

#### K9MCE Officers:

- President: Gary Huff, K9AUB
- Vice-President: Ron Ochu, KO0Z
- Secretary: Mark Kerhlikar, WD9HBF
- Treasurer: Jim Pitchford, N9LQF
- Trustee: Skp Riba, WS9V
- Board of Directors:
- Mark Osborn, WA9SXK
- Issac Pizzo, KC9NJW
- Tim Coonrod, KC9HQA
- Hugh Watson, AB9UB
- Webmaster: Issac Pizzo, KC9NJW

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# K9MCE QSN

Volume I, Issue II

November 2013

## K9MCE Club Meeting on Wednesday 6 November

Mark your calendars now and plan on attending this month's meeting of the Macoupin County Amateur Radio Club at 7:00 pm on Wednesday, November 6. We meet on the second floor of the Macoupin County Sheriff Department, 215 S. East Street, Carlinville, IL 62626.

Prior to the club meeting the club has an informal dinner gathering at Reno's Pizza in the Carlinville Square starting around 5:00 pm.

This month's presentation immediately after the business meeting will feature a DX video : ZL9CI Campbell Island. Anyone interested in learning more about DX will want to see this video. A program that you will not want to miss.

The club also offers FCC license exams after the meeting. Please contact Bill, W9FJ @217-854-8261. Remember to bring pencils, a copy of your FCC license and a simple calculator.



Gary-K9AUB Club President



Pictured: Jared-KC9ZMD, Tom-KC9WOH and Walt—KB9ENT



Pictured back row: Jim-N9LQF, Ritter-KC9OXH, Mark –WA9SXK. Front Row: Bill-W9FJ, Hugh-AB9UB and Lou-KC9YFU





Reno's, a K9MCE favorite!

Lumpy-KC9WJM

## **K9MCE Now Accepting Dues for 2014**

According to our club's bylaws if dues are not paid to the treasurer by the January 2014 club meeting, then the end of the world will occur. Well, maybe not the end of the world, but your name will be dropped from the club roster and we would most certainly hate to have that happen. Dues are \$20.00/year for full, Family membership is \$25.00/ year and senior/student member-ship is \$15.00/year. Make your check payable to Macoupin County Amateur Radio Club and please get it to club treasurer Jim Pitchford, N9LQF as

soon as you are you are able.

So, if you haven't paid your dues and you've been meaning to do

so avoid the holiday rush and get them in at this club meeting. If you're unable to attend, Jim will gladly received your check via the U.S. Postal System. The club address is

Macoupin County Radio Club 215 South East St. P.O. Box 253 Carlinville, IL 62626-0253





## **K9MCE Celebrates Birthdays!**

At the October 2nd K9MCE club meeting both Ritter -KB9OXH and Bill - W9FJ were surprised to discover that they were the club program!



Earlier Ritter - KB9OXH celebrated his 94th birthday and a month later Bill - W9FJ cele-

brates his 91st birthday! Both gentlemen are WWII veterans.

Happy birthday Ritter and Bill!



After the club business Jim, N9LQF brought out a birthday cake. In addition, he invited the families of both of our celebrated guests which came as a total surprise to them!





## **Inaugural Springfield Marathon A Success!**

"Amateur Radio at its best!" Jim Pitchford N9LOF Sunday, October 20th Springfield, IL held its first annual marathon and 1,550 runners participated in either the full marathon (26.2 miles) or a half marathon. Macoupin County ARC members, Mike NF9M, John KD8KVO, Jim N9LQF, Tim N9PUZ, Mark WD9HBF and Tom KC9WOH assisted with communications for the event.

The running event started and ended at the University of Illi-

nois Springfield campus just east of Springfield and I-55. According to Jim there were a few logistic problems with water that were soon solved and there was only one minor injury that was quickly addressed.

It is worth noting that one II year old runner hadn't reached the finish line and his parents were concerned and they asked the medic tent if they knew of his whereabouts. An inquiry was put out via ham radio and Stephanie KC9ZGS spotted him nearing mile 20 and quickly relayed the information and his parents were thrilled that he was found so quickly! The eleven year old and other runners did make it!

This event was a huge success and ham radio played a major role in helping it be so successful. Jim N9LQF summed it up best, "Amateur Radio at its best!"



## Macoupin County ARC Mission Statement:

We, the undersigned, being desirous of securing for ourselves the pleasures and benefits of the association of persons commonly interested in Amateur Radio, by promoting civic interest, specific application, social activities and developing individual efficiency, while improving the general interest in amateur radio, do ordain and establish this Constitution and By-Laws of the Macoupin County Amateur Radio Club Inc., a non-profit corporation. We do further agree that in pursuit of these purposes, this organization shall be non-sectarian, non-partisan and that it shall lend neither support or influence to any political party or candidate for office. The Macoupin County Amateur Radio Club, Inc., shall afford all persons, regardless of race or creed an equal opportunity to join, participate, hold office and enjoy in the benefits of this organization and the challenges of amateur radio.

## K9MCE Christmas Party Update

At the October meeting, under new business it was suggested that instead of a regular December club meeting held at the Sheriff's Office, the club may like to meet for a Christmas dinner at a local restaurant. Club members present liked the idea and suggested we check out Crabbys Supper Club, formerly known as The Glades, just south of Carlinville on IL Route 4.

Ron KO0Z visited Crabbys and the restaurant manager would enjoy hosting the club Christmas party. He suggested that we book the event as soon as possible. His menu offers salads, sandwiches, beef, chicken, pork and fish entrees. Dinners range from \$7.99 to \$23.99. Since we will most likely have more than fifteen people in attendance there will be a \$50.00 charge so that the manager will be able to bring in extra people.

KO0Z also checked with the manager at Magnolia's Restaurant on West Street in Carlinville and they offer a similar menu and there would also be an additional charge since the restaurant only offers breakfast and lunch Tuesday through Thursday. However, Magnolia's is open for dinner on Fridays and Saturdays and there would be no extra charge if the club decided to move the meeting date to either Friday or Saturday evening.

With either opportunity the club will need to decide at this month's club meeting as to what will be our pleasure so that we can book the venue.



## **K9MCE Elects 2014 Officers**

Officers for next year were elected at the club meeting. The slate of officers didn't change at all with the exception of Charlie Ritter, KB9OXH opted not to run for reelection to the board of directors due to health reasons. Tim Coonrod, KC9HQA agreed to run in Charlie's spot and he was elected as was the other officers for 2014.

Therefore the K9MCE slate of officers for 2014 are the fol-

lowing:

President: Gary Huff-K9AUB Vice-President: Ron Ochu,

KO0Z

Secretary: Mark Kerlihkar, WD9HBF

Secretary: Jim Pitchford, N9LQF

Board members: Mark Osborn,WA9SXK, Tim Coonrod, KC9HQA, Isaac Pizzo, KC9PJW and Hugh Watson,



AB9UB. Congratulations to these Macoupin County ARC officers! "Club elections were held and congratulations to the 2014 K9MCE officers"

## Your ARRL Central Division Contacts:

Director: Dick Isely, W9GIG; w9gig@arrl.org 630-584-3510

Vice Director: Kermit Carlson, W9XA, w9xa@arrl.org; 630-879-0983

Illinois Section Manager: Tom Ciciora, KA9QPN, ka9qpn@arrl.org 815-498-4929



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MSU's 21 Meter (60 FT Diameter) Radio Telescope!

"The folks at Morehead State University could not have been more gracious hosts for this year's MUD!"

## MUD in KO0Z's Eye!

Thursday morning October 17th around 11:30 am, Zack-W9SZ from Champaign-Urbana dropped by KO0Z's QTH to carpool with him to Morehead State University in Morehead, KY for this year's Microwave Update Conference (MUD). This was both Zack and Ron's first time attending a MUD and both were looking forward to it with much anticipation!

Besides outstanding technical presentations, MUD offers preamp noise figure and antenna gain measurements, but this year the conference also boasted about the availability of a 60 ft in diameter parabolic dish used for radio astronomy and satellite ground station work!



(MSU's 60 ft Radio Telescope) Jeff Kruth, WA3ZKR (Staff Electrical Engineer with the MSU Space Science Center) and together with his boss, astrophysicist Dr. Benjamin Malphrus, KJ4HFE hosted this year's MUD and they could not have been more welcoming and cordial!

Four years ago the Morehead State University's Space Science Center was opened at a cost of \$17 million dollars and it is an exceptional state-of-the art facility. Not only does this center provide radio telescope research opportunities, it also is ground control station for some NASA low earth satellites! This facility even has a clean room and an anechoic chamber for testing antennas associated with space research!



#### (MSU's Space Science Center)

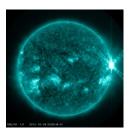
One of Ron's primary reasons for attending the MUD conference at MSU was to get his 3 cm dish measured on the antenna range. His offset dish pattern is tight 3.5 degrees with a measure gain of 31 dBi! KO0Z would have been happy with 27 dBi, but he is not complaining!



(Kent WA5VJB getting ready to measure KO0Z's 3 cm dish)

Besides the outstanding technical forums throughout the day on Friday and Saturday and the tour of the 21 m dish, the highlight had to be watching Al, W5LUA and Barry, VE4MA listen with the 21 m dish for Sergi, RW3BP's 78 Gigahertz signals being reflected off of the moon (EME)! Listening for 78 GHz EME signals!





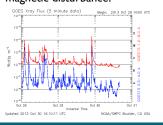
Satellite image of the 2.3 X class flare on October 29th.

## **KO0Z's Radio Telescope**

Were you aware that KOOZ has a radio telescope? For that matter did you know that if you have a transceiver and antenna that covers the fifteen and ten meter bands then you do as well?

The fact that most hams own a radio telescope isn't new. While working for Bell Labs, Karl Jansky discovered static hiss from an "unknown origin" back in 1933. He developed a steerable antenna for 20.5 MHz and discovered that the hiss came from the sun and from the center of the Milky Way Galaxy. Radio Astronomy was born!

So how does that relate back to KO0Z. On October 29 around 21:50 Zulu while working CM2CCA, KO0Z observed sudden, severe QSB that at times obliterated the QSO in progress. KO0Z suspected a Sudden lonospheric Disturbance (SID) most likely brought on by a solar flare or CME. Sure enough a few hours later the solar graph at http:// dx.qsl.net/propagation/ revealed that an 2.3 X class flare had erupted and his antenna picked up the sun induced geomagnetic disturbance!



## North Mac Middle School's New Com-Tech Club!

After returning from the ARRL Teachers Institute, Debbie Ochu, KC9ULA was excited to get a ham radio club organized at NorthMac Middle School in Girard. After meeting with the principal the steps were taken to get administrative and school board approval for the club.

It was decided to call the club the NorthMac Middle Com-Tech club. At the organizational meeting Debbie was hoping to get six to eight students from each grade level, 6th-8th. On the organizational day her classroom was jammed with 35 -40 students from the sixth grade, the same number from the seventh grade and about 10 from the eighth grade! Wow what an unexpected, nice problem to have. From that group, Debbie has sixty-three signed parental permission slips!

The club plans to teach basic electronics, soldering, geocaching and basic communication skills. Towards that goal, KC9ULA just submitted a grant to the ARRL to fund the school with a basic HF/VHF/UHF station with all the needed antennas. She expects to hear from the ARRL before too long. In the meantime, she is trying to determine the best time in which to meet. Since these are middle school students, staying after school is somewhat of a problem. There is time to meet around the lunch periods, but Debbie is awaiting administrative approval to her teaching schedule to accommodate that meeting time. It looks like the school club is going to be a reality and students are anxious to begin!



## **KO0Z Closer To Being Fully QRV!**

Tnx to Jim-N9LQF's connections, his love of life and limb and the fact that my fully assembled Rohn HDBX 48 foot tower is nothing short of a gutbuster; Jim was able to obtain for Ron at a very reasonable cost a crane to hoist the beast up to an upright position! The project went up without a hitch! It took longer to set up the rig and attach it to the tower than it did to actually raise it. The tower is now in place and KO0Z just finished grounding each leg of his two towers.

He plans to make the Rohn 25 G his HF tower and the Rohn HDBX will be his VHF-SHF tower.

Ron is now in the process of reassembling is antennas and rigging the coaxial feeds. Both rotors are working and soon he hopes to have his skyhooks up in the air at his Girard QTH.





"A crane is the way to go when putting up a tower! Tnx Jim for your connections."







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Jim and Gloria's dual band VHF/UHF vertical.

"N9LQF is all about managing emergency communication leading to saving lives and property !"



Cushcraft R5 HF Vertical antenna.

## On Frequency With Jim-N9LQF & Gloria- KC9NTC Pitchford

Ask anyone in Macoupin County if he or she knows Jim Pitchford-N9LQF and it's a sure bet that the response will be a resounding, "Yes!" Jim was born and raised in Girard and both he and his wife Gloria live in the home that his parents reared him in! In fact, Jim and Gloria raised their family there as

well. Their daugh-KC9KFM make to Gloria, Jim the late 1980s and that it would be they passed their and his VE team! Mark wanted to Gloria couldn't be that Lori's profes-

Gloria-KC9NTC

to Springfield. In and Gloria are active

she's been with the

organization of vol-

child and one com-Gloria are commit-

lot for our commu-

ville all have recy-

our carbon foot other Kiwanis activi-

very worthwhile

starting the recycling

pers, plastics, tin and

ing "Breakfast With



ter Lori is N9MZE and their son Markthe Pitchford's an all ham family! According wanted to earn his ham radio license back in Lori, who was eleven at the time, decided fun thing to do with her dad and together FCC exam administered by Bill Ogle, W9FJ Gloria went on to say that both Lori and please and surprise their dad and Jim and prouder of them! Club members may recall sional graphic artistic ability produced our

K9MCE club logo! And speaking of the Macoupin County Amateur Radio Club, K9MCE, Jim was one of the charter members. Gloria is also a club member and she prefers a more low-key profile; however, she is very active with the club's hamfest. Gloria, along with a handful of other ladies, work hard to put on one of the best hamfest breakfast and lunch speads to be found anywhere! Well, let's not leave Jim completely out of this for his BBQ meat is a major hamfest lunch menu item! Jim is quite the cook and his BBQ is legendary around these here parts. Of course any good cook has his favorite places to go eat and for Jim and Gloria, Fast Eddies in Alton is one of their favorites. Taylor's chili in Carlinville is another N9LQF haunt. However, I'd be remiss to not bring up Jim's penchant for Mark's WD9HBF's Field Day chicken. Jim will stop what he's doing at night to grab some of Mark's chicken and it's a woeful lim when none is to be found (sorry lim, but you had to know that I'd bring that fond FD memory up...again)!

Field Day is one of Jim's favorite ham radio activities for N9LQF is all about emergency communications. He has to be, for he is the Emergency Management Director for Macoupin County as well as Illinois State Deputy RACES (Radio Amateur Civil Emergency Service) officer. Jim was one of a handful of dedicated ham radio operators who successfully integrated ham radio back into the Illinois State Emergency Management Agency! In fact, when Jim took on his present job of Macoupin County EMA Director back in 1986 he quickly realized that ham radio could be a tremendous asset in the event of an emergency. That's why he earned his General class license and that's why he is actively recruiting hams to be involved with communications at various events such as sponsored bicycle rides, running marathons, some Macoupin County Health Department events, etc., so as to give folks a chance to hone their emergency communication skills. One of Jim's greatest strengths is his amazing ability to see the "big picture" and

to manage resources to best fit that big picture!

works for the Illinois State Dental Society and Society since 1990. She makes the daily commute addition to their professional careers, both Jim Kiwanis Club members. The Kiwanis is a global unteers dedicated to changing the world, one munity at a time. Beyond a doubt, both lim and ted towards that selfless goal and they've done a nity. Jim, through the Kiwanis, is responsible for program in our area. Virden, Girard and Carlincling trailers for residents to recycle their newspaaluminum cans so as to significantly help to reduce print on our planet Earth! Coats for Kids is anty. In a few weeks the Kiwanis will again sponsor-Santa" at the St. Patrick's Parish Center. This is a and fun family activity that goes a long way to-

wards assisting those in need. Not to embarrass Jim and Gloria for they try to avoid the spotlight, but they have a long history of helping people down on their luck and not once has anyone seen them expect anything, outside of a heartfelt thank you, for their efforts. For example, a little time ago a penniless transient arrived in Carlinville trying to get to relatives in St. Louis. He didn't have any money. Jim came up with the funds to get him an Amtrak ticket to St. Louis, but the railway wouldn't issue a ticket

## **On Frequency With Continued...**

because he was without proper identification. The same story for the bus, but Jim was able to convince the driver that this fellow was harmless. Otherwise, Jim was prepared to drive this fellow all the way to St. Louis. The really neat part to this story is that Gloria completely supports her husband in his endeavors. The Pitchford's truly live the Kiwanis' goal of changing the world, one child and one community at a time!

Of course ham radio plays a vital role in Jim's position as EMA Director. He views area hams as one of his greatest assets for he knows that when the time comes, he will have at his disposal trained radio communicators. That's why Jim is actively involved with getting a statewide ham radio packet system activated in every county by using recycled state VHF radios. Jim is also very active in the National Weather Service's Skywarn Program and through his efforts the NWS recognizes Macoupin County as a storm ready county! A big part of that designation comes through the efforts of Skip Reba, WS9V and his outstanding UHF linked repeater system with a backbone directly back to the NWS office in St. Louis. Now EmCom isn't the only aspect to the ham radio hobby that interests Jim. He enjoys meet-

ing new folks traveling the repeater and he is always involved with our hobby. first HF contact and it was a US Navy battleship off the Jim has built up his station. groundplane antenna up high Cushcraft R5 HF vertical that 2000 and a Kenwood 922A has an Icom 2720 and a Kenous HTs.



N9LQF's radio shack

interested in getting people Jim's fondest QSO was his with a radio operator aboard east coast! Since that time He has a dual band VHF/UHF on a mast. He also sports a is feed by a Kenwood TS 1,500 watt amplifier. He also wood TMV71 as well as vari-

through the area and using



I'm gonna play my yagi like a fiddle and fill

N9LQF mostly operates on the 75m, 40m, 20m, 2m and 70cm bands. He also has dipoles for the 75 and 40 meter bands. Jim feels that the future of ham radio looks bright. He sees our club to be alive and well! He sees more kids getting involved with ham radio and that is a good thing. However, Jim cautions that he'd like to see more club members commit themselves to various club activities along with the regulars that always are involved.

Gloria added that her biggest contribution to the ham radio hobby is giving up her husband to all of his ham radio related activities! For that we all owe Gloria a tremendous, resounding THANK YOU!

Although Gloria isn't on doesn't mean she isn't her big passions is pottery. her own kiln, she smiled "Why yes I do! Not too pottery replica of our club she did! When asked if would be their dream ham have it now. Gloria add that their QTH could Virgin Islands! This article into the lives of Jim and say, the world is a bet-

ya full of RF!"

Jim and Gloria Pitchford! An example of Gloria-KC9NTC's pottery.

the air very much, that "radio active!" One of When asked if she has and proudly exclaimed, long ago Gloria made a logo and what a fine job they won the lottery what radio station, Jim said I agreed. However, she did be relocated in the U.S. only gives a slight glimpse Gloria but suffice it to ter place because of



A very collectable antique microphone that still works!



"Jim's Girard High School senior picture."



Jim's low band dipoles up in the tree

## 22 THINGS YOU CAN DO WITH AMATEUR RADIO: TECHNOLOGY THAT'S AS COOL AS YOU WANT TO MAKE IT



## EXPAND YOUR WORLD

- Talk around the world without the Internet or cell phones. Use your own "Internet" when the "other one" is down.
- Send your voice, text and pictures to unusual places, both near and far.
- Create your own network of ham radio friends and send instant text messages without cell phones.
- 4. Meet awesome people from all over the U.S. and around the world, on-the-air and in person at ham radio events.

## EXPLORE AMATEUR RADIO

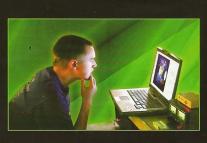
- **5.** Talk through satellites or with astronauts on board the International Space Station.
- Send messages in code—learn Morse code.
- 7. Be a signal sleuth, "Fox" hunt for hidden radio signals, and with GPS—GeoFox!
- *S.* Investigate the many new combined radio-Internet communication techniques.
- Try a new sport—Radiosport: Compete-on-the-air for awards and fun!
- 10. Send a message around the world using less electricity than a nightlight.

## PUT RADIO TO WORK

- **11.** Become a weather spotter and help your community prepare for weather events.
- 12. Use Amateur Radio to control models, robots, or even drones.
- 13. Support recovery efforts in emergencies.
- Earn badges and patches through Scouting programs and participate in worldwide radio events.

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#### (Continued from front)

- Use your radio for community service! Provide communications for a bike race or a marathon.
- 16, Track your friends, pets, or wildlife using your ham radio.
- 17. Take ham radio along when you go hiking or camping. You'll never be out of contact with ham radio!
- 16. Collect weather and flight data by releasing and tracking a high-altitude balloon.
- 19. Learn how radio is used to explore space.

## GO BEYOND THE MENU: CREATE TECHNOLOGY

20. Do it yourself, build and test your own gear.

- **21.** Experiment with new software applications for radio, or create your own.
- Learn the radio science that powers cell phones, Bluetooth and all of the hottest wireless technologies.

#### FIND OUT WHAT OTHER YOUNG HAMS ARE UP TO AT: WWW.ARRL.ORG/YOUTH

There are over 700,000 Amateur Radio (otherwise known as "ham") operators in the United States and 3 million worldwide. To get your Amateur Radio License you'll need to take a 35-question, multiple choice exam. Anyone—of any age—can be on-the-air as an Amateur Radio operator!

## ADVENTURE IS WAITING ...

225 Main Street • Newington, CT USA 06111 (860) 594-0200 • www.arrl.org

The national association for **AMATEUR RADIO**®

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## Work Satellites with your HT!

Most hams already have the necessary equipment to work FM amateur satellites. This guide offers all the information you need to "work the birds."

All cited resources are available to you on one Web site:

#### http://www.work-sat.com

If you have 2M and 440 capabilities (either "split frequencies" in one HT, or two radios), you can work FM amateur satellites! For example, for satellite SO-50's **VHF/UHF (V/U)** mode, the **UPLINK** frequency (**to** SO-50) for FM voice is 145.850 MHz\*. The **DOWNLINK** frequency (**from** SO-50) is 436.795 MHz\*.

First, you need to know **WHEN** and **WHERE** the satellite will be passing over your location. There are several commercial computer programs<sup>[1]</sup> that will tell you. In the home office, I use **MacDoppler**. Outside, though, I use **PocketSat** on my Palm PDA or iPod touch/iPhone. On my netbook, **Nova for Windows** and **SatPC32** are amazing. But **free of charge** info is also available online at ...

#### amsat.org - or - heavens-above.com

Plug in your longitude and latitude coordinates on either or both of these sites, and you can access amateur satellite pass information.

The one "absolute" for success is to **open up your squelch**. We are talking about "weak signals" from 500+ miles away - so don't expect the satellite to be strong enough to break squelch like your local repeater. Sure, it's a little noisy - but that's part of the process: That noise is an aid in locating the satellite. When the frequency starts exhibit **quieting**, that's a sign that you are **capturing** the satellite's signal.

Improve your HT's stock antenna (most are rated at **NEGATIVE** 2-3 db!). For BNC connectors, **Pryme**'s AL-800<sup>[2]</sup> will make the difference. For SMA, the **Diamond** SRH-320a or **Smiley** 270A are good performers. Using an **Arrow** dual-band<sup>[3]</sup> Yagi is better. If you prefer to homebrew your antenna<sup>[4]</sup>, go to the work-sat.com Web site's ANTENNAS page for construction article links.

Set up your radio to tune for the **Doppler effect** on the downlink. Start listening **above** the center frequency<sup>[5]</sup> - you will **acquire** the satellite sooner and clearer. When the downlink gets scratchy or fuzzy, tune down 5KHz at a time, and reception should be clearer. Only transmit when you can **clearly** hear the satellite. Follow the signal down in frequency as the pass continues.

**Don't hold your whip antenna upright**. Held in a vertical position, your transmitted signal is hitting land-based receivers. You need to tilt your HT's antenna so that it is **perpendicular** to the airborne satellite. Very few of the ham satellites are land-based (grin), so you must **TILT** your antenna about the same amount as the satellite's **ELEVATION**. You'll quickly get the hang of it - and hear the difference! You'll have better results with a modest beam or Yagi.

Ideally, we should all be working the satellites in **full duplex** mode, where we can simultaneously listen to the downlink as we are transmitting. Although this method is preferred, it is not mandatory: Carefully monitor the downlink, and wait for a break in the conversations to announce yourself. You might find it helpful to record your sessions for later review. Even if you don't make a contact during a pass, a recording can help you recognize the callsigns and voices of other operators. Pocket recorders or smartphone apps are great for this. If working full-duplex, use an earpiece or headphones to monitor the downlink.

Knowing your grid square - and having a grid square map - is a quick way of identifying locations of what you will hear. The **ARRL** and **Icom** have grid square maps: Icom's is free and available at better ham radio stores<sup>[6]</sup>.

It just takes a little preparation and planning for working amateur satellites. Not every pass is workable with an HT — don't go after the sub-10° elevation passes as you start "working the birds." Choose your passes wisely: Working higher elevation passes will give you better results.

When you clearly hear others, listen for a break in the action, and use the ITUapproved phonetics<sup>[7]</sup> to announce your callsign, grid square, and op mode:

"KILO-SIX-LIMA-CHARLIE-SIERRA, DELTA-MIKE - ONE-THREE, handheld."

Check work-sat.com for the satellites' home Web pages – to make sure the sat is in the mode you can work with your setup!

Ask questions! Find an elmer in your club for support, or use the Work-Sat.com YahooGroup for any questions.

## Clint Bradford, K6LCS NASA / ARISS school technical support www.work-sat.com clint@clintbradford.com

Skype, Twitter: clintbradford

Updated 04/23/2013

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#### **Notes**

## Access this Web site for all citations, links, resources, and updates:

#### http://www.work-sat.com

[1] Links to Nova for Windows, PocketSat, MacDoppler, SatPC32, HamSat DROID, SATme, GoSatWatch. GPREDICT – and more – available on the Tracking page at work-sat.com.

[2] The Pryme AL-800 telescopes to 34" and collapses to 10". It is packaged with a 9" rat tail - which you can use for everyday use. Use caution with this massive, heavy antenna: It has the potential of placing a lot of stress on your radio's BNC connector.

[3] Arrow's Model 146/437-10WBP is a dual-band cross-Yagi design, with a diplexer built into the handle, with 3 elements on 2M and 7 on 440. See it in action in the December, 2007 issue of CQ Magazine. Links to Arrow – and others – are on the Antennas page at work-sat.com.

[4] Alex Diaz' Yagi-Uda plans, AMSAT's "Cheap and Easy" sat antenna articles, a tape measure beam construction article – and LOTS more – are all on the Antennas page at work-sat.com

[5] For example, here's how I have programmed my radios for AO-27\*:

CTCSS	RX Freq	CTCSS	TX Freq	Name	Ch #
None	436.805	None	145.850	27 +2	101
None	436.800	None	145.850	27 +1	102
None	436.795	None	145.850	27 MID	103
None	0 None 436.790		145.850	27 -1	104
None	436.785	None	145.850	27 -2	105

And here's how I have programmed my radios for SO-50\*:

Ch #	Name	TX Freq	CTCSS	RX Freq	CTCSS
201	50 +4	145.850	67.0	436.815	None
202	50 +3	145.850	67.0	436.810	None
203	50 +2	145.850	67.0	436.805	None
204	50 +1	145.850	67.0	436.800	None
205	50 74	145.850	74.4	436.795	None
206	50 MID	145.850	67.0	436.795	None
207	50 -1	145.850	67.0	436.790	None
208	50 -2	145.850	67.0	436.785	None
209	50 -3	145.850	67.0	436.780	None

[6] A .pdf copy of Icom's grid square map is available on the Shack Aids page at work-sat.com.

[7] Download the ARRL's Handy Ops Guide (FSD-220) at - you guessed it - work-sat.com.

[\*] Always consult the sats' control team pages for possible frequency changes and updates (and problem reports). As of April, 2013, AO-27's V/U mode is inoperable. What's your single source for links to the ops schedules for the easily-worked FM birds? work-sat.com !



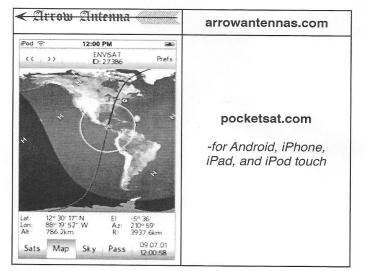
## www.work-sat.com

"Your Web site took me from zero knowledge to getting an HT and an Arrow. And just four months later, I have qualified for VUCC on the FM birds. A great site for the beginner on the birds. You un-mystify them."

> "I love the site and I greatly appreciate the information you have provided to get me going! Yours is a no-nonsense approach to working satellites and helpful documentation (tutorial). The photos really helped in understanding."

"Simplicity ... the idea of working sats "sounds complicated" but that's really not the case. You keep the language simple, illustrations simple, and concept simple ... give folks the idea that any ham can do this (which they can) with the right equipment ... if they follow the directions you provide."

> Clint Bradford, K6LCS Jurupa Vallley CA US DM13 Email: clint@clintbradford.com



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## Illinois Section Manager News Tom Ciciora - KA9QPN

Full News with links at http://www.arrl.org/sections/view/illinois. From the top...

\*\*The FCC is still out of business as of this writing, so those of you who need to renew licenses and such need to stand by until everyone in DC stops posturing.

\*\*In this month's QST, David Sumner KIZZ addresses the ongoing jihad against distracted driving and how it relates to Amateur Radio. One thing that I should have guessed and was confirmed by the article was that the enactment of such laws is tied to receipt of Federal grant money. The wording is quite precise and should not be interpreted as affecting mobile operation. However, interpretation being in the eye of the beholder and the current tendency to go directly to 'scorched earth' lengths to prohibit behavior commonly viewed as 'unsafe', there is a perceived need in our community for an exception. We here in Illinois have our exception in the state's distracted driving statute. However, it seems that every little jurisdiction feels the need to develop and implement their own spin on the prohibition. And, of course this is all about the General Good and not because the fines from such offenses would be kept locally rather than go to Springfield. Each of us has to remain aware of developments in our own locality. The League never finds out about these until we're informed by a local ham. And, once these are enacted, it's the Devil's own chore to get such a thing modified or rescinded. I can assist with facts and information to help demonstrate the safety record of mobile Amateur operations. It's also helpful to point out what would be hampered if an exception is not given: restriction of SKYWARN operations and crippling our ability to assist with the myriad of public events in which we participate.

However, the opposition to these things has to come on a local level, led by a voter in that municipality. Neither I or the League have any status in your town. And, as I've pointed out here many times, those governing in those situations feel as they are lords in their domain, and do not suffer 'outsiders' at all. If you have such a situation arise, by all means: tell me. And, get ready to actively participate in an effort to get the measure passed with a clear exception for Amateur Radio.

## Section Manager News Continued...

Get informed...

\*\*Illinois QSO Party this weekend! Let's see if we can have all 102 counties live for the exercise.

\*\*\*Also on-air this weekend is the Scouting Jamboree on the Air. Here is a perfect opportunity to reach out and interest the younger folks in the Service. If you think about it, the kind of kid who would be attracted to Scouting might also be the type who might be interested in Amateur Radio. Scouting is a tradition-rich fraternity, where boys make lasting friendships, learn core skills and receive knowledge which might otherwise be forgotten. Sound a little like us? If you hear a 'CQ Jamboree' this weekend: answer it. The next generation is waiting for you to kindle and encourage their interest.

\*\*Do NOT forget the Girl Scouts! Being a 'geek gurl' holds a certain cachet these days, and there are plenty of young women out there who might be interested in the Service.

Around the Section...

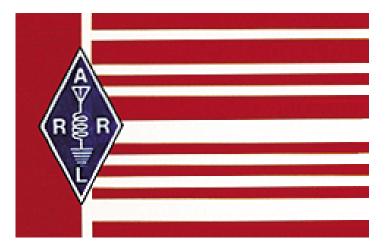
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\*\*Congratulations to the Starved Rock RC on the eightieth anniversary of their founding. That's Eight. Zero. An incredibly long and colorful history. Be proud, folks.

\*\*\*\*\*

\*\*While we're at it, a tip of the hat to the Western Illinois ARC. It's no small exercise to put on the Illinois QSO Party. There's a lot more to it than just picking a date and saying 'here you go!' There are logs to be checked, plaques to be produced and awarded, endless amounts of tiny admin details. Oh, and they might want to even participate in their spare(!) time. Ladies and gentlemen: thank you for making this event your own and bringing it off every year.



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## **ARRL Midwest Division Convention**

November 8-9, 2013 Cowan Civic Center Lebanon, Missouri

(Noon Friday to 4PM Saturday)

Amateur Radio & Public Service Hosted by the Lebanon Amateur Radio Club

#### FACILITES AND ENTRANCE FEE (NO CHARGE):

- Free Convention entry, NO CHARGE TO ATTEND!
- ¥ 46,000 square feet of vendor and manufacture display space
- > Free "Polar Bear" outside tailgate space
- > Tables available inside for a small fee for folks not comfortable with November weather

#### CONVENTION ACTIVITIES

- Well-known/famous guest speakers that include;
- \*\* Bob Heil, Gordon West, Rick K5UR, K1ZZ ARRL CEO, Carole Perry, just to name a few....
- Forums that will include DXing, Technical, Youth Activities, Emergency Preparedness.
- Amateur Radio Reps with the latest equipment on display including; Associated Radio, WB0W, D & L Antenna Products, RadioWavz, ICOM, ALPHA, FORCE12, Balun Designs, Mosley, Alpha Antennas, just to name a few with many others attending
- Public Service/Emergency Preparedness Vendors and Manufactures
- > Over a dozen emergency Comm vehicles and mobile command centers on display

#### SPECIAL ACTIVITIES

- > Operate new ICOM equipment at W1AW/0 Special Event Station
- KCDXC World Famous CW Contest with a fabulous prize!
- Classic Radio Beauty Contest
- > VE Testing
- > DXCC card checking that includes 160 cards!
- ARRL booth and Forum with K1ZZ
- Buy tickets for hourly and grand prize drawings

AND MUCH MORE... THE LIST IS GROWING! UPDATES TO FOLLOW. Check out our website: http://www.arrimidwestconvention.com/

The Lebanon, Missouri, area has over 20 hotels and motels, plus over 75 restaurants. There are many area points of interest to visit with your family while in the area such as Bennett Spring State Park, and the Route 66 Museum.

Sponsors: Missouri DX/Contest Club, Keneas City DX/Contest Club, Rolls Regional Amsteur Radio Society. Nixa ARC

(19 January 2013 -- Updates to follow)



#### WELCOME TO LEWIS AND CLARK RADIO CLUB P.O. BOX 553 GODFRET, IL 62035 K9HAM RSTABLINHED IN 1945 LEWIS AND CLARK RADIO CLUB 12 METER NET MONDAYS 20:00 CST, 07:00 UTC 15:230 (600) FL 79.7

## \*EARLY WARNING\* MARK YOUR CALENDARS NOW

## LEWIS & CLARK RADIO CLUB 2014 HAMFEST

## SATURDAY - APRIL 26, 2014 - 7 AM to NOON

LOCATION: "RIVER BEND ARENA" LEWIS & CLARK COMMUNITY COLLEGE GODFREY, ILLINOIS 62035

Large Indoor Facilities - Commercial Vendors Flea Market Tables \$12.00 Each

EARLY VENDOR ACCESS FRIDAY 6-9 PM - SATURDAY 5:30AM

For Reservations & Additional Information Contact Lewis And Clark Radio Club - Hamfest Committee

email: hamfest@k9ham.org or Call Jacques (KN9O) at 618-401-5558

Commercial VendorsFree ParkingDoor PrizesHandicapped Accessible FacilityFood & Refreshments

License Exams – All Classes, ARRL Format Pre-Registration Required For Technician Exams

Contact Dennis Hutchins (WA9RD) at wa9rd@charter.net

Lewis & Clark Community College Is Located Approximately 25 Miles North Of Downtown St. Louis On U.S. Route 67, Just North Of Alton, Illinois.

Once you are on campus just look for the signs directing you to the Lewis & Clark Radio Club Hamfest.

Visit our Web-site: www.k9ham.org Talk-In Will Be On K9ham Repeater 145.230(-) PL 79.7

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## **K9MCE QSN Contact Information:**

**K9MCE QSN** is a monthly publication of the Macoupin County Amateur Radio Club. Our club meets on the first Wednesday of the month at 7:00 pm on the second floor of the Macoupin County Sheriff Department in Carlinville, IL

Editors: Mark Kerhilikar, WD9HFB. mkerhilikar@gmail.com

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Repeaters: 444.250 (103.5 pl); 146.865 (103.5 pl).

Website: www.k9mce.org

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Webmaster: Issac Pizzo, KC9NJW



Macoupin County Amateur Radio Club P.O. Box 253 Carlinville, IL 62626-0253

# K9MCE November 2013

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2 ARRL CW Sweepstakes
<b>3</b> ARRL CW Sweepstakes \Clinton Cnty ARES Net @ 8:30 pm, 444.250 (103.5pl) Okaw Valley ARC Net@>00 pm, 444.250 (103.5 pl)	<b>4</b> W9EVY Memorial Net @8:30 pm, 146.820	5	<b>6</b> K9MCE infor- mal dinner 5:00 pm at Reno's Pizza, Carlinville, IL. Club meeting @7:00 pm, 2nd floor Ma- coupin County Sheriff Dept.	<b>7</b> K9MCE Club Net, 8:30 pm, 444.250 MHz (103.5 pl) Macoupin Cnty ARES Net. W9FJ Net Control, 9:00 pm on 147.480 MHz Sim- plex	8	9
<b>10</b> Clinton Cnty ARES Net @ 8:30 pm, 444.250 (103.5pl) Okaw Valley ARC Net@9:00 pm, 444.250 (103.5 pl)	<b>11</b> W9EVY Memorial Net @8:30 pm, 146.820	12	13	14 K9MCE Club Net, 8:30 pm, 444,250 MHz (103.5 pl) Macoupin Cnty ARES Net. W9FJ Net Control, 9:00 pm on 147.480 MHz Sim-	15	<b>16</b> ARRL SSB Sweepstakes
17 ARRL SSB Sweepstakes Clinton Cnty ARES Net @ 8:30 pm, 444.250 (103.5pl Okaw Valley ARC Net @.00 pm, 444.250 (103.5 pl)	<b>18</b> W9EVY Memorial Net @8:30 pm, 146.820	19	20	21 <sub>K9MCE</sub> Club Net, 8:30 pm, 444.250 MHz (103.5 pl) Macoupin Cnty ARES Net. W9FJ Net Control, 9:00 pm on 147.480 MHz Sim- plex	22	23 CQ WW CW Contest
24 CQ WW CW Contest Clinton Cnty ARES Net @ 8:30 pm, 444.250 (103.5pl) Okaw Valley ARC Net@9:00 pm, 444.250 (103.5 pl)	<b>25</b> W9EVY Memorial Net @8:30 pm, 146.820	26	27	28 Thanksgiving K9MCE Club Net, 8:30 pm, 444.250 MHz (103.5 pl) Macoupin Cnty ARES Net. W9FJ Net Control, 9:00 pm on 147.480 MHz Simplex	29	30