SPARKS

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

This month's meeting is **CANCELLED** because of the COVID-19 pandamic. We do plan to meet via "ZOOM." Details to follow.

Program: **none**

TESTING SESSIONS are also CANCELLED for June.

There may be some random testing sessions held, but there is no schedule at this time. Contact Jeff Krause, AJ4GY at AJ4GY@comcast.net or call at 901-301-6776 for current information.

New and upgraded hams:
James Fletcher, General KO4BXY
Michelle Zapf, General KN4ACJ
Ryan McElfresh, Tech KO4DZM
Terry Simmons, Tech KI5JIF

President's Corner
Submitted by Steve Frazier, KK4VPT

It is hard to believe it is already June 2020, meaning the year is half over. But at the same time it is hard to believe it is only June 2020. With all the changes and challenges, this looks like it will be a long year. I do hope that you and your family are doing well during this interesting year. Just like you, the Delta Club is needing to adapt and change to the "new normal".

Among the changes, the Delta Club was not able to meet as a group for our April or May meetings. We have been keeping in contact with each other using the online app Zoom. Local "Stay at Home" guidelines changed for June and we were planning to be able to meet in person in June. Unfortunately the Ellendale Church of Christ where we meet is using the room we use for the meeting for short term storage and the room is not available for the June meeting. The room should be available for the July meeting. For the June meeting we will be using Zoom again. We hope you can join us for the June Zoom meeting. To join the meeting use the following information -
Meeting ID: 820 8441 9738
Password: 745601

Another change this year is the annual ARRL Field Day. This will be one of the main topics for the June Zoom meeting. This year, we will not be doing Field Day as a large group but will be doing contacts mainly as individuals. We do plan to have a few operators at the Ellendale Church of Christ on Saturday June 27. We will start setting up Saturday morning and will be there until about 8pm. This will give members and anyone else interested a chance to see HF operations in person. For most people, Field Day is the first opportunity they had to experience HF contacts in person. Field Day 2014 was my first HF experience and it was very helpful.

Unfortunately one more change this year is that we have found out that this year's Huntsville Hamfest has been cancelled. This is always a highlight of the year and I am sure we are all disappointed and already looking forward to next year.

One thing that has not changed is that you can keep in touch with all your friends and fellow Delta Club members on the nightly net at 8pm on the 146.82 repeater. We also have a Facebook page that we use for updates and to share information that may be of interest.

The Facebook page can be found at https://www.facebook.com/darcmem/. We get 150 to over 200 views when we add a post, so most of you should already know how to find the page.

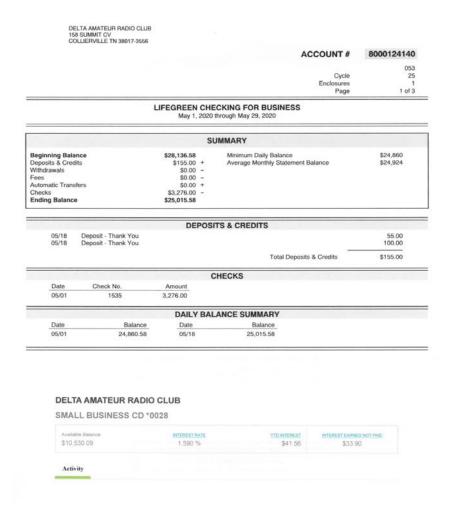I do look forward to seeing each of you as soon as we are able to meet.

73 to all !

Steve
KK4VPT

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

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

ACCOUNT #	8000124140

Cycle	053 25
Enclosures	1
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LIFEGREEN CHECKING FOR BUSINESS
May 1, 2020 through May 29, 2020

SUMMARY

Beginning Balance	$28,136.58	Minimum Daily Balance	$24,860
Deposits & Credits	$155.00 +	Average Monthly Statement Balance	$24,924
Withdrawals	$0.00 –		
Fees	$0.00 –		
Automatic Transfers	$0.00 +		
Checks	$3,276.00 –		
Ending Balance	$25,015.58		

DEPOSITS & CREDITS

05/18	Deposit - Thank You	55.00
05/18	Deposit - Thank You	100.00
	Total Deposits & Credits	$155.00

CHECKS

Date	Check No.	Amount
05/01	1535	3,276.00

DAILY BALANCE SUMMARY

Date	Balance	Date	Balance
05/01	24,860.58	05/18	25,015.58

DELTA AMATEUR RADIO CLUB

SMALL BUSINESS CD *0028

Available Balance	INTEREST RATE	YTD INTEREST	INTEREST EARNED NOT PAID
$10,530.09	1.590 %	$41.56	$33.90

Activity

DARC Board of Directors Meeting Minutes
June 2, 2020, submitted by Mary Jean Hall KN4FBL

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

Steve F. called the meeting to order at 6:30 p.m. Due to the COVID-19 Pandemic, the Delta Amateur Radio Club Board of Directors held the meeting online through Zoom.

David J. read the Treasurer's Report and said that he had submitted the Tennessee Tax Exemption Request for to the state. He is awaiting a response. The board reviewed and voted on the memberships per the club's bylaws.

The board discussed the option of meeting in person for the June Delta Club meeting. Joe L. said that we were unable to use the church fellowship hall next week since it was currently being used for storage. The board decided to hold the June Delta Club meeting on Zoom, and that meeting information will be listed in Sparks.

Joe L. said that the May 30 testing produced two Technicians. Two others upgraded to General. Joe L. said that, at this time, Jeff Krause AJ4GY does not have anything scheduled for testing. Jeff will update the ARRL testing site when he has another test session scheduled.

The board discussed the possibility of meeting in person in July. Scott A. said that we would have to consider PPE options and cleaning. He recommended that we hold a board meeting in person before the club was to meet in person. The board members discussed possibilities for a June program, as well as options on how to coordinate Field Day activities by the individual club members.

Joe L. has a Technician class scheduled on Thursdays from June 25 to August 13. Class will not be held on June 16 or August 6; it will be a combination of Zoom and in-person classes. He will put more information in the Sparks newsletter and on the ARRL website.

Mary Jean H. made a motion to approve the Treasurer's Report. Joe L. seconded the motion. The motion unanimously passed.

Barry M. told the board about the 146.820 repeater issues, which he is working to troubleshoot. The board discussed Field Day and Huntsville options briefly.

Joe L. moved to adjourn. Without objection, Steve F. adjourned the meeting at 7:13 p.m. The next Board of Directors meeting is scheduled for Tuesday, July 7, 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.

DARC Meeting Minutes for May 12, 2020
Submitted by Mary Jean Hall KN4FBL

Call to Order and Opening Remarks
Club President Steve Frazier KK4VPT called the meeting to order at 7:02 p.m. on a Zoom conference call and welcomed everyone to the meeting. Due to the COVID-19 Pandemic, the club met online to abide by state and local guidelines. At least 51 members and guests were present for the meeting.

Secretary's and Treasurer's Reports
Barry McDonald W5CJ moved to approve the Treasurer's Report and previous meeting's minutes as published in Sparks. Carrie Blackwell KN4LCU seconded the motion. The minutes and the Treasurer's Report were unanimously approved by the club.

Announcements
Barry McDonald W5CJ updated the members on the status of the 146.820 repeater. The antenna has been replaced, but he is assessing the repeater for other issues. He will update the club as he makes progress with troubleshooting the additional issues.

Joe Lowenthal WA4OVO informed the club members about upcoming testing opportunities, including one in Atoka. Steve Frazier KK4VPT read aloud a message from Jeff Krause AJ4GY stating that he will hold a special testing session on Saturday, May 30 at 11:00 a.m. They will test all levels, but you must contact him to schedule a spot since they will only test three at a time.

Steve Kellett KF4SJU, the West Tennessee Assistant Section Emergency Coordinator for TNARES, talked about ARES Connect as a new way to submit ARES volunteer hours. John Reiners KN4BVH said that ARES Connect is found at ARRL.volunteerhub.com. Once you create an account, it takes 24-48 hours to see the event listing. You can keep tabs on your volunteer hours through this program; this makes it easier for reporting hours. John said that they will go over ARES Connect at the May Shelby County ARES Meeting.

Steve Frazier KK4VPT said that Field Day activities will likely be done individually, though he was unsure about final decision. He encouraged club members to get familiar with their equipment and to ask the club for any needed assistance.

Discussion / Program
Steve Frazier KK4VPT shared his screen and discussed the N3FJP ARRL Field Day Contact Log. He showed everyone how to log contacts, see previous entries, and use other features of the software that is popular to use during Field Day. Club members discussed the ARRL Field Day Rules and how members should consider classifying themselves if they are to work Field Day individually.

Announcements
Barry McDonald W5CJ thanked everyone who helped out with the 146.820 repeater antenna. Members then discussed the antenna and its location on the repeater.

Joe Lowenthal WA4OVO told the club that we will consider chartering a bus to the Huntsville Hamfest, but he is waiting to see if the event is confirmed before he books it.

Closing Remarks
Len Grice W4MKS moved to adjourn. With no objection, Steve Frazier KK4VPT adjourned the meeting at 7:53 p.m. The next Delta Amateur Radio Club meeting will be Tuesday, June 9, 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 June Sparks or the Delta Amateur Radio Club Facebook page just before the scheduled meeting time for more information.

HAM LICENSE TRAINING for 2020
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 <u>wa4ovo@gmail.com</u> 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
11 Technician
3 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 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 General class will probably start in early November.

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

SCHEDULED CLASSES

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

Tech Class 3-20 will be held starting June 25th on six Thursday nights from 6:15-9:30pm on a combination of Zoom online and in person classes at the Memphis Police Department Appling Farms station, 6850 Appling Farms Parkway. The classes will be held on June 25, July 2,9,23,30 and August 13. To register send an email with Subject line: Tech Class 3-20 and include name, email address and cellphone number in the text area. A Federal Registration Number (FRN) is required for the FCC exam.

CURRENT CLASSES

None

COMPLETED CLASSES

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 3rd 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 22nd to March 21st on four Saturdays except March 14th 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 caronavirus 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 Tiption County ARS VE team led by Bob AI4GI with Ronny WA4RW and Bill KI4BIYfor offering the test session.

Congratulations to Chris Smallwood for earning his Technician license on May 18th 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 4th 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 25th. Congrats to Brett Johnston

KN4SMV for upgrading at the February 11th Delta Club test session. Congrats to Jim Harris KF5TPT for upgrading at the Olive Branch ARRL exam session on February 19th.

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 15th 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 7th thru December 19th 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 19th. 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 KN4ZNJ, 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 8th thru August 12th 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 12th 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-200O 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 5th through February 16th excluding January 26th (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 9th. 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 16th.

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.

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.

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

Ham 101 is on hold due to COVID-19. We will resume when the club resumes their meeting. I and still looking for ideas for programs after the one I had planned for April. If you would like to have something covered then e-mail me at w4gmm@bellsouth.net.

ARMED FORCES DAY 2020

 Joint services have postponed the Crossband test until Fall due to Covid=19.

 FALL, 2020 is the date of this years Armed Forces Day Cross band Communication Test. Due to the current restrictions I have not been able to recruit operators. WE will operate at NSA Mid-South at the MARS building N-100.We will operate from 1200z Saturday until 0100z Sunday. 6am till 8pm local time.
This would be a great time for those that are interested in HF but don't have the room or equipment to get some on air time. We will be operating two stations most of the day. If you can come for just an hour or two we would welcome the help. We will be joining with other stations operating from military locations. This is an important test as it gives the military knowledge that in an emergency it can enlist the help of Ham Radio operators across the country. It is not a contest except for bragging rights among the military stations.
Anyone interested may contact W4GMM at w4gmm@bellsouth.net.

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

Lots of older equipment use transistors in the circuitry. Replacement small signal transistors like the popular 2N2222A have been around for 40 years. Along with transistors like the 2N3904 and 2N3906 they have been used in lots of circuit designs. eBay also has packages of transistors with different common types in the box. Getting these using eBay is easier than ever. I recently got 100 2N2222A transistors for under $3.00 with free shipping. Transistors for less than 5 cents each makes repair and experimenting with our own projects very cheap. Since eBay has many transistor types just search for the part number or do a search for "transistor" to see all the deals they have.

James Butler
KB4LJV

Amateur Packet Update
Submitted by James Butler, KB4LJV

Many new radios use a DSP filtering system to allow better reception of signals. Older radios do not have these systems. SOTAbeam has come out with a new add-on DSP filtering system. Just plug the unit into the headphone jack of the radio. Connect output of the Wolf-100 to a speaker or headphones and you are ready to go. This DSP filtering unit has adaptive noise reduction, band pass filtering, Morse code decode function and even correction for hearing loss. The unit has an OLED display that can show the band pass audio spectrum as it is adjusted. Features like 50 Hz to 5 KHz frequency adjustment mean you can have a setting just like you want. The unit also has a one button bypass to compare your setting with straight through audio to hear the difference. This Wolf-100 is very powerful with the latest processor and a 20 bit analog to digital converter for the best performance. If you are looking for the ultimate add-on DSP for your older radio have a look at the SOTAbeams Wolf-100 sold by DX Engineering. The web address is www.dxengineering.com

James Butler
 KB4LJV

AMSAT announces 2020 Field Day rules

It's that time of year again; summer and Field Day!
Each year the American Radio Relay League (ARRL) sponsors Field Day as a "picnic, a campout, practice for emergencies, an informal contest and, most of all, FUN!"

The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

For 2020, the event takes place during a 27-hour period from 1800 UTC on Saturday June 27, 2020 through 2100 UTC on Sunday June 28, 2020.
Those who set up prior to 1800 UTC on June 27 can operate only 24 hours.

AMSAT Director of Contests and Awards Bruce Paige, KK5DO, has announced the rules for the 2020 event.

Paige notes that "AMSAT has followed the ARRL when it comes to the date, times and most rules with regard to Field Day. [ARRL has made some modifications due to COVID-19]. With that in mind, AMSAT is going to have to adapt as well."

Paige further elaborates, "What we will do for AMSAT Field Day is con-centrate on rovers and operating from home." In line with this new concentration, the awards issued this year will be modified.
The top three club stations will receive certificates as will the top three stations overall (instead of the top three home operators on emergency power). AMSAT will also award certificates to the top three roving stations.

The 2020 rules can be found at https://www.amsat.org/field-day/.

Bruce Paige, KK5DO
AMSAT Director of Contests and Awards

Amsat

73,
W4WTN

How to get on DMR in 3 easy steps! BridgeCom systems

If you are looking for the first steps to take to get on DMR radio, you are in the right place. Keep reading for this easy 3 step guide on how to enter the exciting world of DMR.

But before we get into the details, did you know that out of 763622 amateur users in the US 96973 have already taken the plunge into DMR (as of 2020)? This number grows daily! With thousands more worldwide! What this means for you is an exciting opportunity to communicate with other users in a brand new way!

Here's the problem you face with your newfound interest in DMR… Most people in the amateurradio community think it is difficult to get started.

It's possible you may write DMR off because of this common misconception and miss out on a really enjoyable experience with DMR.

Luckily for you, we are busting this myth with this 3-Step Guide to get on DMR, a step by step solution to get anyone on DMR quickly.

Let's go over the basics… What is DMR ?

This exciting technology is sweeping across the Ham Radio landscape. It's called DMR and this stands for Digital Mobile Radio. By using an internet-linked local repeater or a HotSpot, you can communicate with fellow hams all across the globe with clear digital communications.

Hello, my name is Ron Kochanowicz, KCØQVT, owner of BridgeCom Systems. I've been a licensed amateur since 2003. My experience with DMR began in 2009 when I attended Motorola's first-ever third-party MOTOTRBO app developers conference. Since that time, DMR has exploded in usage for both commercial and amateur radio because DMR is an open standard. This has allowed many manufacturers to supply the market with low-cost DMR handhelds. This has been great for amateur radio because it allows for many hams to enjoy this exciting new technology at an affordable price.

We at BridgeCom Systems provide DMR radios. As a result, we are often asked: "How do I get on DMR? Or What do I have to do to get on DMR?" That's why I wrote this simple 'How-To' guide. I want to help you get on the air. This 'How-to' guide is not intended to get technical nor is it intended to expose you to all the intricacies that make DMR work. I simply want to outline the steps you need to take in order to start using DMR as soon as possible.

Before we dive in I recommend you read the whole guide before doing any of the action steps so you have a complete picture of what to do.

Let's get started!

STEP 1: You need to get your own unique DMR ID.
Visit www.radioid.net , register with your amateur radio call sign and obtain a DMR ID.
www.radioid.net has an automated registration process where you can instantly get a unique
DMR ID. Why do you need an ID? This will allow for you to take and use your DMR radio
anywhere in the world and be uniquely identified and access DMR networks to communicate. It
is a must when using DMR!
For a step by step guide to get a DMR ID, watch this video we have created to help you!
https://youtu.be/o73BPhBeMIg

STEP 2: Get a good quality DMR capable handheld radio –
You need a good reliable radio that's heavily supported by the company you bought it from.
Support is absolutely critical when considering the purchase of a radio, especially when it
comes to DMR. Because DMR can be complicated, you're probably going to have a lot of
questions. Oftentimes folks new to DMR will buy a low priced DMR HT on Amazon or eBay
and soon after, they find themselves in a bad way if problems arise. They'll make an effort to
contact the vendor they purchased the radio from and then be told to contact the manufacturer.
This creates a great amount of grief and causes a lot of people to simply give up on DMR due to
lack of support from hands off vendors.
So, you want to make absolutely sure you partner with a good company that has the resources
to help you be successful. At BridgeCom Systems, we are committed to your success and
enjoyment with DMR. Ham Radio is supposed to be fun!
That's why we've partnered with AnyTone, makers of the popular AT-D878UV Plus dual-band
UHF/VHF DMR radio. The AT-D878UV makes getting on DMR very easy and we support the
AT-D878UV 100%. We've sold thousands of AnyTone's AT-D878UV Plus DMR radio and it
has proven to be an extremely reliable and versatile radio. Our extensive knowledge of the
AT-D878UV Plus and DMR makes us a good partner for you.
Check out the AnyTone 878 Plus here https://
www.bridgecomsystems.com/products/anytone-at-d878uv-plus-bluetooth-gps-programmi
ng-cable-with-support
We have worked to create an exhaustive course of over 86 'how-to' videos ranging from how to
install the CPS (Customer Programming Software); to creating your first code plug, and making
your first contact. This course is called BridgeCom University and comes FREE with an
AnyTone Handheld from BridgeCom.

STEP 3: Make your first contact!
Now that you have a DMR ID and a DMR Radio, what are the options for making your first
contact?
1. Local Repeater- You'll need to find a local repeater. This is not too hard. I suggest you visit

www.RepeaterBook.com and search for a DMR repeater in your area. From there you can obtain the repeater credentials to create a "code-plug"(channel list) for your radio. Another option would be to inquire of your local amateur radio club and see if they support DMR. They should be able to steer you in the right direction. You'll want to inquire and see what talk groups are available and what color codes(Basically a "CTCSS/PL Tone") are used and what network the repeater is connected to if any. Is your local repeater connected to BrandMeister, DMRMARC.net, or something else?

If you are looking for an already made codeplug, visit our public Codeplug Bank on our website https://www.bridgecomsystems.com/pages/download-a-codeplug

2. DMR HotSpot- If you don't have access to a local repeater or you want to be as autonomous as possible, the BEST way to communicate worldwide is through a DMR Hotspot. A DMR hotspot is essentially a link that allows you to use your handheld DMR radio to communicate with other connected repeaters or HotSpot connected users on the internet.

Simply put, if you have an internet connection, you can connect to the DMR network and talk all over the world. It's amazing and this pictorial below says it all.

If you're a do-it-yourself kind of person, I hope this 3 step process greatly assists you in getting on the air with DMR.

If it all seems overwhelming and you want to press the EASY button, BridgeCom Systems can save you a ton of time and get you a plug and play system you don't have to program. We offer a DMR Plug-n-Play bundle that includes an AT-D878UV PLUS and a DVMEGA Dual Band HotSpot all programmed and ready to go . We can program your radio and your hotspot to 11 of the most popular talk groups on the Brandmeister DMR network. As an added bonus, we'll program in your state-wide talk group so that all you have to do is plug it in and you're making QSO's. Simply order the package, and supply us your DMR ID and amateur radio call sign, and we'll program your DMR HT and Hotspot for you so you're up and running right out of the box.

Click here for all the information to get your new DMR radio ready to use right out of the box!

https://www.bridgecomsystems.com/pages/anytone-878-plus-dual-band-dvmega-hotspot

We hope this guide has been helpful in learning how to get on DMR.

If you have any questions, please email us at Contactus@bridgecomsystems.com or give us a call at 816-532-8451. We would be happy to assist you!

NEW WSJT software is out!

The WSJT Development Group is pleased to announce the general availability (GA) release of WSJT-X Version 2.2.0. A brief summary of new features is provided here; for further details see the Release Notes:

http://physics.princeton.edu/pulsar/k1jt/Release_Notes.txt

... and of course the updated WSJT-X 2.2 User Guide:

http://www.physics.princeton.edu/pulsar/K1JT/wsjtx-doc/wsjtx-main-2.2.0.html#NEW_FEATURES

New Features in WSJT-X 2.2.0:

- Significant improvements to the decoders for FT4, FT8, JT4, JT65, and WSPR.

- New format for "EU VHF Contest" Tx2 and Tx3 messages

When "EU VHF Contest" is selected, the Tx2 and Tx3 messages (those conveying signal report, serial number, and 6-character locator) now use hashcodes for both callsigns. This change is NOT backward compatible with earlier versions of _WSJT-X_, so all users of EU VHF Contest messages should be sure to upgrade to version 2.2.0.

- Accessibility

Keyboard shortcuts have been added as an aid to accessibility: Alt+R sets Tx4 message to RR73, Ctrl+R sets it to RRR.

As an aid for partial color-blindness, the "inverted goal posts" marking Rx frequency on the Wide Graph's frequency scale are now rendered in a darker shade of green.

- User Interface Translations have been enabled. Translations are now available for Catalan, Spanish, Japanese, Chinese, and Hong Kong Chinese. Additiional languages will follow, when available.

Note that UI translation is automatic, based on your system primary language. If you do not want the WSJT-X UI translated to your local language then start WSJT-X with the '--language=en' command line option:

wsjtx --language=en

If you wish to contribute by authoring WSJT-X UI translations please join the new discussion group wsjtx-l10n@Groups.io (https://groups.io/g/wsjtx-l10n), where help from other translation authors and coordination with the development team is available.

- Minor enhancements and bug fixes

"Save None" now writes no .wav files to disk, even temporarily.

An explicit entry for "WW Digi Contest" has been added to "Special operating activities" on the "Settings | Advanced" tab.

Contest mode FT4 now always uses RR73 for the Tx4 message.

The Status bar now displays the number of decodes found in the most recent Rx sequence.

The "Highlight Callsign" UDP message has been enhanced to allow clearing of old highlighting for a specified callsign. Please note a recommended restriction on the use of this message in the documentation here: https://tinyurl.com/y85nc3tg

- Hamlib - this library which we use for direct rig control has had many defect repairs and enhancements, we thank the contributors to that project for their work.

Upgrading from earlier versions of WSJT-X should be seamless. There is no need to uninstall a previous version or move any files.

Please do not continue to use any release candidate -- that is, any beta release with "-rc#" in the version name.

Links to installation packages for Windows, Linux, and Macintosh are available here:
http://physics.princeton.edu/pulsar/k1jt/wsjtx.html

You can also download the packages from our SourceForge site:
https://sourceforge.net/projects/wsjt/files/
It may take a short time for the SourceForge site to be updated.

WSJT-X is licensed under the terms of Version 3 of the GNU General Public License (GPL). Development of this software is a cooperative project to which many amateur radio operators have contributed. If you use our code, please have the courtesy to let us know about it. If you find bugs or make improvements to the code, please report them to us in a timely fashion.

We hope you will enjoy using WSJT-X Version 2.2.0.

-- 73 from Joe, K1JT, Steve, K9AN, and Bill, G4WJS,
for the entire WSJT Development Group

73,
W4WTN

NEW satellite activated!

DOAAF-85 (RS-44) amateur radio transponder activated
The amateur radio linear transponder (SSB/CW) payload on the Russian satellite DOSAAF-85 (RS-44) has been activated.

Dmitry Pashkov R4UAB reports:

DOSAAF-85 is a small scientific satellite created by specialists of the company Information Satellite Systems (ISS) Reshetnev and students of the Siberian State Aerospace University (SibSAU) Krasnoyarsk.

The satellite is named after the 85th anniversary of the Voluntary Society for the Assistance to the Army, Aviation and Navy, the organization responsible for the military training of Soviet youth.

The DOSAAF-85 satellite is designed to provide amateur radio communications, as well as to develop promising technologies. This is the third satellite that was created by specialists of ISS-Reshetnev and is based on the Yubileyniy platform, which features a hexagonal prism structure with body mounted solar cells.

The satellite was launched into orbit on December 26, 2019 from the Plesetsk Cosmodrome and is in an elliptical orbit with a perigee of 1175 km, an apogee of 1511 km and an inclination of 82.5 degrees.

Transmitter power - 5 watts
Beacon: 435.605 MHz - transmits call sign RS44

Inverting transponder:
Earth-to-Space: 145.965 MHz +/- 30 kHz
Space-to-Earth: 435.640 MHz +/- 30 kHz

Source Dmitry Pashkov R4UAB whose page also contains the satellite's TLE, see
https://tinyurl.com/RussiaR4UAB

Peter 2M0SQL has added RS-44 to the AMSAT Live OSCAR Satellite Status Page at
https://www.amsat.org/status/
73, W4WTN

S.O.S.

A Welsh radio amateur copied the Titanic distress call, but authorities did not believe him.

April 15 marked the 108th anniversary of the Titanic disaster. As the passenger vessel was going down, frantic shipboard radio operators transmitted repeated distress calls.

Arthur "Artie" Moore, MNX, near Pontllanfraith, Wales, heard one of the calls for help: "CQD CQD SOS de MGY Position 41.44N 50.24W. Require immediate assistance. Come at once. We have struck an iceberg. Sinking." At that time, operators used "CQD" (come quickly, distress) and "SOS" interchangeably. MGY was the RMS Titanic's call sign.

The then 26-year-old Moore picked up the distress calls from the stricken ship thousands of miles away, and, as recounted in The South Wales Argus newspaper, he raced to inform police about what he'd heard, but the authorities would not believe him.

It wasn't until a day or two later that the grim news reached the shores of Great Britain. More than 1,500 people died in the tragedy, including some prominent individuals, on the voyage from England to the US on the Titanic's maiden voyage.

http://www.arrl.org/arrlletter?issue=2020-04-23

73,
W4WTN

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.

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│                          ARES                                │
│           Amateur Radio Emergency Service                    │
│    Emergency Coordinator (EC) - John Reiners KN4BVH          │
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If you are interested in joining Shelby County ARES, complete an application at 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.

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│                   Public Service Events                      │
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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.

2020 Date	Event	Contact Information
Jan. 18	~~Swamp Stompers 50K/25K Run~~	~~Ken Laseter KI4AOH~~
May 12	MARS contacts POSTPONED UNTIL THE FALL	
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

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│              Hamfests in the Southeast Area                  │
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2020

January 24-25	~~Capitol City Hamfest in Jackson, MS~~
February 7-9	~~HamCation 2019 in Orlando, FL~~
February 16	~~LCARC's 2020 Winterfest in Hoxie, AR~~
March 6 - 7	~~BirmingHamfest 2019 in Birmingham, AL~~
March 14	~~MTARS Hamfest Tullahoma, TN~~
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

• **As of October 2018, all you need to renew your ham tag is to provide a <u>copy of your FCC license</u> 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.

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| **Memphis Area VHF/UHF Nets** |
| Updated January, 2018 |
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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	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
As of January 2019
All times are Central Time

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 & 6:30 PM
Saturday - 8:00 AM & 6:30 PM
Sunday - 8:00 AM only
Holidays - 8:00 AM only

If you would like to advertise equipment you have for sale, please email Bob. My email address is 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 or
call me @ 901-413-6096 Lel Nicholson

DELTA CLUB ADVERTISEMENTS