DELTA AMATEUR RADIO CLUB

SPARKS

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



Welcome to the Delta Amateur Radio Club!

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

W4BS

REPEATER SYSTEM

 $\begin{array}{ccc} 146.820^{\text{-}107.2} & 147.360^{\text{-}107.2} \\ 224.420 & 443.200 \end{array}$

NEXT CLUB MEETING

DATE: April 10, 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: "Armed Forces Day Communications Test"

Presented By: Ham Hilliard W4GMM

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

A happy April to all. I hope everyone is enjoying the mild Spring weather.

Spring is a great time for many ham projects. One project that I'm been providing updates on is our tower. Well, I'm got "Good and Bad" news on the project. The good news--we have our city permit! The bad news--we only have six months to complete the project!! The clock is now ticking but several great hams have offered their help and insight. Now that the OM (KI4YOP) is back in town, we can get busy.

Since the tower is going to be attached to the house, at the back of our garage, one of our first steps will be to reinforce the inside attic studs. Knowing how hot and how much head room is available at that end of the attic, we'll work early mornings and take breaks. Safety is something that the OM, our volunteers and I are adament about

The first antenna that will go on the tower is a tri-band beam that we purchased from one of the club's estate sales.

I'll be taking photos as the work progresses and as long as I'm guaranteed "editing rights", (Whatever happened to that photo of me sitting up on my roof??) I'll share a few at one of the upcoming DARC Club meetings.

So, for now, 73 to all. Be safe!

AN APRIL GIGGLE

By: Rosalinda Melena AK4SB

April Fools' Day is celebrated in different countries on April 1 every year. Sometimes referred to as **All Fools' Day**, April 1 is not a national holiday, but is widely recognized and celebrated as a day when many people play all kinds of jokes and foolishness. The day is marked by the commission of good-humored or otherwise funny jokes, hoaxes, and other practical jokes of varying sophistication on friends, family members, teachers, neighbors, work associates, etc. Its origins are uncertain. Some see it as a celebration related to the turn of the seasons, while others believe it stems from the adoption of a new calendar.

In Scotland, April Fools' Day is traditionally called Hunt-the-Gowk Day ("gowk" is Scots for a cuckoo or a foolish person), although this name has fallen into disuse. The traditional prank is to ask someone to deliver a sealed message requesting help of some sort. In fact, the message reads "Dinna laugh, dinna smile. Hunt the gowk another mile". The recipient, upon reading it, will explain he can only help if he first contacts another person, and sends the victim to this person with an identical message, with the same result.

In modern times, people have gone to great lengths to create elaborate April Fools' Day hoaxes. Newspapers, radio and TV stations and Web sites have participated in the April 1 tradition of reporting outrageous fictional claims that have fooled their audiences. In 1957, the BBC reported that Swiss farmers were experiencing a record spaghetti crop and showed footage of people harvesting noodles from trees; numerous viewers were fooled. In 1985, *Sports Illustrated* tricked many of its readers when it ran a made-up article about a rookie pitcher named Sidd Finch who could throw a fastball over 168 miles per hour. In 1998, after

Burger King advertised a "Left-Handed Whopper," scores of clueless customers requested the fake sandwich.

TREASURER'S REPORT

Submitted By: Rick Tillman WA4NVM

Ending Balance	as of March 31, 2012		\$6,845.00
		Total Income	\$495.00
Donations			\$15.00
Tickets	Nov. Drawing		\$20.00
Club Patches			\$5.00
Advertisement			\$40.00
Membership Dues	Year 2012		\$415.00
	Income		
		SubTotal	\$6,350.00
		Total Expense	\$239.97
Joe Lowenthal	Club Stamp		\$29.49
Enterprises,LLC	Monthly Prizes		\$210.48
Jams	·		001010
	Expenses		
Deginning Dalance	uo 01 maron 1, 2012		Ψ0,000.01
Beginning Balance	as of March 1, 2012		\$6,589.97

Submitted by Rick Tillman WA4NVM

BOARD MEETING MINUTES

March 6, 2012 - Presented by: Tom Raggett KJ4LMH Secretary

Meeting held at Exline Pizza in Bartlett.

- 1. Members present—Joe Lowenthal, Rick Tillman, Richard Martin, Tom Raggett, Ken Laseter, Rosalinda Melena, Dale Gilbert.
- 2. Ray Turner is the new Net Manager, appointed by President Rosalinda Melena. Ray replaces Lance Morris. Joe Lowenthal will publish procedures for Net Manager.
- 3. Budget—Approved by the Board and will be presented at the March General meeting. A vote for approval will be taken at the March 13 meeting.
- 4. Field Day—Field day was discussed at length. The Board suggested that it be a fun day instead of contesting. Richard Martin said he would ask for input at the March 13 meeting.

- 5. Antenna Trailer—Discussion was about the use of the trailer. If it is used, we need to put tires on the trailer. No resolution at this point.
- 6. VOAD Presentation—Board agreed to order a stamp for the literature that will be on display outside the main room at the presentation on March 9. Joe Lowenthal and Tom Raggett will man the table to distribute brochures and answer questions. Ham Hilliard will present a program, "Amateur Radio in Emergency Communications".
- 7. Program for March 13 meeting—Joe Lowenthal will present a video on the new method of CPR. Ham will present the presentation he made at the VOAD conference, "Amateur Radio in Emergency Communications".
- 8. Rosalinda will contact Larry McMillan about hosting Field Day on his property.
- 9. Meeting adjourned.

GENERAL CLUB MEETING MINUTES

March 13, 2012 - Presented by: Tom Raggett KJ4LMH

- 1. The meeting was called to order by President Rosalinda Melena. She called for introductions by each member present.
- 2. Minutes of the Board meeting and the general meeting were accepted and approved. Motions were made and seconded to approve as published in SPARKS.
- 3. Budget—The 2012 budget was published in SPARKS. A motion was made and seconded to approve the 2012 budget. The budget was approved by vote of all present at the meeting.
- 4. Treasurer Report—Rick Tillman submitted the Treasurer Report. A motion was made to accept and seconded. The report was approved by all present at the meeting.
- 5. Repeaters—The club has 2 new ICOM repeaters. We should have no problems now. Bill Stevens has salvaged several pieces of equipment and antennas. Bill asked that if anyone knew of equipment we can use, please contact him.
- 6, Training—Technician class- 26 license at the time of the meeting, 2 more expected later. Extra- 6 new at time of meeting and 2 expected later.
- 7. Testing—2 new Technicians, 1 General, and 2 Extra.
- 8. Net Manager—Ray Turner was introduced as new Net Manager.
- 9. Field Day—Richard Martin addressed the group about Field Day. There has not been much progress toward Field Day. Richard asked the group for suggestions on where to have Field Day and what the format would be. He asked that suggestions be communicated directly to him.

- 10. March of Dimes Walk for Babies—Bob Holford asked for volunteers for the Walk for Babies to be held on April 28. Good opportunity for new hams to work an event and understand how the communication works.
- 11. Armed Forces Day—Due to increased security at the Huxable Pumping station, the Armed Forces Day will be held at WKNO again this year. For details see Ham Hilliard.
- 12. Fox Hunt—Next Fox hunt will be on April 7th at Freeman Park in Bartlett.
- 13. Program—Joe Lowenthal presented video on new method of CPR. Ham Hilliard presented his VOAD presentation, "Amateur Radio for Emergency Communications".
- 14. Rosalinda reminded everyone to renew their membership and pay their dues.
- 15. Free Fest—There is one table left at the FreeFest. Since the March meeting was held, a request for volunteers has been sent to all members
- 16. April Board meeting will be held at Stevie B's in Bartlett.
- 17. Meeting Adjourned

AMATEUR PACKET UPDATE

By: James Butler - KB4LJV

Many time we run digital modes in a remote location. This portable operation requires a radio that has the features we want, but needs low power consumption and maybe even battery power. Elecraft has come out with a new super QRP rig you can use for portable operation. The KX3 is a brand new model shown for the first time at the 2011 Dayton Hamvention. The unit runs all modes from 160 through 6 meters. It has a general coverage receiver also built in. It looks like a radio controlhead unit for an HF rig without the other part. They also have a 100 watt linear amp matched for it. The rig is the ultimate all mode QRP rig. Check it out by watching the videos on YouTube about it and looking it over at the Elecraft website. The web address is http://www.elecraft.com/

AMATEUR HARDWARE UPDATE

By: James Butler - KB4LJV

Many times we want to build our own projects to use with our other equipment. Microprocessors have gotten cheaper and the tools to use them are easier to work with. One of the cheapest Processors to work with is the PIC microprocessors. One style of these is the PICAXE line of microprocessors. These microprocessors are available in a number of different packages from 8-pin chip to 40-pin chips. More pins mean more power, a larger number of inputs and outputs with higher cost. The cheapest of these is the PICAXE 08M . You can buy these processors for as little as \$3.00 for each one. Companies sell a development board to use to



program this chip or you can build your own. These Microcomputers are used for small projects such as robotics and other electronics projects. The PICAXE 08M has several pins for input and output. It can read an analog voltage with the analog to digital function. It also offers a Pulse width modulation output on a pin for motor control. The chip even supports serial output and input to drive a serial LCD screen as a display. The processor runs on 5 volts DC max or can run on 3 AA batteries at 4.5 volts for portable applications. Software and hardware for this computer are easy to use and learn. One of the main sites to learn about the PICAXE is http://www.rev-ed.co.uk/picaxe/

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
28 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.

None.

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 are not hams, but are going for their Technician and General licenses.

Joe Lowenthal WA4OVO is the primary instructor with Pat Lane W4OQG providing added knowledge on antennas and feedlines. FCC testing will be offered on the last night of class.



General Class 3-12 Left to right, 1st row-Juan Carlos Altuzar KJ4OKR, John Wilkinson KJ4NWU, Phil Hagood KJ4THG, Gene Adams KF5KVL; 2nd row- Robert Deeken, Finnegan Gruggett KK4DMI, Kathy Kennedy KK4GQM, Jenny Stafford KK4GQQ; 3rd row-Kandy Bernskoetter, and Rick Bernskoetter; and not shown- Kimberlee Norwood KJ4THC, and Kent Mathis KK4DMI.

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 http://copaseticflow.blogspot.com/2010/06/technician-class-practice-test-gadget.html
- 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 Technician Class 2-12 – January 21st & February 4th, 2012 Tech Class 2-12 Revisited

Several students either were not able to be at the class test session or did not pass the first test. Monte Bratschi KF5ONJ earned his Technician license at the Delta Club' test session on February 14th; Virginia Murdoch KF4ORO earned hers on February 20th at the Chickasaw Amateur Radio Association's test session; Chago Santiago KK4HYE earned his license at Delta Club's March 13th test session; and Ginger Walton KK4IFR received her license at the March 20th Olive Branch ARC test session.

Troop 457 Merit Badge College – February 11, 2012 Troop 225 Merit Badge Class – February 11, 2012

COVENANTS, CODES, & RESTRICTIONS INPUT FOR ARRL

Submitted by: Hugh Wardlaw WB4SLI

The ARRL has a survey on their website related to the impediments to the hobby based upon Covenants, Codes, and Restrictions (protective covenants). I have to believe that there are plenty of members who have been impacted in their ability to operate (especially HF) due to restrictions. The FCC is looking at this and the ARRL wants to assemble some data to use in convincing the FCC that something like PRB-1 could be created to allow reasonable accommodation for the hobby.

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: Vice-President: Secretary:

Rosalinda Melena – AK4SB 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

<u>wa4nvm@comcast.net</u> <u>wa4ovo@yahoo.com</u> <u>kmlaseter@laseterinc.com</u>

Director of Programs: Director of Meetings & Special Events:

David Campbell – KD4NOQ David Gilbert – AJ4LV 901-388-6166 aj4lv@hotmail.com kd4nog@arrl.net

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

15th Swamp Stompers. Danny– KJ4FXZ kj4fxz@arrl.net

February 2012

Boy Scout Merit Badge University. Hugh – WB4SLI <u>hwardlaw@bellsouth.net</u>

March 2011

None

April 2011

28th March for Babies (March of Dimes). Bob – KF4NDH <u>kf4ndh@bellsouth.net</u>

HELP! - Bob 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 Bob at the email address shown above.

28th Tour de Cure Denise – KJ5DG <u>kj5dg.denise@gmail.com</u>

May 2012

19^{nd*} Memphis in May Triathlon. Ned - KA4BLL ka4bll@arrl.net

September 2011

10th & 11th MS 150 Bike Ride Darrell - KK4D kk4d@xipline.com

December 2011

8th St. Jude Marathon Roger – WR4R wr4r@bellsouth.net

8th Bartlett Christmas Parade Dennis – KJ4BDU dcvv3714@aol.com

TBA Juvenile Diabetes Research Kathleen - KC0HZU (No Contact Information)

Foundation Walk

Tour de Cure Denise – KJ5DG <u>kj5dg.denise@gmail.com</u>

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 (901) 363-9607 or Fax (901)365-1992 5579 Federal Avenue Memphis, TN 38118-7918 35 YEARS of EXPERIENCE

ADVERTISEMENT ORDER FORM

411	DELTA	

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J DELTA	-		Date:
MATEUR RADIO CUM		Name:	
Call Sign:	Phone:	Email:	
	TO PLACE A	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						
Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
2012	2012	2012	2012	2012	2012	2012	2012	2012	2013	2013	2013