

DELTA AMATEUR RADIO CLUB

SPARKS

P.O. Box 750482 * Memphis, Tennessee 38175-0482 * Volume 18 * May 2012



**Welcome to the
Delta Amateur Radio Club!**

Visit our home on the web at: <http://www.deltaclub.org>

W4BS

REPEATER SYSTEM

146.820^{-107.2} 147.360^{-107.2}
224.420 443.200

NEXT CLUB MEETING

DATE: May 8, 2012 (2nd Tuesday of each month)
PLACE: Ellendale Church Of Christ, 7365 Highway 70
Memphis, TN (1 ½ miles north of Hwy. 64 – Stage Road)

TIME: 7:00 PM

PROGRAM: “Overview of APRS”
Presented By: David Campbell KD4NOQ

VE TESTING: Don't forget the monthly Volunteer Examiner testing session. Registration begins at 5:30 PM and testing begins promptly at 6:00 PM. Please remember to bring two (2) forms of identification and copies of any existing licenses or CSCE's you might have. Please be on time for registration, as you will not be allowed to enter the testing session after 6:00 PM. This is to allow our volunteer VE team to finish in time to attend the club meeting. For more VE testing information, please contact:

Bill Stevens, WC9S, VEC
Phone: 901-603-3448
Email: wc9s@att.net

PRESIDENT'S CORNER

By: Rosalinda Melena AK4SB

Nothing Received.

TREASURER'S REPORT

Submitted By: Rick Tillman WA4NVM

| | | |
|--------------------------|----------------------------|-------------------|
| Beginning Balance | as of April 1, 2012 | \$6,845.00 |
|--------------------------|----------------------------|-------------------|

Expenses

| | | |
|---------------|-------------------|--------|
| David Gilbert | Club Refreshments | \$7.78 |
|---------------|-------------------|--------|

| | |
|----------------------|---------------|
| Total Expense | \$7.78 |
|----------------------|---------------|

| | |
|----------|-------------------|
| SubTotal | \$6,837.22 |
|----------|-------------------|

Income

| | | |
|-----------------|-----------|----------|
| Membership Dues | Year 2012 | \$125.00 |
|-----------------|-----------|----------|

| | | |
|---------|--------------|---------|
| Tickets | Nov. Drawing | \$20.00 |
|---------|--------------|---------|

| | | |
|-----------|--|--------|
| Donations | | \$5.00 |
|-----------|--|--------|

| | |
|---------------------|-----------------|
| Total Income | \$150.00 |
|---------------------|-----------------|

| | | |
|-----------------------|-----------------------------|-------------------|
| Ending Balance | as of April 30, 2012 | \$6,987.22 |
|-----------------------|-----------------------------|-------------------|

Submitted by Rick Tillman WA4NVM

BOARD MEETING MINUTES

April 3, 2012 - Presented by: Tom Raggett KJ4LMH Secretary

Members and guests present at Stevie B's Pizza —Rosalinda Melina, Richard Martin, Joe Lowenthal, Bill Stevens, Tom Raggett, Ham Hilliard, Steve Smith, David Gilbert.

1. President Rosalinda Melena called the meeting to order and noted, along with Board, that the Treasury Report sent by Treasurer Rick Tillman via email was good and would be presented to General meeting for full approval.
2. Rosalinda had been requested by non-members to put items for sale on the DARC table at Free Fest. It was agreed by the Board that non-members could put items on the table with the requirement that a phone number and price would be on the item. DARC members working at the table would not be responsible for the items belonging to non-members.

3. Ham Hilliard asked the Board for approval to spend \$50 for food for the Armed Forces field day. The board members contributed \$70 instead of using the DARC treasury.
4. The program for the next DARC meeting will be done by Ham Hilliard reviewing the Armed Forces Field Day activities.
5. Bill Stevens commended Rick Tillman for all his help in getting the 443 repeater online. It required a lot of time to make the changes necessary to get the repeater working properly.
6. Richard Martin reported that Field Day will be held will be held at the Police and Fire Training Center. The dates are June 23 & 24 2012.
7. Joe Lowenthal reported that the present class has 12 students.
8. Meeting adjourned.

GENERAL CLUB MEETING MINUTES

April 10, 2012 - Presented by: Tom Raggett KJ4LMH

1. Meeting was called to order by President Rosalinda Melena and introductions were done.
2. Minutes for Board meeting and General meeting were approved as appeared in SPARKS, Ham Hilliard made the motion and Bill Stevens seconded.
3. Testing- 5 people tested, with 3 new extras.
4. Training- General class with 12 students, 3 trying for tech and general. J-Pole training class has been postponed until early June. Ham Hilliard will communicate the date later.
5. Ham Hilliard presented a sign up sheet for Armed Forces Field Day to be held May 12,13. Bob Holdford asked for more volunteers for the March of Dimes Walk to be held April 28. Ned Savage talked about the Memphis in May triathlon and said he would put the details in SPARKS.
6. Treasurer Report—Rick Tillman gave the treasurer's report. Ham Hilliard made the motion to accept, seconded by Steve Smith.
7. Field Day—Richard Martin reported that Field Day would be held at the Police and Fire Training Center. Details are still being worked.
8. Free Fest—Rosalinda reported that non-members could put items to sell on the DARC table at Free Fest as long as there was a price and phone number on the item. Dennis Foster attended the meeting and brought raffle tickets for anyone wishing to purchase before Free Fest.
9. Program—Ham Hilliard presented the program on Armed Forces Field Day. He explained how everything works and urged members to sign up for the exercise.

10. 443 Repeater—Bill Stevens reported to the meeting that the 443 repeater is now online and operating. Rick Tillman did much of the work to get the repeater working and reliable.
11. Covenant restrictions—Hugh Wardlaw urged everyone to go the ARRL web site and complete the survey about neighborhood covenants and how they will restrict emergency communications during times of disasters.
12. Next Board meeting at Stevie B's pizza, May 1, 2012.
13. Bob Holdford, KF4NDH won the door prize.
14. Meeting adjourned.

AMATEUR PACKET UPDATE

By: James Butler - KB4LJV

Many times we run portable digital modes. Having a power source usually consists of batteries or battery packs. Some batteries weigh a lot and the capacity may not be enough for your purpose. Buddipole has come out with a series of battery packs for portable operation. These packs have different voltages and amp hour ratings. They are very high quality and offer maximum storage for the size and weight. They are built up from lithium ion cells with powerpole power connectors ready for hookup. These packs are not cheap, but do offer the most powerful storage in their class. The prices range from \$75 to \$225. To look up all the specs go to their website. It is <http://www.buddipole.com/>

AMATEUR HARDWARE UPDATE

By: James Butler - KB4LJV

Sometimes we have more than one Morse code key or paddle we use for Morse code. Proper storage of extra paddles or keys can help keep them in good working order. Dust collecting on the keys can make movement stiffer and get on contacts causing problems. What is needed is a good cover or container to put them in. I have been burning CDs and DVDs with my computer and just throwing away the round disk case they come in. These are usually made from a translucent plastic top that screws on the base. I cut the post out with a knife so I could put in the paddle. With the top in place it is perfect for protection from dust and the elements. The case makes a great storage case for small QRP keys and paddles. Now I save all my old disk cases just for that purpose.



2012 TRAINING CLASSES

Submitted by: Joe Lowenthal WA4OVO, Director of Training

There is no charge for classes, but the student is responsible for the purchase of the license manual and the \$15 ARRL FCC examination fee.

Licenses Earned in 2012 from Delta Classes

30 Technician

3 General

6 Extra

CLASSES PLANNED

If you are interested in any of the classes, send an email to Joe Lowenthal at wa4ovo@arrl.net with your name, email address, and phone number, preferable cell with subject line of the class you are interested in.

Technician Class 4-12 – July 2-August 6, 2012

Tech Class 4-12 will be held on six Monday nights from July 2nd to August 6th at the Memphis-Shelby County Health Dept East Complex at 1075 Mullins Station Road. The FCC exam will be offered on the 5th night of class. The 6th night will be Repeater-Wouxun radio basics.

If you are interested, send an email to Joe Lowenthal at wa4ovo@arrl.net with your name, email address, and phone number, preferably cell with subject line: Tech Class 4-12.

CLASSES IN PROGRESS

General Class 3-12 – March 26-May 7, 2012

General Class 3-12 started March 26th at the Memphis-Shelby County Health Department Emergency Services Training Room at 1075 Mullins Station Road. The first night began with nine students on a refresher of the Technician level material. Three additional students have joined the class for a total of twelve.

Three of the students were not hams, but are going for their Technician and General licenses. Congratulations to Kandy Bernskoetter KK4IUX and Rick Bernskoetter KK4IUW for earning their Technician license.



General Class 3-12 with Pat Lane W4OQG providing antenna and feedline knowledge.
Photo by Joe Lowenthal WA4OVO

Joe Lowenthal WA4OVO is the primary instructor with Pat Lane W4OQG providing his superb knowledge on antennas and feedlines. Alan Proffitt AE5RX expounded on the electronics. FCC testing will be offered on May 7th.

CLASS INFORMATION

Technician Class

If you are interested in the first amateur license class, Technician, please let us know by sending an email to wa4ovo@arrl.net with subject line "Technician Class" and give name, email address, and a contact phone number (preferably a cell number). Or you can go to the Delta Club webpage www.deltaclub.org click on Training Classes; then click on Technician Class to send an email, or call at 901-683-2701. We usually publish class schedules a month or two in advance. You will be notified by email or phone when the class is set if you send an email informing us of your desire to be in a class.

There is no charge for the class, but registration is required. Advanced study of *The ARRL Ham Radio License Manual*, product #0977/ISBN 978-0-87259-097-7 (red-brick colored cover) is strongly suggested as well as study of the 396 question and answer Technical Class License question pool. Barnes & Noble Booksellers may have this manual. You can purchase it online from www.msars.com, www.arrl.org/catalog or on Amazon.com. The list price is \$29.95 (which includes a CD). The older ARRL Ham Radio License Manual, Second Edition was priced at \$24.95, but did not have a CD.

The current Technician License question pool, which was approved by the NCVEC on February 1, 2010, can be seen at <http://www.ncvec.org/page.php?id=356>. Testing for this question pool started July 1, 2010.

Practice tests are highly recommended. The www.qrz.com website is free. To access the sample tests, go to www.qrz.com. From the QRZ home page click on **RESOURCES** in the blue band on the top right. Then click on 2010 Technician Exam Practice Test. When you start answering the questions, it will show you if you answered correctly or not with **CORRECT!** or **SORRY BUT THAT ANSWER IS NOT CORRECT**. Statistics are kept below the test question at **This Quiz** with the number of questions answered correctly and the percentage correct. Also shown is the number of questions answered correctly from the 396 questions of the question pool. It keeps track of your correct answers on subsequent tests. Below the **This Quiz** line is **Questions in This Test**, that is a list of the 35 question numbers of the current test. If answered correctly, the question number radio button turns green. If answered incorrectly, it turns red.

There are a number of other free sample-test sites. The following are some other ham radio practice exam sites:

- www.aa9pw.com
- <http://kb0mga.net/exams>
- <http://copaseticflow.blogspot.com/2010/06/technician-class-practice-test-gadget.html>
- www.qrz.com
- <http://www.hamradioclass.org>

The 35-question FCC exam will be given at the end of class by a Volunteer Examiner (VE) team. There is a \$15.00 ARRL VEC FCC exam fee.

General Class

If you are interested in a General License Class, please let us know by sending an email to wa4ovo@arrl.net with subject line "General Class." Or you can go to the Delta Club web page www.deltaclub.org; click on Training Classes; then click on General Class to send me an email with name, email address and contact phone, preferably cell number, or call at 901-683-2701. A new question pool became effective July 1, 2011. The new textbook is *The ARRL General Class License Manual, Seventh Edition*, item #8119, ISBN 978-0-87259-811-9. This edition with its question pool is valid through June 30, 2015. Lately, we have been running a combined Technician-General class. You will be notified by email or phone when the class is set.

Basic Electronics Class

The Basic Electronics Class is designed to bridge the electronics-learning gap between the General and the Extra Class licenses. The class textbook is ARRL's *Understanding Basic Electronics, Second Edition*. The suggested calculator is the Casio fx-260 solar calculator, which can be purchased at Wal-Mart for about \$10. There is no exam for this class. The class has been held in the September-November time frame.

If you are interested in the Basic Electronics Class, please let us know by sending an email with name, email address and contact phone, preferably cell number to wa4ovo@arrl.net with subject line "Basic Electronics Class" or call at 901-683-2701. You will be notified by email or phone when the class is set.

Extra Class

If you are interested in an Extra Class, please pre-register by going to the Delta Club web page www.deltaclub.org; click on Training Classes; then click on Extra Class to send an email with name, email address and contact phone, preferably cell number to Joe Lowenthal, WA4OVO, at wa4ovo@arrl.net or call at 901-683-2701. You will be notified by email or phone when the class is set. Classes have been held on Saturdays for 6 or 7 weeks in January and February.

COMPLETED CLASSES

Extra Class 1-12 – January 14 – February 25, 2012

Technician Class 2-12 – January 21st & February 4th, 2012

Tech Class 2-12 Revisited

Troop 457 Merit Badge College – February 11, 2012

Troop 225 Merit Badge Class – February 11, 2012

HUNTSVILLE HAMFEST BUS TRIP

August 18, 2012

Submitted by: Joe Lowenthal WA4OVO, Director of Training

DARC is sponsoring a 50-passenger bus to go to the Huntsville Hamfest on August 18, 2012. There is a graduated scale fare for the bus trip. The fare is \$60 if paid by June 25, 2012. The fare is \$65 if paid by August 7, 2012. The fare is \$70 if paid after August 7th. There will be biscuit sandwiches, water, sodas, chips, and fruit on the bus going to Huntsville and whatever is left for the trip back.

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

Reservations will be on a first come first paid basis.

MUSEUM SHIPS WEEKEND 2012
June 2nd (0000Z) thru June 3rd (2359Z)
Forwarded by: Joe Lowenthal WA4OVO, Director of Training

Activating IOTA NA-143 (Pelican Is.) Brazos Valley ARC, KK5W will be operating from radio rooms of WWII Submarine USS Cavalla and Destroyer Escort USS Stewart from Seawolf Park on Pelican Is. in Galveston, Texas. We will be operating on 10-40 meters (SSB and CW). Be a part of living history as we commemorate the actions of these ships and crews. More information at <http://www.bvarc.org/index.php?page=ms> Special Event QSL with SASE via KK5W (QRZ.com).

SIXTY METERS FOR THE FT-897D AND FT-857D

Submitted by: Hugh Wardlaw WB4SLI

I don't know if you have been scratching your head like I have about how to get the new Sixty Meter 5.3585 MHz in lieu of the 5.368 MHz frequency. There actually is a way that involves using the CAT cable and some freeware. The software is called CHIRP. Here is how to get all of this done. Take your browser to http://trac.chirp.danplanet.com/chirp_daily/daily-02112012/

Windows users download chirp-daily-02112012-installer.exe to your PC.

Mac users download chirp-daily-02112012.app.zip

Linux users download chirp-daily-02112012.tar.gz

Install the downloaded software.

You may be tempted to get the latest and greatest – don't bother. It won't work. Take my word for it. That exercise cost me about an hour.

Now you need to hook up your FT-8x7 to the computer with the CAT/Serial cable. Read the section of the user's guide about cloning. That is where the magic happens. Load the CHIRP software and click on Radio and select Download from Radio. On the FT-857D you then power up the radio with the <> buttons both depressed while pressing the blue Power button. On the FT-857 press the C button to SEND. In the CHIRP Window on your computer click on Special Channels and change M-603 from 5.368 to 5.3585 and press enter. Power Off the Radio. Go to Clone Mode, again press <> and Power. Press the A key on the radio and in the CHIRP Window select Radio, Upload to Radio. The Radio should show RECEIVING and a progress bar goes across the bottom of the display. Voila! You have changed the Sixty Meter allocation.

GREG BUTLER (SK)

Submitted by: Kenneth Laseter KI4AOH, Publications

As many of you know, we recently lost one of our dear friends, Greg Butler. It was his wish that his ham radio equipment be sold for the benefit of his son. A list of that equipment is being compiled and will be distributed as soon as it is complete.

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, 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

2012 BOARD OF DIRECTORS

President:

Rosalinda Melena – AK4SB
901-921-4474
ki4zkw@gmail.com

Vice-President:

Richard Martin – K4DXF
901-372-3722
k4dxkf@att.net

Secretary:

Tom Raggett – KJ4LMH
901-517-0492
traggett@bellsouth.net

Treasurer:

Rick Tillman – WA4NVM
901-268-7047
wa4nvm@comcast.net

Director of Training:

Joe Lowenthal – WA4OVO
901-683-2701
wa4ovo@yahoo.com

Director of Publications:

Kenneth Laseter – KI4AOH
901-853-0400
kmlaseter@laseterinc.com

Director of Programs:

David Campbell – KD4NOQ
901-388-6166
kd4noq@arrl.net

Director of Meetings & Special Events:

David Gilbert – AJ4LV
aj4lv@hotmail.com

PUBLIC SERVICE EVENTS --- 2012

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 provide me with the correct information. Please email corrections to me at kmlaseter@laseterinc.com.

| DATE | EVENT | COORDINATOR | CONTACT INFO. |
|--|--|-------------------|--|
| January 2012 | | | |
| 15 th | Swamp Stompers. | Danny– KJ4FXZ | kj4fxz@arrl.net |
| February 2012 | | | |
| 11 th | Boy Scout Merit Badge University. | Hugh – WB4SLI | hwardlaw@bellsouth.net |
| March 2011 | | | |
| None | | | |
| April 2011 | | | |
| 28 th | March for Babies (March of Dimes). | Bob – KF4NDH | kf4ndh@bellsouth.net |
| 28 th | Tour de Cure | Denise – KJ5DG | kj5dg.denise@gmail.com |
| May 2012 | | | |
| 19 nd | Memphis in May Triathlon. | Ned - KA4BLL | ka4bll@arrl.net |
| HELP! – Ned is still looking for volunteers for this event. This is always a fun event and for a good cause. If you can help please contact Ned at the email address shown above. | | | |
| September 2011 | | | |
| 10 th & 11 th | MS 150 Bike Ride | Darrell - KK4D | kk4d@xipline.com |
| December 2011 | | | |
| 8 th | St. Jude Marathon | Roger – WR4R | wr4r@bellsouth.net |
| 8 th | Bartlett Christmas Parade | Dennis – KJ4BDU | dcvv3714@aol.com |
| <hr/> | | | |
| TBA | Juvenile Diabetes Research Foundation Walk | Kathleen - KC0HZU | (No Contact Information) |
| | Tour de Cure | Denise – KJ5DG | kj5dg.denise@gmail.com |

MEMPHIS AREA VHF/UHF NETS

| Net Name | Freq. MHz | Local Time | Day |
|---|--------------------------|--------------|--------------|
| Mid-South Barefooted Bullfrog net | 146.535 | 7:30p | Daily |
| Delta Club Traffic and Information Net | 146.820 - (107.2) | 8:00p | Daily |
| Secret Service Net | 224.780 - | 8:30p | M |
| Elmer Net | 147.030 + (107.2) | 9:00p | M |
| The Short Winded Net | 146.850 - | 8:30p | Tu |
| MedMERS Net | 146.730 - (107.2) | 12:00p | W |
| Six Meter Tech Net | 53.01 - | 8:30p | W |
| The 440 Net | 443.200 + (107.2) | 9:00p | W |
| Collierville CERT Net | 444.125 + (107.2) | 7:00p | W |
| TAC 2 Net | 224.420 - | 8:30p | Th |
| ARES Training Net | 146.880 - (107.2) | 9:00p | Th |

TENNESSEE HF NETS

| Net Name | Freq. MHz | Local Time | Day |
|--|-----------|------------|-------|
| Tennessee CW Net | 3.563 | 7:00p | Daily |
| Tennessee Slow CW Net | 3.682 | 7:30p | T-Su |
| Tennessee Early Morn Phone Net | 3.980 | 5:40a | M-F |
| Tennessee Morning Phone Net | 3.980 | 6:45a | M-F |
| Tennessee Evening Phone Net | 3.980 | 6:30p | T-Su |
| CUSEC (Center for United States Earthquake Consortium) | 3.810 | As needed | |
| CUSEC (Center for United States Earthquake Consortium) | 7.180 | As needed | |

DELTA CLUB 146.82 NET PREAMBLE (Rev. 2)

GOOD EVENING: This is _____ calling this session of the DELTA CLUB'S TRAFFIC AND INFORMATION NET. This net is affiliated with the ARRL and the NTS and is organized to pass traffic in and out of the mid - south area, in addition to providing information about club events and amateur related topics. This net meets nightly at 8:00 p.m. CT except the second Tuesday of the month on the 146.82 W4BS repeater and **requires** a pl. tone of 107.2 Hz. All stations will refrain from transmitting without being acknowledged by net control.

All licensed amateurs are encouraged to participate.

Before we begin, is there any station with emergency or priority traffic?

During this net should any station have emergency or priority traffic please use a double break followed by your call sign.

Is there an NTS Liaison station on frequency?

Is there any station wishing to list formal written traffic?

Does any station have announcements for the net?

(If anyone asks to make an announcement after you finish handling the ones taken here ask them to hold until after the monolog. Eliminate the following sentence unless there are announcements.)

Does any station have any questions or need any fills?

We will now take check-ins. Are there any stations that are mobile, on battery power, or needing to leave early, if so please come now phonetically with your suffix only and please remember to spread them out?

We will now take check-ins phonetically by suffix only if your suffix begins ALPHA through HOTEL please come now and remember to spread them out.

We will now take check-ins phonetically by suffix only if your suffix begins INDIA through KEEBECK please come now and remember to spread them out.

We will now take check-ins phonetically by suffix only if your suffix begins ROMEO through ZULU please come now and remember to spread them out.

The DELTA CLUB meets the second Tuesday of each month at the ELLENDALE CHURCH OF CHRIST 7365 HWY 70 in Bartlett at 7:00 P.M. V. E. Registration begins at 5:30 P.M. with testing starting promptly at 6:00 P.M. A copy of your license and CSCE is required. For V. E. Information contact Bill, WC9S at 603-3448. For membership information contact Tom, KJ4LMH at 517-0492. For training information contact Joe WA4OVO at 683-2701.

Are there any additional announcements?

We will now take late check-ins from anywhere in the alphabet ALPHA through ZULU please come now and spread them out.

Is there anything that this station or the net can do for anyone before we close?

This is _____ now closing this session of the DELTA AMATEUR RADIO CLUB'S Traffic and information net and would like to thank all _____ stations for checking in tonight. And would like to ask that everyone to check in tomorrow night at the same time.

GOODNIGHT AND 73: THE NET IS NOW CLOSED. _____ CLEAR

DELTA CLUB ADVERTISEMENTS

See Advertisement Order Form for Instructions.

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)

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Memphis, TN 38118-7918

Ned Savage

35 YEARS of EXPERIENCE

ADVERTISEMENT ORDER FORM



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 three (3) months you want your ad to appear in Sparks.
2. Submit this completed order form, your camera ready ad, and your check payable to Delta Amateur Radio Club (DARC) to Kenneth Laseter KI4AOH via mail at 684 Oasis Cove, Cordova, TN 38018 or give it to him at the monthly Delta Club meeting. Camera ready means that the ad you submit is exactly as you want it to appear in your ad and fits within the dimensions specified below. Ads may be submitted in gif or jpg format or submitted as a hard copy and we will scan and place your ad for you.
3. Your ad order must be received on or before the first Tuesday of the **month before** you want it to appear in Sparks.

SPARKS ADVERTISING

| | | | | | | | | | | | |
|---|-------------|-------------|---|-------------|--------------|--|-------------|-------------|---|-------------|-------------|
| FULL PAGE \$50.00 for 3 Months 7" w X 8 ½" h <input type="checkbox"/> | | | HALF PAGE \$25.00 for 3 Months 7" w X 4" h <input type="checkbox"/> | | | ¼ PAGE \$15.00 for 3 Months 3 ½" w X 4" h <input type="checkbox"/> | | | BUSINESS CARD \$10.00 for 3 Months 3 ½" w X 2" h <input type="checkbox"/> | | |
| Apr 2012 | May 2012 | Jun 2012 | Jul 2012 | Aug 2012 | Sept 2012 | Oct 2012 | Nov 2012 | Dec 2012 | Jan 2013 | Feb 2013 | Mar 2013 |