!

Submitted by KD8DGB

DARA VE Schedule

Looking to upgrade your license in 2019? The Dayton Amateur Radio Association VE Team will be providing FREE License Exams at the Bellefontaine Rd. clubhouse on the following dates:

Any last minute changes or additional testing will be announced on the DARA RF Carrier and DARA Yahoo group email reflectors.

Date	Time	Location
October 19, 2019	10:30 AM	DARA Clubhouse 6619 Bellefontaine Rd. Huber Heights
November 20, 2019	7:00 PM	DARA Clubhouse 6619 Bellefontaine Rd. Huber Heights

Anyone wishing to test for or upgrade their license should bring a picture ID, their FRN number, and any supporting documents for upgrades (CSCE's, copies of cancelled licenses, etc.) You can acquire an FRN by visiting the FCC CORES site at

<https://apps.fcc.gov/cores/userLogin.do>

RF Carrier Quiz 7

T6C03 What is component 2 in figure T1?

- A. Resistor
- B. Transistor
- C. Indicator lamp
- D. Connector

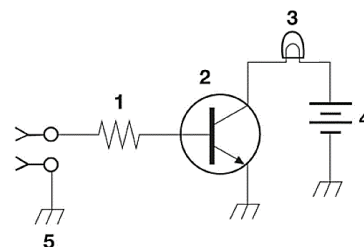
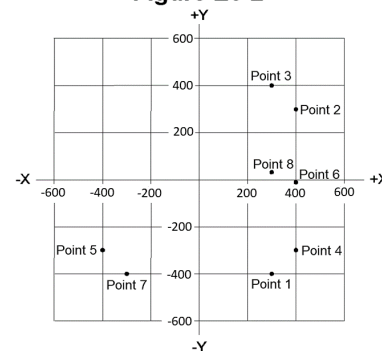


Figure T-1

E5C17 Which point on Figure E5-2 best represents the impedance of a series circuit consisting of a 300 ohm resistor, a 0.64-microhenry inductor and an 85-picofarad capacitor at 24.900 MHz?

- A. Point 1
- B. Point 3
- C. Point 5
- D. Point 8

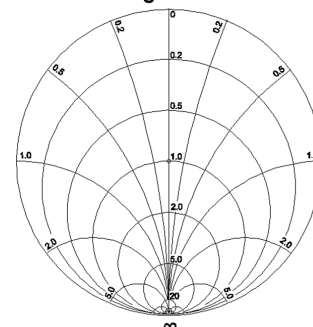
Figure E5-2



E9G07 On the Smith chart shown in Figure E9-3, what is the only straight line shown?

- A. The reactance axis
- B. The current axis
- C. The voltage axis
- D. The resistance axis

Figure E9-3



Answers on Page 12

Public Service Events

Saturday, October 5. Make It Dayton Festival. Carillon Park

On the web: makeitdayton.org

DARA will have a significant presence at this event. Eric Vinande KG6NFJ is the coordinator.

Sunday, October 13. Dayton River Corridor Classic 5k and Half Marathon. Start/Finish at Welcome Stadium.

On the web: rundayton.org

We need a number of volunteers to track the runners, some fixed, some bicycle mobile. Wraps up early afternoon.

Please contact n8ado@arrl.net for more information or to sign up.

Saturday, October 19. Dayton District Cross Country Meet. Cedarville University. We need nine volunteers to cover this beautiful dedicated cross-country course. Starts mid-morning and wraps up in the afternoon. Lunch provided. Please contact n8ado@arrl.net for more information or to sign up.

Amateur Radio at UD Street Faire

It was Amateur Radio's pleasure to participate in yesterday's UD Safety Street Fair and Smoke House Event. We were very pleased in the interest shown in Amateur Radio at our presence and demonstrations. We ran this as a simulated emergency event as if we had been asked to activate and pass messages (amateur radio calls these messages "Traffic") on behalf of students to their parents wherever located. I was really quite amazed at how many students took the time to find out about amateur radio, how we operated in an emergency and what amateur radio operated. Since we acted as a simulated emergency operation my function was to be the on site contact. I passed Traffic to a Net Control operator who would then pass that traffic on to wherever the student's parents resided. We simulated passing traffic (generally the message was that the student was safe and well) on from the Net Control to San Diego, San Francisco, Buffalo, Chicago and Pittsburgh among other cities. When a practice event is conducted a log is kept by the Net Control similar to a log which would be kept in an actual event. I have attached for your addition to the materials collected on this event the log which was kept by our Net Control. This required a lot of effort and I want to thank Jack KM8N who acted as our Net Control for his efforts - he was on the radio for the entire 4 hours that we were up and running and prepared the log.

We look forward to working with UD again next year for the ongoing Safety and Smoke House event for the UD students.

Bill Pell, K8BP

Amateur Radio Pavilion at the Make It Dayton Festival

By Eric Vinande, KG6NFJ

Once again DARA will be sponsoring a four tent Amateur Radio Pavilion at the Make It Dayton Festival <http://www.makeitdayton.org/make-it-dayton-festival/> (formerly the Dayton Mini Maker Faire). The one day festival will be held Saturday, October 5 from 9am-5pm at the Carillon Historical Park.

We plan to have solder-less and soldering kit building (volunteers will need to bring their own soldering irons), low-cost software defined receiver (SDR) sales and demonstrations, the DARA communications van, and as many amateur radio / project demonstrations as we can handle. On the space front, we will have a Cubesat simulator from AMSAT transmitting AFSK 1200 bps telemetry and a computer steered, dual-band yagi satellite station courtesy of Reuben Meeks, W8GUC!

The best part is volunteers get into the festival for free! Volunteer for one or several hours and you'll be able to explore the festival in addition to spreading the excitement of amateur radio to the local community.

Please email me (evinande@gmail.com) or call/text me on 303-241-9057 if you'd like to volunteer, have any questions, or have a project you'd like to display.

I'll also have a table at October membership meeting if you'd like to chat in person.

Satellite Station Planned for Make it Dayton Festival

Reuben Meeks, W8GUC

This month, October 5, 2019, is the 'Make it Dayton Festival', 'Makers Fair', to be held at the Carillon Park, here in Dayton, Ohio. This is also 'The anniversary of the first practical flight'. More information can be found at www.makitdayton.org/make-it-dayton-festival/.

One of the many displayed projects will be a 'Satellite Tracking Station', built by Reuben Meeks, W8GUC.



Reuben has been a Ham radio person since his high school days, in Southern California, back in the late '60's.

His satellite tracking station, is made up of various pieces of equipment's, consisting of both transmit, receiving equipment, with the appropriate antennas, and software that ties it all together.

There are over 180 communication satellites in the sky that amateur operators can work with. Most of the are called LEO, meaning 'Low Earth Orbit'.

Some satellites include the Amateur Radio Space Station, with the ISS (international Space Station), known as ARISS Communications, FM Repeater Satellites, Transponder, Digital, Weather, and Video Comsat Satellites in the skies. Communicating to the satellites can be 'in on VHF', and 'receiving on 70 CM', and/or just the opposite, or just plain using simplex methods on either of the bands.

Reuben will be having all the equipment pieces, parts, both hardware, and software, used together making a viable demonstration of what satellite communication is all about. He will demonstrate how you can use the various modes, i.e. FM, SSB, Video, and Digital/Packet, and various means to carry a conversation to points from California, to the East Coast, and from North America, to South America.

Reuben has a complete 'Automated Tracking Station', that uses the Keplerian Elements, or better known as Keps's from the Internet; i.e. Norad of the past, and with your GPS location(s), they are used to find the satellites locations/positions in the sky for any given moment. Then by a click of your 'mouse', the software drives the motors, that will give the elevation, and azimuth of any satellite, to point your antennas to in the sky.

Reuben is a retired E.E. from Wright-Patterson AFB, and other industries. Reuben is an avid Private-Pilot, and a R.C. person, doing both boats, and planes. By the way he is also an Ordained Minister, that loves to play the piano, and organ.



New Members

These five youngsters are all new members of DARA. Unfortunately, due to the destruction of data on my thumb drive (which contained this edition of the RF Carrier), their names and callsigns are temporarily lost. I do know that the young lady at far right is an active General Class operator. If you see them at the next meeting, shake their hand and make them feel welcome.

In Memoriam

Three very prominent members have recently passed away. Steve Schoemann N8NRE, Chris Geib W8CWG and Barb Hobbs (No Call). Steve was an active volunteer for DARA and Hamvention. Chris was a well known member of the Thursday Night Group. His wife Renee KE8ATL continues to be active in DARA and the TNG. Barb Hobbs was an active volunteer and very dear friend to one of our eldest mentors, Ron Moorfield W8ILC who is the only known living member to have attended EVERY Hamvention. Our hearts and prayers go to all of their families.

Members of the Month Recognized



The Dara Board has awarded Tom Homes N8ZM the Member of the Month plaque for August 2019. Tom heads up the Thursday Night Group at the clubhouse every week. The group has spearheaded several large projects for DARA and Hamvention. Tom is not only active in DARA but is also active in VHF/UHF and microwave operating.

Janese Brooks KD8DGB was awarded the September Member of the Month award. Janese is a past Sargent of Arms for the DARA meetings. She is best known for her cool headed operating practices during public service nets. Her extensive practice paid off during the tornado outbreak on Memorial Day when the area was hit with several tornados over a span of about two hours. She was able to harness quick, efficient reports while calming operators from going into complete chaos.



CHILI

COOK OFF



The annual Chili Cook-off will be held at B-Road during the Dara Harvest Party on October 11 at 7pm. Fix your favorite recipe and bring it for a chance at becoming a prize winning entry. We will have awards for 1st, 2nd, 3rd place, Best flavor, Most Unusual and Hottest. A panel of blue ribbon chili experts will do the judging and their decision will be final! To be eligible for prizes you must have a current paid up membership. Not only can you try some excellent, if daring then HOT, chili recipes. But also this is another great time to have casual interactions with your fellow club members. In the past there have been some very interesting and tasty entries. We ask all entrants to bring their recipe for publication in the Carrier. Warning. If this is a family secret recipe then don't enter it as publication of a full correct recipe is mandatory. No leaving ingredients or instructions out. If you won last year in a category then please do not reenter the same recipe! Instead try another category. Of course modifications of your previous award winning entry is permitted. Hot Dogs, Hamburgers, beverages plus plenty of plain old water is provided by the club. Maybe even some saltines will be there. We look forward to seeing you there





Dayton Amateur Radio Association
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Dayton, Ohio 45401-0044

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Answers: T6C03 = B, E5C17 = D, E9G07 = D.

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Interested in Amateur Radio?

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Call the DARA Information Line at
937-237-8440

DARA Analog Repeaters

146.94- T123.0 223.940- T123.0 442.100+ T123.0

DARA D-Star Repeaters

	<u>YOUR</u>	<u>RPT1</u>	<u>RPT2</u>
147.1050	CQCQCQ	W8RTL^^C	W8RTL^^G
443.0500+	CQCQCQ	W8RTL^^B	W8RTL^^G
145.2700-	CQCQCQ	W8HEQ^^C	W8HEQ^^G
444.0875+	CQCQCQ	W8HEQ^^B	W8HEQ^^G

Oct 4	Membership Meeting, Kettering Rec Center, 2900 Glengarry Dr, 45420	7:30 PM
Oct 8	Hamvention Chair Meeting, DARA Clubhouse, 6619 Bellefontaine Rd	7:00 PM
Oct 9	Planning Council, DARA Clubhouse, 6619 Bellefontaine Rd	7:00 PM
Oct 15	Board Meeting, DARA Clubhouse, 6619 Bellefontaine Rd	7:00 PM
Oct 18	Pizza Night at Marion's Beavercreek	7:00 PM
Oct 31	Halloween	
Nov 1	Membership Meeting, Kettering Rec Center, 2900 Glengarry Dr, 45420	7:30 PM
Nov 12	Hamvention Chair Meeting, DARA Clubhouse, 6619 Bellefontaine Rd	7:00 PM
Nov 13	Planning Council, DARA Clubhouse, 6619 Bellefontaine Rd	7:00 PM
Nov 19	Board Meeting, DARA Clubhouse, 6619 Bellefontaine Rd	7:00 PM
Nov 20	VE Test Session, DARA Clubhouse, 6619 Bellefontaine Rd	7:00 PM