

# SPARKS

P.O. Box 342768 \* Memphis, Tennessee 38134-2768 \* Volume 57 \* October 2020



## Delta Amateur Radio Club (DARC) Sparks Newsletter

Website: <http://deltaclub.org>

Facebook: <https://www.facebook.com/daremem>

### W4BS

#### REPEATER SYSTEM

146.820-107.2	* 147.360+107.2
146.625-107.2	443.200+107.2
224.420-107.2	443.700+107.2
144.390 Digipeater	*Fusion

We do plan to meet this month via “ZOOM.”

Topic: October Delta Club Meeting

Time: Oct 13, 2020 07:00 PM Central Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/81022490852?pwd=VkVaeTVLOFdpZEI5WnRRQXJGMUNoZz09>

Meeting ID: 810 2249 0852

Passcode: 817082

*Program:*



Topic: ARRL 2020 in the 21st Century

David Norris K5UZ is the Delta Division Director.

He was first elected to Vice Director and began his three year term in 2009.

David has served as Delta Division Director since 2012 and will continue until at least 2024.

He lives in the Little Rock area.

**For Ham License testing information,** Contact Jeff Krause, AJ4GY at [AJ4GY@comcast.net](mailto:AJ4GY@comcast.net) or call at 901-301-6776 for information.

## Announcements

Junk in the Trunk flea market has been rescheduled for **Saturday, October 24th** from **8am to noon** at Ellendale Church of Christ, 7365 Hwy 70 (Summer Ave).

Bill Stevens WC9S Memorial Service will be held on **Saturday, October 17th** at **11am** at Lord of Life Lutheran Church, 6865 Poplar Pike with reception to follow.  
73, Joe WA4OVO

## President's Corner

Submitted by Steve Frazier, KK4VPT

We started this month with the sad news on October 1 that Bill Stevens, WC9S, had become a Silent Key. Upon hearing the news, many Delta Club members initial reaction was to give an example of Bill sharing his knowledge and enthusiasm about amateur radio. I only knew Bill for a relatively short time, but during that time benefited from Bill's technical knowledge and his insight about how ham radio can continue to be an important part of the local and global community.

While the examples of Bill's contributions to amateur radio are many, they are not unique. The Delta Club and amateur radio as a whole continues to exist and even grow because of the tradition of experienced members mentoring new members. I am not aware of another group that has a unique name for these mentors like we do by calling mentors "Elmers."

In addition to our Elmers, Delta Club continues to be active due to the dedication of our officers on the Board of Directors. It is no secret that most clubs struggle to find officers, and this year has made this task even more of a struggle. Thanks to the commitment of some current officers to remain on the Board for 2021 and the work of our nomination committee- namely Joe Lowenthal to fill openings, we have at least one candidate for all the positions for the Board election that will be held on November 10. We will announce the current nominees during the October 13 members Zoom meeting. The final deadline for any changes or additions to the ballot will be November 2 so the ballot can be finalized during the Board meeting on November 3.

Keep in touch as often as you can by checking in on the net every night on the 146.82 repeater at 8pm. And don't forget to say thanks to the net control operator that night who is one of many that make the nightly net possible.

73 to all,  
Steve Frazier  
KK4VPT

# Treasurer's Report

## Submitted by David Jackson

Please RENEW your Delta membership right away, so you won't forget about it! Download the new member or renewal form: <https://img1.wsimg.com/blobby/go/58124ffd-d6ca-4502-9af3-7fa04c033729/downloads/application-15-3.pdf?ver=1574454355059>

Membership for one is \$20 or family is \$25. You can fill out the form online and email to David Jackson KM4SEC. [davidjkson@bellsouth.net](mailto:davidjkson@bellsouth.net)

If you prefer you can print the form and bring the completed form, along with the membership fee to any meeting.



**Regions Bank**  
 Whitehaven 3471 Elvis Presley Blvd  
 3471 Elvis Presley Blvd  
 Memphis, TN 38116

DELTA AMATEUR RADIO CLUB  
 158 SUMMIT CV  
 COLLIERVILLE TN 38017-3556

**ACCOUNT # 8000124140**

1  
 053  
 Cycle 25  
 Enclosures 0  
 Page 1 of 2

**LIFEGREEN CHECKING FOR BUSINESS**  
 September 1, 2020 through September 30, 2020

SUMMARY			
<b>Beginning Balance</b>	<b>\$25,300.10</b>	Minimum Daily Balance	\$25,300
Deposits & Credits	\$60.00 +	Average Monthly Statement Balance	\$25,328
Withdrawals	\$0.00 -		
Fees	\$0.00 -		
Automatic Transfers	\$0.00 +		
Checks	\$0.00 -		
<b>Ending Balance</b>	<b>\$25,360.10</b>		

DEPOSITS & CREDITS			
09/14	Deposit - Thank You		45.00
09/25	Deposit - Thank You		15.00
Total Deposits & Credits			\$60.00

DAILY BALANCE SUMMARY			
Date	Balance	Date	Balance
09/14	25,345.10	09/25	25,360.10

**DELTA AMATEUR RADIO CLUB**  
**SMALL BUSINESS CD \*0028**

Available Balance	<a href="#">INTEREST RATE</a>	<a href="#">YTD INTEREST</a>	<a href="#">INTEREST EARNED NOT PAID</a>
\$10,614.59	1.590 %	\$126.06	\$5.54

**Activity**



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## **DARC Board of Directors Meeting Minutes**

**Submitted by Mary Jean Hall KN4FBL**

DARC Board of Directors Meeting Minutes for October 6, 2020

Attendees: Steve Frazier KK4VPT, Bob Van Keuren KM4SEB, Mary Jean Hall KNFFBL, David Jackson KM4SEC, Joe Lowenthal WA4OVO, Bob Vawter KW4RJ, Ian Lucas KN4OEK, Scott Adams KM4PMU, Barry McDonald W5CJ and Len Grice W4MKS.

Absent: N/A

The regular monthly meeting of the Delta Amateur Radio Club Board of Directors was held on Tuesday, October 6, 2020 at 6:30 p.m. on a Zoom video conference call, with the President serving as chair and the Secretary being present. Four guests were present. President Steve Frazier KK4VPT called the meeting to order. Due to the COVID-19 Pandemic, the board met online to abide by state and local guidelines.

The board discussed the upcoming Board of Directors Elections, as well as those who have volunteered to serve for 2021. Steve Frazier said that the nominees will be announced during the October Delta Club meeting.

Steve Frazier said there is a chance the “Junk in the Trunk” swap meet could be rained out due to the recent hurricane weather. Joe Lowenthal pointed out that the original rain date conflicts with the memorial service for Bill Stevens WC9S. So, Joe said he would look at another option for a rain date and get the information out closer to the event. The board also agreed that it would be a best practice to require masks to be worn at the swap meet.

David Jackson read the Treasurer’s Report. He noted fewer transactions due to the cancellation of events and activities.

The board decided to plan for the remainder of the 2020 club meetings to remain on Zoom. While it is a hard decision to make, the board stressed the importance of keeping club members safe.

Board members took turns suggesting ideas for the rest of the 2020 meetings. Ian Lucas said that he will cover DMR in the October program, and the Delta Club Board of Directors Elections will be the November “program.” They discussed options of whether or not to have drawings or to delay them until the in-person meetings begin again. Also, the board members discussed the possibility of having a December virtual meeting, though that would not be finalized until later.

The board reviewed and voted on the memberships per the club's bylaws.

Joe Lowenthal said that Jeff Krause is holding a test session this Saturday, October 10, 2020 at 10 a.m. He announced that he will have a Technician Class on Zoom, likely starting at the end of October or early November. More information will be announced about the class later.

Joe Lowenthal recognized that Delta Club and the local amateur radio community had three silent keys recently: Ray Ware KJ4DUE, Robert Deeken KK4JIC and Bill Stevens WC9S. The board members took time to reflect on the three individuals.

Given that Bill Stevens WC9S served as an officer on the Delta Amateur Radio Club's Board of Directors, the board voted to donate \$100 to ARRL as a memorial.

Barry McDonald moved to adjourn and Joe Lowenthal seconded the motion. With unanimous approval, Steve Frazier adjourned the meeting at 7:24 p.m. The next Board of Directors meeting is scheduled for Tuesday, November 3, 2020 at 6:30 p.m. at Ellendale Church of Christ. Should it not be possible to meet in person, the board meeting will be held online through Zoom.

Respectfully submitted by Mary Jean Hall KN4FBL, Secretary

## **Minutes of Last Month's Club Meeting**

Submitted by Mary Jean Hall KN4FBL

DARC Meeting Minutes for September 8, 2020

### **Call to Order and Opening Remarks**

The regular monthly meeting of the Delta Amateur Radio Club was held on Tuesday, September 8, 2020 at 7:00 p.m. on a Zoom video conference call, with the President serving as chair and the Secretary being present. Club President Steve Frazier KK4VPT called the meeting to order and then welcomed everyone to the meeting. Due to the COVID-19 Pandemic, the club met online to abide by state and local guidelines. At least 42 members and guests were present for the meeting.

### **Minutes and Treasurer's Report**

Ian Lucas KN4OEK moved to "approve the Treasurer's Report as published in Sparks." Richard Martin K4DXF seconded the motion. The motion was unanimously adopted by the club.

Bill Flanigan KK4VPS moved to "approve the previous meeting's minutes as published in Sparks." Ian Lucas KN4OEK seconded the motion. The motion was unanimously adopted by the club.

### **Training**

Joe Lowenthal WA4OVO announced that currently there are not any classes planned, though he is working to get a General class in October or November.

As far as testing opportunities are concerned, he said that Jeff Krause AJ4GY has a test session planned for 10 a.m. Saturday, September 19, 2020 at the Ellendale Church of Christ. Bob White in Tipton County has a test session scheduled at 6 p.m. every Monday night at the Atoka City Hall.

### **Announcements**

Delta Club, along with MARA, will host a swap meet called Junk in the Trunk from 8 a.m. to noon on Saturday, October 10, 2020 at the Ellendale Church of Christ parking lot. It will be rescheduled if there is rain in the forecast. More information will be announced later in Sparks and on the Delta Club nightly net.

Steve Frazier KK4VPT said there will be several open positions to serve on the Delta Amateur Radio Club Board of Directors for 2021. Though all positions are open each year, some of the Board members have expressed interest in serving another year. The main requirements to serve

on the board include being a paid-up member and having attended six meetings within the past year. The Zoom meeting attendance will be included for this requirement. Anyone who may be interested in serving should contact a board member for more information.

Steve Kellett KF4SJU updated the club on recent ARES events and changes, including training requirements for volunteer deployment. He encouraged everyone to continue to log hours into ARES Connect, and said that the ARES members in Shelby and Fayette Counties are some of the more active members on the program.

Steve Frazier KK4VPT said there will be a Ham Breakfast at the Cordova Danvers this Friday, starting about 7 a.m. The breakfast is normally on the second and fourth Friday each month.

### **Discussion / Program**

The September program was a Show and Tell, which was a time when members could “show off” quarantine projects.

### **Announcements**

Marc Gwin AG5QY announced that there is a new System Fusion repeater in West Memphis, Arkansas. The frequency is 442.400 with a PL Tone of 107.2 for non-System Fusion users. Marc encouraged participation on the repeater and asked for feedback. Steve Frazier KK4VPT pointed out that they have a Facebook page for the repeater system, too.

There was discussion among the club members about Sparks articles, testing equipment and programming radios. Members took time to help answer questions that others had about radios and other equipment.

### **Closing Remarks**

The meeting adjourned at 8:02 p.m.

The next Delta Amateur Radio Club meeting will be Tuesday, October 13, 2020 at 7:00 p.m. If the meeting is held in person, it will be at the Ellendale Church of Christ. If it is not possible to meet in person, the meeting will be held online, likely via Zoom. Check the current edition of Sparks or the Delta Amateur Radio Club Facebook page just before the scheduled meeting time for more information on where/how the meeting will be held.

Respectfully submitted by Mary Jean Hall KN4FBL, Secretary



## **Delta Ham License Training, 2020**

Submitted by Joe Lowenthal WA4OVO, DIRECTOR OF TRAINING

There is no charge for classes, but the student is responsible for the purchase of the license manual and the \$15 ARRL FCC examination fee.

If you want to take a class, send an email to Joe at [wa4ovo@gmail.com](mailto:wa4ovo@gmail.com) with the class name; ie, Tech Class, General Class, or Extra Class, on the Subject line and name, callsign if you have one, email address, and cellphone number in the text.

### *Licenses Earned in 2020 from Delta Classes*

**20 Technician**

**5 General**

**4 Extra**

#### **Note:**

The current Technician ARRL Ham Radio License Manual Fourth Edition with question pool that became effective July 1, 2018 for four years. This is the new question pool.

The current ARRL General Class License Manual is the Ninth Edition with question pool that became effective July 1, 2019 for four years.

The current ARRL Extra Class License Manual is the Twelfth Edition with question pool that became effective July 1, 2020 for four years.

As of September 3, 2015 there is no longer any charge for Vanity callsigns.

As of late 2019, expired Amateur Radio license holders can get their license back by taking the current Technician exam and show proof of their previous license class. A previous Advanced Class licensee will only be able to get a General Class license.

### **PROPOSED CLASSES**

All classes will be 3-1/4 to 4 hours long for six sessions; one per week on a weeknight 6:15pm-9:30pm or Saturday day 9am-1pm.

The next Amateur Extra class will probably start in early January.

The next Technician class will probably start in late February.

## SCHEDULED CLASSES

### **General Class 4-20 – October 26 – December 7, 2020**

General Class 4-20 is being planned via Zoom if there are six students registered by October 23<sup>rd</sup>. It will be held on six nights on Monday and Thursday nights from October 26<sup>th</sup> to December 7<sup>th</sup> from 6:15-9:30pm. The nights are Monday October 26, Monday November 2<sup>nd</sup>, Thursday November 12<sup>th</sup>, Monday 23<sup>rd</sup>, Monday 30<sup>th</sup> and FCC testing Monday December 7<sup>th</sup>. To register, send an email with name, callsign, cellphone number and email address to Joe at [wa4ovo@gmail.com](mailto:wa4ovo@gmail.com).

## CURRENT CLASSES

None

## COMPLETED CLASSES

### **Tech Class 3-20 – June 25 – August 13, 2020**

Tech Class 3-20 is being held starting June 25<sup>th</sup> on six Thursday nights from 6:15-9:30pm on a combination of Zoom online and planned in person classes. There are twelve students in the class. One of the students is eight years old. Both of his parents are in the class. The classes are being held on June 25, July 2, 9, 23, 30 and August 13. The Zoom classes continued thru the July 23<sup>rd</sup> class. The Laurel FCC test session was held in the gym at Germantown United Methodist Church, 2323 West Street, using social distancing.



Tech Class 3-20 Test Session

Photo by Rick Tillman WA4NVM

Congratulations to Carla Andrews KO4FVX, Ryan Bednar KO4FVY, Ransom Bowen KO4FVZ, David Harkleroad KO4FWB, Phillip Green II KO4FWC, Brian Richards KO4FWD, Cynthia Spain KO4FWE, and Philip Thomas KO4FWF for obtaining their Technician licenses. Additional congratulations to Ryan KO4FVY and Cynthia KO4FWE for also upgrading to

General. Thanks to Joe WA4OVO, Perry N4GJ, Barry W5CJ, Jelly N4HLT and Rick WA4NVM for providing the Laurel VEC test session.



Laurel VEs Jelly N4HLT, Joe WA4OVO, Perry N4GJ, Barry W5CJ with photographer Rick WA4NVM. The instructors were Joe Lowenthal WA4OVO, Paul Roberts KA9VAU, Len Grice W4MKS, Perry Hayes N4GJ, John Reiners KN4BVH, and Pat Lane W4OQG.

On August 13<sup>th</sup> the class met via Zoom for some of the equipment demonstrations. Rick Tillman WA4NVM gave a very informative instruction on satellite operations. Rick Pellicciotti KJ4NWQ informed the class on APRS. Joe WA4OVO presented more detailed information on Repeater Basics. The HF Wire Antennas by Pat W4OQG and programming handhelds has been deferred until we can meet. John KN4BVH provided FM digital instructions on DMR, Fusion, and D-STAR during an earlier class. Barry W5CJ provided earlier demonstrations on Echolink and information on Allstar.

## **General Class on Zoom – March 24 – April 10, 2020**

Working with K1ZG in Massachusetts, I helped provide instruction with an online General license class on the Zoom platform. This General class was offered to the Tech Class 2-20 students. One student did participate from 1-2:30pm on week days. Students were from Massachusetts, upstate New York, Indiana, Texas and Tennessee. Barry W5CJ and Ed KV4LF were also instructors.

When FCC testing resumes, we will see how well the students retained their learning. Congratulations to Kyle KD2TCA for upgrading on April 3<sup>rd</sup> at a drive-thru test session. Congratulations to Debra Johnson from the Tech 2-20 for earning her General as noted below.

## **Tech Class 2-20 – February 22 – April 4, 2020**

Tech Class 2-20 was held from February 22<sup>nd</sup> to March 21<sup>st</sup> on four Saturdays except March 14<sup>th</sup> from 9am to 1pm. The first three sessions were at the Memphis Police Department Appling Farms Station precinct, 6850 Appling Farms Pkwy. Due to the coronavirus the last instructional class was held online on GoToMeeting. While the order for 10 or less people in a meeting was active, we had arranged to have the Laurel VE team provide testing at a student's shop with only five students testing at a time. However, the Safer at Home order cancelled those plans. Congratulations to Jennifer Boardman KX4YG for Tech, General and Extra; Deborah Johnson KO4DEP for Tech and General; and Thomas Clark KO4DEQ, Elliot Pope KO4DER and Marc Tester KO4DES for Tech. Thanks to the Tipton County ARS VE team led by Bob AI4GI with Ronny WA4RW and Bill KI4BIY for offering the test session. On July 30<sup>th</sup> with Tech Class 3-20 testing Michael Ehrhardt KO4FWA earned this Technician license.

Congratulations to Chris Smallwood for earning his Technician license on May 18<sup>th</sup> at the Tipton ARC test session. FCC testing for the others will be in the future after the Safer at Home declaration is lifted.



Tech Class 2-20 on first day of class. Photo by Joe Lowenthal WA4OVO

The instructors were Paul Roberts KA9VAU, Pat Lane W4OQG, John Reiners KN4BVH, Perry Hayes N4GY, Len Grice W4MKS, and Joe Lowenthal WA4OVO. There were no demonstrations for this class. Joe WA4OVO did cover the Repeater Basics at the end of the fourth class.

### **Extra Class 1-20 – January 4 – February 15, 2020**

Extra Class 1-20 began on January 4<sup>th</sup> with six students for six Saturdays from 9am to 1pm at Memphis Police Department Neighborhood Watch training room at Appling Farms Station, 6850 Appling Farms Blvd. Congratulations to Bobby Stroud KK5PAC for upgrading early to Extra at the Jackson MS Capital City Hamfest on January 25<sup>th</sup>. Congrats to Brett Johnston KN4SMV for upgrading at the February 11<sup>th</sup> Delta Club test session. Congrats to Jim Harris KF5TPT for upgrading at the Olive Branch ARRL exam session on February 19<sup>th</sup>.





Dean Honadle N2LAZ demonstration left hand rule for Extra Class 1-20  
Photo by Joe Lowenthal WA4OVO

The instructors were Joe WA4OVO, Paul KA9VAU, Dean N2LAZ, Barry W5CJ, Dave AD4Q, David W4DWW and Pat W4OQG. The FCC testing was available on February 15<sup>th</sup> by the Delta Club ARRL VE team led by Jeff Krause AJ4GY.

### **Tech Review for CBU – February 5, 2020**

A Tech Review class was held on February 5th for five Christian Brothers University students in the Engineering Department upper division elective course, Introduction to Unmanned Aerial Systems. Dr. Eric Welch WD5FTA requires the students to earn their FCC Technician license for this course.



All five passed with great scores. Congratulations to Judit Aubets Macia KO4BPP, Josue Bohorquez KO4BP Hammontree KO4BPT, Oscar Mendoza KI5ICD, and Samuel Ruleman KO4BPS.

The Laurel VEC team provided the FCC exam session. The VEs were Bill Stevens WC9S, Barry McDonald W5CJ, Len Grice W4MKS, Jelly Thompson N4HLT, Eric Welch WD5FTA, and Joe Lowenthal WA4OVO.



CBU Introduction to Unmanned Aerial Systems Tech Class with professor Dr. Welch WD4FTA on left and instructor Joe Lowenthal WA4OVO on right.  
Photo by Eric Welch WD4FTA

### **General Class 4-19 – November 7 – December 19, 2019**

General Class 4-19 was held on six Thursday nights from November 7<sup>th</sup> thru December 19<sup>th</sup> from 6:15-9:30pm. The 11 students began with eight completing the class. The location was at the Germantown Police Department training room, 1930 South Germantown Road.

Congratulations to Rodney KN4WGV, Robert KN4KFL, Mike KM4MRW, Bobby KK5PAC and Robert KN4RBW who upgrade to General at the class test session. Congratulations of Russell Rutledge KO4ASW who earned his Technician and General licenses. Congratulations to Shawn KN4WKF for upgrading at Delta Club test session on March 10, 2020.



The instructors were Joe WA4OVO, Barry W5CJ, Paul KA9VAU, Len W4MKS, John KN4BVH and Pat W4OQG. The Delta Club ARRL VE Team tested on December 19<sup>th</sup>. Thanks to the VE team of Jeff AJ4GY, Stacy KJ4MDA, Barry W5CJ, Tom KK4ZZZ, Warren KC7ND and Joe WA4OVO for providing the testing opportunity.

### **General for CBU - November 20, 2019**

A General test session was held on November 20<sup>th</sup> for six Christian Brothers University students in the Engineering Department upper division elective course, Unmanned Aerial Systems Design. Congratulations to Matthew Donnelly KN4ZNI, Nicholas Ireland KN4ZNK and Zhaoliang Ni KN4ZNN for upgrading to General.

### **Tech Review for CBU - October 30, 2019**

A Tech Review class was held on October 30<sup>th</sup> for eight Christian Brothers University students in the Engineering Department upper division elective course, Unmanned Aerial Systems Design. Dr. Eric Welch WD5FTA requires the students to earn their FCC Technician and General Class licenses for this course. There are 11 students in the class with three who had earned their Tech license last February in the Intro class.

All eight students earned their Technician license and five upgraded to General. Congratulations to Mat Donnelly KN4ZNI, John Clark KN4ZNI, Nicholas Ireland KN4ZNK, Jonathan Looney KI5GZS, Pablo Marin KN4ZNM and Zhaoliang Ni KN4ZNN who earned their Technician licenses. Congratulations to Riggs Markham KN4ZNL and Zach Yancy KN4ZNO who earned Tech and also upgraded to General. Congratulations to Josue Becerra KN4SQK, Ian Dover KN4SQQ and Bryce Whitfield KI5DLE who upgraded to General.

Dr. Welch WD5FTA is the Department Chair of Electrical and Computer Engineering. The Laurel VE Team of Dr. Welch WD5FTA, Joe Lowenthal WA4OVO, Bill Stevens WC9S, Barry McDonald W5CJ and Perry Hayes N4GJ administered the FCC test session.

### **Tech Class 3-19 – July 8 - August 12, 2019**

Tech Class 3-19 was held on six Monday nights from July 8<sup>th</sup> thru August 12<sup>th</sup> from 6:15-9:30pm. The location was at the Germantown Police Department training room, 1930 South Germantown Road. Eleven students originally registered for the class, two more became students, and two resigned. So, eleven students completed the class. There was one ham who audited the class.

Congratulations to Rodney Adams KN4WGV, Daniel Brieck KN4WGW, Robert Broom KN4WGX, David Cary KN4WGY, Jim Dollar KN4WGZ, Joshua Foster KN4WHA, Vicky Gamber KN4WHB, Lauren Martin KN4WHC, Matthew Massey KI5FYA, Jonathan Pesce KN4WHD, and Shawn Thomas KN4WKF who earned their Technician licenses. Congratulations also to Robert Broom and David Cary who also earned their General licenses, as well as, Mary Jean Hall KN4FBL who upgraded to General. Six more of the students tried for General but did not pass.

The instructors were Joe WA4OVO, Paul KA9VAU, Pat W4OQG, John KN4BVH, Perry N4GJ, and Len W4MKS. Barry W5CJ presented Echolink and Allstar information. John KN4BVH demoed DMR with information on D-Star and Fusion. On Monday, August 12<sup>th</sup> there was equipment demonstrations. Joe WA4OVO and John KN4BVH provided repeater basics and a CHIRP demo. The students checked into the Delta Net. Rick WA4NVM and Richard K4DXF made a live SO-50 satellite contact while Rick KJ4NWQ informed on APRS. Pat W4OQG showed off the non-FM side of ham radio with his Kenwood TS-2000 HF SSB setup with a long wire and talked about MARS.

The Laurel VE team of Joe WA4OVO, Bill WC9S, Jelly N4HLT, David W4DWW, Karen AG4CC, Barry W5CJ, Len W4MKS and Perry N4GJ administered the 20 exams.

### **Tech Class 2-19 – February 21-March 28, 2019**

Tech Class 2-19 was held on six Thursday nights from February 21 thru March 28th. The location was the Germantown Police Department training room, 1930 South Germantown Road. Sixteen students signed up for the class with thirteen attending the first class and a self-study Tech auditing the class. Eight students earned their ham radio licenses.

Congratulations to Chuck Chow KN4TMR, Al Dyer KN4TMQ, Brian Hagood KN4TME, Andrew Humphreys KN4TMG, Thomas Humphreys KN4TMF, Bryan Parker KN4TMH, Mark Parrish KN4TMO, and Bob Stroud KI5DWP who earned their Technician licenses. Chuck also earned his General Class license. Since the class Chuck has upgraded to Extra as KX4RE. Congratulations to Tom Thibeault KN4SLP who audited the class and upgraded to General. Two others will test at a later date.

Thanks to the Laurel VEC team of Bill WC9S, Barry W5CJ, David KV4QI, Len W4MKS and Joe WA4OVO for providing the FCC test session.

Demonstrations were given on March 28th. John KN4BVH previewed DMR, Fusion, and Echolink. Joe WA4OVO instructed on programming FM radios and APRS while Pat W4OQG showed off HF and long wire antenna. Rick WA4NVM and Richard K4DXF made a satellite contact.

### **Tech Review for CBU February 20, 2019**

A Tech Review class was held on February 20th for 11 Christian Brothers University students in the second Engineering Department upper division elective course, Introduction to Unmanned Aerial Systems. All 11 students earned their Technician license. The students were either Electrical, Mechanical or Computer Engineering majors. Dr. Eric Welch WD5FTA is the professor. He is Department Chair of Electrical and Computer Engineering. The Laurel VE Team of Dr. Welch WD5FTA, Joe Lowenthal WA4OVO, Bill Stevens WC9S, Barry McDonald W5CJ and Len Grice W4MKS administered the FCC test session

## **Extra Class 1-19 January 5 – February 16, 2019**

Extra Class 1-19 began on January 5<sup>th</sup> through February 16<sup>th</sup> excluding January 26<sup>th</sup> (Jackson MS Hamfest) on six Saturdays from 9am-1pm at the Memphis Police Department Northeast Precinct, Appling Farms Station, at 6850 Appling Farms Parkway. Nine students began with seven completing the class.

Congratulations to Steve Evans KM4VYA, Carolyn Horne KX4QF, Jerry Kirkscey KX4QE, Robert Murry KN4OEF, and Bob Waters KN4PDW for earning their Extra Class license at the class ARRL FCC test session. Congratulations to Jim Martin KD4FUU who upgraded at the Delta Club test session on April 9<sup>th</sup>. The Delta Club VE Team of Jeff Krause AJ4GY, Joe Lowenthal WA4OVO, Barry McDonald W5CJ, Bill Stevens WC9S, and David Webb KV4QI provided the FCC test session on February 16<sup>th</sup>.

### **HOW TO PRINT YOUR FCC LICENSE**

1. Go to **<https://wireless2.fcc.gov/UlsEntry/licManager/login.jsp>**
2. Enter your FCC Federal Registration Number (FRN) and Password
  - a. If you do not know your FRN, go to Search box and click on License  
Click on Amateur; Enter your callsign in Callsign box;  
Your FRN is in center of page after your name  
(If you do not know your Password, click on Contact Tech Support after Forgot your Password)
3. In When My Licenses screen comes up, click on **Now** in the green line reading “Change your paper authorization preferences [here](#), or download your official electronic authorizations now”
4. In Under Download Authorizations screen, highlight your callsign in the My Authorization area at the bottom left.
5. Click on ADD to right of the highlighted callsign.
6. Highlight your callsign in Authorization to Download and then click on Download on bottom right of screen.
7. If pop-ups are blocked, click on Allow One
8. Click Open at bottom.
9. Print your License.

## ARRL Benefits

ARRL amateur radio community. When you renew, a few of the benefits you will enjoy are:

- Your choice of a print magazine. Eligible US-based ARRL members can elect to receive QST, the official membership journal of ARRL or On the Air, aimed at helping new and emerging radio communicators get active and on the air.
- Digital access to all four ARRL publications -- QST, On the Air, and now QEX, covering topics related to radio communications experimentation, and National Contest Journal (NCJ), covering radio contesting.
- Access to ARRL's Technical Information Service to assist with technical problems and help with your projects.
- Free FCC license renewal and modification service.

To secure these amazing members-only benefits and many more in the coming year, visit [www.arrl.org/join/WE1](http://www.arrl.org/join/WE1) to renew or call us toll-free at: 1-888-277-5289 (US Only) , Monday-Friday, 8 a.m. to 5 p.m. ET. International members call (860) 594-0338.

### **Amateur Radio Emergency Service (ARES) Emergency Coordinator (EC) - John Reiners KN4BVH**

If you are interested in joining Shelby County ARES, complete an application at <https://www.tnares.com>. Click (do not pull down) on INFORMATION on the top right of the page. Next, go to TN ARES Membership and Appointment Application Forms and then click on ARES Membership Application: FSD-98. Complete the form and click SUBMIT at the bottom of the page. You should get an acknowledgment soon after submitting.

**YL News**  
submitted by Linda

**YL NET – Please join us each Saturday night at 8:45 p.m. on the 146.820 repeater for the YL Net. We enjoy hearing from you.**

**Amateur Hardware Update**  
Submitted by James Butler, KB4LJV

Many times we want to be able to check antennas with our test equipment. One new unit that has come to the market is the RigExpert Stick 230. This piece of test equipment is used to analyze cable and antenna systems. The unit has a small LCD screen to display information. It also has a coax connector at the end to make connections. The RigExpert features a rechargeable battery to make it a portable unit for field use. It also has a Bluetooth connection capability to send data wirelessly to a computer or phone. The unit covers .1 to 230 MHz frequencies. This test equipment generates its on test signal to feed antenna and cable systems to check parameters. If you are needing an analyzer for antenna systems and cables, check out the unit from RigExpert. The web address is <https://rigexpert.com/products/antenna-analyzers/stick-230/>



James Butler  
KB4LJV

## Amateur Packet Update

Submitted by James Butler, KB4LJV



One item we need on our antenna systems is a lightning arrester. It allows voltage surges on the antenna line to be shunted to ground protecting our radio equipment. One company that makes lightning arrestors is Morgan Manufacturing. They have a variety of units to fit your needs. They have units that are set up with SO239 connectors and N-style connectors. They even have a unit for balanced line feed lines to your antenna. The reasonable prices as well as very strong construction makes these a good pick for radio protection. If you are looking for a great lightning arrester check out these from Morgan Manufacturing. Their web address is [https://www.kf7p.com/KF7P/Morgan\\_Mfg\\_arrestors.html](https://www.kf7p.com/KF7P/Morgan_Mfg_arrestors.html)

James Butler  
KB4LJV

## Logbook Of The World (LOTW) User Guide

If you are a new user or planning to use "Logbook of The World" (LoTW), Gary, ZL2IFB, has put together an easy step-by-step guide or should we say manual (about 33 pages with pictures) to help you use LoTW.

The PDF file is available for download at:  
[https://www.g4ifb.com/LoTW\\_New\\_User\\_Guide.pdf](https://www.g4ifb.com/LoTW_New_User_Guide.pdf)

73,  
W4WTN

## Storm Spotter Training

The National Weather Service Memphis Office will be conducting a series of 14 Storm Spotter Training classes from late September to early November via GoTo Webinar. These sessions will be two hours long and usually in the evenings. The schedule will be posted in early September. To see the schedule go to [https://www.weather.gov/meg/skywarn\\_meetings](https://www.weather.gov/meg/skywarn_meetings)

## New Repeater in West Memphis & Buy/sell Facebook Group

There is a new System Fusion repeater in West Memphis.

The frequency is 442.400 with a PL Tone of 107.2 for non System Fusion users.

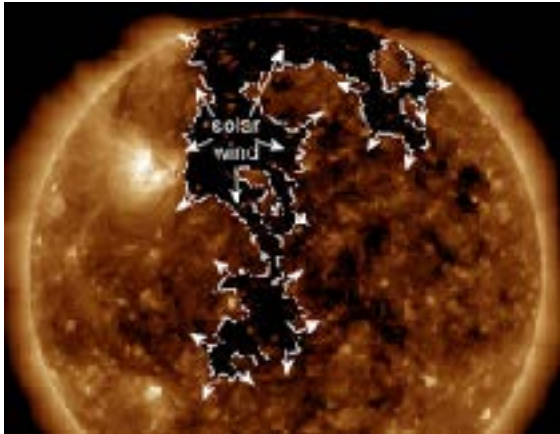
Also, Marc says there is a Buy and Sell Facebook Group for the Memphis Metro Area. The link is:

[www.facebook.com/groups/memphismetroareahamradioswapshop](http://www.facebook.com/groups/memphismetroareahamradioswapshop)

73,  
Marc Gwin AG5QY

## Geomagnetic Storm Warning!

**GEOMAGNETIC STORM WARNING:** A solar wind stream is heading for Earth, and it could spark the strongest geomagnetic storm in more than a year. NOAA forecasters say storm levels could reach category G2 (moderately strong) when the gaseous material arrives on Sept. 29th. Bright "equinox auroras" are already dancing around the Arctic Circle. If the G2-storm unfolds as predicted, Northern Lights could descend into upper-tier US states as well. Get the full story at [Spaceweather.com](http://Spaceweather.com).



**Aurora alerts:** Sign up for Space Weather Alerts and receive a text message when auroras appear in your area.

Above: A hole in the sun's atmosphere is facing Earth, spewing solar wind in our direction. False-color image from NASA/SDO.

<http://www.spaceweather.com/>

73,  
W4WTN

## Former Dayton Hamvention Venue Hara Arena is Being Demolished

Hara Arena, the former venue for Dayton Hamvention® and myriad sports, entertainment, and other presentations over the years, will soon be history. In the wake of a failed attempt to revitalize the tornado-damaged complex, officials in the city of Trotwood, Ohio — where Hara Arena is actually located — announced plans last week to raze the complex and rezone the property from commercial recreation to light industrial.

“The complex suffered extensive damage during the 2019 Memorial Day tornado outbreak,” the city said in a news release on September 25, taking note of hopes to salvage the complex. “However, redeveloping the property would be a challenge due to the extent of the damage, so the decision was made, and a contract has been secured to demolish the legendary venue.”



The city said the zoning change will allow manufacturing, distribution centers, and call centers to establish their businesses in the area.

“We are excited for what the future holds for this property,” Trotwood Mayor Mary McDonald said.

The Dayton Daily News reported that the owners of the property have said the iconic marquee spelling out “Hara Arena” atop the main arena will be preserved and auctioned off at a later date, with the proceeds donated to charity.

The Hara complex and the surrounding real estate occupy some 128 acres all together.

Owner Corey Heitz told the Dayton Daily News that it will take up to 6 months to tear down the buildings completely, and he hopes to have “something” there in the next 12 months.

Hara Arena had served as the venue for Dayton Hamvention from 1964 until 2016. Hamvention announced in July 2016 that Hara Arena would be closing and that Hamvention would continue. The show is now held at the Greene County Fairgrounds and Expo Center.

Over its six-decade history, Hara Arena hosted concerts by performers that included the Rolling Stones and the Grateful Dead; it was also where hockey legend Wayne Gretzky played his first professional hockey game.

<http://www.arrl.org/news/former-dayton-hamvention-venue-hara-arena-is-being-demolished>

73,  
W4WTN

## Ham radio save lives during wildfires and hurricanes

In Wired, Jaime Stathis writes there's no better time to be an Amateur Radio Geek

"The most important component of staying safe during an emergency is the ability to give and receive information. When the power goes out—which it often does, not only during wildfires but also during hurricanes, blizzards, earthquakes, and tornados—the internet doesn't work and cellular networks crash with increased demand. In Northern California, we often have our electricity cut to prevent fire during high-risk times, leaving millions of customers in both metaphorical and actual dark."

"Although I spent most of my life thinking amateur radio was for geeks and grandparents, I now sit with Martin for twice-weekly check-ins with the local amateur radio club. It's a way for ham radio operators to not only touch base with each other, but also to test their equipment. Amateur radio operators not only help themselves, but in emergencies they deploy to assist organizations like the Federal Emergency Management Agency (FEMA), Red Cross, and local public safety offices communicate and coordinate with the public, and with each other."

Read the full Wired article at

<https://www.wired.com/story/amateur-radio-disaster-preparedness/>

What is Amateur Radio?

<http://www.essexham.co.uk/what-is-amateur-radio>

Free UK amateur radio Online Training course

<https://essexham.co.uk/train/foundation-online/>

73,  
W4WTN

## Hams Help Find Kids by Monitoring FRS Radios

Late on the afternoon of September 16, the police department in Post Falls, Idaho, received a 911 call that two juveniles — ages 9 and 11 — were missing from a Post Falls residence for about an hour. According to the report, the pair had left home intending to play in the neighborhood with some Family Radio Service (FRS) radios. Several patrol cars were dispatched to the area to conduct a visual search, and detective Neil Uhrig, K7NJU, responded as officer in charge due to his training and experience with missing persons investigations. The initial search focused on a 2-mile radius from the missing kids' residence.

One officer received information from witnesses that the pair was probably using FRS Channel 1 (462.5625 MHz). An officer returned to police headquarters to retrieve some FRS radios for distribution to the patrol officers, in the event they might be able to hear the youngsters talking.

Uhrig, meanwhile, pulled out his VHF/UHF handheld with the thought of setting up FRS Channel 1 as an auxiliary frequency, but without the manual at hand, he wasn't able to execute the channel setup. But Uhrig did hear the Northwest Traffic Net (NWTN) that had begun at 6:30 PM on the local 2-meter repeater.

Checking into the net at about 6:45 PM, Uhrig explained the missing persons situation to net control station Shannon Riley, KJ7MUA, and asked if net participants in the Post Falls area with FRS capability could listen for the youngsters talking.

A number of stations promptly checked in to say they had FRS radios and were monitoring FRS Channel 1. It was assumed that only stations located near the missing youngsters would hear them, given the limited range of FRS radios.

Not long after 7 PM, Jim Hager, KJ7OTD, reported hearing children talking on FRS Channel 1. Uhrig went to Hager's home to confirm his observation, and the patrol units were redirected to the new search vicinity. A short time later, the missing pair was found safe and returned home.

Uhrig said the most remarkable thing about the incident was that the missing youngsters were some distance from the original search area, and in the opposite direction from where it was expected they might have been headed.

Net Manager Gabbee Perry, KE7ADN, said, "I'm so proud of what a superior job NWTN NCS Shannon and all the operators did last Wednesday. It was a very unusual situation, but everyone had excellent focus and used their resourcefulness to help quickly find the missing kids." — Thanks to ARRL Assistant Idaho Section Manager Ed Stuckey, AI7H

<http://www.arrl.org/news/hams-help-find-kids-by-monitoring-frs-radios> 73, W4WTN

## MARS Communications Exercise will Involve Amateur Radio Community

Military Auxiliary Radio System (MARS) volunteers will take part in the Department of Defense (DOD) Communications Exercise 20-4, starting on October 3 and concluding on October 26.

The MARS focus is interoperability with ARRL and the amateur radio community. “Throughout the month of October, MARS members will interoperate with various amateur radio organizations that will be conducting their annual simulated emergency tests with state, county, and local emergency management personnel,” said MARS Chief Paul English, WD8DBY.

“MARS members will send a DOD-approved message to the amateur radio organizations recognizing this cooperative interoperability effort.” MARS members will also train with the ARRL National Traffic System (NTS) and Radio Relay International (RRI) to send ICS 213 general messages to numerous amateur radio leaders across the US. “This exercise will culminate with MARS Auxiliarists sending a number of summary messages in support of a larger DOD communications exercise taking place October 20 – 26,” English added.

Throughout October, MARS stations will operate on 60 meters, and WWV/WWVH will broadcast messages to the amateur radio community. English assures no disruption to communications throughout the month-long series of training events.

ARRL

<http://www.arrl.org/news/mars-communications-exercise-will-involve-amateur-radio-community>

73,  
W4WTN

## An Old TV!

The mystery of why an entire village lost its broadband every morning at 7am was solved when engineers discovered an old television was to blame. An unnamed householder in Aberhosan, Powys, was unaware the old set would emit a signal which would interfere with the entire village's broadband. After 18 months engineers began an investigation after a cable replacement program failed to fix the issue. The embarrassed householder promised not to use the television again. The village now has a stable broadband signal.

The engineers used a spectrum analyzer to help pinpoint the "electrical noise" that was causing the problem.

"At 7am, like clockwork, it happened," said engineer Michael Jones. "It turned out that at 7am every morning the occupant would switch on their old TV which would, in turn, knock out broadband for the entire village."

<https://entertainment.slashdot.org/story/20/09/22/2147243/old-tv-caused-village-broadband-outages-for-18-months>

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All the Best & 7 3's  
Dale Miller, KC2CBD

## RF Pollution from Solar Panel installations

In the latest edition of QNews Geoff Emery VK4ZPP describes the severe radio interference he gets from his neighbors' polluting Solar Panel installations

He writes:

Hello, I'm Geoff Emery, VK4ZPP, and I've been thinking.

In preparing for the summer season, I have managed to erect my previously used HF antenna on some fiberglass poles. The height is barely above the surrounding building gables and it also crosses over a metal awning and a metal clothes hoist, both of which lower the effective height above ground. This is of course, the constant challenge of radio amateurs living in suburbia and on smaller blocks designed to increase the housing density.

Where we live has been settled for a few years and seems to have a largely older age group of residents. Now the reason I mention the relative age of the locality is that in this part of Queensland there is quite a high uptake of roof top solar photovoltaics.

This brings me to the point of the story and that is I have been trying to familiarize myself with a genuine 50 year plus, all valve transceiver. Like all these beasts, you turn them on and walk away until the valves are properly warmed and the electro-mechanical components have reached a stable temperature, then you tune it, as they used to say, for maximum smoke. Of course, we really don't want the magic smoke to leave parts of our gear because they then no longer work properly or at all.

Now the issue is that on my re-erected antenna, I am receiving some signals but I am being plastered by electromagnetic smog. At the moment I haven't been able to identify discrete sources in the neighborhood. Visually, I know there are plenty of PV installations, but the other items which might be involved are yet to be discovered. Needless to say, when the S-meter rises to a 40dB over 9 level on switch on, reading the mail on HF is really off the menu, to mix metaphors.

I have been fortunate in other locations not to have been inundated with EMC issues and it brings home the sad and sorry lack of regulation that has afflicted users of the radio spectrum have incurred by deregulation. Let me explain. Back when the CB explosion was getting aluminum in the air, the then predecessor of the ACMA endeavored to prevent the sale of 40 channel 11 meter radios. The Department of Trade fought back and some of the importers and vendors managed to get the issue into court. It was held that it would be a restraint of trade if the imports were banned and that selling them was alright too. The illegality only happened when the devices were connected for use. The dollar won that round at the expense of effective regulatory process.

Since then we have had consumer goods marketed without suppression components, after approval was granted. Plasma TV's of course were legal as were early switch mode computer power supplies. Now we have led lighting, solar PV and linear wall power adaptors are banned, replaced with dirty switching supplies all too often.

It is indicative that the inmates have taken over the asylum, when the US Coastguard recommends vessels turn off the led lighting to make satisfactory use of the two way radio system.

The aviation industry is concerned at the level RF crud that emanates from ground sources and our regulators have the least numbers of field staff following up compliance that have been employed, probably in the last 75 years.

If you think this is wrong well so do I.

I'm Geoff Emery, VK4ZPP.

Source QNews-VK

<https://groups.io/g/QNEWS-VK>

<http://wiaq.org.au/>

Solar Panels cause interference - despite preventative measures

<http://www.southgatearc.org/news/2020/september/solar-panels-cause-interference.htm>

Swedish Electrical Safety Agency threatens ban on sale of Solar Panel optimizers

<http://www.southgatearc.org/news/2020/september/swedish-electrical-safety-agency-threatens-ban-on-sale-of-optimizers.htm>

73,

W4WTN

## Air Force Research Laboratory Tracks Sporadic E

Researchers at the Air Force Research Laboratory (AFRL) in New Mexico have discovered a new way to track and characterize sporadic E, which occurs when large structures of dense plasma form naturally in the upper atmosphere. These plasma structures, which occur at mid-latitude locations around the world, can affect radio wave propagation in both positive and negative ways. VHF enthusiasts frequently take advantage of sporadic-E propagation (or E-skip) to work stations outside of their local area.

“Previous methods to observe these structures were insufficient for identifying and tracking these structures over large regions,” said Ken Obenberger, a research physicist at AFRL. “It would be advantageous to actively identify where these structures are, where they are going, and how dense they are. And we thought we could find a better way.”

The new method, developed by Obenberger and collaborators at AFRL and the University of New Mexico, leverages unintentional RF emissions from power lines, and using broadband radio noise, they can map and track dense sporadic-E structures.

“Since power lines are widespread, we can observe sporadic E over a very large region surrounding our observatory, the Long Wavelength Array (LWA), an asset of our collaborators at the University of New Mexico,” Obenberger said. “This technique could be used anywhere in the world where there is an electrical grid and an instrument similar to the LWA, and we are lucky because there are not many.”

This kind of technology could be of interest to those who rely on HF and VHF frequencies, such as radio amateurs, mariners, broadcasters, and the military.

Radio amateurs have long taken advantage of sporadic E for long-range communication in the VHF bands, such as 6 and 2 meters. Climatology of sporadic E can provide a probability that it will occur, but the actual presence of sporadic E can only be determined through trial-and-error observations.

“This is similar to how meteorologists can predict how likely thunderstorms will occur in the afternoons above New Mexico during monsoon season, but use Doppler radar to identify and track specific thunderstorms as they occur,” notes Chris Fallen, KL3WX, one of Obenberger’s collaborators at AFRL. “Ken’s technique basically provides weather radar for sporadic E, only using radio noise from power lines as the radar transmitter.”

Having accurate “now-casting” of sporadic E could prove critical during disaster situations where hams may play a key role in supporting communication of vital information.



“Better understanding will lead to improved design and use of radio systems that mitigate the negative effects and take advantage of the good effects, thereby ensuring a stronger emergency communication network,” Obenberger said. “We are interested in sporadic E and the effect it has on radio wave propagation, both good and bad.” — Thanks to Joanne Perkins, Air Force Research Laboratory

<http://www.arrl.org/news/air-force-research-laboratory-tracks-sporadic-e>

73,  
W4WTN

### **New day, new mode ... SSTV**

In 1958 The Kentucky Engineer published an award winning student article by Copthorne "Coppie" MacDonald. He described a Slow-Scan T.V. System for Image Transmission. If you get the opportunity, have a look for the link on his archived home-page which you can find from the Wikipedia SSTV page.

The purpose of this narrow band television idea was to be able to send images using cheaper equipment and less bandwidth than normal television. The idea caught on and it's still in use today.

In 1959 the idea of slow scan tv was used by the Luna 3 mission to transmit images from the far side of the moon. The NASA Apollo program also used SSTV to transmit images from Apollo 7, 8, 9 and from the Apollo 11 Lunar Module.

In 1968 SSTV became a legal mode for radio amateurs in the United States.

The International Space Station regularly uses SSTV to send images to radio amateurs across the globe.

The version of SSTV in use by radio amateurs today is different from the earlier grainy black and white images coming from the moon and if you're expecting a moving image, something that TV implies, you're going to be disappointed, since the popular SSTV modes send images one at a time, taking up to a minute or so to send. With a frame-rate of one frame per minute, watching anything other than grass grow is going to be a challenge.

That said, SSTV is a lovely and relatively simple way of sending images across the air.

In my quest for new adventures I like to play with things I know nothing about. I suspect that it's ingrained but it does keep me off the street. The other day I received an email from a local amateur, Adrian VK6XAM, who sent a message describing a new SSTV repeater he'd set-up for testing purposes. It's a local 2m repeater that waits for an activation tone, then it expects you to transmit an SSTV image and it will replay the image back to you. If you're familiar with a parrot repeater, this is a similar thing, just for SSTV rather than audio. The repeater is running on solar power and with the 100% duty cycle of SSTV, it's only available during daylight hours.

Technicalities aside, I couldn't resist.

So, I fired up QSSTV, a piece of Linux software that among other things knows how to receive and send SSTV images. After turning on my radio, tuning to the correct frequency, I received my first ever SSTV picture.

On a bright red background a yellow symbol appeared. At first I thought it was a hammer and sickle, but on closer inspection it was a micrometer and caliper, which absolutely tickled my fancy, having just taken delivery of some precision measuring tools - a Mitutoyo Test Indicator and a few other bits and pieces for another project I'm working on.

Had to learn how to drive QSSTV, make a template so you can overlay text on an image, learn what a signal report should look like, then when I figured all that out I triumphantly hit send and it made all the right noises, but nothing was happening.

More time looking at the inter-web taught me that if I want to use the rear connection on my FT-857d to send audio using FM, as opposed to SSB which is what most digital modes need, you need to set the radio to PSK mode and magically it starts to work.

My first ever SSTV image was sent an hour and a half after receiving my first image and the repeater dutifully sent it back. Then I got a picture from Keith VK6WK.

Of course the paint isn't even dry on any of this, so there's plenty more to learn, but the process is not too complex.

I will note a few things.

I had already set-up digital modes, that is, my radio was talking to my computer via CAT, that's Computer Assisted Tuning, essentially a serial connection that controls the radio and the audio was already being sent and received from the rear connector of my radio.

Getting SSTV running was really an extension on those activities, so if you're going to do this, take some time to make things work. I continue to recommend that you start with WSJT-X since it helps you get your levels and connections right.

Now I suppose I should start playing with SSTV over HF, but first I would like to figure out how to make the templates work better for me and how to actually seriously log an actual contact.

More adventures ahead!

Remember, have fun, play, get on air and make noise!

I'm Onno VK6FLAB

## Sparks Newsletter and Delta Club Information

SPARKS is published monthly by the Delta Amateur Radio Club and emailed to club members. All information published in this newsletter is provided as a service. While every reasonable effort has been made to ensure accuracy, neither the Delta Amateur Radio Club nor its officers assume any liability resulting from errors or omissions. All correspondence may be mailed to:

**Delta Amateur Radio Club \*P.O. Box 342768 \* Memphis, Tennessee 38184-2768**

Please note that you must provide your name and call sign if you're requesting specific actions or personal follow-ups, and also be aware that any profane or mean-spirited comments will be unceremoniously discarded without consideration.

Delta Club Members Can Like Us/Follow Posts On Facebook! Go to <https://www.facebook.com/darcmem>.

### 2020 Board of Directors

#### **President**

Steve Frazier, KK4VPT  
sfrazier1@bellsouth.net  
901-218-6385

#### **Vice President**

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[rtvk@hotmail.com](mailto:rtvk@hotmail.com)  
901-853-0303

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[kn4fbl@gmail.com](mailto:kn4fbl@gmail.com)  
901-356-1475

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[davidjkson@bellsouth.net](mailto:davidjkson@bellsouth.net)  
901-487-3016

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[wa4ovo@gmail.com](mailto:wa4ovo@gmail.com)  
901-628-4318

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[vawter.bob@gmail.com](mailto:vawter.bob@gmail.com)  
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[KN4OEK@gmail.com](mailto:KN4OEK@gmail.com)  
901-828-6209

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Scott Adams, KM4PMU  
[scottedadamsjr@hotmail.com](mailto:scottedadamsjr@hotmail.com)  
901-573-6280

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Barry McDonald W5CJ  
[W5CJ@ARRL.NET](mailto:W5CJ@ARRL.NET)  
901-853-0510

#### **Public Information Officer**

Len Grice, W4MKS  
[W4MKS@arrl.net](mailto:W4MKS@arrl.net)  
901-522-6711

#### **Immediate Past President**

Ken Laseter, KI4AOH  
[KenLaseter@gmail.com](mailto:KenLaseter@gmail.com)  
901-487-9103

## Public Service Events

If you are a coordinator for any of these events, please review the listed information. Please email corrections or additions to [vawter.bob@gmail.com](mailto:vawter.bob@gmail.com).

<b>2020 Date</b>	<b>Event</b>	<b>Contact Information</b>
Jan. 18	<del>Swamp Stompers 50K/25K Run</del>	<del>Ken Laseter KI4AOH</del>
May 12	MARS contacts POSTPONED UNTIL THE FALL	
June 27-28	<del>Field Day @ Ellendale Church of Christ</del>	
Sep 12-13	MS-150 Bike Ride CANCELLED	
Oct 10	Bluff City Blues Bike Ride CANCELLED	

## Hamfests in the Southeast Area

### 2020

January 24-25	<del>Capitol City Hamfest in Jackson, MS</del>
February 7-9	<del>HamCation 2019 in Orlando, FL</del>
February 16	<del>LCARC's 2020 Winterfest in Hoxie, AR</del>
March 6 - 7	<del>BirmingHamfest 2019 in Birmingham, AL</del>
March 14	<del>MTARS Hamfest Tullahoma, TN</del>
March 28	Ides of March Hamfest in Union City, TN - CANCELLED
March 28 - 29	April Fool Hamfest in Corinth, MS-- CANCELLED
April 11	Memphis FreeFest in Bartlett, TN - CANCELLED
May 15 - 17	Hamvention in Xenia, OH - CANCELLED
July 25	Greater Nashville & Middle TN HamQuest – CANCELLED
August 22 - 23	Huntsville Hamfest in Huntsville, AL – CANCELLED
October 16 - 17	Hamfest Chattanooga in Chattanooga, TN — CANCELLED

## Tennessee Amateur Radio License Plate

Submitted by Joe Lowenthal, WA4OVO

• As of October 2018, all you need to renew your ham tag is to provide a copy of your FCC license with a copy of your last year's registration or a renewal notice, if you received one, and your payment.

The link below is for information and instructions about Tennessee ham radio call sign Emergency/Safety automobile license plates:

<https://www.tn.gov/revenue/title-and-registration/license-plates/available-license-plates/emergency-safety.html>

The application can be found at this link:

<https://www.tn.gov/content/dam/tn/revenue/documents/forms/titlereg/f1312601Fill-in.pdf>

The following link from the Tennessee Department of Revenue <https://www.tn.gov/revenue/title-and-registration/license-plates/available-license-plates/emergency-safety.html> has the Amateur Radio auto tag information.

## Memphis Area VHF/UHF Nets

Name of Net	Freq. MHz	Offset/Tone	Local Time	Day of Week
<b>Delta Club Information Net</b>	<b>146.820</b>	<b>- (107.2)</b>	<b>8:00p</b>	<b>Daily</b>
<b>YL Net</b>	<b>146.820</b>	<b>- (107.2)</b>	<b>8:45p</b>	<b>Sat</b>
Mid-South Bullfrog Net	146.535	[simplex]	7:30p	Daily
Elmer Net	145.210	- (107.2)	9:00p	Sun
MedMERS Net	146.820	- (107.2)	12:00p	Wed
ARES Training Net	146.850	- (107.2)	9:00p	Thu
Sunday Super Niner Net	927.6125	- (146.2)	8:30p	Sun
TN Statewide DMR Net	Digital – DMR		8:00 p	Friday

## TENNESSEE HF NETS

<b>Net Name</b>	<b>Freq. MHz</b>	<b>Local Time</b>	<b>Day of Week</b>
Tennessee CW Net	3.563	7:00p	Daily
Tennessee Slow CW Net	3.682	7:30p	Tue-Sun
Tennessee Alternate Phone Net	7.238		As needed
CUSEC	3.810		As needed
CUSEC (Center for United States Earthquake Consortium)	7.180		As needed

**3980 kHz – Tennessee Phone Net**

Mon-Fri - 5:40 AM, 6:45 AM & 6:30 PM

Saturday - 8:00 AM & 6:30 PM

Sunday - 8:00 AM only

Holidays - 8:00 AM only

**Used equipment for sale**  
Please **ONLY** contact the person offering the equipment.

If you would like to advertise equipment you have for sale, please email Bob. My email address is [vawter.bob@gmail.com](mailto:vawter.bob@gmail.com)

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1. Alinco VHF/UHF Twin Band DR 735 (new in the box)
2. Alinco EDS 30 (new in the box)
3. 2 Speakers Kit HSN4039 (new in the box)
4. Kenwood THK 20A 144 mhz FM Transceiver (new in the box)
5. Galaxy Blue Light Digital Frequency Counter (new in the box)
6. Kenwood Charger (new)

If anyone is interested, please email me [lelnicholson@gmail.com](mailto:lelnicholson@gmail.com) or call me @ 901-413-6096 Lel Nicholson

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If you have new members just starting out as Ham operators and could use some sections of Rohn Tower, I have some that I am willing to part with. They have been out of use for many years and at 79 years of age, I have no revival plans for them. Currently stored at ground level. Not too pretty but I do have the top cap.

Respond to Earl Barker, 5940 Bishop Dale Dr, Memphis, Tn 38141-6954

Contact via USPS only until further info is exchanged.



DELTA CLUB ADVERTISEMENTS

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**P.O. Box 342768**  
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WIDE REPEATER SYSTEM  
 146.82- 147.36+ (137.2Hz tone)  
 224.42- 443.20+ (137.2Hz tone)



Joe Miller  
Owner

Chick-fil-e storage store  
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At Poplar and Massie  
Memphis, TN 38119  
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C 901.230.5043  
joe.miller@chick-fil-e.com  
chick-fil-e.com