

# SPARKS

P.O. Box 342768 \* Memphis, Tennessee 38134-2768 \* Volume 50 \* March 2020



**Delta Amateur Radio Club (DARC)**

**Sparks Newsletter**

Website: <http://deltaclub.org>

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

## W4BS

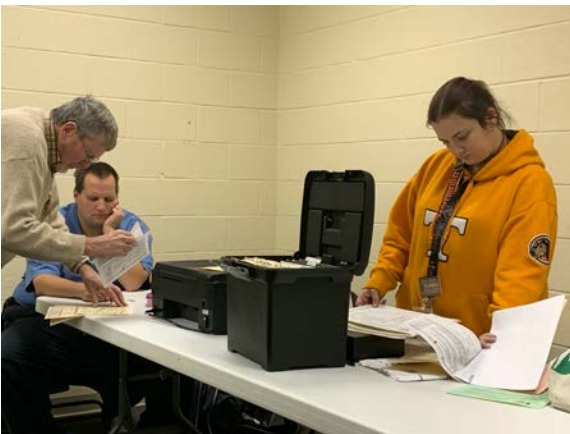
### REPEATER SYSTEM

|                           |                             |
|---------------------------|-----------------------------|
| 146.820 <sup>-107.2</sup> | * 147.360 <sup>+107.2</sup> |
| 146.625 <sup>-107.2</sup> | 443.200 <sup>+107.2</sup>   |
| 224.420 <sup>-107.2</sup> | 443.700 <sup>+107.2</sup>   |
| 144.390 Digipeater        | *Fusion                     |

**This month's meeting** begins at 7:00 pm on March 10, 2020, at Ellendale Church of Christ, 7365 Highway 70 Memphis, TN (1 ½ miles north of Highway 64 /Stage Road).

**Program:** Ian KN4OEK, will present a program on “CHIRP” software to program Amateur radios.

**Delta Club FCC testing sessions** are held monthly except December. Registration begins at 5:30 PM; testing begins by 6:00 PM. Please bring a photo ID and another form of



identification, copies of existing licenses or CSCEs, and your FCC Registration Number (FRN) if one has been issued. Please be on time for registration to allow our Volunteer Examiner (VE) team to complete their work prior to the club meeting. The 2019 test fee is \$15 (cash or check). Individuals receiving their initial FCC license grant at a Delta Club test session or through a Delta Club training class will receive a complimentary individual club membership for the remainder of the current calendar year when they also show proof of ARRL membership. For more information, please email

our VE Liaison, Jeff Krause, AJ4GY at [AJ4GY@comcast.net](mailto:AJ4GY@comcast.net) or call at 901-301-6776.

### **New and upgraded hams:**

James Fletcher, tech

Benjamin Wilson, tech

Brett Johnson KN4SMC, Extra

## President's Corner

Submitted by Steve Frazier, KK4VPT

The recent tornadoes in Nashville and other parts of Tennessee are a harsh reminder of how quickly anytime of the day or night events can happen with little or no warning. We all need to be ready to do what we can to help our community. In addition to continuing your training and education involving armature radio skills, there are other opportunities available to you in the Memphis area. On Tuesday March 24 at 7pm the National Weather Service will provide Skywarn Storm Spotter training. This will be at Lord of Life Lutheran Church which is at 6865 Poplar Pike. Other option is the local ARES (Armature Radio Emergency Service) group that meets at 7pm on the 4th Tuesday of the month at the Baptist Woman's Hospital on Humphreys Blvd. For more information check out <http://www.aresmemphis.org>.

FreeFest this year will be on Saturday April 11. This is a great time to stock up on any supplies or equipment you may need and to meet with fellow armature radio operators. Admission is free, but you can buy extra chances for a chance at one of the amazing door prizes and the money raised from the extra tickets is donated to Le Bonheur. You will be able to purchase extra tickets at the March Delta Club meeting and that will mean that you will have more time to spend visiting and shopping at FreeFest.

During February, we had a large number of you renew your membership or join as a member for the first time. Everyone on the Board of Directors would like to thank all of you for your support. If you have not joined for 2020, you can do so when you are ready.

I look forward to seeing you at the next meeting and at any of the activities that you are able to join us. Don't forget to check in on the 146.82 net every night except the 2nd Tuesday of the month. Thanks to our dedicated net control operators, the net is a great way to keep in touch with everything that is going on at the Delta Amateur Radio Club.

73  
Steve  
KK4VPT

**Treasurer's Report**  
Submitted by David Jackson KM4SEC

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. [davidjackson@bellsouth.net](mailto:davidjackson@bellsouth.net)

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

DARC Treasurer's Report

02/29/2020

Submitted by H. David Jackson

Checking Account:

Beginning balance: \$27,280.88

Deposits: 2

\$1,170.00, membership/equip. sale

\$105.00, membership

Total: \$1,275.00

Balance: \$28,555.88

Checks: 2

(\$139.18) Club food

(559.19) Club equipment

Total: (\$698.37)

Balance: \$27,857.51

CD-0028: Interest Rate: 1.590% Mat. Date: 10/19/2022. Balance: \$10,488.53

Petty cash account: \$50.00

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

Submitted by Mary Jean Hall KN4FBL

DARC Board of Directors Meeting Minutes

March 3, 2020, submitted by Mary Jean Hall KN4FBL

*Attendees: Steve Frazier KK4VPT, Bob Van Keuren KM4SEB, Mary Jean Hall KN4FBL, David Jackson KM4SEC, Joe Lowenthal WA4OVO, Bob Vawter KW4RJ, Ian Lucas KN4OEK, Scott Adams KM4PMU and Barry McDonald W5CJ.*

*Absent: Len Grice W4MKS*

Steve F. called the meeting to order at 6:32 p.m. at the Ellendale Church of Christ. The board briefly discussed the Nashville tornadoes and other recent events.

David J. read the Treasurer's Report. Barry M. made a motion to approve the Treasurer's Report and Bob V.K. seconded it. The motion unanimously passed.

Barry M. updated the board on the status of fixing the 146.820 repeater, and he said he will continue to update the board and the club as progress is made. He purchased over 1,000 feet of rope to use when the new antenna is installed. Bob V.K. asked about possibly hooking the 443.700 repeater up to MTEARS. Barry said that he would look into it after the 82 repeater was fixed.

The board discussed the review of memberships per the club's bylaws.

Joe L. gave a training update. Three from the Extra class have upgraded their licenses, and three others are planning to test soon. A Technician class started February 22 with 15 students currently enrolled.

Joe L. said that two tables have been reserved for the club to sell items at FreeFest on Saturday, April 11, 2020. As previously discussed, Delta Club donated a Lithium Iron Phosphate battery for one of the door prizes. Tickets for door prizes will be distributed soon; the goal is to pre-sell as many tickets as possible to locals to help shorten the line at FreeFest. Proceeds will be donated to the Le Bonheur Children's Hospital.

Ian L. said that the March program will cover CHIRP software. Steve F. asked if we should consider a club shirt order; he will ask the club members at the upcoming meeting. Steve announced that Field Day is June 27-28, and they are welcoming ideas for a possible location since there may be a conflict with the typical location.

Steve F. encouraged the board members to start reviewing the bylaws to hopefully revise them this year.

Joe L. moved to adjourn. Without objection, Steve F. adjourned the meeting at 7:46 p.m. The next Board of Directors meeting is scheduled for Tuesday, April 7, 2020 at 6:30 p.m. at Ellendale Church of Christ.

**Minutes of Last Month's Club Meeting**  
Submitted by Mary Jean Hall KN4FBL

DARC Meeting Minutes for February 11, 2020  
Submitted by Mary Jean Hall KN4FBL

**Call to Order and Opening Remarks**

Club President Steve Frazier KK4VPT called the meeting to order at 7:00 p.m. at the Ellendale Church of Christ and welcomed everyone to the meeting. Everyone then introduced themselves by name and call sign. 64 members and guests were present for the meeting.

**Secretary's and Treasurer's Reports**

Ham Hilliard W4GMM moved to approve the previous meeting's minutes and the Treasurer's Report as published in Sparks. Jeff Krause AJ4GY seconded the motion. The minutes and the Treasurer's Report were approved by the club.

**VE Testing**

Jeff Krause AJ4GY announced that the following tested/upgraded tonight: two technicians and one extra. He also announced that the Bad Dog 5K/10K Run is on Saturday, April 25 at Overton Park. If anyone is interested in coordinating communications for that event, let him know and he will pass that on to the appropriate person.

**Training**

Joe Lowenthal WA4OVO updated the club on the status of the current Extra Class. Six students are in the class: two have already passed the test and four will test this Saturday.

There is a Technician Class scheduled from February 22 to April 4, with the exception of March 14. 18 students have already signed up for the class, so there are only two more spots available. Anyone interested in attending can email Joe at [wa4ovo@gmail.com](mailto:wa4ovo@gmail.com). Include your name, phone number and email address in the body, and put "Tech Class" in the subject line.

Joe Lowenthal WA4OVO announced that ARRL members recently received an email about an opportunity for clubs to get books into the local libraries. A club can buy a ten-book set for \$200 to donate to the library for radio reference, testing manuals, etc. The goal of the program is to create a relationship with the local library, possibly through trainings and events as well. Joe said he made a suggestion that the clubs could even see about splitting the funding with the library. He asked everyone to think about the opportunity. Given the clubs in the area, if Delta

Amateur Radio Club decided to participate in this program, we could likely donate the set to the Memphis Public Library.

Joe Lowenthal WA4OVO reminded everyone that the County Clerk Offices are now requiring those renewing the call sign emergency tags to present a copy of their current amateur radio license. You can print off a reference copy from [fcc.gov](http://fcc.gov).

### **Announcements**

Rick Tillman WA4NVM announced that the Memphis FreeFest will be on Saturday, April 11, 2020. Volunteers are needed to work in the kitchen, load/unload supplies and help in other ways. Proceeds will be donated to the Le Bonheur Children's Hospital, with over \$51,000 donated so far. All of the proceeds come from ticket sales for the door prizes.

Rick encouraged everyone to consider pulling out their radio go-kits to test out occasionally, perhaps once a month, when they check in on the net. The 443.700 repeater is now online, too.

Barry McDonald W5CJ said that he was able to reach the 443.700 repeater from Collierville with a handheld radio. The new repeater is located on the same tower that houses the 146.820 repeater. The 443.700 repeater is also a Fusion repeater, and it requires a +5 MHz offset with a +107.2 PL tone.

Barry McDonald W5CJ updated the club on the status of the 82 repeater. There is an antenna ready to go at the site; he's working on finding an option to get it installed. The club purchased 1,100 feet of rope to have on hand for the installation.

Steve Frazier KK4VPT encouraged everyone to sign in on one of the rosters; we will be using the rosters to print the "tickets" for this month's meeting. Also, be sure to check your information for accuracy. If your name is not listed on the roster, check with Mary Jean Hall to see if your membership is current.

### **HAM 101**

Ham Hilliard W4GMM said that he needs ideas for Ham 101, and those ideas can be emailed to him at [W4GMM@bellsouth.net](mailto:W4GMM@bellsouth.net). Ham 101 is at 5:30 p.m. before the Delta Amateur Radio Club meeting upstairs in the Ellendale Church of Christ Fellowship Hall. He has a few ideas for the March Ham 101, but he has yet to decide on a specific topic. Look for the topic in the March Sparks newsletter.

### **YL News**

Linda Laseter KJ4CTX said that the YL luncheon will be 11:00 a.m. February 22, 2020 at the Ellendale Church of Christ Fellowship Hall. It will be a working meeting for the YLs to create items to sell at FreeFest; No lunch will be served so feel free to bring your own.

### **Announcements**

Steve Frazier KK4VPT announced that Field Day is June 27-28, and they are welcoming ideas for a possible location since there may be a conflict with the typical location.

He also let everyone know that tonight will be Dan Lasley N7QB's last meeting; he will be moving out of the state. He thanked Lasley for his years of service as Director of Publications and the support he has given the amateur radio community.

### **Break/Presentation**

Steve Frazier KK4VPT called for a break from 7:25 p.m. to 7:32 p.m. Ian Lucas KN4OEK led the program on Baofeng Basics and Repeaters, which covered the basics of programming a Baofeng handheld radio.

### **Closing Remarks**

Bill Covington KC4SXT moved to adjourn. With no objection, Steve Frazier KK4VPT adjourned the meeting at 8:13 p.m. The next Delta Amateur Radio Club meeting will be Tuesday, March 10, 2020 at 7 p.m. at the Ellendale Church of Christ.



## **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*

0 Technician

0 General

3 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 Eighth Edition with question pool that became effective July 1, 2015 for four years.

The current ARRL Extra Class License Manual is the Eleventh Edition with question pool that became effective July 1, 2016 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 week night 6:15pm-9:30pm or Saturday day 9am-1pm. The next class will probably be a Technician level class starting early July.

None

## CURRENT CLASSES

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



Tech Class 2-20 is being held from February 22<sup>nd</sup> to April 4<sup>th</sup> on six Saturdays except March 14<sup>th</sup> from 9am to 1pm at Memphis Police Department Appling Farms Station precinct, 6850 Appling Farms Pkwy. There are fifteen students in the class.

Tech Class 2-20 on first day of class. Photo by Joe Lowenthal WA4OVO. The instructors are Paul Roberts KA9VAU, Pat Lane W4OQG, John

Reiners KN4BVH, Perry Hayes N4GY, Len Grice W4MKS, and Joe Lowenthal WA4OVO. The demonstration operators are John Reiners KN4BVH on DMR, Fusion and D-Star; Barry McDonald W5CJ on Echolink and Allstar; Pat Lane on HF on long wire antenna; Rick Tillman WA4NVM and Richard Martin K4DXF on satellite; Rick Pellicciotti KJ4NWQ; and Joe Lowenthal WA4OVO on repeater basics. The Laurel VEC team will provide an opportunity for their FCC exam.

## COMPLETED CLASSES

### 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 are Joe WA4OVO, Paul KA9VAU, Dean N2LAZ, Barry W5CJ, Dave AD4Q, David W4DWW and Pat W4OQG. The FCC testing will be provided on February 15<sup>th</sup> at 10am 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.

CBU Tech Review Class  
Photo by Joe Lowenthal WA4OVO

All five passed with great scores. Congratulations to Judit Aubets Macia KO4BPP, Josue Bohorquez KO4BPHammontree 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 who earned his Technician and General licenses. Five others will test later.

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.



Perry Hayes N4GJ introducing the aura of digital modes. Photo by Joe Lowenthal WA4OVO



General Class 4-19  
ARRL FCC Test  
Session Photo by Joe  
Lowenthal WA4OVO

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

A General test session was held on November 20th 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 30th 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.



Tech Class 3-19

Photo by Joe Lowenthal  
WA4OVO

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.

## USE OF CELLPHONE WHILE DRIVING

As of July 1<sup>st</sup>, it is against the law to hold a cellphone while driving. However, amateur (ham) radio is exempted per the below paragraph 1(a)3 of State of Tennessee House Bill 164. It might be wise to carry a copy of this document and a copy of your amateur radio license in case you get stopped by police and they are not aware of the exemption.

"Wireless telecommunications device" means a cellular telephone, a portable telephone, a text-messaging device, a personal digital assistant, a stand-alone computer, a global positioning system receiver, or substantially similar portable wireless device that is used to initiate or receive communication, information, or data. "Wireless telecommunications device" **does not include** a radio, citizens band radio, citizens band radio hybrid, commercial two-way radio communication device or its functional equivalent, subscription-based emergency communication device, prescribed medical device, **amateur or ham radio device**, or in-vehicle security, navigation, autonomous technology or remote diagnostics system.

<https://www.handsfreetn.com/files/pc0412.pdf?fbclid=IwAR3vZvmm5nPLyCeZg1gqUkgL0EaltPBt3sX9XSUpYpyFARjnYNuRu3fNbtU>

Here are the two weather service websites I spoke of in the ARES meeting.

[preview.weather.gov/edd](http://preview.weather.gov/edd)

<https://www.arcgis.com/apps/MapSeries/index.html?appid=5dfbf1be13b74f1097a93cd954a3c4f8>

Joe WA4OVO

## **HQ 101**

Submitted by Ham Hilliard W4GMM

**HQ 101** is for new hams, old hams, and hams that want to know more about their hobby. This class is for you and I need to know what you want to learn about, so if you have a subject you are curious about let me know and if there is enough interest I will offer it one month. Email me at [w4gmm@bellsouth.net](mailto:w4gmm@bellsouth.net).

Ham 101 meetings are upstairs above the Delta Club meeting hall beginning at 5:30 pm just before the Delta Club meeting.

**The Ham 101 March topic is a discussion of SWR and Propagation.**

## **YL News**

submitted by Linda KJ4CTX

**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 work on our own equipment. Replacing parts means soldering and unsoldering parts to do the fix. There are two types of solder for use with electronics. For years the solder used was a lead based alloy which worked fine but the lead could be bad for your health. Later companies started to use a lead free solder in their products. These products are not designed to be mixed. Using the wrong type solder can result in a bad solder connection that could fail. The good news is both types of solder are available on Ebay. Use lead solder on older equipment lead free on newer equipment. Just do a search on Ebay for "SOLDER."



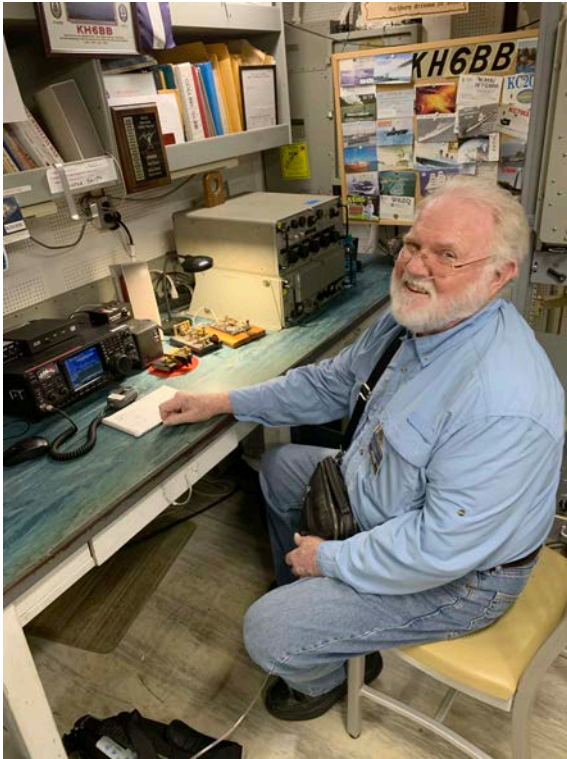
## Amateur Packet Update

Submitted by James Butler, KB4LJV

Many times we look for smaller antennas to use on the HF bands. MFJ has come out with a smaller antenna system for the HF BANDS. The antenna covers 75,30,20, and 15 meters. It is an octagonal housing that mounts on top of a pole you supply. They give you 8 Hamstick brand antennas to hook up to create 4 dipoles for HF. The MFJ -2104 can also be mounted on a rotor to allow for directional control. The antenna handles 250 watts of power. By fine tuning the Hamstick to frequency range you use this antenna can be used without a tuner. This makes the perfect emergency antenna for the field. To see more information on the MFJ-2104 antenna system check out the website. The web address is

<https://www.mfjenterprises.com/Product.php?productid=MFJ-2104>

## KH6BB On board the USS Missouri



I met with Jim Davis WH6Q at one of our bi-weekly “Ham” breakfast meetings. Jim lives in Aiea, Oahu, overlooking Pearl Harbor. His son lives in Bartlett, TN, so Jim usually makes a yearly visit to Bartlett to visit. Jim has attended the Hamfest in Dayton, OH for many years as well. Jim’s home club meets aboard the “Mighty MO” battleship, which is famous for being the “stage” where the Japanese formally surrendered to the US on September 2, 1945. Very impressive with her 15” guns and armament! Today the Missouri is part of the National Park on Ford Island, Pearl Harbor, where volunteers lead visitors through the boat and talk about the history of the vessel.

Jim and some of his club members meet in the radio room of the Missouri where they have added an HF rig, computer and vertical antenna for contacts, both phone and FT8.

Submitted by Bob KW4RJ



KH6BB Hams: Jim WH6Q, Willie NH6HD, Ray WH6ASW, and Jim AH6OY.

View from Jim’s back yard out over Pearl Harbor. If you look closely you can see the Arizona Memorial.

## **The F-Troop NET**

By Onno VK6FLAB

If you've ever had the pleasure or misfortune to hear an on-air net, you might have considered, however briefly, how that net came to be, how it's run and what's involved behind the scenes to make it happen.

I host a weekly net called "F-troop". It's been running every week since the 12th of June in 2011. Since then I've made over 5000 contacts with stations scattered all over the globe. A typical net has about ten people, but depending on the weather, what's on TV or if people had a hard Friday night that number fluctuates. The biggest was about 40, the smallest just two.

At this point I could tell you that the infrastructure to make this happen, the preparation, management processes, network and marketing are what take up the bulk of my week. I mean, there might be a weekly stand-up between stakeholders on a Wednesday, a plan for the content, what to discuss, you know, the typical.

If I told you that, I'd be lying.

The reality is that F-troop is an organic animal. I generally get to my radio a couple of minutes before we start, midnight UTC, switch on, kerplunk the local repeater and wait for the clock to tick over.

I then launch into my opening spiel, something along the lines of: "Hi folks, it's me, it's F-troop, who's awake?"

After taking a few calls and logging them, I'll circulate through, call for more people, rinse and repeat.

There are two invisible things happening, one required, the other I do because I'm a computer geek. The required activity is logging. I chose to log in an online spreadsheet. It's helpful because it makes for a single place where all contacts are stored and it allows for others to host the net if I happen to fall off the air, either by being somewhere else, like a holiday every decade or so, or because my radio isn't being cooperative.

The other thing that logging gives you is a memory. I generally recall a person's name from their callsign, but if you listen closely you'll notice that every now and again I'll extend my babble so I can search for a callsign and appear not to be suffering from memory loss.

The other thing that happens is that I update the website. I'll be merrily adding articles from emails or discussion as it's happening. If someone mentions a product or a website, a callsign or a project, I'll often be searching for it in real time and adding it as a post to the F-troop website. That way people who want to refer back at a later time, that includes me, can search and find the thing that someone showed us.

As simple or as complex as that sounds, depending on your level of experience, it's really not rocket science. You can do this with pen and paper. I know, I've done it, standing in a car-park with a notepad, whilst dodging rain showers and preparing for a field-day. It's fun to test your skill and to get out of your comfort zone every now and again.

I should interrupt this story for a word from our sponsors. Don't have a kitten, we're not talking about advertising, we're talking about repeater and network operators who graciously give of their time and resources to link the main F-troop repeater to others around the world. The network of AllStar, Echolink, IRLP and IRN radios that carry F-troop is astonishing to me. We have regular participants all over Australia, the United States and the United Kingdom. There have been contacts with stations in Asia and Europe.

For that to happen I don't do a single thing. Well, technically I let repeater operators know I exist and when it breaks, but that's pretty much the sum total of my efforts.

Why am I telling you this?

Last week it broke. My radio was acting up and someone commented on that. I handed over the reins and let them at it. They were very unsure. I let them know that F-troop is for beginners. It's expected that people are going to make a mistake, I know I do, plenty of times.

It occurred to me afterwards that hosting a net can be scary. If you have no idea what's involved, how to make it happen, what to do, then hosting must be immensely daunting.

I hope that sharing how I do this will give you the confidence to host your own net in your own community. Perhaps you can tell me more about it or come and visit F-troop. Saturday morning at midnight UTC. If you want, I'll even help you host it.

I'm Onno VK6FLAB

# FREEFEST

Saturday April 11, 2020 9 am to 3 pm

Bartlett Station Municipal Center (behind the library)

5868 Stage Road Bartlett, TN

North side of State Road just west of Bartlett Blvd.

Buy your door prize tickets early at the March 10<sup>th</sup> meeting so our out of town guests have less congestion on the day of FreeFest. One sheet of 6 tickets for \$5; Five sheets for \$20.

Bring cash or check payable to MARA

## **Main Prizes - you do not have to be present to win these:**

Icom IC-7300 HF / 50MHz Transceiver      2000 Watt Predator Inverter/Generator

Apple Ipad 7<sup>th</sup> Generation      20Ahr BLF-1220A LiFePO4 Battery and Charger

Yaseu FT-2980R 144MHz Transceiver      MFJ259C SWR Analyzer

Kenwood TM281A 144MHz Transceiver      40" RCA LED Full HDTV

In addition, there are hourly prizes, but you must be present to win. A few are:

Hamsource HSC-EZ-4 Anderson PowerPole Power Panel, ARRL Coupons, Baofeng handheld

\$50 Danver's on Germantown Gift Card,      \$50 Jason's Deli Gift Card

VE Testing from 8:30-11:00am      Seminars 11:10am – 2:30pm

for more information, go to <https://sites.google.com/a/maraonline.org/mara-online/freefest>

## 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

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sfrazier1@bellsouth.net  
901-218-6385

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**Public Information  
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901-522-6711

**Immediate Past President**

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



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

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

**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> | Ken Laseter KI4AOH         |
| May 12           | MARS contacts                         |                            |
| June 27-28       | Field Day @ Morgan Woods Park, G'town |                            |
| Sep 12-13        | MS-150 Bike Ride                      | Darrell Sheffield KK4D     |
| Oct 10           | Bluff City Blues Bike Ride            | Ken Laseter KI4AOH         |

**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        | MTARS Hamfest Tullahoma, TN                           |
| March 28        | Ides of March Hamfest in Union City, TN               |
| March 28 - 29   | April Fool Hamfest in Corinth, MS                     |
| April 11        | Memphis FreeFest in Bartlett, TN                      |
| May 15 - 17     | Hamvention in Xenia, OH                               |
| July 25         | Greater Nashville & Middle TN HamQuest in Lebanon, TN |
| August 22 - 23  | Huntsville Hamfest in Huntsville, AL                  |
| October 16 - 17 | Hamfest Chattanooga in Chattanooga, TN                |

**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/fl312601Fill-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**

Updated January, 2018

| <b>Name of Net</b>                | <b>Freq. MHz</b> | <b>Offset/Tone</b> | <b>Local Time</b> | <b>Day of Week</b> |
|-----------------------------------|------------------|--------------------|-------------------|--------------------|
| <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>-</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                |

## **TENNESSEE HF NETS**

As of January 2019  
All times are Central Time

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| <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<br>(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).

---

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

## DELTA CLUB ADVERTISEMENTS

### DELTA AMATEUR RADIO CLUB

P.O. Box 342768

Memphis, TN 38134-2768

**DARC** Meeting: Second  
Tuesday of every month  
at Ellendale Church of Christ  
7365 Hwy 70, Bartlett TN



W4BS REPEATER SYSTEM  
146.82- 147.36+ (107.2Hz tone)  
224.42- 443.20+ (107.2Hz tone)



Joe Miller  
Owner

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6282 Poplar Avenue  
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