

SPARKS

P.O. Box 342768 * Memphis, Tennessee 38134-2768 * Volume 66 * July 2021



Delta Amateur Radio Club (DARC)

Sparks Newsletter

Website: <http://deltaclub.org>

Facebook:

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

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 plan to meet this month **In Person and via "ZOOM."**

Topic: July Member Meeting

Time: Jul 13, 2021 07:00 PM Central Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/88178734148?pwd=QUQrUFBmaVBGNDIvbk9BQWwyRGp2QT09>

Meeting ID: 881 7873 4148

Passcode: 111136

Program: John Reiners KN4BVH will be discussing solar battery power.

For Ham License testing information: Contact Jeff Krause, AJ4GY at AJ4GY@comcast.net or call at 901-301-6776 for information. If enough testers are identified, Jeff will hold a special testing session.

Announcements

None

President's Corner
Submitted by Steve Frazier, KK4VPT

WE ARE BACK AND IT FEELS GOOD!

After what I think we will all agree has been a long and challenging time since March 2020, we are well down the road to normal and moving forward at a good pace. March 2020 was the last in person meeting we had before everything was shut down due to Covid-19. For our June 2021 meeting, we had a combination in person and Zoom meeting. We had good attendance both in person and on line. At this time, we plan to continue doing combination meetings. By continuing to include the Zoom option, we can include members who may not be able to attend the meeting in person regardless of the reason. And we are recording and saving the Zoom meetings.

During June, Delta Club joined other local area clubs to participate in Field Day 2021. At Field day, we had four active stations plus a Get On The Air station and we had 82 people sign in as participates or visitors. While those numbers are down from prior years, it was encouraging after a year of everything being shut down.

On the road to getting back to normal, Ham Hilliard W4GMM will resume Ham 101 at 5:30pm before the July meeting. Ham 101 is a hands on "how to" that Ham does with small groups to share his knowledge and experience with fellow hams at all levels of experience. While Ham has a lot of knowledge, he is always looking for ideas for his next Ham 101. You can contact him at w4gmm@bellsouth.net or let him know at the next meeting.

Farther down the road to normal, we will be doing our annual bus trip to the Huntsville Hamfest on August 21. We will also support the Rockin' Bike Ride September 11-12 and the Bluff City Blues Ride October 9. These are in addition to our usual monthly activities and anything new we can find to do.

To stay in touch with everything that is going on and to stay in touch with each other, please join us on the net we have every night at 8pm on the 146.82 repeater. Our alternate repeater is 146.625. Both have a PL tone of 107.2. This net is made possible by the net control operators who volunteer their time - so don't forget to thank them when you join the net.

73 to all
Steve Frazier
KK4VPT

Treasurer's Report
Submitted by Jim Martin, KD4FUU

Please renew your membership right away, so you won't forget about it! The membership application may be downloaded from our website (for both renewals *and* new members) at:

<https://deltaclub.org/membership>

Annual membership fee is \$20 per individual or \$25 per family. Completed applications and payment may be mailed to:

Delta Amateur Radio Club
PO Box 342768
Memphis, TN 38134-2768

If you prefer you can print and bring the completed form, along with the membership fee, to any in-person meeting. Please contact Jim Martin KD4FUU at kd4fuu@gmail.com with any questions or concerns regarding application submission and/or payment of annual dues.

LIFEGREEN CHECKING FOR BUSINESS
 May 29, 2021 through June 30, 2021

SUMMARY			
Beginning Balance	\$21,385.51	Minimum Daily Balance	\$21,385
Deposits & Credits	\$1,645.00 +	Average Monthly Statement Balance	\$21,961
Withdrawals	\$0.00 -		
Fees	\$0.00 -		
Automatic Transfers	\$0.00 +		
Checks	\$257.52 -		
Ending Balance	\$22,772.99		

DEPOSITS & CREDITS		
06/07	Deposit - Thank You	375.00
06/10	Deposit - Thank You	75.00
06/10	Deposit - Thank You	75.00
06/10	Deposit - Thank You	150.00
06/10	Deposit - Thank You	300.00
06/21	Deposit - Thank You	75.00
06/25	Deposit - Thank You	75.00
06/29	Deposit - Thank You	60.00
06/29	Deposit - Thank You	205.00
06/29	Deposit - Thank You	255.00
Total Deposits & Credits		\$1,645.00

CHECKS					
Date	Check No.	Amount	Date	Check No.	Amount
06/09	1546	92.91	06/14	1547	164.61
Total Checks					\$257.52

* Break In Check Number Sequence.

DAILY BALANCE SUMMARY					
Date	Balance	Date	Balance	Date	Balance
06/07	21,760.51	06/09	21,667.60	06/10	22,267.60

SMALL BUSINESS CD *0028

Available Balance	<u>INTEREST RATE</u>	<u>YTD INTEREST</u>	<u>INTEREST EARNED NOT PAID</u>
\$10,741.44	1.590 %	\$84.80	\$7.96
View More Details			

Applications Received - June 2021

(1) New Membership(s)	\$15.00
(13) Membership Renewal(s)	\$245.00
Donations Received w/ Applications	\$5.00
Total Received	\$265.00

Other Deposits

Deposits - Huntsville	\$1,125.00
Club Polo Shirt Orders	\$255.00

**Total
Deposits \$1,645.00**

DARC Board of Directors Meeting Minutes Submitted by Carolyn Horne, KX4QF

DARC Board of Directors Meeting Minutes for July 6, 2021

Attendees: Steve Frazier KK4VPT, Mary Jean Hall KY4FB, Carolyn Horne KX4QF, Jim Martin KD4FUU, Joe Lowenthal WA4OVO, Ian Lucas KN4OEK, Ray Cole KX5RC, Scott Adams KM4PMU, and Barry McDonald W5CJ.

Absent: Mike Harrison KM4MRW, Len Grice W4MKS.

Guests: None

The regular monthly meeting of the Delta Amateur Radio Club Board of Directors was held on Tuesday, July 6th, 2021, at 6:30 PM on a Zoom video conference call, with the President serving as chair and the Secretary being present. President Steve Frazier KK4VPT called the meeting to order.

Ian Lucas said that the July program will feature John Reiners KN4BVH who will be discussing solar battery power.

Steve Frazier talked about the Delta Club's potential involvement in upcoming races: 1) the Bike MS: Rockin' Ride 2021 on the weekend of September 11th – 12th, from the Landers Center to Tunica. This is a 2-day event, so some people provide support just for a day while others stay overnight in Tunica to cover the full ride. See [Bike MS: Rockin' Ride 2021 \(donordrive.com\)](https://donordrive.com) for more info, and 2) the Bluff City Blues Ride in Shelby Forest, a 1-day event on Saturday, October 9th. See <https://www.bcb100.com> for more info.

Jim Martin read the Treasurer's Report. We took in \$1645 this month. This reflects membership dues, tickets for the Huntsville Hamfest and orders for polo shirts. He had a question about submitting the annual report and if that differed from the budget. Steve said they were two different reports. There was a discussion on switching from Regions Bank to another. Some initial research has been done but nothing has been decided yet. Points raised included finding out their policy on changing names on the account, is there a monthly fee and would it be waived with a minimum balance maintained. Joe Lowenthal has procured some brochures. Mary Jean Hall reviewed receipts for food supplied on Field Day 2021. She will cost itemize what was used to be divided between the three participating clubs. The board determined that the cost of supplying food this year was very reasonable.

Jim Martin received three membership application forms in our P.O. Box and forwarded pdf versions of them to Carolyn Horne for processing. Of the applications, one was a new member

and the other two renewals. The board took in ten more applications at the June Members Meeting at the Ellendale Church of Christ. Of these, three were new members and the rest renewals, with one family renewal.

Joe Lowenthal has his 3rd Tech Class on Zoom on Thursday July 8th, and the rest will be in-person at the Ellendale Church of Christ on July 22nd, 29th and the 12th of August. He said students are asking more questions in this class than usual. There are nine students and one person auditing the class.

Joe Lowenthal reminded Jim Martin that the check for the bus trip needs to be in the mail to the bus company by August 1st to arrive by the August 7th deadline. Steve Frazier asked if the attendance on the trip was up to par, and Joe Lowenthal said attendance was normal.

Scott Adams asked Mary Jean Hall what refreshments were left over from Field Day. Mary Jean Hall will do an inventory and bring these to the next Members Meeting at the Ellendale Church of Christ. He asked about table set-up for the meeting, and it was decided to go back to seating six per table. Joe Lowenthal is to confirm that the Members Meeting is on the schedule at the church.

Barry McDonald talked about linking to the MTEARS network. Joe Lowenthal said that the Health Department is being encouraged to get linked into it and he has started investigating, but it is in the early stages. It will take two sets of equipment to do it, one here in Memphis and another in Brownsville or a site halfway between Jackson and Memphis, so equipment may need to be purchased. A beam antenna will be necessary to link into Jackson. Barry McDonald said we would use the 440 MHz repeater on the Brunswick Tower for the Memphis link. It is not being used and has great reception. Ray Cole mentioned there is an old AT&T tower in downtown Brownsville that may be a good potential site for that link.

Carolyn Horne read the new and renewed membership requests. Joe Lowenthal moved to accept, and all agreed with none opposed. Carolyn Horne asked whether the Delta Club had considered doing Winter Field Day. Barry McDonald said he had done it with the Olive Branch club and there is little activity on the air. He added that it is very cold, so it is not a worthwhile effort. Joe Lowenthal said that it happens on the same weekend as the Jackson Hamfest so there is a scheduling conflict.

Steve Frazier talked about the W5KUB balloon event. He piloted his Cherokee for surveillance from the air, taking up a team that included Barry McDonald who manned VHF/UHF/APRS comms. The team is also participating on the W5KUB.com live show reviewing the event. To see videos, see W5KUB's YouTube channel. Steve Frazier also uploaded a live video taken in the air to the Delta Amateur Radio Club YouTube channel. He said he would write an article on it.

Mary Jean Hall gave an update on ordering polo shirts. The cut-off date for placing an order is this month's Members Meeting.

Steve Frazier made a motion to adjourn, and all agreed. He adjourned the meeting at 7:18 PM. The next regular Board of Directors meeting is scheduled for Tuesday, August 3, 2021, at 6:30 PM either in person or on Zoom.

Respectfully submitted by Carolyn Horne KX4QF, Secretary

Minutes of Last Month's Club Meeting

Submitted by Carolyn Horne, KX4QF

DARC Meeting Minutes for June 8, 2021

Call to Order and Opening Remarks

The regular monthly meeting of the Delta Amateur Radio Club was held on Tuesday, June 8, 2021, at 7:00 PM at both the Ellendale Church of Christ and 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. At least 56 members and guests were present for the meeting.

Minutes and Treasurer's Report

Ham Hilliard W4GMM moved to "approve the Treasurer's Report and Minutes as published in Sparks." Dan Wehner KN4FBJ seconded the motion. The motion was adopted by the club without objection.

Announcements

Steve Frazier KK4VPT and Jim Martin KD4FUU discussed membership applications and dues. Membership applications were available at the check-in table at the Ellendale CoC and on-line at the www.deltaclub.org website. We took in a good number of applications during the meeting. Steve Frazier KK4VPT said to take time to sign in on the check-in sheets for attendance credit. Zoom participation was recorded via screen shots.

Mary Jean Hall KY4FB had a display of a Cornerstone polo shirt along with sign-up forms at the main desk. She said it had all the same features as the more expensive 5.11 polo and was available in men's and women's styles. She wore the sample Cornerstone polo to her farm and gave it a strenuous work-out. It stood up perfectly to that heavy-duty test. Prices are dependent on size as follows:

XS-XL.....	\$35.00
XL2	\$37.00
XL3	\$41.00
XL4	\$43.00

If there is a question on size, here is the size chart for CS-410 men's sizes:



Select Snag-Proof Tactical Polo. CS410

PRODUCT MEASUREMENTS

	XS	S	M	L	XL	2XL	3XL	4XL
Chest Width	19	20 1/2	22	23 1/2	25	26 1/2	28 1/2	30 1/2
Body Length at Back	27 1/4	28 1/4	29 1/4	30 1/4	31 1/4	32 1/4	32 3/4	33 1/4

CHEST WIDTH

Measured across the chest one inch below armhole when laid flat.

BODY LENGTH AT BACK

Measured from high point shoulder to finished hem at back.

Here is the size chart for CS-411 women’s sizes:



Ladies Select Snag-Proof Tactical Polo. CS411

PRODUCT MEASUREMENTS

	XS	S	M	L	XL	XXL	3XL	4XL
Bust	18	19	20	21 1/2	23	24	26 1/2	28 1/2
Body Length at Back	26	26 1/2	27	28	29	30	30 1/2	31

BUST

Measured one inch below armhole.

BODY LENGTH AT BACK

Measured from high point shoulder to finished hem at back.

In addition to taking orders at the meeting, she is collecting money on Field Day 2021, at the July members meeting, or by check in the mail to her QRZ address. Checks should be made payable to the Delta Amateur Radio Club. The cut-off date for ordering is the July members meeting, and the polos should be available to hand out at the August members meeting. Steve Frazier KK4VPT said that the polo shirts will be good for wear on the Huntsville trip in addition to other events coming up in the fall.

Ham Hilliard W4GMM brought index cards and asked members to fill them out with program suggestions for Ham101. You can also email him with ideas at w4gmm@bellsouth.net. There will be a Ham101 session next month upstairs at the Ellendale Church of Christ at 5:30 PM, just before the July members meeting at 7 PM. Please come ready to discuss topics of interest so that Ham can plan future sessions accordingly. It is a highly informative time for new and old hams alike, so please avail yourself of his expertise and the chance for Q&A with other members in an informal setting.

Joe Lowenthal WA4OVO is offering a Tech Class starting June 24th through August 12th on 6 Thursday nights. The first 3 classes will be via Zoom and the last 3 will be in-person at the Ellendale Church of Christ main hall where we have our monthly meetings. Anyone interested should sent him an email at wa4ovo@gmail.com with the subject 'Tech Class', and include their name, email and cell phone number. Joe Lowenthal WA4OVO is one of the most experienced teachers in our area and in the ARRL, so this excellent class is bound to fill up soon!

He also reminded members that the Huntsville Hamfest Bus Trip is coming up soon. The bus will leave Germantown Baptist Church at 6:30 AM August 21st, getting into the Von Braun center at 9:30 AM, leaving around 4:30 PM after the prize drawing, and arriving home at 8 PM. The \$75 fee includes refreshments, tickets to the Hamfest and bus fare. Make checks payable to the Delta Amateur Radio Club. Checks may be sent to his home QTH which is good in QRZ. Try to get your checks in ASAP so we know how much the Delta Club is going to have to pay to make up the cost.

Steve Frazier KK4VPT added that the Huntsville trip is a great opportunity to get hands-on feel for the wide selection of equipment on display. He said the bus is the way to go since it is such a full day at the Hamfest that many find themselves sleeping on the way home. Driving home yourself after such a long day can be very tiring.

Steve Frazier KK4VPT said he has been contacted about supplying radio support for two upcoming bike events: 1) the Bike MS: Rockin' Ride 2021 on the weekend of September 11th – 12th, from the Landers Center to Tunica. This is a 2-day event, so some people provide support just for a day while others stay overnight in Tunica to cover the full ride. See [Bike MS: Rockin' Ride 2021 \(donordrive.com\)](https://www.donordrive.com) for more info 2) the Bluff City Blues Ride in Shelby Forest, a 1-day event on Saturday, October 9th. See <https://www.bcb100.com> for more info. Since we use VHF repeater comms for these events, it is a good opportunity for new Tech's to get involved.

Steve Frazier KK4VPT also extended a warm welcome to newcomers who have not attended our meetings before.

Barry McDonald W5CJ said the 146.82 repeater is still in the same situation it was in last month. The interference comes and goes and since it covers a wide spectrum, there is not much we can do to filter it out.

Rick Tillman WA4NVM brought a notice from Tom Medlin W5KUB, about volunteer recovery teams for a balloon launch. Steve Frazier KK4VPT read the notice which requested volunteers for advance recovery teams for a hot air balloon launch in the next 3-4 weeks. The balloon will go up to 100,000 feet, then pop and come down (given prevailing winds that can be up to 50 miles away). In addition to APRS, he has added GPS satellite tracking which is good up to 20,000 feet in the air. A hard hat is required. Teams require a navigator and a spotter to look for the red and white parachute coming down. Spotters should try to get a video of the landing. If interested contact Tom at (901) 570-2188. He is the host of a live ham radio program, Amateur Radio Roundtable, every Tuesday night on <http://w5kub.com> at 8 PM Central time (0200 UTC Wed).

Marc Gwin AG5QY chat texted that a West Memphis ham group is meeting Thursday, June 24th at 7 PM in the library at 500 E Broadway Blvd. Parking is available on Thomas Avenue.

Discussion / Program

Field Day 2021 discussions were featured at this month's meeting. Steve Frazier KK4VPT gave a run down on the change of event venue this year. We will be joining the Neshoba and MARA Clubs at the Germantown Municipal Park, south of GPAC, the athletic club swimming pool and the tennis courts and north of (behind) the fire and police stations. It is best to come in off Exeter or by the athletic club. Try to stay away from parking by the tennis courts as they are usually full on the weekend. Rick Tillman WA4NVM announced that Piccadilly's, where we normally meet for breakfast before setting up, is closed. Set-up will begin on June 21st around 8:30 – 9:00 AM. This is another good opportunity for new hams to see how antennas are put up, so you are welcome to observe and help. There will be CW, SSB stations on 40/20 and 15/80, digital with off-grid solar battery power stations, a Get-On-the-Air or GOTA station to provide unlicensed individuals the chance to listen and talk on the ham bands. Rick WA4NVM will make a satellite contact with a handheld radio and Elk antenna. Kids love it! Field Day 2021 starts at 1 PM CT rain or shine, since operating in emergency conditions is what Field Day is all about. However, in dangerous weather conditions power and antennas will be disconnected and participants will take appropriate cover. The event ends on Sunday, June 22nd at 1 PM CT. John Reiners KN4BVH announced he will be calling the Saturday night Delta Club Net from his Field Day station at 8 PM, another good opportunity for visitors and new hams to see how this is done. Steve Frazier KK4VPT asked members to think about volunteering. He reminded us that we use Field Day as an exercise, not a serious competition, so please invite family and friends to come on out!

Mary Jean Hall KY4FB gave us an update on the menu for Field Day. On Saturday there will be pizza for lunch, boxed sandwiches for dinner, and on Sunday morning the fare will be breakfast sandwiches. Or feel free to bring your own refreshments.

Steve Frazier KK4VPT reminded us to bring fold-up chairs, bug spray and fans.

Ham Hilliard W4GMM said he will be doing Field Day 2021 in Millington, near the Fire Training Academy and close to the radar dome, at the north side of the Navy Base. Set up will be Friday, June 20th at 5:30 PM. He is offering training on about 4 different subjects to 9 new hams on Saturday, June 21st from 8 AM to noon. You are more than welcome to come. Volunteers to cover the Saturday night shift are needed.

Joe Lowenthal WA4OVO said that N3FJP logging software will be used at the Field Day 2021 event. Ray Cole KX5RC said that videos on the N3FJP Field Day logging procedures are available on YouTube, just search on 'Field Day logging' and they will show up. It is advisable to avail yourself of these training videos if you plan on participating at a station. Remember to log your initials in the setup options before doing your shift.

Closing Remarks

Bobby Stroud KD5BS, who supplied the Zoom streaming cameras and service at this night's meeting, said streaming the meeting helps people who either cannot travel or are not comfortable with assembling just yet. So, we will continue having hybrid meetings for the foreseeable future.

Steve Frazier KK4VPT gave a review of our YouTube channel. He will try to do some videos on Field Day 2021 and upload them.

Dave Church AD4Q gave kudos to the organizer of last month's Bob Heil live presentation, Ian Lucas KN4OEK, who said Joe Lowenthal WA4OVO recommended this guest speaker. There was general agreement that this was an exceptional program. It is available on the Delta Club YouTube channel. Steve Frazier KK4VPT said that speaking of experts, the Huntsville Hamfest offers seminars by well known presenters throughout the day, yet another reason to book a seat on the bus trip there.

Delta Club President Steve Frazier KK4VPT adjourned the meeting at 8.00 PM.

The next Delta Amateur Radio Club meeting will be Tuesday, July 13, 2021, at 7:00 PM both in-person and 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 venue instructions or the Zoom link for the meeting.

Respectfully submitted by Carolyn Horne KX4QF, Secretary (2021)

Delta Ham License Training, 2021

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. The FCC will implement a \$35 application fee in 2021.

If you want to take a class, send an email to Joe at 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 2021 from Delta Classes

23 Technician

5 General

4 Extra

Note:

Coming soon will be a \$35 FCC application fee for new hams, renewals, upgrades, etc except for address or email changes.

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 week night 6:15pm-9:30pm or Saturday day 9am-1pm.

The next General license class will probably start in early November 2021.

The next Extra Class license class will probably start in early January 2022

SCHEDULED CLASSES

Tech Class 4-21 – June 24 – August 12, 2021

A Technician license class is being held on six Thursday nights between June 24th and August 12th from 6:15-9:30pm. There are nine students in the class and one auditing. It is a hybrid with the first three classes via Zoom and the last three in-person classes. It is being held on June 24, July 1, 8 via Zoom and July 22, 29 and August 12th at Ellendale Church of Christ, 7365 Hwy 70 (Summer Ave). The FCC exam will be offered on July 29th after we do a review of the question pool questions and answers.

The instructors are Joe Lowenthal WA4OVO, Paul Roberts KA9VAU, Perry Hayes N4GJ, David Wilson KY4FH, John Reiners KN4BVH, and Pat Lane W4OQG. The equipment demonstrators will be John Reiners KN4BVH, Rick Pellicciotti KJ4NWQ, Rick Tillman WA4NVM, Richard Martin K4DXF, and Joe Lowenthal WA4OVO.

COMPLETED CLASSES

Tech Class 2-21 – February 22 – April 5, 2021

A Technician license class was held one night a week via Zoom from February 22nd thru April 5th on Monday or Thursday nights. Twenty-two students started on the 22nd with 19 finishing the training. An in-person class was held on March 29th for review and opportunity for FCC exam at Ellendale Church of Christ, 7365 Hwy 70 (Summer Ave) in Bartlett.

Sixteen students tested and all passed.

Congratulations to Wallace Bell KO4OWD, Park Dodge AI5CY, Michael Engelken KI5PDQ, Arie McClanahan KI5PDR, Scott McDermott KO4OWE, Terrell Naylor KO4OWF, Craig Owen KO4OWG, Adam Shirley KO4OWH, Don Swindoll KO4OWI, Diane Thomas KO4OWJ, Anthony Tribo KO4OQK, and Bruce Swindoll KO4OWN.

Additional congratulations to Michael KI5PDQ and Scott KO4OWE for upgrading to General. An extra congratulaton to Park AI5CY for running the table to Extra Class. Congratulations also to Ina Wiehl KY4GA for running the table to Extra Class at the Atoka TARS test session on March 15th. Congratulations to Mike Murell KO4QBT for earning his Technician and General licenses at the Olive Branch ARRL test session on April 20th.



Tech Class 2-21 test session left side Photo by Joe Lowenthal WA4OVO



Tech Class 2-21 test session right side Photo by Joe Lowenthal WA4OVO

Also, two CBU students tested. Congratulations to Jose Bonafasi KO4OWL and Will Clayton KF0EYO.

Additionally, nine year old Jacob White KO4OWN earned his Technician license.



Photo back left to right: 9 year old Jacob KO4OWN and proud grandpa Bob AI4GI;
front left to right: VEs Perry N4GJ, Bobby KD5BS, Jeff KJ4GY

Thanks to the Laurel VEC team of Joe WA4OVO, Perry N4GJ, Jeff AJ4GY, Barry W5CJ, Bobby KD5BS, Rick WA4NVM, and Eric WD5FTA for administering the FCC test session.

The instructors were Paul KA9VAU, Perry N4GJ, Len W4MKS, John KN4BVH, Barry W5CJ, Pat W4OQG, and Joe WA4OVO. The equipment demonstrators were Rick WA4NVM and Richard K4DXF on Satellite, Rick KJ4QNWQ on APRS, John KN4BVH on Digital, and Joe WA4OVO on Repeater Basics.

CBU Tech Review Class 3-21 – February 24, 2021

A Technician license review session was held in Dr. Eric Welch (WD5FTA)'s junior level Introduction to Unmanned Aerial Vehicle class for nine Christian Brother

University students on February 24th . Congratulations to Cesar Mireles KO4NFT, Allison Sorette KO4NFU, Brennan Griffin KO4NFV, Michael Longo KO4NFW, Jose Villa Hidalgo KO4NFX, Novy KO4NFY and Sean Williams KI5OEI, who earned their Technician licenses.

Thanks to the Laurel VEC Team of Barry W5CJ, Perry N4GJ, Jelly N4HLT, Rick WA4NVM, Eric WD5FTA and Joe WA4OVO for providing the FCC test session.

EXTRA Class 1-21 – January 4 – February 25, 2021

An Extra Class license class was held one night a week via Zoom from January 4th thru February 25th on Monday or Thursday nights from 6:15-9:30pm. The Zoom classes met on January 4, 14, 21, 25, February 1, 11 and tested a week late on the 25th due to snow on the 18th. The students were Carla KO4FVX, Ransom KO4FVZ, Russell KO4ASW, Jason KO4DOH, Mary Jean KN4FBL and David KN4BXI.

Congratulations to Mary Jean Hall KY4FB (formerly KN4FBL) and David Wilson KY4FH (formerly KN4BXI) who passed their Extra exam on the 25th.

The instructors were Joe WA4OVO, John KN4BVH, Dean N2LAZ , Barry W5CJ, Dave AD4Q, Paul KA9VAU and Pat W4OQG.

Thanks to the Delta Club ARRL VE Team of Jeff Krause AJ4GY, Stacy KJ4MDA, Warren KC7ND, Tom KK4ZZZ, Barry W5CJ and Joe WA4OVO for providing the FCC test session.

In addition to the Extra Class students testing, congratulations to Brian Kelly KO4KAO for upgrading to General. Also, the following earned their Technician licenses: Dan Currey KO4NGZ, Rob Currey KO4NHA, Wilson Langford KO4NHB, Ebben Raves KO4NHC, David Wolford KO4NHD, Garrett Robinson KO4NHE, and Steven Porter KO4NHF.

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

General Class 4-20 was held via Zoom with five students. It was held on five nights on Monday and Thursday nights from October 26th to December 7th from 6:15-9:30pm. The nights were Monday October 26, Monday November 2nd, Thursday November 12th, Monday 23rd and ARRL FCC testing Monday December 7th.

Congratulations to Ransom Bowen KO4FVZ and Elliot Pope KO4DER for upgrading to General on December 7th. Also, congratulations to Carla Andrews KO4FVX for upgrading to General on December 21st at the Tipton County ARS (Atoka) test session.

The others will test later. Congratulations to Kevin Kelly KO4KAO who earned his Technician license during the Delta Club test session.

Thanks to the ARRL VE Team of Jeff Krause AJ4GY, Warren Zimmer KC7ND, Tom Ungren KK4ZZZ, Dan Columbus AA4HV, Barry McDonald W5CJ and Joe Lowenthal WA4OVO for providing the test session.

The instructors were Perry N4GJ, Barry W5CJ, Paul KA9VAU, Len W4MKS, John KN4BVH, Pat W4OQG, and Joe WA4OVO.

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 and Print your License.

HUNTSVILLE HAMFEST BUS TRIP - AUGUST 21, 2021

Submitted by Joe Lowenthal, WA4OVO, DIRECTOR OF TRAINING

DARC is sponsoring a 50-passenger bus trip to go to the Huntsville Hamfest on Saturday, August 21, 2021. The fare is \$75 if paid by July 31st and \$80 after. A spouse or child living at the same address can accompany a full fare rider for \$50. The fare includes the \$10 hamfest entry ticket. There will be two Danver's bacon, ham or plain breakfast biscuits, water, sodas, cookies, chips, and fruit on the bus going to Huntsville, during the day and whatever is left for the trip back. There are no refunds, but you can sell your seat to someone else if you can not go. Let me know.

Cash or checks will be accepted for payment. Make checks payable to Delta Amateur Radio Club. You can pay at a meeting. You can also send your check to Joe Lowenthal WA4OVO, 6675 Ashbridge Cove, Memphis, TN 38120. Please include your name, callsign, cell phone number, email address and whether you want bacon, ham or plain biscuits.

Reservations will be on a first come first paid basis.

The bus will leave Germantown Baptist Church, 9450 Poplar Avenue at Johnson Road, Germantown, TN at 6:30am. The bus will leave Huntsville immediately after the 4pm door prize drawing and return to Germantown Baptist Church approximately 8pm.

The Huntsville Hamfest website is www.hamfest.org.

Delta Club Polo Shirt Order
Submitted by Mary Jean Hall, KY4FB

Delta Club Polo Shirt Order – Deadline July 13!

Delta Club is organizing a club polo shirt order, and the deadline to order is Tuesday, July 13!

The polo features snag resistant, polyester material, as well as dual pen pockets on the left sleeve and mic clip loops at the center and front shoulders. Both men's and women's style polo shirts are available; the color is royal blue. Price includes the embroidered DARC logo with your name and call sign.

Mary Jean Hall KY4FB will be collecting polo money at the upcoming Delta Club meeting on July 13, 2021. This is the last day to sign up for a club polo! The polos are expected to be handed out at the August meeting.

For more information contact Mary Jean KY4FB at 901-356-1475 or ky4fb@arrl.net. Make checks payable to Delta Amateur Radio Club. If you are unable to attend an in-person event, notify Mary Jean KY4FB to make other arrangements.

Pricing:

XS-XL: \$35 2XL: \$37 3XL: \$41 4XL: \$43

Sizing guide for men's style (CS410):

<https://www.apparelvideos.com/cs/CatalogBrowser?todo=ss&productId=CS410&customer=midsouthsolutions>

Sizing guide for women's style (CS411):

<https://www.apparelvideos.com/cs/CatalogBrowser?todo=ss&productId=CS411&customer=midsouthsolutions>

Delta Club Polo Order 2021

Contact Mary Jean Hall KY4FB to order, or if you have any questions. All money must be turned in by July 13, 2021. Price includes the embroidered DARC logo with your name and call sign.

XS-XL: \$35 each

2XL: \$37 each

3XL: \$41 each

4XL: \$43 each

Men's style (CS410)



Women's style (CS411)



FCC Auto-Registration Feature for
Exam Applicants to be Discontinued
Submitted By: Bob Vawter KW4RJ

Auto-registration in the FCC Commission Registration System (CORES) amateur radio exam for candidates using a Social Security number will be discontinued on May 20, 2021. Applicants must use an FCC Registration Number (**FRN**) for all license transactions with the FCC. Examinees must **register in CORES** and receive an FRN *before* exam day. Starting on May 20, electronic batch filed applications that do not include a candidate's FRN will be rejected. The Social Security/Licensee ID Field will be disabled. An **instructional video** provides step-by-step instructions on how to establish a CORES account, which is necessary for licensees to make administrative updates and download electronic license authorizations. After June 29, all filers **must provide an email address** on all applications. When an email is provided, applicants will receive an official electronic copy of their licenses once granted (allow incoming email from **authorizations@fcc.gov**). If no email is provided when filing on or after June 29, applications will be rejected. ARRL VEC suggests that those without access to email to use the email address of a family member or friend.

Licensees need to log in to the Universal Licensing System (ULS) to **download their authorizations**. The FCC no longer issues paper copies. — *Thanks to the FCC*

<http://www.arrl.org/news/fcc-auto-registration-feature-for-exam-applicants-to-be-discontinued>

W5KUB High Altitude Balloon Submitted by Steve Frazier, KK4VPT

You may remember that during the June meeting an announcement was made that Tom Medlin W5KUB needed volunteers to help a high altitude balloon launch he was planning to do soon. Delta Club members stepped up to the plate and provided help not only on the ground but in the air for the recovery of the payload package that contained several cameras and other equipment. We had at least two cars on the ground supported by Rick Tillman WA4NVM, Richard Martin K4DXF, Joe Gresham WB4NWE and Rick Kanschat N0KYN. In the air, we had Steve Frazier KK4VPT, Barry McDonald W5CJ and Ina Wiehl KY4GA. Ina is currently not a Delta Club member. I met her at Field Day and after she has participated in 2 activities in two weeks, I think she is very interested in joining Delta Club in the near future.

The balloon had APRS and GPS for tracking. We used both methods to track the balloon. I was the pilot of the plane and used my Kenwood TH-D74 with APRS to get real-time accurate data for bearing and distance. This was very helpful at groundspeeds of 100-130 MPH.

We never did see the parachute / package from the air, but at least one ground crew saw it before it landed.

And the ground crews did say that the plane was constantly over the landing site.

The project met its overall goal of reaching over 100,000 feet and recovering the equipment that was launched. And the support teams were successful in tracking the parachute with the equipment and the support teams successfully used VHF simplex to coordinate the recovery.

For more information and interesting videos, checkout <http://www.W5BUB.com/balloon> or <http://www.youtube.com/W5KUB>





Steve Frazier KK4VPT and Ina Wiehl KY4GA



Barry McDonald W5CJ

Steve Frazier
KK4VPT

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 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.

Packet Update

By: James Butler KB4LJV

DARC wishes James a speedy recovery.

Many times when repairing radios we have to change out components. Getting the old part off of a printed circuit board requires “desoldering”. This is a way to heat up and remove the solder from a point on the board so we can remove the failed part. There are a couple of ways to get the old part out and prepare the board for a new part. One is to heat up the solder and use a vacuum to suck up the liquid solder before it cools. Commercial systems have a vacuum pump and heat source to do this. A much cheaper option is to buy a “solder sucker” which is a manual pump to remove solder. You can buy these on Ebay for under \$10. Another way is to buy a roll of desoldering braid. This is chemically treated braided copper. You heat up the solder with your soldering gun while you press the braid against the connection on the board. The desoldering braid wicks up the liquid solder to allow the part to be removed. Once used that small part of the braid is cut off and thrown away. You can buy a roll of desoldering braid for under \$2. I keep both types on hand so I can use them when needed. Once the part is removed you can use the solder sucker or the braid to clean the printed circuit board holes to allow the new part to be installed in place and soldered in.



James Butler
KB4LJV

Amateur Hardware Update

By: James Butler KB4LJV

How do you make sure your antenna is functioning properly with you radio and your signal gets out while the radio is protected against mismatch? One new piece of test equipment on the market is the NANOVNA. It connects to your antenna and transmits a very low power signal that looks at reflection and analyzes the antenna for SWR across the frequency range you select. These units cover from 1.8 to 500 MHZ. It can also generate a Smith chart on the small color LCD screen. The newer models even have a USB cable to run computer software and charge the built in rechargeable battery. This instrument can even do a time domain reflectometer function to find shorts and opens in coax. The best thing is the price of under \$50.00. To find the unit search on EBAY for “NANOVNA”.



James Butler
KB4LJV

**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 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.

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

73, W4WTN

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

73, Marc Gwin AG5QY

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>.

2021 Board of Directors

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sfrazier1@bellsouth.net
901-218-6385

Vice President

Mary Jean Hall KY4FB
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Immediate Past President

Ken Laseter, KI4AOH
KenLaseter@gmail.com
901-487-9103

Repeater Trustee

Barry McDonald W5CJ
W5CJ@ARRL.NET
901-853-0510

Upcoming Events

Huntsville Hamfest – August 21 – 22

MS Rockn' Bike Ride – September 11 – 12

BCB 100 Ride to Fight On – October 9

For more information go to <http://hamcalendar.com/>

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 State of Tennessee is again making Amateur Radio License Plates since reconstruction of the building that was demolished by the tornado in Nashville in February 2020. The link below is for information and instructions about Tennessee ham radio call sign Emergency/Safety automobile license plates: [Vehicle Titling & Registration \(tn.gov\)](#) The application can be found at this link: Application for Special Amateur Radio License Plates [in.pdf](https://www.tn.gov/content/dam/tn/revenue/documents/forms/titlereg/f1312601Fill-in.pdf)

Memphis Area VHF/UHF Nets

Name of Net	Freq. MHz	Offset/Tone	Local Time	Day of Week
Delta Club Information Net	146.820	- (107.2)	8:00p	Daily
YL Net	146.820	- (107.2)	8:45p	Sat
Mid-South Bullfrog Net	146.535	[simplex]	7:30p	Daily
Elmer Net	444.175	+ (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

Net Name	Freq. MHz	Local Time	Day of Week
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	7.180		As needed

(Center for United States Earthquake Consortium)

3980 kHz – Tennessee Phone Net

Mon-Fri - 5:40 AM, 6:45 AM & **5:30 PM** (5:30 pm beginning Nov. 9 evening)

Saturday - 8:00 AM & 5:30 PM

Sunday - 8:00 AM only

Holidays - 8:00 AM only

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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