

JEFFERSON REPORT

PUBLISHED BY THE JEFFERSON AMATEUR RADIO CLUB, INC. W5GAD

March 2008

The next meeting will be held at East Jefferson Hosp., Domino Pavilion, Dreyfous 2. Please see w5gad.org for the latest information.

General Meeting:
March 27

Board Meeting:
April 10

Open clubhouse: none until further notice

Tuesday Net: 9:00 P.M. on
145.37- (PL114.8),
Alternate: 147.24+/
444.000+ (PL114.8)

www.w5gad.org
e-mail: w5gad@arrl.net;
Phone: 504-831-1613

Send newsletter items to:
w5ctv@arrl.net
Deadline: 2nd Friday of
the month



Workparty This Weekend

Saturday March 29 starting at 8:30 a.m. we will have a workparty at the clubhouse. There are several tasks to be completed. We will be working on the furring for the ceiling in preparation for installing new tiles as well as some other wood working repairs. We will also start preparing for the installation of new electrical wiring. Please come out and help out. As a friend of mine likes to say "many hands makes for short work."

New Meeting Location

The next JARC General Meeting, (and the rest of the year, will be hosted by East Jefferson General Hospital. The meeting will be in the Domino Pavilion, Dreyfous 2 Thursday, March 27 at the usual 7:30 P.M. Park in the Hudson Garage, that is the West most garage and enter the hospital. Go to the 1st floor and as you come from the elevators the conference center is to your right. The room is near the end of the hall on the left.

New Member

The following has applied for membership and will be voted on at the next meeting.
James Sakobie, Associate Member, St. Bernard

D-STAR 1.2GHz Antennas Installed

The 1.2 GHz antennas for the D-Star repeater have been installed. This means that all systems are now fully functional. Here is a list of all frequencies for the D-Star system:

1.2 Voice 1285.000 -12MHz
1.2 Data 1251.000
440 Voice 444.925 +5.00 MHz
2m Voice 146.925 -0.600 MHz

New Section Manager Takes Helm

On April 1, Gary Stratton, K5GLS takes over as Louisiana Section Manager. The JARC would like to wish Gary well as he embarks on this new leadership role. We would also like to extend an invitation to Gary to come by any JARC meeting. Thank you to outgoing section manager Mickey Cox, K5MC for his many years serving as section manager.

Technician Class

A Technician class is in the planning stages. It will be held at East Jefferson Hospital. Dates are being discussed. If you would like to teach, please get in touch with Keith, W5KB. If you know anyone who is interested in taking the class, please let a board member know so we can get an idea of the class size.

New repeater coming up

The 145.39 repeater is currently undergoing testing and is awaiting its permanent home. The site it will be going to has to have another tenant vacate first. This should happen soon. As soon as the site is secure, we will announce its location.

Field Day Preparations

Field Day is coming soon. The JARC and Delta DX Association are once again teaming up to put on a Field Day operation. It has been decided to go with the same type operation as last year. The 5th wheel camper has been secured and the site is awaiting approval (Bonnabel boat launch). More details will be forthcoming.

Solar Cycle Prediction

(Updated 2008/03/11)

Predicting the behavior of a sunspot cycle is fairly reliable once the cycle is well underway (about 3 years after the minimum in sunspot number occurs [see Hathaway, Wilson, and Reichmann Solar Physics; 151, 177 (1994)]). Prior to that time the predictions are less reliable but nonetheless equally as important. Planning for satellite orbits and space missions often require knowledge of solar activity levels years in advance.

A number of techniques are used to predict the amplitude of a cycle during the time near and before sunspot minimum. Relationships have been found between the size of the next cycle maximum and the length of the previous cycle, the level of activity at sunspot minimum, and the size of the previous cycle.

Among the most reliable techniques are those that use the measurements of changes in the Earth's magnetic field at, and before, sunspot minimum. These changes in the Earth's magnetic field are known to be caused by solar storms but the precise connections between them and future solar activity levels is still uncertain.

Of these "geomagnetic precursor" techniques three stand out. The earliest is from Ohl and Ohl [Solar-Terrestrial Predictions Proceedings, Vol. II. 258 (1979)] They found that the value of the

geomagnetic a index at its minimum was related to the sunspot number during the ensuing maximum. The primary disadvantage of this technique is that the minimum in the geomagnetic aa index often occurs slightly after sunspot minimum so the prediction isn't available until the sunspot cycle has started.

An alternative method is due to Joan Feynman. She separates the geomagnetic aa index into two components: one in phase with and proportional to the sunspot number, the other component is then the remaining signal. She found that this remaining signal faithfully represents the sunspot numbers several years in advance. The maximum in this signal occurs at sunspot minimum and is proportional to the sunspot number during the following maximum. This method does allow for a prediction of the next sunspot maximum at the time of sunspot minimum.

A third method is due to Richard Thompson [Solar Physics 148, 383 (1993)]. He found a relationship between the number of days during a sunspot cycle in which the geomagnetic field was "disturbed" and the amplitude of the next sunspot maximum. His method has the advantage of giving a prediction for the size of the next sunspot maximum well before sunspot minimum.

We have employed these

methods along with several others to determine the size of the next sunspot cycle using a technique that weights the different predictions by their reliability. [See Hathaway, Wilson, and Reichmann J. Geophys. Res. 104, 22,375 (1999)] This analysis indicated (by mid-1996) a maximum sunspot number of about 154 ± 21 . We then use the shape of the sunspot cycle as described by Hathaway, Wilson, and Reichmann [Solar Physics 151, 177 (1994)] and determine a starting time for the cycle by fitting the data to produce a prediction of the monthly sunspot numbers through the next cycle. We find a starting time of July 1996 with minimum occurring in October 1996. The predicted numbers are available in a text file, as a GIF image, and as a Postscript file. As the cycle progresses, the prediction process switches over to giving more weight to the fitting of the monthly values to the cycle shape function. At this phase of cycle 23 we now give full weight to the curve-fitting technique of Hathaway, Wilson, and Reichmann Solar Physics 151, 177 (1994). The two parameters for this fit (cycle amplitude and cycle starting time) have remained unchanged since early 1999.

Note: These predictions are for "smoothed" International Sunspot Numbers. The

smoothing is usually over time periods of about a year or more so both the daily and the monthly values for the International Sunspot Number should fluctuate about our predicted numbers. Also note that the "Boulder" numbers reported daily at www.spaceweather.com are typically about 35% higher than the International sunspot number.

Another indicator of the level of solar activity is the flux of radio emission from the Sun at a wavelength of 10.7 cm (2.8 GHz frequency). This flux has been measured daily since 1947. It is an important indicator of solar activity because it tends to follow the changes in the solar ultraviolet that influence the Earth's upper atmosphere and ionosphere. Many models of the upper atmosphere use the 10.7 cm flux (F10.7) as input to determine atmospheric densities and satellite drag. F10.7 has been shown to follow the sunspot number quite closely and similar prediction techniques can be used. Our predictions for F10.7 are available in a text file, as a GIF image, and as a Postscript file. Current values for F10.7 can be found at: http://www.drao.nrc.ca/icarus/www/sol_home.shtml.

See the prediction graphic on page 3.

Online CQ Magazine Archive Complete;

Issues from 1945-2006 Posted on HamCall.net

CQ Communications, Inc. of Hicksville, New York, publisher of CQ Amateur Radio magazine, and Buckmaster Publishing of Mineral, Virginia, jointly announce that Buckmaster's searchable online archive of CQ magazine back issues, dating back to the magazine's first issue in January 1945, is now complete. The searchable archive may be accessed via the internet at <http://hamcall.net/cq> or via a one-click link from the CQ website at <http://www.cq-amateur-radio.com>.

All issues through early 2006 are now online, according to Buckmaster President Jack Speer, N1BIC. By agreement with

CQ, issues are not posted until two years after their publication dates, as paper copies are still available from the CQ bookstore. Newer issues will be posted as the two-year "window" expires.

Buckmaster, which produces the "HamCall" CD and website, and has for decades filmed back issues of CQ onto microfiche for use by researchers and hobbyists alike, has applied its advanced scanning and searching technology for online posting of documents to back issues of CQ. It has taken nearly four years to get all back issues scanned and posted. Pages are available to users as either low-resolution or high-resolution

JPEG image files, or as PDF files, which are more "printer-friendly" than the JPEGs.

"One of the great benefits to this approach is Buckmaster's very powerful search engine," which indexes every word on every page, notes CQ Publisher Dick Ross, K2MGA. "It is far better than anything we could put onto a CD." Ross also noted that most readers seeking a specific article and don't necessarily want to spend the money for a set of CDs, "an amount which can really add up if you want access to nearly 65 years worth of magazines."

On the HamCall archive

site, pricing is based on the length of time for which the user wants access. Searches are free, as is access to the first ten pages of each issue, assuring that the table of contents page will always be accessible. Archive subscription pricing is as follows:

* Searching and access to the first ten pages of each issue: Free

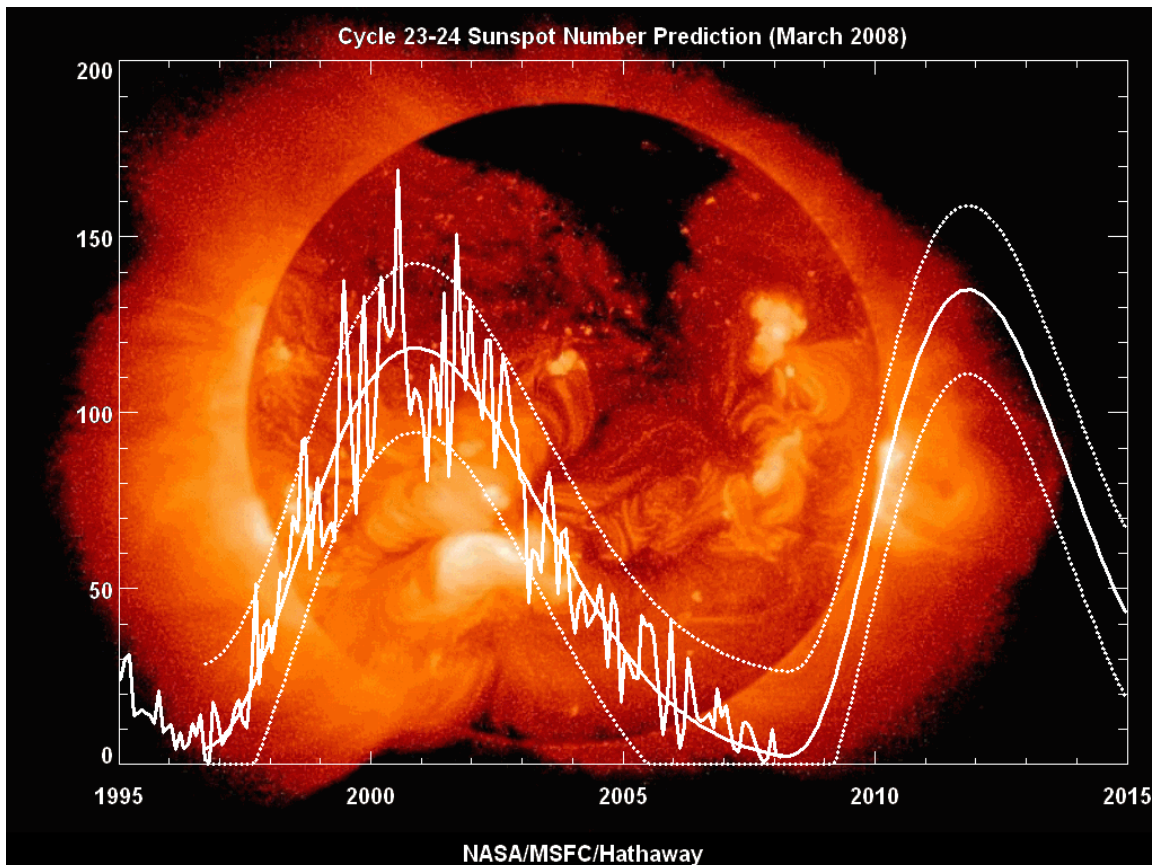
* 1-day "test drive": \$5 (same as the cost for ordering a reprint of a single article from CQ)

* 3 months: \$20

* 6 months: \$30

* 12 months: \$50

Views are limited to 300 pages per day to conserve bandwidth on the busy "HamCall" server.





Mark your calendars to attend the Northeast Louisiana Regional Ham RadioFest on Saturday, April 26th, 2008. Come enjoy commercial dealers, forums, food and beverages, fellowship, door prizes and much more . . .

Hours:

* Doors will open to the public at 8:00 a.m. Saturday and run through mid afternoon.

* Set-up: Friday, April 25th from 1:00 p.m. to 7:00 p.m.

Admission & Prize Tickets:

* Admission is \$5, which gives you a chance at the Grand Prizes.

* Additional prize tickets will be available for purchase (1 for \$1.00 or 6 for \$5.00)

VE Testing:

* Testing for new licenses or upgrades begins at 9:00 a.m

Tables

* Tables are \$10 each; Electricity is an additional \$10

* Please contact us early to reserve your table.

On-site dealers include:

* MFJ Enterprises

* The Sign Man of Baton Rouge (Exclusive Sign and Badge Dealer)

* Palmetto Antennas

* More to be announced soon, please continue to check back for updates.

Directions:

* Take Garrett road exit off I-20(exit 120), heading South.

* At the first light, take a left then head East onto Frontage Road.

* Proceed approx. 1 mile and the Barak Shrine Temple will be on the Right.

* We have plenty of FREE car parking, but a limited number of RV & trailer hookups, for which the facility charges \$16 per night.

Talk-In:

* Talk-in will be handled on the 146.85 repeater.

For additional information contact:

David S. Gore, W5DSG

Event Coordinator and Point of Contact

318-235-6845

318-237-9245

e-mail: w5dsg @ arrl.net

The 2008 BCRO Superfest

“The warm-up for Dayton”

Saturday, April 26th, 2008 8:00 AM to 2:30 PM

The Jones Center for Families

922 East Emma St. Springdale, Arkansas 72764

N 36° 11.174 W -94° 07.073

Web: <http://www.jonesnet.org/>

Talk-in: 145.290 - offset with PL 110.9

Admission: \$3:00 per person in advance

\$5:00 per person at the door

Tables: \$5:00 each if reserved in advance

\$6:00 if purchased at the door

New Vendor Special: \$5:00 Unlimited amount of tables.

To reserve a table: download and mail in this form.

Set-up times: Friday April 25th from 6:00 PM until 9:30

PM and Saturday April 26th from 7:30 – 8:00 AM.

Plenty of Free Parking

Food and Drinks will be available

Vendors Attending:

Clear Signal Products, D&L Antenna Supply, K&E Electronics, All-Star Name Tags, Ozark Thread Works, Razorback Radio

Great Bargains at the Flea Market

Forums:

ARES/RACES - Karl Bullock WA5TMC

ARRL Forum - David Norris K5UZ

ARRL in Washington DC - Amy Bullock N5TBB

Weather - Steve Gibbs

VE Testing – Starts at 1:00 PM. Walk-ins are welcome.

Hourly door prizes and a terrific grand prize

(do not have to be present to win grand prize)

Plan now for the ARRL 2009 Arkansas State Convention to be held here.

For More Info Contact:

Jay Harrison, KC0CNB

Phone: (479) 631-7727

Cell: (479) 644-6646

E-mail: Texgun19@cox.net



April 2008

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--|---|--|--|--------|--|
| 30 | 31 | 1 9:00 p SELA/Coast Guard Auxiliary Net | 2 | 3 8:00 p WARC Net 146.94 | 4 | 5 |
| 6 | 7 7:00 p GNO EmComm Comm. Meeting at West Jeff Hosp. | 8 9:00 p SELA/Coast Guard Auxiliary Net | 9 7:00 p WARC General Meeting at Picadilly's on Lapalco | 10 7:30 p JARC Board Meeting 8:00 p WARC Net 146.94 | 11 | 12 11:00 a DDXA Meeting at St. Tammany Library (Causeway branch) |
| 13 | 14 | 15 9:00 p SELA/Coast Guard Auxiliary Net | 16 | 17 8:00 p WARC Net 146.94 | 18 | 19 |
| 20 | 21 | 22 9:00 p SELA/Coast Guard Auxiliary Net | 23 | 24 7:30 p JARC General Meeting at EJGH 8:00 p WARC Net 146.94 | 25 | 26 |
| 27 | 28 | 29 9:00 p SELA/Coast Guard Auxiliary Net | 30 | 1 8:00 p WARC Net 146.94 | 2 | 3 |

JEFFERSON AMATEUR RADIO CLUB • APPLICATION FOR MEMBERSHIP • PLEASE PRINT CLEARLY.

Name _____ Callsign _____ Areas of interest: _____

Address _____

City, State, Zip _____ Occupation _____

License Class _____ Spouse's Name _____ E-mail address _____

Home Phone _____ Work Phone _____ Ever been issued a Notice of Apparent Liability? Yes ___ No ___

Membership Desired: Full (\$30) _____ Family (\$15) _____ Associate (\$30) _____ Student (\$15) _____

Family membership is full membership plus \$15 for each additional up to a maximum of \$60. Attach a separate application for each family member.

Do you wish to not disclose your contact information with other members of the club? Yes ___ No ___

Signature _____ Date _____ Sponsor _____ Date _____

Please enclose dues and mail to: JARC, P.O. Box 73665, Metairie, LA 70033

JARC Board Of Directors 2008

| | | | | |
|----------------------|--------|--------|----------|----------|
| President: | Keith | W5KB | 737-0858 | |
| Vice President: | Dave | KE5BMS | 812-5482 | |
| Secretary: | Mary | WB5IOE | 885-8667 | |
| Treasurer: | Dick | W5RMX | 888-2878 | |
| At Large: 1 Year #1: | Bob | WD5BJW | 885-7965 | |
| | #2: | Bob | AE5RN | 393-1075 |
| | #3: | Mike | W5MJD | 464-5817 |
| 2 Year #1: | Rafael | KD4WZJ | 471-6122 | |
| | #2: | Don | WB5QAZ | 455-4448 |
| | #3: | John | K5JCJ | 913-6784 |

CCC Race Operation a Success

Thanks to the following Amateur Radio Operators for their assistance with the Crescent City Classic: Amy Smith KE5JJV, Tom Craiz KF6QJQ, Herb Robin N5AUC, Cindy Rizzo KD5PCJ, Mike Rizzo KD5NTP, Richard Danneberg W5RMX, Don Olsen WB5QAZ, Harris Miller KB5BFK, Bob Dunn K5IQ, John James KB5NUN and Joe Glorioso N5OZG. We handled 1 Medical Emergency call and assisted in getting the clocks started at the same time along the race course. Special thanks to Harris Miller who assisted in getting one of the clocks working after realizing the battery was dead in the clock. A Big Thanks to Everyone who participated in the race. A JOB WELL DONE....

-- Joe, N5OZG

DX News

Romania, special call:

YO22NATO represents the NATO Summit taking place in Bukarest Apr 2nd through 4th. Ham radio activity will be Mar 28th through Apr 9th on all bands and several modes. QSL via YO3KAA.

JX - Jan Mayen:

Svein, LA9JKA, promises intense activity on SSB and digimodes on 160 through 6 m during his stay Mar 27th through Oct 8th 2008 as JX9JKA on Jan Mayen (EU-022). QSL via home call.

E7, Bosnia-Herzegovina:

The International Telecommunications Union (ITU) announced last year on August 8th (2007), that they replaced the callsign series prefix block of Bosnia-Herzegovina (BiH) from T9 to E7. It was announced this past week that effective 2300z, March 21st (March 22nd, 1200 AM in Bosnia-Herzegovina), Amateur Radio operators from BiH will begin using their new E7 callsigns. Boris Knezovia, T93Y (soon to be E73TW), stated the Communications Regulatory Agency has issued only two and three letter callsigns suffixes. Applications for one letter suffixes can be applied for starting April 14th and hopefully will be issued in late May 2008.

Fred Fish W5FF Award

ARRL Contest Branch Manager, Sean KX9X writes to let us know, "The ARRL is pleased to announce a new VHF achievement award in the name of Fred Fish, W5FF (SK). This award <http://www.arrl.org/awards/ffma> honors Fred's singular achievement of working and confirming all 488 grid squares in the 48 contiguous United States on 6 meters. We hope this award will help promote activity on 6 meters and encourage the activation of rare grid squares, DXpedition-style."

Using PropNet

If you missed WB8IMY's "Eclectic Technology" column in the March QST (page 95), take another look. The PropNet project <http://propnet.org> is a great tool for determining what band is actually open to where. All those beacon stations out there, to mis-quote "Eleanor Rigby", "Who are they for?" Well, by observing and publishing reception reports on the Web, they're now a lot easier to be used by contesters, that's who. True, the network doesn't operate below 30 meter and not at all on 20 and 15, but it does bracket those bands nicely.

K1JT Releases New Software

And there's more about this propagation testing stuff, as Larry W7IUUV checks in. "Most of you are aware of the WSJT software suite written by K1JT for use on the VHF/UHF bands. Joe has just provided a new software package called WSPR ("whisper") intended for use on HF as a QRP beacon/propagation tool. http://physics.princeton.edu/pulsar/K1JT/WSPR_Announcement.TXT It uses one of the newer JT modes (JT4) and can be set up for VHF/UHF path analysis. Unlike normal beacons, it will also listen for other WSPR beacons on the same frequency!" Don't you just love checking out sites like "physics.princeton.edu"?

ARRL Membership Newsletters, Bulletins

Did you know the ARRL offers more newsletters than just The ARRL Letter? One of the many ARRL membership benefits includes other newsletters, such as the ARRL Contest Rate Sheet (a bi-weekly contest newsletter), the ARES E-Letter (sent monthly, containing public service and emergency communications news), the ARRL Club News, the ARRL Instructor/Teacher E-Letter and the IARU E-Letter.

You can also elect to receive news and information from your Division Director and Section Manager (keep in mind that not all Divisions/Sections send notices), as well as W1AW bulletins that relate to DX, propagation, satellites and Keplerian reports. The ARRL also offers a free notification service to members, letting them know when their membership and license are due to expire.

Sign up for these newsletters, bulletins and notifications on the Member Data page of the ARRL Web site <http://www.arrl.org/members-only/memdata.html>.