

KISHWAUKEE AMATEUR RADIO CLUB

Club Call: WA9CJN / Repeater 146.730, -O/S, 100PL

September 2011 NEWSLETTER

Editor: Kent, KC9LIF

Club Officers:

President – Bob, W9ICU
Vice President–Tom, K9GPC
Treasurer – Eric, KC9DUX
Secretary – Ed, KC9PMM



Next Club Meeting:

September 14th, 2011, 7PM

Location:

Christ Community Church
1200 South Malta Rd.,
DeKalb, IL

On the web: www.kish-club.org or
KARC at P.O. Box 371, DeKalb, IL 60115
Monday evening 2 meter net: 9PM on WA9CJN repeater,
featuring ARRL audio news
AREAS/RACES net: Thursday evenings 7PM on WA9CJN
repeater

AUGUST CLUB MEETING was on Wednesday
August 10th, but was cancelled.

80 METER RAG CHEW NET: Formerly 160M,
at 8:00pm every evening has moved to **3.810
+ 15kc** until we establish a permanent
frequency. So jump in once in a while and say
hello.

KARC MONDAY NET: Bill Vickers KN9N has
offered to take over Net Control for the KARC
Monday evening Net, beginning August 29,
2011.

UPCOMING CLUB EVENTS: Volunteers will
be needed. Contact Bob W9ICU:

09/24/11: Egyptian Theater 100mile Bike
Ride thru Dekalb & W. Kane Co.
10/30/11: Sycamore Pumpkin Festival
Parade

EGYPTIAN RIDE: 100 mile Bike Ride,
through Eastern Dekalb County and far
Western Kane County will be held on Saturday
September 24, 2011. For those who helped

out last year, routes will be the same as last
year. We could still use some more volunteers
for communications for this event from 8am to
about 4pm. Easy duty just sit in your vehicle
at a given location and monitor and
report. Real nice lunch served at the Egyptian
Theatre.



UPCOMING HAMESTS:

09/10-11/11: Radio Expo, Belvidere, IL
09/16/11: W9DXCC Conv., Elk Grove, IL

HAMFEST: The Chicago FM Club " Radio Expo 2011" (listed above) Saturday and Sunday September 10 and 11, 2011 Boone County Fairgrounds, Belvedere, IL. (Intersection US 20 & IL 76 going North on IL 76 a ¼-mile to Fairgrounds) Two Big Days Gates open 8am - 3pm Tickets at gate \$10.00 (kids under 12 free).

VE TESTING SESSIONS in Dekalb are now **by appointment only!** This became effective with the June testing session. The last two testing sessions for this year will be held on Tuesday at 7pm, September 20th, and on Tuesday at 7pm, November 22nd.

If you are planning on attending either of these sessions you must email Eric, at kc9dux@arrl.net or call 815-753-6727 at least 48 hours in advance. If there are no commitments by that time the session will be canceled.

If you are attending you will need to bring \$14.00, a photo ID, proof of Social Security Number or a FRN, original license if any, and any prior CSCEs. Test question pools Q&A can be found on the club website at www.kish-club.org or www.w5yi.org

STEAM SHOW and W9S Special Event:

The 55th Annual Steam Show and Threshing Bee was a big success with mostly mild and sunny weather. This was the 14th year for this special event, which went well and ended up with 131 contacts, not great but not bad considering band conditions. Bob would like to thank those who helped out with the event, setting up, operating and tearing down. Kent-KC9LIF, Mike-WD9GNX, Steve-W9ELG (a very good CW operator) Eric-KC9DUX, Luc-KC9PJM,

Tom-K9GPC, and Special Thanks to Barry W9JBL for providing the truck to transport the equipment to and from event. Below, Luc KC9PJM is driving his 1962 Speed-EX Tractor in the parade. In the same parade was an Avery Engine Tractor. Below those pictures is W9S Tent.

1 Luc KC9PJM driving his 1962 Speed-Ex Tractor



2 Avery Engine Tractor



2 W9S Special Event Tent



ARRL LETTER NEWS AROUND THE COUNTRY:

+ *ARRL Field Day*: 2011 Field Day Logs Posted



www.arrl.org

A record 2654 submissions have been received for the 2011 running of ARRL Field Day. According to ARRL Field Day Manager Dan Henderson,

N1ND, this is the highest number of entries received for what is one of Amateur Radio's most popular on-the-air operating events. The combined list of Logs Received for Field Day has been posted online. The list includes all logs submitted via the website, as well as those submitted via e-mail and US Mail. Read more [here](#).

+ ***Amateur Radio in the Classroom***: ARRL Teachers Institute on Wireless Technology

Opens Horizon of Learning Opportunities

This summer, the ARRL offered five sessions of the Teachers Institute on Wireless Technology (TI). Veteran instructors Miguel Enriquez, KD7RPP, and Nathan McCray, K9CPO -- along with new Instructors Tommy Gober, N5DUX, and Matt Severin, N8MS -- led the instruction. A total of 55 educators from 24 states, ranging from elementary teachers to university PhDs, took part in the 2011 TIs.



Larry Kendall, K6NDL, is poised to confirm a QSO via satellite during a TI session.

The first TI session of 2011 was held at Desert Ridge Middle School in Albuquerque, New Mexico, and was hosted by Diane Nihart, KE5UHB, a 2010 TI graduate. Other sessions took place at Parallax, Inc's corporate office in Rocklin, California (Parallax provides the robotics equipment for each TI session); at Mohawk Valley Community College in Utica, New York -- hosted by Bob Decker, AA2CU; and at ARRL Headquarters. The Dayton Amateur Radio Association hosted the TI-2 seminar, *Space in the Classroom*. The TI-2 curriculum focuses on the nuts and bolts of setting up and operating a satellite ground station. While TI participants do not need to have an Amateur Radio license to attend a session, TI-2 participants must have at least a Technician class license and have already attended a TI session. Read more [here](#).



To check out our newsletter and find out what's happening at RF Concepts, [click here](#).

+ **ARRL and California Researchers Team Up to End 12 Meter Interference.**

After the resolution of the recent 60 meter Coastal Ocean Dynamics Applications Radar (CODAR) situation on the East Coast, the ARRL noted an earlier report by John Terrell, N6LN, of Palos Verdes, California. Terrell described CODAR activity on the 12 meter band, from 24.93 to 25.058 MHz. Since it appeared likely it was originating on the West Coast -- possibly near Orange Section Official Observer Coordinator Dan Welch, W6DFW -- ARRL Field and Regulatory Correspondent Chuck Skolaut, K0BOG, contacted Welch for assistance. Read more [here](#).



Check Out the September Issue of *QST*

The September issue of *QST* is jam-packed with all sorts of things that today's Amateur Radio operator needs. This issue focuses on Emergency Communications and Public Service, activities that many hams enjoy. From product reviews to experiments to contesting, this issue of *QST* has something for just about everyone.



Victor Cid, W3CID, and Andrew Mitz, WA3LTJ, know that radio amateurs have a long history of tinkering, of taking something and adjusting it to their purposes. These two hams -- who work at the National Institutes of

Health in Washington, DC -- did just that when they developed a unique way to link a group of Maryland hospitals during major disasters via Amateur Radio. Find out how they did it in their article "Optimizing Amateur Radio Resources for Major Disasters." When your ARES® group is activated during an emergency, you know to grab your go-kit. Geoff Haines, N1GY, took this idea a bit further with his article "An Emergency Radio Package - or The Radio in a Box II." Haines developed a

box to hold a dual-band VHF/UHF radio, a battery and paperwork using only materials and equipment he already had on hand.

David Gillespie, W4LHQ, looks back at the devastating Alabama tornadoes earlier this year in his article "Alabama Slammer." Gillespie recounts that thanks to the training hams had *before* the storm -- as well as the experiences they brought with them from past disaster deployments -- was crucial to providing top-notch communications support to the area served agencies. Speaking of practice, it's time to get ready for the 2011 Simulated Emergency Test (SET), set for October 1-2. ARRL Field Organization Supervisor Steve Ewald, NV1X, takes a look at this annual event that tests emergency operating skills and the readiness of communications equipment and accessories in an emergency-like deployment.

QST Contributing Editor Howard Robins, W1HSR, takes a look at the Yaesu VX-8GR dual-band handheld transceiver in this month's Product Review. He says that this radio "incorporates GPS and a slew of features into a rugged, compact package. With so many features in a small package, it will be most appropriate for advanced amateurs wanting to explore and master APRS and GPS technology." *QST* Contributing Editor Phil Salas, AD5X, also checks out the Ameritron ALS-1300 HF power amplifier. He says this amplifier "delivers the goods and provides a good value for those interested in a solid state near-legal-limit linear power amplifier for 160-10 meters."

Ward Silver, N0AX, delivers the results of the 2011 ARRL International DX Phone Contest. With the bands wide open during the contest, Silver noted that "more butts in more chairs [meant] a 24 percent increase in QSOs reported by US and Canadian stations. There were more single-band logs than ever this year and the big increase was -- no surprise -- 10

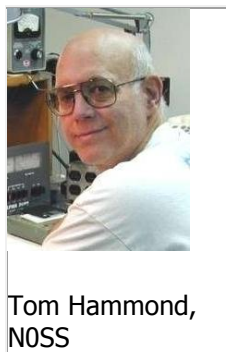
meters, which went from 13 logs submitted in 2010 to 60 in 2011."

Of course, there are the usual columns you know and expect in the September *QST*: Happenings, Hints & Kinks, The Doctor Is IN, How's DX, Technical Correspondence, Vintage Radio and more. Look for your September issue in your mailbox. *QST* is the official journal of ARRL, the national association for Amateur Radio. *QST* is just one of the many benefits of ARRL membership. To join or renew your ARRL membership, please see the [ARRL web page](#).

+Silent Keys:

Lawrence J. Schroeder, 52, a Wheaton resident for 30 years. An avid aviator involved with EAA Chapter 579, he enjoyed spending Sundays introducing kids to the joy of flight. Involved with the Wheaton Amateur Radio Community for over 30 years, he enjoyed attending a yearly Hamfest in Dayton, Ohio. **He was the Treasury/ Secretary of the Illinois Repeater Association.** He was known as KA9KDC to his many Amateur Radio friends. He enjoyed the annual Oshkosh fly-in, camping, traveling, and being an Eagle Scout. He was the beloved husband of Carol, nee Jongleux; loving father of Samantha, Kelsey and Meghan; devoted son of Lillian and Harry; dear brother of David, Russell (Noemi) and Jennifer (Jeremiah) Sullivan; fond uncle of many nieces and nephews.

Tom Hammond, N0SS, of Lohman, Missouri, passed away August 4 from cancer. He was 67. Hammond was the first and only Life Member of the Kansas City DX Club, playing an invaluable role in the club for more than three decades, creating his world famous



Tom Hammond, N0SS

CW pileup files each year for the annual CW Pileup Competition at the Dayton Hamvention. Read more [here](#).

+Solar Update



The Sun, as seen on Thursday, August 18, 2011 from [NASA's SOHO Extreme Ultraviolet Imaging Telescope](#). This image was taken at 304 Angstrom; the bright material is at 60,000 to 80,000 Kelvin.

Tad "[The warmth of the Sun is in your smile](#)" Cook, K7RA, reports: Solar activity was down again this week -- the sunspot number on Sunday went all the way to 0 for the first time since January 27, which was 29 weeks ago. The average daily sunspot numbers declined nearly 50 points, to

25.6, while the average daily solar flux was down nearly 16 points to 88.5. The latest prediction from NOAA/USAF on August 17 has the solar flux at 98 on August 18, 100 on August 19-21, 105 on August 22-24, then 110, 115, and 115 on August 25-27, and back to 110 on August 28-31. The predicted planetary A index is 5 on August 18-20, 8 on August 21, 5 on August 22-25, 15, 10 and 8 on August 26-28, and 5 again on August 29-31. Thanks to Max White, M0VNG, of Worcester, England, for sending along this story from NASA, "[Solar Flares: What Does It Take to Be X-class?](#)" Look for more information on the ARRL website on Friday, August 19. For more information concerning radio propagation, visit the [ARRL Technical Information Service Propagation page](#). This week's "Tad Cookism" is brought to you by The Bangles' [Waiting for You](#).

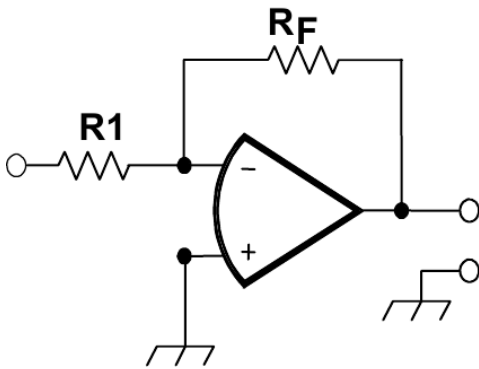


EXAM QUESTIONS OF THE MONTH: The winner of August's Quiz is Barry, W9JBL. Congratulations to Barry for providing the most correct answers. Great Job!!



THIS MONTH'S QUIZ:

Figure E7-4



1. What voltage gain can be expected from the circuit in [Figure E7-4](#) when R1 is 10 ohms and RF is 470 ohms?

- A. 94
- B. 0.21
- C. 47
- D. 24

2. What advantage does a Pi-L-network have over a Pi-network for impedance matching between the final amplifier of a vacuum-tube type transmitter and an antenna?

- A. Greater transformation range
- B. Greater harmonic suppression
- C. Higher efficiency
- D. Lower losses

- 3. What is one way a single-sideband phone signal can be generated?
 - A. By using a reactance modulator followed by a mixer
 - B. By using a balanced modulator followed by a filter
 - C. By using a loop modulator followed by a mixer
 - D. By driving a product detector with a DSB signal

4. Which type of circuit would be a good choice for generating a series of harmonically related receiver calibration signals?

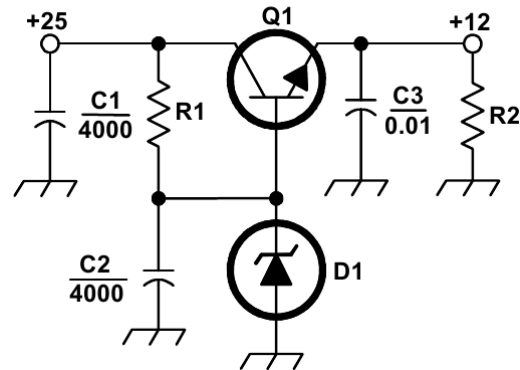
- A. A phase-shift oscillator
- B. A Wein-bridge oscillator followed by a class-A amplifier
- C. A Foster-Seeley discriminator
- D. A crystal oscillator followed by a frequency divider

5. Which of the following amplifier types reduces or eliminates even-order harmonics?

- A. A Class C
- B. A Class AB
- C. Push-push
- D. Push-pull

Figure E7-3

Figure E7-3



6. What is the purpose of R2 in the circuit shown in [Figure E7-3](#)?

- A. It provides fixed bias for Q1
- B. It provides fixed bias for D1
- C. It provides a constant minimum load for Q1
- D. It decouples hum from D1

7. What is a phase-locked loop circuit?

- A. An electronic servo loop consisting of a phase detector, a low-pass filter and voltage-controlled oscillator.
- B. An electronic circuit consisting of a precision push-pull amplifier with a differential input
- C. An electronic servo loop consisting of a ration detector, reactance modulator, and voltage-controlled oscillator.
- D. None of the above.

8. What is the output PEP from a transmitter if an oscilloscope measures 25 volts p-p across a 50-ohm resistor connected to the transmitter?

- A. 5.30 watts
- B. 1.56 watts
- C. 1.25 watts
- D. 12.50 watts

COMMENTS & QUESTIONS: Please direct your comments, ideas, gadgets info, bench work, and questions concerning the newsletter to **Kent KC9LIF**, (kbergphd@hotmail.com). **This is your newsletter to serve your needs.**

Remember the club meeting on September 14th at 7PM.

73,

Kent KC9LIF

