#### DELTA AMATEUR RADIO CLUB founded 1961

## **SPARKS**

P.O. Box 342768 \* Memphis, Tennessee 38134-2768 \* Volume 26 \* March 2018



# Welcome to the Delta Amateur Radio Club Website: W4BS.ORG or DeltaClubMemphis.com

Contact via Email
Facebook: https://www.facebook.com/darcmem

#### W4BS REPEATER SYSTEM

146.820<sup>-107.2</sup> 147.360<sup>+107.2</sup> 146.625<sup>-107.2</sup> 443.200<sup>+107.2</sup>

224.420<sup>-107.2</sup>

144.390 Digipeater \*Fusion

**This month's meeting** begins at 7pm on March 13, 2018, at Ellendale Church of Christ, 7365 Highway 70 Memphis, TN (1 ½ miles north of Highway 64 (Stage Road)).

This month's program will be presented by **Bob White AI4G**: "Smith Chart, Breakin' It **Down For Little Johnny.**" See Bob's bio later in this newsletter.

**Delta Club FCC testing sessions** are held monthly except December. Registration begins at 5:30 PM; testing begins by 6:00 PM. Please bring a photo ID and another form of identification, copies of existing licenses or CSCEs, and your FCC Registration Number (FRN) if one has been issued. Please be on time for registration to allow our Volunteer Examiner (VE) team to complete their work prior to the club meeting. The 2018 test fee is \$15 (cash or check). Individuals receiving their initial FCC license grant at a Delta Club test session or through a Delta Club training class will receive a complimentary individual club membership for the remainder of the current calendar year when they also show proof of ARRL membership. For more information, please email our VE Liaison, <u>Jeff Krause</u>, <u>AJ4GY</u>, or call at 901-301-6776.

**Congratulations** to those who passed exams during Delta's February 2018 test session:

Joseph Pusatesi – Tech, Carlos O'Neill KK4CRO- Extra, Nathan Koehler – Tech, Johanes Vardes KN4IUZ – General, Todd Vanderpool W4RTV - Extra

#### STORM SPOTTER TRAINING

The National Weather Service, Memphis office, will give an NOAA Storm Spotter Training class on **Tuesday, March 27**<sup>th</sup> from 7pm-9pm at **Lord of Life Lutheran Church**, 6865 Poplar Pike.

#### **President's Corner**

#### Submitted by Steve Frazier, KK4VPT

Looking back over the last few years of the March Sparks newsletters for ideas, the common topic has been tower safety. With the weather getting better, it is a good time of the year to check our antennas of all kinds. Not all are on towers, but almost all are at a height that requires at least climbing up a ladder. People are sometimes surprised to find out I am a private pilot - but also have a healthy respect for ladders. Hopefully we are all aware of the dangers associated with climbing on towers or ladders and will use safe practices including the use of a spotter. If you need help, feel free to ask.

While you are checking out your antennas and other equipment, keep in mind that FreeFest on Saturday April 14 will be a great time to get what you need to repair, replace or upgrade.

Once again we have had great support from all of you who have renewed your membership for 2018 - Thank you!

If you would still like to renew for 2018, it is not too late and we would appreciate your support.

I look forward to seeing you at the meeting on Tuesday. And don't forget to join us every night at 8:00pm on the 146.820 repeater net. Thanks to our dedicated net controllers the nightly net is a great way to stay updated and in contact with fellow amateur radio operators in the area.

73

Steve

KK4VPT

It's Time to Renew Your 2018 Annual Memberships! Download the latest Delta Club Membership Application Form. The 2018 membership renewal fee remains a very modest \$20 for an individual, with an additional \$5 fee for family membership. Thanks for Your Active Support of Delta Amateur Radio Club!

#### **DELTA AMATEUR RADIO CLUB**

Monthly Treasurer's Report For month ended February 2018

Submitted by Linda Laseter Treasurer

		CKING ACCOU					
BEGINNING BALANC		GINNING BALAN y 1, 2018	CE				\$3,534.30
		INCOME					
Date					Amount		
02/19/18	Membership du	ues		\$	575.00		
TOTAL INCOME			_	\$	575.00	\$	575.00
TOTAL INCOME				Э	3/3.00	<b>3</b>	5/5.00
		EXPENSES	)				
Date Check #	# To Description		n		Amount		
02/06/18 1444	Scott Adams	Refreshements		\$	(50.97)		
			_				
TOTAL EXPENSES				\$	(50.97)	\$	(50.97
ENDING BALANCE	as of February	y 28, 2018				\$	4,058.33
	CEDTIFIC	CATES OF DEP	OSIT				
	Maturity Da		lance as o	f			
Certificate of Deposit #1	10/10/18		1/31/18			\$	10,567.95
Certificate of Deposit #2	10/19/22	2	12/19/17			\$	10,160.25
TOTAL DARC CASH A	SSETS					\$	24,786.53

### This Month's Board Meeting Minutes Submitted by Steve Evans KM4VYA

DARC Board of Directors Meeting Minutes March 7, 2018, submitted by Steve Evans KM4VYA

1900: Called to order by DARC President Steve Frazier Treasurers Report Presented

Secretary's Report
Dues run from January to January
2017=159 paid members
2018=100 paid members so far this year

Discussed progress of Data Scrub. We have been working diligently to standardize data the requested and retained. Starting in April we will be changing our sign in roster to reflect current members. Members in good standing (paid up) will appear on the official sign in roster. We do not print out all the columns of the Official Roster as it would be unmanageable. However, we do track attendance

Members who have not already paid for 2018 will be bounced against the number of meetings attended columns on the full DARC spreadsheet. If they have not attended meetings in the last 2 years, they will be considered inactive and moved to another portion of the spreadsheet; NOT DELETED but Moved.

We are also trying to update the ARRL membership column to reflect expiration dates instead of a yes or blank entry. If you are an ARRL Life member, please indicate that fact in the ARRL column next to your name. All others please provide expiration dates, so we can capture that information.

Please understand that this scrub is a work in progress. If you notice inaccurate data, please leave a message as to what is in error in the comments section of the official sign in roster. We appreciate your assistance and your patience as we try to improve our record keeping, so all can benefit.

Finally, Delta Club will be seeing Mary-Jean Hall KN4FBL, step in as secretary beginning in April. I accepted (and appreciate) your vote of confidence to fill the position in January in an interim status. I will continue to assist her as we work through this transition (and data scrub). Mary-Jean brings organizational and computer skills vastly superior to mine, as well as a really great attitude to the job. Thank you all for your help.

#### **Newsletter Report**

Currently show 750 + members on roster for Sparks

Sparks is now hyperlinked through the W4BS.ORG website or DeltaClubMemphis.com

**Training Report** 

Covered current and proposed classes

Meeting Ended 2017 Hrs.

#### Minutes of Last Month's Club Meeting February 13, 2018

#### Call to Order and Opening Remarks

Club President Steve Frazier, KK4VPT, called the meeting to order at 7:00 p.m. at the Ellendale Church of Christ. Steve reminded everyone to renew their 2018 annual membership with the Delta Amateur Radio Club. The 2018 membership renewal fee remains a modest \$20 for an individual. Everyone then introduced themselves by name and call sign.

#### Secretary's Report

Ken Laseter, KI4AOH, moved to approve the February meeting minutes as published in Sparks. Daniel Wehner, KN4FBJ, seconded the motion. The minutes were unanimously approved.

#### Treasurer's Report

Ken Laseter, KI4AOH, moved to approve the Treasurer's Report and the 2018 Proposed Budget as recorded in Sparks. Ned Savage, KA4BLL, seconded the motion. The Treasurer's Report and 2018 Proposed Budget were unanimously approved by the club.

#### **Training**

Joe Lowenthal, WA4OVO, informed the club that tonight's VE testing produced two Extra Class Licensee(s), one General Class Licensee, and two Technician Class Licensee(s). There will be a Technician class starting on Feb. 24, 9 a.m. – 1 p.m. at EMHC.

#### **Announcements**

Steve Frazier, KK4VPT, announced that Barry McDonald, W5CJ, accepted the position as the W4BS Repeater Trustee.

Steve informed the club that St. Jude sent a thank you letter for helping out with communications at the 2017 St. Jude Memphis Marathon, and he encouraged everyone to stop and read it.

Steve encouraged everyone to start thinking about the Huntsville Bus Trip on August 15, 2018.

#### **Old Business**

John Reiners KN4BVH, was presented with the 2017 New Ham of the Year award.

John Reiners KN4BVH, and Keith Barton, KT4EP, were each awarded with a Certificate of Appreciation for their service as a Net Control Operator in 2017.

#### Presentation

The club watched an ARRL video about the History of HAM Radio.

#### **Drawings and Closing Remarks**

Several members won prizes: Rick Kanschat, N0KYN, toolkit; Pat Lane, W4OQG, 4 Range USA range passes; Steve Evans, KM4VYA, 2 Range USA range passes; Janice, Shaner, KX4BB, 2 Range USA range passes.

The meeting adjourned at 8:03 p.m.

#### **March Program**

Bob White AI4GI, Biography

Bob White Al4GI has a varied background. He grew up in Des Moines, IA. Got his Novice ticket, KN0EBO, at age 10 for a year. He received a Bachelor of Science in Electrical Engineering from Florida Atlantic University. Was a sales engineer for Sprague Electric in south Florida. Bob has been bi-vocational in technology and ministry since 1987. He came to Memphis in 1987. He worked for TSS (IBM) and then Williams Sonoma as Manager of Technical Services. In 2008 he became the IT Director at Helena Regional Medical Center in Helena, AR until July 2016. When he got to Helena, he started the Helena Amateur Radio Club with former Delta Club member Joe St. Columbia N5MIG. From 1996 to 2017 he was a part time pastor for a small country church, Ragland Memorial Presbyterian in Forrest City, AR. Last year Bob became the full time pastor at Salem Presbyterian Church in Atoka, TN. In 2004 he tested and got Tech, General and Extra in one session. He is currently President of the Olive Branch Amateur Radio Club (OBARC), an active member of the Tipton County Amateur Radio Society, an active ARRL VE liaison, and still goes to the Helena club meetings.

Bob's program is titled: "Smith Chart, Breakin' It Down For Little Johnny."

#### January HQ 101

#### Submitted by Ham Hilliard W4GMM

**Ham 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 <a href="w4gmm@bellsouth.net">w4gmm@bellsouth.net</a>.



At the February Ham 101, Joe Lowenthal WA4OVO filled in for Ham, showing a variety of battery types for ham radio operations.

Ham Hilliard W4GMM

#### **Delta Ham License Training, 2018**

Submitted by Joe Lowenthal, WA4OVO

#### HAM LICENSE TRAINING for 2018

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 <a href="wa4ovo@gmail.com">wa4ovo@gmail.com</a> 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 2018 from Delta Classes 18 Technician 1 General 7 Extra

#### Note:

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

The current Technician ARRL Ham Radio License Manual Third Edition with question pool that became effective July 1, 2014 for four years. This question pool expires June 30, 2018

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.

The next Technician class will probably start right after July 4<sup>th</sup> with the new question pool. The next General class will probably start in early November. The next Extra class will probably start in early January 2019

#### **CLASSES in PROGRESS**

#### Tech Class 2-18 February 24 - April 7, 2018

Tech Class 2-18 is being held from February 24<sup>th</sup> to April 7<sup>th</sup> except March 10<sup>th</sup> and 17<sup>th</sup> on five Saturdays from 9am to 1pm or 9am to 4pm at EMHC ambulance company training room on Appling Farms Pkwy. There are eight enthusiastic students in the class.

The instructors are Joe Lowenthal WA4OVO, Barry McDonald W5CJ, Pat Lane W4OQG, David Webb KV4QI, Len Grice W4MKS, Perry Hayes N4PSH, and John Reiners KN4BVH. The equipment demonstrators are Joe WA4OVO on repeater basics, Rick Tillman WA4NVM on satellites, Pat Lane W4OQG on HF/MARS/Winlink, Rick Pellicciotti on APRS, and a digital presenter.





Tech Class 2-18 with Barry W5CJ instructing Photo by Joe Lowenthal WA4OVO

#### Extra Class 1-18 January 13 – February 24, 2018

Extra Class 1-18 was held on 5 Saturdays and one Sunday from January 13<sup>th</sup> to February 24th from 9am to 1pm on four Saturdays, 1-5pm on Sunday January 28<sup>th</sup>, and at 2:30 on Saturday February at EMHC ambulance company training room,4<sup>th</sup> for FCC testing. All classes were at EMHC ambulance company, 6972 Appling Farms Pkwy. There were 10 students taking the class with two recent Extras auditing the class.

The students were Dan KN4FBJ, Janet KN4FBI, Billy K4IOA, Jim KN4GJF, David KM4SEC, Todd W4RTV, Ed K7EDT, Mac KJ4EHE, Carlos KK 4CRO, and Robert KN4FVT. The auditing Extras were Nathan KX4IA and Rick WB9TCB.



Extra Class 1-18 FCC test session Photo by Joe Lowenthal WA4OVO

Congratulations to Carlos KX4IS (previously KK4CRO) and Todd W4RTV for their Extra upgrade at the February 13<sup>th</sup> Delta Club test session. Congratulations to Robert Horn KN4FVT, David Jackson KM4SEC, Ed Taggard K7EDT, Mac Tidwell KJ4EHE, and Dan Wehner KN4FBJ for their upgrade to Extra.

Thanks to the Delta Club ARRL team for providing the FCC test session. The VEs were Jeff AJ4GY, Stacy KJ4MDA, Perry N4PSH, Barry W5CJ, Tom KK4ZZZ, Bob KW4RJ, David KV4QI and Joe WA4OVO

The instructors were Joe Lowenthal WA4OVO, Paul Roberts KA9VAU, Dean Honadle N2LAZ, Barry McDonald W5CJ, David Webb KV4QI, and Pat Lane W4OQG.



Dean N2LAZ instructing on Electrical Principles for Extra Class 1-18 Photo by Joe Lowenthal WA4OVO



Barry W5CJ providing propagation instruction to Extra Class 1-18 Photo by Joe Lowenthal WA4OVO

#### Tech Review for CBU January 29, 2018

A Tech Review class was held on January 29<sup>th</sup> for 18 Christian Brothers University students in the initial Engineering Department upper division elective course, Introduction to Unmanned Aerial Systems. All 18 students earned their Technician license while one also earned her General Class license. The students were either Electrical or Mechanical Engineering majors. Eric Welch WD5FTA is the professor. He is Department Chair of Electrical and Computer Engineering.



Tech Review Class at CBU Photo by Len Grice W4MKS

Thanks to the Laurel VEC team led by Tim Jones N5PYQ for providing the VE session.



Laurel VE Team (left-right) Rick KF5WVJ, Joe WT4N, standing left Tim N5PYQ, Jim KE5RHM, Weldon N5YW and not pictured is Ed KF8PD. Joe WA4OVO, standing right, is helping with the registration paperwork. Photo by Len Grice W4MKS

## YL News Submitted by Linda Laseter, KJ4CTX

#### YL News March 2018

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.

Our YL Net continues to grow. Betsy KD4KOM broke our old record of check-ins on February 24<sup>th</sup> with eighteen check-ins and five relays. Great job Betsy! Thanks to all who checked in.

We would love to hear from more YLs. Set your alarm for 8:45 p.m. Saturday night and join us on the net. It is great practice using your radio and you get to know some of the other YLs in the area.

**YL LUNCHEON** — Our theme for our February luncheon was red for Valentine's s of course. We had a good crowd and everyone had a good time. We enjoyed soup, salad and dessert before Jim Cissell KI4I presented the program on HT's and the different equipment you can use with your HT. A lot of notes were taken and we obtained some very good information.

After the program we enjoyed a few rounds of Bingo to celebrate Valentine's. Even the OM's joined in the Bingo fun. Our last game was a cover all and I think there were six numbers left uncalled when three people yelled BINGO! I was beginning to think everyone was going to Bingo at once.

#### MARCH'S LUNCHEON WILL BE:

March 24, 2018 11:30 A.M. Outback 1110 N. Germantown Pkwy. Cordova, TN 901 751-9800

Please drop by the YL table at Free Fest on April 14, 2018. We will have a table with information about our group and we also plan to have a silent auction with lots of goodies. Hope to see you there.

#### New Ham of the Year Award, 2017

Submitted by Steve Evans

The 2017 New Ham of the Year award was presented to John Reiner. John was out of town at the December meeting, so we were able to present the award at the February meeting.



Steve Frazier KK4VPT, shown presenting the New Ham of the Year Award to John Reiners KN4BVH, (Photo by Steve Evans KM4VYA)



Appreciation Certificates awarded to Keith Barton KT4EP and John Reiners KN4BVH, presented by Joe Lowenthal WA4OVO (Photo by Steve Evans KM4VYA)

#### The original "Three Joes!"

At a recent Friday breakfast meeting those present were able to see a rare thing these days: The three Joes all together in one place!



Joe Wray (Joe 2) WD4GXI, Joe Lowenthal (Joe 3) WA4OVO and Joe Gresham WB4NWE (Joe1) (Photo by Bill Stevens WC9S)

**February ARES** meeting a full house! Thanks to **John Reiners KN4BVH**, for taking lead on this important resource. (Photo by Mary Jean Hall KN4FBL)



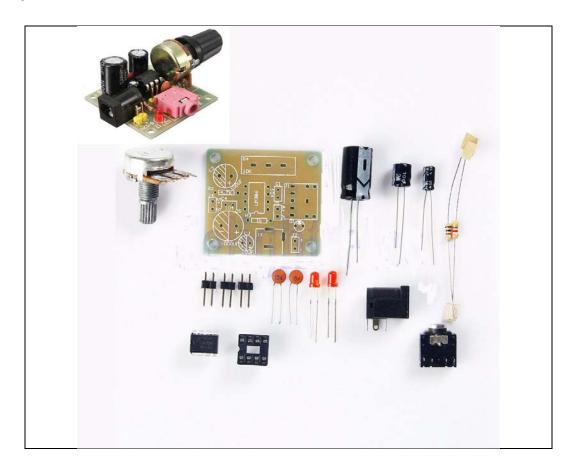
Delta Amateur Radio Cl

#### **Amateur Hardware Update**

Article and image submitted by James Butler, KB4LJV

As hams we need to keep up our electronics skills. This is easily done by building up kit electronics. This keeps you in practice for electronics troubleshooting and soldering skills. In the past many companies offered kit electronics. Luckily the market has lots of kits for hams to build. These range from simple kits in the \$2.00 range going up to more complex kits. Many of these come out of China and are shown for sale on Ebay. These kits include clocks, timers, light control, and amateur radio gear. To see the selection of kits you can build go to Ebay and search 'DIY kit electronics". The address is <a href="http://www.ebay.com">http://www.ebay.com</a>

James Butler KB4LJV



#### **Amateur Packet Update**

Submitted by James Butler, KB4LJV

One manufacturer of kits and assembled QRP radios is LNR Precision. They have several radios based on designs by Steve Weber. His radios are known to by very trail friendly with extremely low power consumption. They offer his designs assembled and tested as well as in kit form. They also have a line of QRP rigs that compete with the Elecraft QRP rigs. LNR also carries a line of antennas for use in the field. If you are looking for quality low power radios check out the equipment from LNR Precision, Their web address is <a href="https://www.lnrprecision.com/store/">https://www.lnrprecision.com/store/</a>

James Butler KB4LJV

#### **SPARKS Newsletter & 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.

2018 Board of Directors				
President Steve Frazier, KK4VPT 901-218-6385	Vice President Bob Van Keuren KM4SEB 901-853-0303	Secretary Steve Evans, KM4VYA 901-237-6905		
Treasurer Linda Laseter, KJ4CTX 901-268-1766 Director of Programs Kevin Zent, K4KLZ 901-207-0024	Director of Training Joe Lowenthal, WA4OVO 901-628-4318 Director of Meetings & Special Events Scott Adams, KM4PMU 901-573-6280	Director of Publications Bob Vawter, KW4RJ 901-438-4563 Repeater Trustee Barry McDonald 901-853-0510		
Public Information Officer Len Grice, W4MKS 901-522-6711  Board members beginning their positions in 2018 are listed in <i>italics</i> .				

#### **Public Service Events**

If you are a coordinator for any of these events, please review the listed information. Please <u>email</u> corrections or additions.

2018 Date	Event	<b>Contact Information</b>
<del>Jan. 14</del>	Swamp Stompers 50K/25K Run	Keith Barton, KT4EP
May 5	March of Dimes March for Babies	Linda Laseter, KJ4CTX
Sep. 8	2018 Bike MS: FedEx Rock-N-Roll	Darrell Sheffield, KK4D
Oct. 6	Bluff City Blues 100 Ride	tbd
Dec. 1	St. Jude Marathon	Roger Schlichter, WR4R

#### **Area HamFests**

January 26-27	Capitol City Hamfest in Jackson, MS
February 9-11	HamCation 2018 in Orlando, FL
February 17	LCARC's 2018 Winterfest in Hoxie, AR
March 2-3	BirmingHAMfest 2018 in Birmingham, AL
March 24	Ides of March HamFest in Union City, TN
April 14	Memphis FreeFest in Bartlett, TN
May 18-20	Hamvention in Xenia, OH
July 28	Greater Nashville & Middle TN HamFest in Lebanon, TN
August 18-19	Huntsville HamFest in Huntsville, AL

#### **Tennessee Ham Radio License Plate**

Submitted by Joe Lowenthal, WA4OVO

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

http://www.tn.gov/revenue/article/emergency-safety

The application can be found at this link:

http://www.tn.gov/assets/entities/revenue/attachments/f1312601Fill-in.pdf

As of July 1<sup>st</sup>, 2017, you must send a copy of or show an ARES membership card to keep from paying the \$25 surcharge for new plates or renewals. If you send a renewal in by mail with the lesser amount and do not include a copy of your ARES membership card, they will return your renewal and check due to insufficient funds.

If you want to become an ARES member, complete an ARES Registration Form FD-98 on the TNARES.com website. The click on Information in the upper right. Scroll down and click on ARES Membership Application: FSD-98.

https://docs.google.com/forms/d/e/1FAIpQLSekaoB6a2YrGNKoSvCq1M7UST9aE\_RwnewMuT-DfgYmWJ\_QRg/viewform

If you are not an ARES member and you do not want to pay the \$25 surcharge for renewal, you can get a regular plate for no additional charge. You will need a copy of your previous registration or there is an additional \$3 charge.

If a spouse is also a ham, only one of the couple needs to be an ARES member if the auto is registered in both names. If registered in the spouse's name, the spouse must have an ARES membership card.

The following link from the Tennessee Department of Revenue <a href="https://www.tn.gov/revenue/article/emergency-safety">https://www.tn.gov/revenue/article/emergency-safety</a> has the Amateur Radio auto tag information and listed below:

#### Amateur Radio

Available to: Tennessee residents who hold an official FCC-issued amateur radio license (unrevoked and unexpired).

Documentation Required: Application supported with copy of the FCC Amateur Radio license. Cost: Annual fee of \$51.50; Members of emergency, rescue squad and Amateur Radio Emergency Service - \$26.50.

#### **Memphis Area VHF/UHF Nets**

Updated January, 2018

Name of Net	Freq. MHz	Offset/Tone	Local Time	Day of Week
Delta Club Information Net YL Net	146.820	- (107.2)	8:00p	Daily
	146.820	- (107.2)	8:45p	Sat
Mid-South Barefooted Bullfrog	Net	146.535	[simplex]	7:30p Daily
Secret Service Net	224.780	[no tone]	8:30p	Mon
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
Super Sunday Niner Net	927.6125	- (146.2)	8:30p	Sun

#### **Delta Club sponsored Nets are shown in red.**

#### **TENNESSEE HF NETS**

As of January 2018
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

#### **DELTA CLUB ADVERTISEMENTS**



#### MID-SOUTH AMATEUR RADIO SUPPLY (MSARS)

6631 Vallendar Cv., Bartlett, Tennessee 38135 tel: 901-371-9700 • fax: 901-266-3374 • web: www.msars.com

CURRENTLY STOCKING			
Antennas	Antenna Mounts	Connectors	Coax & Cable
HT	Magnet	UHF	RG-213
Mobile	Trunk Lip	"N"	RG-8/U Mini
Base Station	Roof Mount	SMA	RG-58
HF	Window Mount	BNC	450 & 300 Ohm
Wire	Swivel Ball	RCA	Rotor Cable

LDG Electronics	Accessories	Miscellaneous
Automatic Antenna Tuners	RF Chokes	Gordon West Books
Remote Tuners	Power Poles	Coax Seal
Brand Specific Antenna Tuners	Antenna Switches	Fuse Holders
Baluns	SWR/Power Meters	Remote Tuner Boxes
Ununs	Mic Holders	Dog Bone Insulators

Owners/
Operators

Steve
W5VAA

Rosalinda
WN2V

Ham
W4GMM

Mid-South Amateur Radio Supply, (MSARS.COM) is owned and operated by local hams who are dedicated to promoting the hobby and providing help to anyone interested in ham radio. We actively support the local amateur radio clubs and are ARRL members.

MSARS offers free antenna building classes each year and help many new hams with guidance on their first radio, setting up a ham shack, programming a radio and much more. We are proud to be a part of the ham radio community and are here to help you.

#### 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)

#### Ben Richhart Sales and Service Director

Chick-fil-A at Paragon Place 6282 Poplar Avenue

Memphis, TN 38119 Phone: 901-766-1875 Fax: 901-766-1878

E-mail: ben@cfaparagonplace.com



Please thank our sponsors by using their services and mentioning that you saw their ad in the Delta Club SPARKS Newsletter!	This space is available!
We offer our continued thanks to EMHC ambulance company for generously providing their training room for the many ham radio classes given there.	Advertisement forms can be downloaded from our website – http://w4bs.org/aboutUs.html