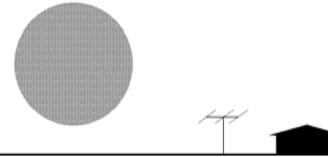


# Twin City Amateur Radio Club

Champaign-Urbana, Illinois

February 2008

Milt Forsberg K9QZI, Editor



## Hamfest Calendar

Feb 8-10 Orlando FL  
Mar 8 Terre Haute, IN  
9 Sterling IL  
28-29 Amateur Electronics Superfest  
Apr 12 TCARC Auction  
19 Stoughton, WI  
26 Godfrey, IL  
27 Arthur, IL  
May 4 Sandwich, IL  
16-18 Dayton, OH

## VE Exams

09-Feb-2008 PIATT COUNTY ARC  
1:00 PM (Walk-ins allowed)ARRL/VEC  
MICHAEL S MULLINS (217)377-1523  
EMERGENCY OPS CENTER - PIATT COUNTY  
301 S CHARTER ST MONTICELLO, IL

08-Mar-2008 WVARA HAMFEST  
11:00AM (No walk-ins) ARRL/VEC  
D STEVEN SHORTER (812)240-6988  
WABASH VALLEY FAIRGROUNDS (Hamfest0  
3901 S US HIGHWAY 41 TERRE HAUTE, IN

05-Apr-2008 SANGAMON VALLEY RADIO CLUB  
9:00 AM (Walk-ins allowed) ARRL/VEC  
JAMES STEVE UPCHURCH (217)529-3218  
AMERICAN RED CROSS-IL CAPITAL AREA CHAPTER  
1045 OUTER PARK DR SPRINGFIELD, IL

06-Apr-2008 WABASH VALLEY ARA  
1:00 PM (Walk-ins allowed) ARRL/VEC  
RAYMOND N ANDREWS (812)535-3222  
GLAS-COL ANNEX NE CORNER OF 7TH & IDAHO ST.  
1730 S 7TH ST (REAR OF BLDG) TERRE HAUTE, IN

## Amateur Accessories

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**PO Box 2061**  
**Champaign, IL 61825-2061**

## Meeting February 12

Our next meeting of the Twin City Amateur Radio Club is Tuesday, February 12 at 7:00 p.m. at the UI Fire Institute. Here is a description of our February program:

### Computers and Ham Radio

TCARC February Meeting Program

TCARC and Mike, K9MLT, present 101 things you can do when you plug your radio into a computer! If you've wondered about sending video images over the air with SSTV, or how to set up macros for PSK31, this is your chance to try them out. Are you curious about Weather Fax or RTTY? See it happening live!

Tired of pushing keyboard buttons to memorize frequencies? Check out Memory Management Programs like FTB MMO. Want to program a dozen repeaters along your vacation route? See it done with Travel Plus. Take digital control of your radio with Ham Radio Deluxe.

This program will have two computers and two LCD projectors set up to demonstrate several software applications that many operators have heard about but not tried. "Live" SSTV and PSK31 sessions will be conducted between transceivers (operating at 5 watts through dummy loads). Individuals will be able to gain hands on experience with software and save hours of trial and error lost learning on their own.

## Auction April 12 2008

The 2008 TCARC Auction is April 12. Be sure to mark your calendar!

### Thanks for Membership Renewal!

Most of our TCARC members have renewed for 2008. You can check your address label to be sure you are current. A few have forgotten to renew. If you see 2007 on the label, we will greatly appreciate your check for 2008, payable to TCARC and mailed to the return address on this newsletter.

The Board meets the Thursday prior to the club meeting at 7:00 p.m. at the UI Fire Institute. All members are welcome to attend.

### TCARC Officers and Board Members

**President** Ralph Cox W9PGE 396-5111  
**Vice President** Dr Mike Trautman 356-4302  
**Secretary** Chris Anderson 403-1599  
**Treasurer** Milt Forsberg K9QZI 352-5075

### Board Members

Al Wolfe K9SI 688-2790  
Wayne Hamilton AB9FJ 384-4310  
Jeremy Lamb KC9KGJ 621-8036

### VE Coordinator

Debbie Fligor N9DN 244-4446

**Website** www.w9seh.org

## Cycle 25 Here, Experts Say

From ARRL News

With the appearance of Sunspot 981 -- a high-latitude, reversed polarity sunspot -- on Friday, January 4, experts at NASA and the National Oceanic and Atmospheric Administration (NOAA) said that Cycle 24 is now here. "This sunspot is like the first robin of spring," said solar physicist Douglas Biesecker of the Space Weather Prediction Center (SWPC), part of NOAA. "In this case, it's an early omen of solar storms that will gradually increase over the next few years."

Solar physicist David Hathaway of NASA's Marshall Space Flight Center in Huntsville, Alabama concurred, saying that new solar cycles begin with a "modest knot" of magnetism, like the one that appeared on December 11 on the east limb of the Sun: "That patch of magnetism could be a sign of the next solar cycle. New solar cycles always begin with a high-latitude, reversed polarity sunspot." The region of magnetism that appeared back in December achieved high latitude (24 degrees North) and was magnetically reversed, but no supporting sunspot appeared until 25 days later.

Reversed polarity describes a sunspot with opposite magnetic polarity compared to sunspots from the previous solar cycle. High-latitude refers to the Sun's grid of latitude and longitude. Old-cycle spots congregate near the Sun's equator; new-cycle spots appear higher, around 25 or 30 degrees latitude. Sunspot 981's high-latitude location at 27 degrees North and its negative polarity leading to the right in the Northern Hemisphere are clear-cut signs of a new solar cycle, according to NOAA experts. The first active regions and sunspots of a new solar cycle can emerge at high latitudes while those from the previous cycle continue to form closer to the equator.

While experts vary in their predictions on when the solar cycle will peak and how strong it will be, NOAA, in April 2007, in coordination with an international panel of solar experts, predicted that the next 11-year cycle of solar storms "would

start in March 2008, plus or minus six months, and peak in late 2011 or mid-2012." In the cycle forecast issued in April 2007, half of the panel predicted a "moderately strong cycle of 140 sunspots, plus or minus 20, expected to peak in October 2011. The other half predicted a moderately weak cycle of 90 sunspots, plus or minus 10, peaking in August 2012. An average solar cycle ranges from 75 to 155 sunspots. The late decline of Cycle 23 has helped shift the panel away from its earlier leaning toward a strong Cycle 24. The group is evenly split between a strong and a weak cycle."

NASA's Hathaway, along with colleague Robert Wilson at a meeting of the American Geophysical Union in San Francisco last month, said that Solar Cycle 24 "looks like it's going to be one of the most intense cycles since record-keeping began almost 400 years ago." They believe the next solar maximum should peak around 2010 with a sunspot number of 160, plus or minus 25. "This would make it one of the strongest solar cycles of the past fifty years -- which is to say, one of the strongest in recorded history." Four of the five biggest cycles on record have come in the past 50 years. "Cycle 24 should fit right into that pattern," Hathaway said.

According to Carl Luetzelschwab, K9LA, "As for improvement in propagation on the higher bands, we still have a way to go before that happens, and it depends on the magnitude of Cycle 24. The Solar Cycle 24 Prediction Panel has published predictions for Cycle 24, but unfortunately the panel did not reach one consensus prediction. If the larger of the two predictions comes true, we should expect consistent F2 propagation on 10 and 12 meters to start toward the end of 2009. If the smaller prediction comes true, this will be delayed about one year."

Luetzelschwab, who writes the column "Propagation" for the National Contest Journal (NCJ), continued: "While we wait for improved high band conditions, don't forget the low bands. Around solar minimum and for the next year or so, the Earth's geomagnetic field is at its quietest.

This is good for low band propagation. Thus, right now is the time to start (or add to) your 80 and 160 meter DXCC efforts."

According to NASA's Tony Phillips, many forecasters believe Solar Cycle 24 will be big and intense. "Solar cycles usually take a few years to build to a frenzy and Cycle 24 will be no exception. We still have some quiet times ahead," says Hathaway.

## Interesting Note from the Internet

Author Unknown

I recently damaged my mast when doing to some maintenance. In looking for replacement pipe, I called a friend who owns a well-drilling company. He gave me a novel idea, which he said he has already implemented for his brother-in-law, who has a tall mast for his ham radio antenna. My friend sunk a well about 70 feet deep, so the guy can simply lower his mast into the well to perform service. (Well pipe comes in lengths roughly 34 feet x 4.5 inches and wholesales for about \$7.50/ft.)

## Local Repeater News

Repeaters around Champaign-Urbana appear to be functioning well at this time. There have been a few changes over the last few weeks. All repeaters are now analog only. There was some testing of digital P25 voice, but the previous analog repeaters have now returned. There is more activity on the TCARC W9SEH 146.76 repeater. It is good to hear the activity and we hope it continues. Since many of us monitor several repeaters, it will be helpful if you identify the repeater when you drop your callsign looking for a contact. Just say, "[your call] listening 76" or whatever you wish, to identify. That way, others scanning will know where to answer. We are investigating a possible installation of a D-Star digital voice repeater. We are still looking for funds to support the purchase. If you wish to help, please contact K9QZI, AB9FJ, or W9PGE. At our March meeting, we will be enlightened on the use of D-Star with all of the features it has. There are now almost 170 D-Star systems worldwide with almost 500 users daily.

## Hamfests

There is still time to arrange to attend the Orlando HamCation in Florida on February 8-10. This event is at the Orlando fairgrounds with both inside and outside areas. 2 large buildings support the commercial vendors and another building contains inside flea market vendors. Also, on the grounds, many vendors set up outdoors. The hamfest committee indicates the attendance is around 10,000, which possibly makes it second only to Dayton. Most major Amateur Radio manufacturers and vendors attend. It makes a nice getaway from our cold weather. Friday Noon is the opening and it continues all day Saturday and most of the day Sunday. Friday and Saturday are the best days to attend. An added attraction to HamCation is the liftoff of STS-122, a space shuttle, from Cape Canaveral, scheduled for Thursday afternoon, the day prior to HamCation. It can be seen all across Florida and it is only about one hour to drive to the cape for a closer look.

**The Dayton Hamvention** is fast approaching. The dates are May 16 to 18 this year. If you had a flea market space last year and want the same this year, the Hamvention committee set a deadline of February 15 for your order to be in to them. It appears that there have been no mailings to outside vendors, but this information is on the website at [www.hamvention.org](http://www.hamvention.org) and click on Fleamarket. An order form is available on the website.

## VE Exam

Our January 27 exam session was very successful. Everyone attending passed the exam they intended. 8 persons tested, resulting in 4 new Technicians and 4 Generals. 3 Generals were upgrades and one was passed after taking the Technician exam. Mark Belding, N9GPA, ran the session. Thanks to Mark and all who helped and congratulations to the new licensees. Our next VE session is April 20. Please contact Debbie Fligor, N9DN, for information.