DELTA AMATEUR RADIO CLUB

SPARKS

P.O. Box 750482

Memphis, Tennessee 38175-0482

Volume 18

March 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: March 13, 2012 (2nd Tuesday of each month)
PLACE: Ellendale Church Of Christ, 7365 Highway 70

Memphis, TN (1½ miles north of Hwy. 64 – Stage Road)

TIME: 7:00 PM

PROGRAM: "Amateur Radio and Emergency Communications"

Presented By: Ham Hilliard W4GMM

And

"CPR Without Mouth to Mouth"

Presented By: Joe Lowenthal WA4OVO

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 KI4ZKW

Happy March to all!

No real President's Corner this month only a few interesting annotations from the OLD FARMER'S ALMANAC.

Regarding the Weather...Sunny but raw - signs of a thaw? Naw! Frost heaves make for bumpy rides, jumpy insides. Irish eyes are smiling:

it's damp but beguiling. Temperature's soaring! March goes out like a lion, roaring.

Did you know...In the old days, people took baths in a tub, with the men using the water first, followed by the women, the children, and last of all, the baby. By then, of course, the water had become so dirty that you could lose someone in it. Thus: "Don't throw out the baby with the bathwater."

And finally, I know this one works having recently fought with a lawn mower for several hours...Get gasoline odor gone: Wash hands with lemon juice or vinegar.

Have a great month. And as always, be safe! 73.

TREASURER'S REPORT Submitted By: Rick Tillman WA4NVM

Beginning Balance	as of February 1, 2012		\$8,048.55
	Expenses		
MFJ Power Supply	Nov. Drawing Prize		\$88.81
Computer Auto.	CAT-250 Controller		\$323.00
The Antenna Farm	Icom FR4000 Repeate	er	\$1,539.90
Ken Laseter	2011 Awards		\$75.99
Radio Shack	Repeater Repairs		\$5.88
		Total Expense	\$2,033.58
		SubTotal	\$6,014.97
	Income		
Membership Dues	Year 2012		\$330.00
Estate Sale Items			\$210.00
Club Patches			\$15.00
Tickets	Nov. Drawing		\$20.00
		Total Income	\$575.00
Ending Balance			
	as of February 29, 2012	_	\$6,589.97

Submitted by Rick Tillman WA4NVM

2012 Proposed Budget

Submitted By: Rick Tillman WA4NVM

EXPENSES for 2012

TN Annual Report \$40.00

Total Operating Cost \$40.00

MEETING COSTS

Meeting Space (Donation)	\$100.00
Meeting Refreshments	\$150.00
Food (Dec. meeting)	\$100.00
Door Prizes (monthly)	\$240.00
Attendance Incentives (Nov.)	\$1,250.00
Certificates & Awards	\$300.00

Total Meeting Cost \$2,140.00

MAILING COSTS

P. O. Box (yearly rental) \$100.00

Total Mailing Costs \$100.00

INSURANCE

Liability \$200.00 Equipment \$139.00

Total Insurance \$339.00

TRAINING

Projector bulb \$250.00 Supplies \$50.00

Total Training Costs \$300.00

REPEATERS

New Repeater UHF \$2,000.00 SouthEastern Repeater Asso. \$30.00

Total Repeater Costs \$2,030.00

SPECIAL EVENTS

Field Day \$300.00

Total Special Events \$300.00

EQUIPMENT MAINTENANCE

Trailer Repairs, etc. (tires) \$500.00

Total Maint. Costs \$500.00

TOTAL EXPENSES \$5,749.00

INCOME for 2012

Donations (cash) \$100.00

Membership \$2,000.00

Ticket Sales (Nov. meeting) \$1,265.00

Club Patches \$60.00 Advertisement \$40.00

TOTAL INCOME \$3,465,00

BOARD MEETING MINUTES

February 7, 2012 - Presented by: Tom Raggett KJ4LMH Secretary

Present at meeting: Joe Lowenthal, Ken Laseter, Rosalinda Melena, Bill Stevens, Richard Martin, Tom Raggett, David Campbell.

Rosalinda called the meeting to order.

- 1. Earthquake Presentation--There was much discussion about the presentation to the Earthquake meeting to be held at the University of Memphis in March. The focus of the presentation was to be ham radio and not DARC. After the discussion, it was decided to let Ham make the decision on how ham radio supports the disasters.
- 2. Silent Auction-- The club will auction all equipment left that it has accumulated in recent months. There will be a minimum bid for each item. Some of the board members are contributing equipment to the auction. Bill Stevens volunteered to set up the items before the meeting.
- 3. Budget-- Rick Tillman will send copy of budget to the board members before the next meeting. It will also be published in SPARKS.
- 4. Web Site-- Joe Lowenthal is reviewing the Delta Club web site and updating where necessary.
- 5. Training--Joe Lowenthal reported 24 tested in the last session, all passed and 3 General were included the number.
- 6. Huntsville Hamfest-- The Hamfest will be held August 18, 2012. Joe will coordinate the trip. It was suggested that it be announced on the net each night as the date gets closer.

7. Next Meeting-- Next board meeting will be at XLINE Pizza because of primary voting at the regular site.

GENERAL CLUB MEETING MINUTES

February 14, 2012 - Presented by: Tom Raggett KJ4LMH

- 1. President Rosalinda Melena called the meeting to order and introductions were done around the room.
- 2. Treasurer's Report--Rick Tillman gave the treasurer's report. It was approved by the members.
- 3. Budget-- The budget was not published in the February SPARKS for member review. After the meeting, Ken Laseter said he will republish the January and February SPARKS with the letter from the President in the January SPARKS and the budget added to the February SPARKS.
- 4. Testing-- There were 8 people tested/passed before Tuesday's meeting, 5 Techs, 2 Generals and 1 Extra.
- 5. Training -- There are 22 new Techs and 3 Generals from the Technician/General class during February.
- 6. New Business -- Pat Lane nominated Joe Lowenthal ARRL Instructor of the Year. The motion was made and seconded to approve and proceed with the documents. Bob Holdford requested participation for supporting the March of Dimes Walk for Babies. Dennis Foster reported on FREEFEST. All tables on the inside are committed and there is a waiting list. There is space available outside.
- 7. Program PL259 My Way -- Ham Hilliard gave presentation on PL259 connectors and how to attach to coax, his way.
- 8. Silent Auction -- The auction proceeded after the program and most of the "stuff" from the estate sales was sold

Any corrections or additions to the minutes should be sent to Tom Raggett, (KJ4LMH@arrl.net).

AMATEUR PACKET UPDATE

By: James Butler - KB4LJV

Many times we look for new places to buy equipment. One new mail order ham radio store is called the NEW HAM STORE. These guys have ham radio accessories along with multimeters and tools. They have a website that shows all the products they offer. They carry coax and powerpole crimp tools. The desktop magnifiers are also very nice. They even carry a RF wireless headphone to hook up and monitor our radio audio. Their VOM multimeter at less than \$20.00 is a great buy. They also have coax connectors and lightning arrestor hardware. If you are looking for a new place to look for mail order ham accessories check out the NEW HAM STORE. Their web address is http://www.newhamstore.com/

AMATEUR HARDWARE UPDATE

By: James Butler - KB4LJV

Many times we carry our HTs with us for monitoring the bands. Running the radios all the time can drain batteries. We also may not have a power receptacle to charge it up. On the newer HTs they run at a lower voltage. Many use a 3.7 volt pack. The documentation says the external DC power can be from 4.5 to 14 volts DC to run the radio and keep the battery charged. One good place to get power is from you laptop computer. What you need is a cable that plugs into the USB connector and the other end is a plug that fits your radio. This will supply 5 volts DC at 500 MA max which is ok



for receive monitoring and battery charging. You can order cables that do this made for cell phones off of Ebay. They will usually give you the plug dimensions in the ad. You can buy these for \$2 or \$3. They make a nice way to hookup you HT and not run the battery down.

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 26 Technician 3 General 6 Extra

CLASSES PLANNED

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

General Class 3-12 - March 2012

The next General class is in the planning stage. It will probably start in late mid to late March on five or six Monday nights from 6:30-9:30pm. FCC testing will be offered on the last night of class. If anyone is interested in this class, send an email to <u>wa4ovo@arrl.net</u> with you name, email address, and phone number; preferably cell, with subject title General Class 3-12.

CLASSES IN PROGRESS

None

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:

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

Extra classes were held on six Saturdays from 9am to 1pm. Joe Lowenthal WA4OVO led the first class on January 14th from the Baptist Women's Hospital due to a power outage in the building at the Memphis-Shelby County Health Department east complex at 1075 Mullins Station. Then, in two classes Dean Honadle N2LAZ covered a refresher on scientific calculators and Extra Class math, electronic principles, components and building blocks, and electronic circuits. Alan Proffitt AE5RX covered radio signals and requirements, radio modes and equipment, and topics in radio propagation. Pat Lane W4OQG expounded on antenna and feedlines. He brought a spectrum analyzer and TDR for some interesting demonstrations.

Congratulations to Aubrey Alexander KG4YZW, Scott Chapman KJ4SJR, Tom Jerdon N2PAE, Charlie Jester KK4BTV, John Loeffler KC8JGT, and James Trainer KK4AVW for earning their Extra Class license.



Photo by Joe Lowenthal WA4OVO
Photo from left to right: 1st row- partial of Larry Hawkins
KJ4WOU, Mark McCormick KI4TGQ, Audrey Alexander
KG4YZW, Scott Chapman KJ4SJR; 2nd row- Tom Jerdon
N2PAE, James Trainer KK4AVW, John Loeffler KC8JGT
3rd row- Tom Ernst N4LIA, Charles Jester KK4BTV; not in
picture-, Chris Smith KK4FYF, Jim Thannum KK4CSX,
and Larry Reid KJ4WOR

The Delta Club's ARRL VE team of Bill Stevens WC9S, Dick Cookenham K3ORS, David Gilbert AJ4LV, Ham Hilliard W4GMM, Jeff Krause AJ4GY, Stacy Krause KJ4MDA, Joe Lowenthal WA4OVO, Alan Proffitt AE5RX, Ron Rubin K3RON, and Roger Schlichter WR4R provided the FCC testing on the last day of class.

Extra Class 1-12 – January 14 – February 25, 2012 Technician Class 2-12 – January 21st & February 4th, 2012

Delta Club Presented at 200th Year Commemoration of the New Madrid Earthquake on March 9th Submitted by: Joe Lowenthal WA4OVO

The Delta Club was asked to make a presentation at the 200th Year Commemoration of the New Madrid Earthquake on March 9th at the University of Memphis. The day was sponsored by West Tennessee Seismic Safety Commission, Mid-South VOAD (Voluntary Organizations Active in Disasters in collaboration with Shelby County Office of Preparedness, TEMA and FEMA. Ham W4GMM gave a 30 minute presentation on Amateur Radio in Emergency Communications followed by questions and answers.



Tom KJ4LMH and Joe WA4OVO staffed the table with the PC showing the N5COO video of 2011 Field Day activities, a Kenwood D-700 on battery power, and training materials for the classes available. A number of people signed up for classes.

New Net Manager for Delta Club 146.82 Training & Information Net

Submitted By: Joe Lowenthal WA4OVO

Lance Morris N4GMT requested to step down from the Net Manager position. He has been Net Manager for a long time. We thank Lance for his service to the nightly net.

The Delta Club board approved and President Rosalinda Melena has appointed Ray Turner N0ELE as the new Net Manager. The Net Control stations were advised last week of this change. We know Ray will do a superb job just as Lance has done.

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

kd4noq@arrl.net

President: Vice-President: Secretary: Rosalinda Melena – KI4ZKW Richard Martin – K4DXF Tom Raggett – KJ4LMH

901-921-4474 901-372-3722 901-517-0492

<u>ki4zkw@gmail.com</u> <u>k4dxf@att.net</u> <u>traggett@bellsouth.net</u>

Treasurer: Director of Training: Director of Publications:

Rick Tillman – WA4NVM Joe Lowenthal – WA4OVO Kenneth Laseter – KI4AOH

901-268-7047 901-683-2701 901-853-0400

wa4nvm@comcast.net wa4ovo@yahoo.com kmlaseter@laseterinc.com

Director of Programs: Director of Meetings & Special Events:

David Campbell – KD4NOQ David Gilbert – AJ4LV 901-388-6166 <u>aj4lv@hotmail.com</u>

PUBLIC SERVICE EVENTS --- 2012

I STILL NEED UPDATED 2012 DATES FOR THE FOLLOWING EVENTS PRINTED IN RED. IF THE DATES SHOWN ARE NOT CORRECT PLEASE EMAIL THEM TO ME AT YOUR EARLIEST CONVENIENCE. THANKS!

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 $\underline{kmlaseter@laseterinc.com}$.

DATE	EVENT	COORDINATOR	CONTACT INFO.
January 2012 15 th	Swamp Stompers.	Danny– KJ4FXZ	<u>kj4fxz@arrl.net</u>
February 201	Boy Scout Merit Badge University.	Hugh – WB4SLI	hwardlaw@bellsouth.net
March 2011 4 th weekend	City Slickers Equestrian Event	Richard – NF5B	(No Contact Information)
April 2011 28 th	March for Babies (March of Dimes).	Bob – KF4NDH	kf4ndh@bellsouth.net
30 th	Tour de Cure	Denise – KJ5DG	kj5dg.denise@gmail.com
May 2012 19 nd	Memphis in May Triathlon.	Ned - KA4BLL	ka4bll@arrl.net
September 20 10 th & 11 th	011 MS 150 Bike Ride	Darrell - KK4D	kk4d@xipline.com
December 20 8 th	11 St. Jude Marathon	Roger – WR4R	wr4r@bellsouth.net
8 th	Bartlett Christmas Parade	Dennis – KJ4BDU	dcvv3714@aol.com
TBA	Juvenile Diabetes Research Foundation Walk	Kathleen - KC0HZU	(No Contact Information)

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 pleases 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 ADVERTISEMENTSSee 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)	Savage Commercial & residential ceramic, quarry, marble & slate tiles Company (901) 363-9607 or Fax (901)365-1992 5579 Federal Avenue Memphis, TN 38118-7918 35 YEARS of EXPERIENCE

ADVERTISEMENT ORDER FORM

114	DELTA ATEUR RADIO CLU	

D.14. A.......... D. 11. Cl.-1.

	Sparks Advertisi		Date:			
MAIEUR RADIO CUM		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											
FU	ULL PAC	ìΕ	HALF PAGE		¹ / ₄ PAGE		BUSINESS CARD				
\$50.00 \$25.00 for 3 Months 7" w X 8 ½" h 7" w X 4" h		\$15.00 for 3 Months 3 ½" w X 4" h		\$10.00 for 3 Months 3 ½ " w X 2" h							
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012