



SARA Newsletter

January 2008

Shreveport Amateur Radio Association

Meeting:

First Thursday of each month at 6:30 P.M. in the Bossier Main Library History Center

Local Amateur Information

Available at:

www.K5SAR.com

or

www.qsl.net/nw1arn/

SARA Repeaters:

145.050 - K5SAR
DX Packet Cluster
145.110 - N5FJ
146.700 - K5KDO
146.820 - K5SL
440.900 - N5FJ

SARA

PO Box 37632

Shreveport, LA

71133-7632

Club Officers

President – [Rick Westerfield, KH2DF](#)
Vice President – [Randy Fulco, K5SL](#)
Treasurer – Mike Ketchens, KE5DLM
Secretary – [Ray Bureau, AD5ZT](#)

Happy New Year, 2008

Make it your New Year's resolution to get on the air more. Be it CW, digital modes such as RTTY or PSK31, SSTV or simply using your microphone, there is something magical about radio. Make 2008 the year you rediscover what the magic is all about.



Remember When? Remember Now.

By Norm Fusaro, W3IZ

Years ago companies like Heath provided a way for many to get involved with Amateur Radio through kit building. The radio kit was less expensive than factory produced gear and, depending on the skill level of the builder, the finished products performed pretty well. Maintenance and repairs were easily performed because the builder had an intimate knowledge of the circuitry. Today, mass production and robotic manufacturing processes help drive down the cost of electronic equipment and in many situations make replacing a device more cost effective than repairing it. After a few short years of producing kits, the company found that they could offer a better product at a lower cost by providing assembled circuit boards populated with surface mount components. Assembly is a matter of plugging-in boards and configuring systems similar to how a computer is built. Digital electronics allows the experimenter to trade-in the soldering iron for computer software codes and the term home-brewing has now given way to a more descriptive phrase -- soft-brewing.

Developers like Joe Taylor, K1JT have completely re-written the rules when it comes to EME, meteor scatter and other exotic digital modes once reserved for the eccentric radio amateur. Today many hams employ WSJT software with modest stations to ricochet information to one another via the lunar surface. Commercial interests are able to offer feature packed equipment that is relatively less expensive than gear offered in the past, and hams are finding applications for this stuff that could only be imagined a short time ago.

ARRL founder Hiram Percy Maxim, W1AW was a forward thinker who moved in the same circles as Edison, Ford and Firestone, people who changed our world. Maxim was innovative and has many inventions to his credit. When the spark gap transmitter used at Maxim's station 1AW, could no longer generate radio signals it was replaced by a modern transmitter that used vacuum tubes. When asked if there were plans to repair the spark gap transmitter Maxim acknowledged the position of employing modern technology when he remarked "The voice of the spark set at 1AW will not be heard again." (QST, January 1923, pg 14)

It may be comforting to stroll down memory lane and fire up the vintage radio for the evening. The warm glow of the tubes and the refreshing aroma of heat radiating from the chassis will create soothing reflections and transport you back to a time when there was no internet, e-mail or cell phones. As you blow smoke rings from your briarwood pipe and replicate the authenticity of what you refer to as "real radio," try to remember that the icons of technology that you pay homage to were once state-of-the-art, modern appliances that filled the dreams of many. As much as Amateur Radio owes to its past, adoration of vintage radio should not take away from Amateur Radio's future.

SDR, Sunair, and FlexRadio

Sunair Electronics and FlexRadio Working Together: Sunair Electronics, announced in November that it has finalized an agreement with FlexRadio Systems to purchase certain customized state-of-the-art software defined high frequency radios (SDR) and accessory items for sale to Sunair's government and military customers. A software defined radio is a major departure from traditional designs where all radio frequency functions and processing are accomplished with hardware. In an SDR, many of the processes are accomplished with high speed digital processors allowing for much simpler hardware designs and allowing for extreme flexibility with respect for filtering and user specified functionality. HF radios operate in the frequency range of 2-30 MHz and are designed for long range global communications circuits. Sunair President Mark Allen said, "FlexRadio has been refining their design for more than four years.

FlexRadio has combined extremely innovative software and graphical interfaces with RF hardware to produce a product which is truly state of the art when it comes to high frequency (HF) radio. This product will help our customers with their critical national security communications requirements." Gerald Youngblood, President of FlexRadio, said, "SDRs represent the most significant change in communications technology in well over half a century, allowing flexibility and performance not practical with traditional analog approaches."

Solid-State Homebrew

Next time you open up your radio, consider that 55 years ago George Rose K2AH, made the first solid-state amateur transmission with a single-transistor homebrew rig. It used an RCA point-contact germanium transistor. Rose measured an input power of 24 mW and estimated the radiated power at somewhere around 50 uW. He made a contact with 25-mile distant W2UK and with W2KNI and W2DPB. (Stew W5FYI)

Digital ID

What is that signal, anyway? The British Amateur Radio Teledata Group (BARTG) has made available MP3 recordings of the sounds of various digital modes. Currently there are 25 recordings on the BARTG Web site <<http://www.bartg.org.uk/Sound%20Files/soundlibrary.htm>> including ALE, DominoEX, Olivia and MT63. (Glenn Rattmann, K6NA)

TECHNICAL TIPS AND INFORMATION

If you are extra-finical about starting the contest at the earliest possible moment, you might want to read this article about ultra-precise clocks <http://www.wired.com/science/discoveries/news/2007/12/time_nist> featuring our friends at the National Institute of Science and Technology. (Matt, WV1K)

Gene, AD3F, reports good results when he used tinned bronze connectors from Harger to make all the wire connections to his aluminum tower, including the coax shield for a sloper antenna. He uses the 222T connectors <<http://tinyurl.com/2ezky6>> to connect solid ground wires to the tower legs and the 213T clamps <<http://tinyurl.com/27nfnn>> for coax shields.

Power line interference problems may yield to the information in the Naval Postgraduate School's "Power Line Interference" manual. It's downloadable from the ARRL Technical Information Service at <http://www.arrl.org/tis/info/HTML/power_line_handbook> (Hank, W6SX)

Formulas, formulas everywhere! Just about any formula you can think of (and I'll bet a lot you haven't) can be found at <<http://www.equationsheet.com/index-Equations.html>>. Keep this site bookmarked, for sure!

TECHNICAL URL OF THE WEEK -- Are your frangible math skills, like my own, a little rusty? Check out the free tutorials at <<http://www.intmath.com>> - they start with the basics and take the student all the way through fundamental calculus. These are great resources for students struggling with math as they study for their ham licenses or to upgrade, as well.

First SARA Meeting of 2008

Thursday, January 3rd, 2008 at the Bossier Library Heritage Center