This month’s meeting begins at 7pm on March 8, 2016, at Ellendale Church of Christ, 7365 Highway 70 Memphis, TN (1 ½ miles north of Hwy. 64 – Stage Road).

This month's program is "An Overview of Logbook of The World (LoTW)" by our own Larry May, K4QZF. Larry will tell us what LoTW is, who can use it, its costs, how does it mesh with QSL Cards, is it secure, and other topics. First licensed in 1959, Larry holds an Extra class ticket and a commercial radiotelephone operator’s license with ship’s radar endorsement. He served four years in the U.S. Navy and is retired from a career in electronics instrumentation and control design and maintenance engineering for DuPont, Raytheon, Magnevox, KBR and others. Larry enjoys amateur radio operations using PSK31, WSPR, JT65, HF SSB and CW, and 2 meter FM.

Delta Club FCC testing sessions are held every month except December. Registration begins at 5:30 PM and testing begins by 6:00 PM. Please remember to bring two forms of identification, one of which is a photo ID, and copies of any existing licenses or CSCEs. You need to know your FCC Registration Number (FRN) if one has been issued. Please be on time for registration to allow our Volunteer Examiner (VE) team to finish in time to attend the club meeting. The 2016 test fee is $15 (cash or check). Individuals who successfully test for 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 contact our VE Liaison, Jeff Krause, AJ4GY, 901-301-6776 or AJ4GY@comcast.net.

Congratulations to those who passed exams during Delta’s February, 2016, test session: new Technicians William Ludden, KM4RCY, Louis M. Rhinehard, KM4RCX, Larry Statham, KG5LNS, and Jeffrey McKinion, KM4RCW, and new General William Varnadore, KG7QAR. Note that Larry Statham upgraded to General during testing in Joe Lowenthal’s Extra class.
Well, another month has passed and it’s just a few weeks till FreeFest (April 9th). I hope you are looking forward to it as much as I am. For me, it’s always fun to hob-knob with friends in a relaxed atmosphere where everyone shares a common interest. Plus, it’s fun to see what new gadgets are available, whether I need one or not.

As the weather warms and we hams venture outdoors to put up new antennas or repair those weathered ones, PLEASE, keep in mind that “what goes up, must come down.” That includes you. So, PLEASE, take one extra minute to consider what could go wrong during your activities, what you can do to prevent it from going wrong, and double-check the condition of your climbing and personal protective equipment, before you climb. Always use the buddy system and have an emergency response plan. Now, after all that, if it’s still daylight, have a good time!

I understand from Phil Fentress that we still need volunteers to help out as net control operators. This is a great opportunity for new hams to get involved in ham radio and overcome any mic-fright you may have. Our net control operators will work with you mentoring you each step of the way.

Don’t forget to check into the DARC information net on the 146.820 repeater at 8:00 pm each evening, and when you check-in, make sure to thank the net control operator for taking time from their family and busy schedule to call the net for us. They are some our most valuable assets!

You may want to mark your calendars for upcoming SkyWarn training. ARES has scheduled SkyWarn training for March 22nd, at the Lord of Life Lutheran Church, 6865 Poplar Pike, Memphis, TN 38119, starting at 7:00 pm.

As a closing note, if you have not renewed your club membership, now is the time. Linda, KJ4CTX, will be glad to accept your renewal application and cash, check or money order. See you at the meeting!

73,
Kenneth Laseter
KI4AOH
# Treasurer's Report
Submitted by Linda Laseter, KJ4CTX

DELTA AMATEUR RADIO CLUB
Monthly Treasurer’s Report
For month ended February 29, 2016
Submitted by: Linda Laseter, KJ4CTX Treasurer

## CHECKING ACCOUNT

| BEGINNING BALANCE as of February 1, 2016 | $ 8,746.22 |

### INCOME

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<tr>
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<tbody>
<tr>
<td>2/3/2016</td>
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</tr>
<tr>
<td>2/11/2016</td>
<td>Membership dues - 2016</td>
<td>$ 230.00</td>
</tr>
<tr>
<td>2/26/2016</td>
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<tr>
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**TOTAL INCOME**

|  | $ 435.00 |

### EXPENSES

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<td>Ryan Turner</td>
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<td>Radio equip (for resale)</td>
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**TOTAL EXPENSES**

|  | $(2,279.39) |

### ENDING BALANCE as of February 29, 2016

|  | $ 6,901.83 |

### CERTIFICATES OF DEPOSIT

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<th>Amount</th>
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<tr>
<td>Certificate of Deposit #2</td>
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<td>10/9/2015</td>
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</table>

**TOTAL DARC CASH ASSETS**

|  | $ 22,232.19 |
Attendees: Steve Frazier, KK4VPT, Ken Laseter, KI4AOH, Linda Laseter, KJ4CTX, Jim Cissell, KI4I, Barri Munday, WB4SWP, Joe Lowenthal, WA4OVO, Bill Stevens, WC9S, Dan Lasley, NE7JN. Michael Knight, KK4IOH, and Len Grice, KM4MRY, were absent.

The meeting was called to order at 7:15 pm. Jim Cissell reported that Larry May, K4QZF, will speak on Logbook of The World at the March meeting. The program for the following meetings will be Glen Popiel, KW5GP, Arduino projects (April), and Michael Knight, KK4IOH, Field Day (May).

SkyWarn will be the topic of the ARES meeting on March 22nd. Details provided elsewhere in this month's newsletter.

Bill Stevens said the 146.625 repeater is down and he has been investigating the cause. Bill also indicated Jelly Thompson, N4HLT, is requesting permission to use Delta’s 146.820 repeater on April 2nd for the Shelby County Auxcom exercise. Bill then made a motion that the board grant permission, seconded by Linda Laseter; the motion passed.

Bill said the Nashoba Club is inviting all clubs to join in Field Day at Morgan Woods, Pickering Center, on Poplar Pike near the horse show arena. Joe Lowenthal moved to accept the invitation on behalf of the Delta club, Steve Frazier seconded; the motion passed.

Bill discussed the inventory of equipment obtained from Dan Beebe and asked to have the inventory added to this month's newsletter, with a silent auction to take place at the next meeting.

Linda presented the treasurer’s report and discussed the club's increasing membership numbers.

Joe Lowenthal discussed the training classes being held; details are to be found elsewhere in the newsletter. Joe asked to buy to tables for the training classes being held at the EMHC ambulance company to show our appreciation for their continued courtesy to the Delta club. Jim Cissell moved to purchase the tables, seconded by Dan Lasley; the motion passed.

Joe also discussed the club again providing a bus to the Huntsville ham fest. We need at least 41 people to break even. Prices will be as follows: April and May $55, June & July $65, August $75, with the exception that new hams attending a Delta club training class will pay $60. Bill made a motion that Delta provide a bus, seconded by Steve; the motion passed.

The meeting adjourned at 8:30pm after a motion by Linda and a second by Jim.
The meeting was called to order by Ken Laseter, KI4AOH, at 7:00pm. Introductions were made by name and call sign.

A motion to approve the Minutes made by Richard Martin, K4DXF; second not recorded.

A motion to approve the Treasurers Report was made by Bill Covington, KC4SXT, and seconded by Steve Smith, W5VAA.

Linda Laseter, KJ4CTX, read the proposed budget; Bill Stevens, WC9S, moved to accept as read and Joe Lowenthal, WA4OVO, seconded; attendees approved by acclamation.

Joe, WA4OVO, announced that an Extra Class was in progress with testing on February 20th and a Technician Class is beginning on February 22nd at EMHC. Joe also announced that EMHC will be the back up to The Med in the event of an emergency; EMHC has some ham radio operators on staff.

Ryan Turner spoke about the HamWan equipment that is going up at Methodist North Hospital.

Ken Laseter and Michael Knight, KK4IOH, asked for volunteers for Field Day to be held at Morgan Woods on the horseshow grounds on Poplar Pike at the railroad tracks near Germantown High School.

Net Control Operators are needed especially on Tuesday night due to Juan Carlos having to relinquish his post.

Now is the time to renew your membership for the year!!!!!

Jeff Krause, AJ4GY, announced there were 4 new techs and 1 new general after testing.

Jim Cissell, KI4I is asking for ideas for programs for the months of June through the end of the year.

March 22nd is a Storm Spotter class to be held at Lord of Life Lutheran Church, 6865 Poplar Pike, Memphis, TN at 7:00 pm.

Tonight’s program was presented by Gary Woodall with the National Weather Service. He spoke about how ham radio operators are beneficial to the weather service.

Motion to adjourn at 8:30 pm by Dean Plessala, KC5RDP; second not recorded.
Many times when receiving signals we want the signal and not extra noise or tones. Older circuits used through-hole electronic parts on a PC board to modify the signal for best reception. Now the latest is to use a DSP (digital signal processor) chip to do the job. These are programmed for different filtering and noise reduction functions. BHI has come out with a portable battery powered noise reduction DSP for amateur radio. It has adjustable noise reduction. It has speaker or line level input jacks. The output is a headphone jack for stereo headphones or a speaker. The unit uses 2 AA batteries or an external DC power supply at 8 to 15 VDC. If you are looking for a portable noise reduction DSP, check out this one from BHI. The web address is www.bhi-ltd.com.

When building up computer circuits we often want to control things in the real world. This means we need a method to handle the voltage and current required to turn the device on and off. The relay is the best to do this job. Wiring them up to computers has become a lot easier now that the computer interface and relay along with a terminal strip to hook the wiring up for our device is being built on a PC board. This is ready to hook up and go. Ebay has these relay outputs at a great price. The single relay board with a current rating up to 10 AMPS and voltages to 230 VAC sell for about $1.25. You can also buy boards with 2, 4, or 8 relays on one PC board to turn multiple devices off and on. Go to Ebay and do a search for "Arduino relay board" to see all the products offered.
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.

Licenses Earned in 2016 from Delta Classes

- 0 Technician
- 0 General
- 4 Extra

If you are interested in attending a training class, send an email to Joe Lowenthal at wa4ovo@gmail.com with the desired class name in the subject line, along with your name, email address and (cell) phone number in the text.

**Current Classes**

**General Class 2-16: February 27 - April 9, 2016**

This General Class began on February 27th and will run for six Saturdays from 9am to 1pm at EMHC ambulance company’s training room, 6972 Appling Farms Parkway. There are three students in the class. The instructors are Joe Lowenthal, WA4OVO, Pat Lane, W4OQG, and Jack Moody, KK4VPY. The Elmer is Mike Sparks, KK4VPZ.

General Class 2-16 left to right: Scott Adams, KK4PMU, Clay Hancock, KD4VXN, and Jim Barnes, N5YOK. Photo by Joe Lowenthal, WA4OVO.
Technician Class 3-16: February 22 - April 4, 2016
This Technician Class began on February 22nd and will run for six Monday nights from 6:15 pm to 9:30pm at EMHC ambulance company’s training room, 6972 Appling Farms Parkway. Fifteen students attended the first class, but only eight attended the second class. Instructors are Joe Lowenthal, WA4OVO, Pat Lane, W4OQG and Bob Vawter, KM4OWT. The class Elmer is Len Grice, KM4MRY. The WCARS VE team will provide the FCC testing opportunity on the fifth night of class. On the sixth night of class the equipment demonstrators will be Michael Knight, KK4IOH, on digital modes (Allstar, Echolink, D-Star, Fusion, DMR), Rick Pellicciotti, KJ4NWQ, on APRS, Pat Lane, W4OQG, on Winlink and MARS, and Rick Tillman, WA4NVM, on satellites.
Classes Completed

Extra Class 1-16: January 9 - February 20, 2016
This Extra Class started on January 9th and ran for six Saturdays from 9am to 1pm at EMHC ambulance company’s training room, 6972 Appling Farms Parkway. Seven hams were in the class. Congratulations to Jack Moody, KW4RH (was KK4VPY), Richard Smith, KJ4UZK, Mike Sparks, KW4RI (was KK4VPZ) and Bob Vawter, KW4RJ (was KM4OWT) for upgrading. The instructors were Ed Arndt, KV4LF, Dean Honadle, N2LAZ, Pat Lane, W4OQG, Paul Roberts, KA9VAU, and Joe Lowenthal, WA4OVO.

The Delta Club VE team headed by Jeff Krause, AJ4GY, provided the opportunity for FCC testing on February 20th. The other VEs were David Webb, KV4QI, Ray Turner, AE0AE, Scott Vanzandt, N2WMD, Tom Dichiara, AC5MR, and Joe Lowenthal, WA4OVO.

Extra Class 1-16 Test Session. Photo by Joe Lowenthal, WA4OVO.
Classes Planned

A Technician class will probably start July 7th or 11th from 6:16-9:30pm for six weeks either on Thursday or Monday nights. Please contact Joe Lowenthal, WA4OVO, if you are interested in attending this class.

You may want to do some pre-study by going to www.KE0OG.net The right side has links to Technician, General and Extra Class YouTube video training.

Alternative approach: If you want to check on class availability and/or to register for a future training class, go to www.deltaclub.org and click on the link under Training – registration form will guide you through needed information, and an email will be automatically sent.

We offer our continued thanks to EMHC ambulance company for generously providing their training room for the many ham radio classes given there.
Gary Woodall, KD5WUT, presented last month's program, "Amateur Radio and the Integrated Warning System." Gary is the Warning Coordination Meteorologist at the National Weather Service (NWS) in Memphis and oversees the hazardous weather preparedness and storm spotter training programs. He regularly collaborates with media and emergency management partners across the mid-South.

Gary explained the pieces that comprise the Integrated Warning System (IWS): storm spotters, the National Weather Service, local media, and emergency managers. The goal of the IWS is to deliver a consistent message to the public as components of the IWS gather information on potentially dangerous weather.

Although modern radars deliver amazing images of weather, the radar beam provides less information near the ground as the distance from the transmitter increases. Gary told us that the IWS still needs spotters to fill in local cloud formations and local conditions.

Gary mentioned some of the challenges of covering damaging weather: potential outages of the Internet, the telephone system, and cell towers, media overload in providing wall-to-wall coverage of weather conditions, and NWS overload.

He summarized the work of the IWS by saying it provides consistent warning messages to the public and by acknowledging that storm spotters and hams play an important role in the process.

Gary is looking to form a team of 5-6 volunteer amateur radio operators. This team will serve as communications liaisons, monitoring the spotter net and inputting reports via NWSChat. The team would also provide on-site support to the NWS during high-end severe weather events and following significant incidents where continuity of operations is needed. If you are interested in volunteering, please contact Gary at 901-544-0399 extension 223 or at gary.woodall@noaa.gov.

Those interested in becoming storm spotters should attend a class on Tuesday, March 22nd at 7pm at the Lord of Life Lutheran Church, 6865 Poplar Pike. For more details, see the section entitled “SKYWARN STORM SPOTTER TRAINING at ARES Meeting.”
Please join me in welcoming Michael Adam Krause, temporary call sign BA4BY, as the newest member of the Delta Amateur Radio Club. His parents are Stacy, KJ4MDA, and Jeff Krause, AJ4GY. He sent out his first signal on December 29th, 2015, with a birth weight of 6 pounds, 6 ounces. Best wishes to BA4BY (I stole this call sign from Jeff) and parents.

Photo courtesy of Jeff Krause, AJ4GY
We in the ham community are poorer for having lost one of our own, Keiko Gugle, an uncommonly sweet lady and the wife of Larry Gugle, K4RFE.

On July 2nd, 1984, Keiko (pronounced “Kay-ko”) and Larry married and formed a blended family with seven children. The family eventually became 14 grandchildren and four great-grandchildren. With Keiko having been born and raised in Japan and Larry having been born in Germany and having spent his first 11 years there before coming to America, their children were blessed with having been exposed to the Japanese, German, and English languages. Even in the melting pot of America, not many children can claim such a wide variety of rich languages, each with its own culture and traditions.

Larry told us that Keiko’s hobbies and interests included ballroom dancing, bowling, cooking, crochet, country line dancing, doll making, gardening, knitting, puzzle building, reading books, roller skating, and she was a skilled seamstress who made most of her own clothes.

Keiko was one of those rare souls who, upon first meeting her, make you feel as if you had known her for a long time.

After a brief illness, Keiko passed on during the morning of February 21st with Larry at her side. Visitation was February 25th at Arrington Funeral Directors in Jackson, Tennessee. Please keep Keiko and Larry in your thoughts and prayers.

You will be missed, Keiko.

Submitted by Dan Lasley, NE7JN, with the grateful acknowledgement of contributions by David Webb, KV4QI, and especially by Larry Gugle, K4RFE.
If you’re interested in improving your emergency communications skills (and your personal level of emergency preparedness), mark your calendars for May 5-8, 2016, for the next TEMA-AUXCOM (Tennessee Emergency Management Agency - Auxiliary Communications) exercise.

All licensed amateur radio operators are invited to participate. This year’s exercise will evaluate how well State and local agencies can communicate during major disasters when support infrastructures are unavailable.

If you want to see what goes on behind the scenes when TEMA and local EM agencies partner with amateur radio groups such as ARES (Amateur Radio Emergency Services), RACES (Radio Amateur Civil Emergency Service), and others, I strongly suggest that you stay on campus at the Tennessee Fire Academy during these exercises (staying Friday and Saturday nights and through the end of the exercise which will probably occur early Sunday afternoon). The room charge is $63 per night and includes 3 good quality cafeteria style meals in the dining hall (there are no other local facilities conveniently near the Academy).

The Fire Academy address is 2161 Unionville Deason Road, Bell Buckle, TN 37020 (Southeast of Nashville).

Spring 2016 AUXCOM Event registration forms must be submitted no later than April 21, 2016. For more info, go to URL: https://docs.google.com/forms/d/1ztvXxQNa3-Qxluxl3sohsFp2tFOJVs3zN3fAgWRqDH8/viewform.

Additional information will be provided via EMAIL following your event registration.

Note: Because these exercises follow standard Incident Command System protocols, you will gain more from the experience if you’ve completed FEMA (Federal Emergency Management Agency) on-line courses ICS100, ICS200, ICS700, and ICS800 before attending. Regardless, you will learn a great deal should you decide to attend.
Delta club members Bill Stevens, WC9S, and Jim Cissell, KI4I, recently drove to middle Tennessee to purchase the equipment of a ham who is in ill health and who wanted to dispose of his equipment. Here is the available equipment:

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<th>Item</th>
<th>Starting Price</th>
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<tbody>
<tr>
<td>Astron SS-25M Power Supply</td>
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<tr>
<td>2 Kenwood Speakers</td>
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<tr>
<td>LDG AT-1000 Pro Autotuner</td>
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<tr>
<td>Ameritron AL-811H Amplifier + Interface Buffer</td>
<td>$525.00</td>
</tr>
<tr>
<td>Yaesu FT-23R VHF FM HT</td>
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<td>Astron RS-20A Power Supply</td>
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<tr>
<td>MFJ-267 Dummy Load / Watt meter</td>
<td>$80.00</td>
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<tr>
<td>MFJ - 259-B swr analyzer</td>
<td>$75.00</td>
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<tr>
<td>Daiwa SWR power meter 1.8 to 150</td>
<td>$45.00</td>
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<td>MFJ-986 Diferential-T tuner</td>
<td>$150.00</td>
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</tr>
<tr>
<td>Old WeatherWise weather station</td>
<td>$0.01</td>
</tr>
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</table>

This equipment will be available for sale by blind auction at the March Delta club meeting with a minimum starting bid. If you are interested in purchasing any of this equipment, we suggest you print this page and bring it with you to the club meeting.
The Lancaster/Marston Corner
Submitted by Dan Lasley, NE7JN, contributions by Pat Lane, W4OQG

The Lancaster/Marston Corner refers to the works of Don Lancaster and Ray Marston, both of whom published extensively in various electronics magazines. This column will cover wide-ranging topics in electronics but won’t be limited to Lancaster and Marston; we’ll cover other authors as well.

In last month’s Sparks, we discussed Don Lancaster’s marvelous books. This month we’ll talk about some of Ray Marston’s contributions to the field of electronics. Let’s start with a search for “Ray Marston” through the archives of Radio-Electronics and Electronics Now magazines. The search returns 171 hits on these 40 topics:

- 4007 CMOS building block
- 555 timers and oscillators
- AC power control circuits
- active filters
- analog delay lines
- audio power amplifiers
- bargraph led displays
- bipolar junction transistors
- bridge circuits
- capacitors
- CMOS bilateral switches
- CMOS clock circuits
- compound op-amps
- counter circuits
- digital panel meters
- flip-flops
- home security cookbook
- inductive-capacitive filters
- instrumentation op-amps
- JFETs and MOSFETs
- LEDs
- light-sensitive devices
- logic-gate fundamentals
- low-power electronic voltage converters
- monostable multivibrators
- Norton op-amps
- op-amp basics
- op-amp oscillators
- operational transconductance amplifier
- optocoupler devices
- phase-locked loops and related circuits
- power semiconductors
- power supply circuits
- relays
- resistors
- SCRs and Triacs
- square wave generator circuits
- synthesizing sine waves
- voltage comparators
- waveform generation and shaping

If you would like to investigate one of these topics, go to the archive page, click on the icon to the right of “Search,” and type in a topic. You can narrow the search by including “Ray Marston” (using the quotes) as a part of the search.

Marston is a clever designer and a good writer; I don’t think you will be disappointed with his articles. Next month we’ll look at some of Marston’s Nuts & Volts articles.

When I was looking through the Electronics World archive recently, I found a one-page article entitled “The Decibel Wheel” from the February, 1965, issue. The article shows how you
can construct a circular slide rule to assist with conversions between decibels and power, voltage, or current ratios. Here are the two parts of the slide rule:

I put the two parts together and asked Pat, W4OQG, to evaluate it. He said it works as advertised in the article. Thanks, Pat!

The author of the article, Jim Kyle, claims an accuracy of 0.1 db or better. This was pretty good for 1965, but I think I’ll continue using my trusty TI-35 Plus calculator if for no other reason than it keeps track of the decimal point for me, a very useful feature that the Decibel Wheel can’t provide.
Delta Club Information Net Control Operators Needed
Submitted by Phil Fentress, AK4UE

We are still in need of a Net Control Operator for our 8:00 p.m. Wednesday sessions, as well as back-up and standby operators. Positions can be assumed for half of the month or for the whole month to help distribute the work load. If you have a desire to serve the local ham community in this vital role, we can work with you to make it happen! Prior experience is great, but there’s certainly room to learn as you go through a variety of possible training options. Performing net control duty is very rewarding, improves your on-mic skills, and allows a unique opportunity to get to know a wide cross-section of club members, local, and visiting hams.

Additionally, Net Controllers get together for an information-sharing group luncheon one weekend day each quarter. Absolute fun has been known to break out during these sessions!

For more information on this exciting opportunity, please contact Net Coordinator Phil Fentress via email at p_fentress@bellsouth.net.

SKYWARN STORM SPOTTER TRAINING at ARES Meeting
Submitted by Joe Lowenthal, WA4OVO

NOAA’s National Weather Service Gary Woodall, KD5WUT, warning preparedness meteorologist, will present SKYWARN® storm spotter training on Tuesday, March 22nd at 7pm at the Lord of Life Lutheran Church, 6865 Poplar Pike. NWS encourages anyone with an interest in public service and access to communications to join the SKYWARN® program. Training will include the following:

- Basics of thunderstorm development
- Fundamentals of storm structure
- Identifying potential severe weather features
- How to report information
- Basic severe weather safety
1961 was a momentous year in the history of the United States. Consider these events, most of which were extracted from here:

- John F. Kennedy is inaugurated as the 35th President of the United States.
- Elvis Presley’s "Are You Lonesome Tonight?" hits #1 on the pop charts.
- Frank Sinatra launches the Reprise label under Warner Brothers Records.
- Yuri Alexeyevich Gagarin becomes the first person to orbit Earth.
- 1,400 Cuban exiles land in the Bay of Pigs in a doomed attempt to overthrow Castro.
- Robert Noyce patents the integrated circuit.
- Alan Shepard becomes the first American in space.
- FCC Chairman Newton N. Minow criticizes TV as a "vast wasteland."
- Johnnie Spotts becomes the first president of the Delta Amateur Radio Club.
- Russian ballet dancer Rudolph Nureyev defects to the west in Frankfurt, West Germany.
- Iraq announces that Kuwait is a part of Iraq (Kuwait disagrees).
- Construction of the Berlin Wall begins in East Germany.
- Betty and Barney Hill claim that they saw a mysterious craft in the sky and that it tried to abduct them.
- Roger Maris hits home run #60 off Jack Fisher to tie Babe Ruth’s record.
- Ham radio satellite Oscar 1 launched with military satellite Discoverer 36.

Here is today’s history lesson: which of the two events above are related? No cheating – think about the answer before you read the next page!
Did you answer, “Johnnie Spotts and Frank Sinatra?” Here is some of Johnnie’s history, as gathered from a letter and several emails:

"What fun renewing my club membership after about 55 years. Greetings to the DARC. I remember great times with the club. I was part of the group that helped to organize the club. One fond memory is the 10 meter get together late at night, until we all ran out of "grid drive."

When in Memphis as K4VIS I flew for Southern Airways. We had a labor problem and I left in 1964. I came to California in 1967 to fly for Mr. Sinatra. I was with him on and off for 25 years. Great time, he was great, we made a deal, he would not fly and I would not sing. When I first went to work [for Mr. Sinatra], he had a Hawker Siddley 125, we later got a Gulfstream 2. Both great airplanes.

I got the call W6HTY when I got to California and have had it ever since. I really enjoy the "Sparks" newsletter even though I don’t know many of the members.

I am running a Flex 3000 on all bands, all modes, I have a KWM-2 for a back up rig. They both work great, I really like the Flex 3000. I am still active, and if anyone hears me, please call me."

Welcome back to the Delta Club, sir!

Photo by “Mr. Mystery Man,” Johnnie Spotts, W6HTY, ex-K4VIS
For those of you who aren't familiar with the term "maker movement," let's look at a description based on a [Techopedia](https://www.techopedia.com/) definition:

"The maker movement is the name given to the increasing number of people employing do-it-yourself (DIY) and do-it-with-others (DIWO) techniques and processes to develop unique technology products. Generally, DIY and DIWO enables individuals to create sophisticated devices and gadgets, such as printers, robotics and electronic devices. With all the resources now available over the Internet, virtually anyone can create simple devices, which in some cases are widely adopted by users. For example, MintyBoost, a popular DIY USB charger kit built from an Altoids tin, batteries and a few connectors, can easily be created using instructions online, or purchased from other makers who sell their devices.

Most of the products created under the maker movement are open source, as anyone can access and create them using available documentation and manuals. The maker movement also incorporates new creations and inventions developed by individuals in their homes, garages or a place with limited manufacturing resources."

Rick, WA4NVM, recently emailed a link to an interesting article entitled "[Why Modern Makers Are Bringing Back Ham Radio](https://www.arrl.org/news/why-modern-makers-are-bringing-back-ham-radio)." The article quotes Bob Inderbitzen, ARRL's sales and marketing manager, as saying, "... familiarity with [the combination of ham radio and the maker movement] could be a real plus when it comes to getting hired as an engineer. Hands-on experience with radio frequency engineering is extremely valuable these days but also hard to find." Inderbitzen says he is seeing "a significant boost in employment opportunities" for hams who know how to make stuff.

Whether you view the maker movement as a potential employment opportunity or simply as a way to expand into new areas of ham radio, I think you will enjoy learning about the maker community.

Adafruit is a successful maker that provides posts, tutorials, and kits based on the popular Arduino and Raspberry Pi microcomputers. Google and YouTube are good sources for investigating the maker movement.
What are the two things hams like to do? Hams like to talk and hams like to eat! In furtherance of the latter, I present another recipe from my good friend, raconteur, bon vivant, and CW expert Bob Gruner, W4UFT:

**Ham and Cheese Quesadillas**

- 1/2 cup (2 oz.) shredded Monterey Jack cheese
- 1/2 cup (2 oz.) shredded Cheddar cheese
- 4 oz. ham, finely chopped
- 1/4 cup chopped canned green chilies
- 4 ten inch flour tortillas
- salsa (optional)

Combine cheeses; divide equally between 2 tortillas. Place ham and green chilies over cheese. Top each with another tortilla. Heat large skillet over medium heat. Add 1 quesadilla; cook until cheese starts to melt and bottom is browned, (about 2 minutes). Turn over and cook other side until browned. Remove and keep warm while cooking remaining quesadilla. Cut each quesadilla into 8 wedges. Serve with salsa, if desired. Makes 2 servings.

I had six inch tortillas but no ten inch tortillas, so a little math shows that 10 six inch tortillas give roughly the equivalent surface area of 4 ten inch tortillas.

As I mentioned in last month’s Sparks, everything tastes better with jalapenos. A large, thinly sliced jalapeno is sufficient for three quesadillas. If you enjoy smoke coming out of your ears, try one large jalapeno per quesadilla.

Bob’s quesadillas are delicious, quick and easy to prepare, and you can substitute chicken, turkey, meat loaf, or most any meat in your refrigerator for ham (ok, maybe not meat loaf).

I hope you enjoy Bob’s recipe as much as I did. Next month we’ll see what else Bob has to offer.
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

An alternative email address to offer the Board your suggestions, ask questions, and voice complaints is darc4you@gmail.com.

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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LenardGrice@aol.com

Board members beginning their positions in 2016 are listed in red.
If you are a coordinator for any of these events, please review the listed information. If it is incorrect or changes need to be made, please email corrections to sparks@carbheat.net.

<table>
<thead>
<tr>
<th>DATE</th>
<th>EVENT</th>
<th>PUBLIC SERVICE EVENT</th>
<th>CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 30, 2016</td>
<td><strong>March for Babies</strong></td>
<td>March of Dimes fundraising event: walk around Memphis Botanical Gardens</td>
<td>Linda Laseter, kj4ctx, <a href="mailto:lindalaseter@gmail.com">lindalaseter@gmail.com</a></td>
</tr>
<tr>
<td>June 4, 2016</td>
<td><strong>Diabetes Tour de Cure</strong></td>
<td>Start on Mud Island and ride thru Shelby Forest</td>
<td>Pat Lane, w4oqg, <a href="mailto:w4oqg@bellsouth.net">w4oqg@bellsouth.net</a></td>
</tr>
<tr>
<td>Sept. 2016</td>
<td><strong>2016 Bike MS: FedEx Rock-N-Roll</strong></td>
<td>Landers Center in Southaven to Gold Strike Casino in Tunica and back on 2(^{nd}) day; Multiple Sclerosis fundraising event</td>
<td>Darrell Sheffield, kk4d, <a href="mailto:darrell.sheffield@memphistn.gov">darrell.sheffield@memphistn.gov</a>, (901) 277-8122</td>
</tr>
</tbody>
</table>

**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
It's Time to Renew Your 2016 Annual Memberships! Download the latest Delta Club Membership Application Form. Thanks for Your Active Support of Delta Amateur Radio Club!

Memphis Area VHF/UHF Nets
Updated Nov, 2015

<table>
<thead>
<tr>
<th>Name of Net</th>
<th>Freq. MHz</th>
<th>Tone</th>
<th>Local Time</th>
<th>Day of Week</th>
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<tbody>
<tr>
<td>Delta Club Information Net</td>
<td>146.820</td>
<td>- (107.2)</td>
<td>8:00p</td>
<td>Daily</td>
</tr>
<tr>
<td>Mid-South Barefooted Bullfrog Net</td>
<td>146.535</td>
<td></td>
<td>7:30p</td>
<td>Daily</td>
</tr>
<tr>
<td>Secret Service Net</td>
<td>224.780</td>
<td></td>
<td>8:30p</td>
<td>Mon</td>
</tr>
<tr>
<td>Elmer Net</td>
<td>145.210</td>
<td>- (107.2)</td>
<td>9:00p</td>
<td>Mon</td>
</tr>
<tr>
<td>The Short Winded Net</td>
<td>146.850</td>
<td>- (107.2)</td>
<td>8:30p</td>
<td>Tue</td>
</tr>
<tr>
<td>MedMERS Net</td>
<td>146.820</td>
<td>- (107.2)</td>
<td>12:00p</td>
<td>Wed</td>
</tr>
<tr>
<td>CERTPlus Net</td>
<td>443.200</td>
<td>+ (107.2)</td>
<td>8:30p</td>
<td>Wed</td>
</tr>
<tr>
<td>ARES Training Net</td>
<td>146.880</td>
<td>- (107.2)</td>
<td>9:00p</td>
<td>Thu</td>
</tr>
<tr>
<td>Super Sunday Niner Net</td>
<td>927.6125</td>
<td>- (146.2)</td>
<td>8:30p</td>
<td>Sun</td>
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Delta Club sponsored Nets are shown in red.

TENNESSEE HF NETS
As of December, 2015
All times are Central Time

<table>
<thead>
<tr>
<th>Net Name</th>
<th>Freq. MHz</th>
<th>Local Time</th>
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<tbody>
<tr>
<td>Tennessee CW Net</td>
<td>3.563</td>
<td>7:00p</td>
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<tr>
<td>Tennessee Slow CW Net</td>
<td>3.682</td>
<td>7:30p</td>
<td>Tue-Sun</td>
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<tr>
<td>Tennessee Alternate Phone Net</td>
<td>7.238</td>
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<td>As needed</td>
</tr>
<tr>
<td>CUSEC (Center for United States Earthquake Consortium)</td>
<td>3.810</td>
<td></td>
<td>As needed</td>
</tr>
<tr>
<td>CUSEC (Center for United States Earthquake Consortium)</td>
<td>7.180</td>
<td></td>
<td>As needed</td>
</tr>
</tbody>
</table>

3980 kHz – TN 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
Please thank our sponsors by using their services and mentioning that you saw their ad in the Delta Club SPARKS Newsletter!

This ad space is available
Please thank our sponsors by using their services and mentioning that you saw their ad in the Delta Club SPARKS Newsletter!

Wednesday night Net Control Operator positions for our 8:00 p.m. Delta Club Information Net sessions need to be filled! For additional information, please contact Phil Fentress via email p_fentress@bellsouth.net

We offer our continued thanks to EMHC ambulance company for generously providing their training room for the many ham radio classes given there.
Delta Amateur Radio Club
Sparks Advertising Order Form

Date: ____________

Name: ____________________________

Call Sign: _________ Phone: __________ Email: ____________________________

TO PLACE AN ORDER

1. Mark the box below indicating the ad size you are purchasing and the months you want your ad to appear in Sparks.
2. Submit this completed order form and your camera ready ad, via email at sparks@carbheat.net. Make check payable to Delta Amateur Radio Club (DARC) at monthly Delta Club meeting, or send US Mail to club mailing address at P.O. Box 432768, Memphis, TN 38134-2768. Camera ready means that ad copy is exactly as you wish it to appear, scaled to fit within the dimensions specified below. Ads may be submitted in .gif or .jpg format, or submitted as a hard copy (we will scan and place your ad for you).
3. Your ad order and payment must be received on or before the first Tuesday of the month before you want it to appear in Sparks.

SPARKS ADVERTISING

<table>
<thead>
<tr>
<th>Full Page</th>
<th>Half Page</th>
<th>¼ Page</th>
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<tr>
<td>$50.00</td>
<td>$25.00</td>
<td>$15.00</td>
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<tr>
<td>for 3 Months</td>
<td>for 3 Months</td>
<td>for 3 Months</td>
<td>for 3 Months</td>
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<td>7” w X 8 ½” h</td>
<td>7” w X 4” h</td>
<td>3 ½” w X 4” h</td>
<td>3 ½” w X 2” h</td>
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</tbody>
</table>

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