

RCA AMATEUR RADIO CLUB

FEBRUARY, 2010 MONTHLY NEWSLETTER INDIANAPOLIS, IN

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE
TUESDAY, FEBRUARY 9th, 6:30 PM AT THE [G.T. SOUTH'S](#),
5711 E. 71st STREET, INDIANAPOLIS, IN

RCA ARC NEWS

SUMMARY OF THE DECEMBER MEETING – Thanks to all those who attended the December meeting. K9RU reported on the computer problems which we had experienced with the computer which has been running the '88 repeater for the past several years. We were able to use one of the spares donated by W9KVK but not without a few minor glitches. House Bill 1060, currently in the Indiana legislature relating to driving and operating hand held communication devices was discussed. Also, a Field Day joint operation with the Indianapolis Radio Club (as we did last year) was discussed.

SNOW ON TUESDAY? -- If bad weather should cause us to have to cancel the Feb. 9th meeting, we'll let you know my email. We'll try and get it out by mid afternoon.

ON THE AIR – BAND CONDITIONS -- If you been on the air you have noticed the improvement as the sunspot number are starting to go up. The weekend of the NA QSO Party I worked stations on both 10 and 15 meters. I was working on my vertical and work some stations on 12 meters, while I was testing, the first in several years. And since it is winter 80 and 40 meters continue to provide good operating conditions. The only down side was the VHF contest, the weather and condition were not that great. –K9RU

INDIANA REPEATER DIRECTORY ON THE WEB -- The Indiana Repeater Council repeater directory is now on the IRC web site
<http://www.ircinc.org/DirByRegByCity.html>

W9RCA REPEATER HAS A NEW COMPUTER FOR ECHOLINK -- Thanks to the donation of a new computer by Bud, W9GOV and to Dave, N9KT for installing and setting up the new Echo Link software we now have the computer we been looking for quite awhile. The new Echo Link software that offers many new features and Kate should not stutter any longer.

HAMFESTS & OPERATING EVENTS

The next scheduled Indianapolis Radio Club VE test will be on April 3.

February 5

NCCC Sprint Ladder .

February 6

Minnesota QSO Party and the

February 6-7

Vermont QSO Party

10-10 International Winter Contest (SSB)

- British Columbia QSO Party
- Delaware QSO Party
- Mexico RTTY International Contest
- February 7**
 - North American Sprint (CW)
 - ARCI Fireside SSB Sprint
- February 8**
 - New Mexico QSO Party
- February 8-12**
 - [ARRL School Club Roundup](#)
- February 10-11**
 - CWops Mini-CWT Test
- February 13-14**
 - CQWW RTTY WPX
- February 20-21**
 - ARRL International DX Contest (CW)
- February 26-28**
 - CQ 160-Meter Contest (Phone)
- March 27**
 - Bartholomew County Hamfest 4-H Fairgrounds, Columbus, IN,
- May 14-16**
 - Dayton Hamvention, Hara Arena, Trotwood, OH
- June 26-27**
 - Field Day
- July 10**
 - Indianapolis Hamfest, Camp Sertoma, Indianapolis

See the [ARRL Contest Branch page](#), the [ARRL Contest Update](#) and the [WA7BNM Contest Calendar](#) and the [ARRL Special Event Station Web page](#) for more info.

ENGINEERS RACE TO RESTORE COMMUNICATIONS AFTER HAITI QUAKE

With thousands of doctors, nurses, aid workers and troops in Port-au-Prince in the last few weeks and more than [800 non-governmental organizations](#) (NGOs) already there, reporters on the ground have observed that the [damage done to the telecommunications infrastructure has hampered coordination efforts](#). But in an ironic twist, it turns out that Haiti's Internet connectivity is robust precisely because its telecommunications infrastructure is so underdeveloped. Specifically, most Haitian ISPs connect to the Internet via satellite and are not dependent on the country's lone undersea fiber optic cable link, which was knocked out during the quake. The challenge for engineers now is the proverbial last mile--getting local connections to satellites restored so NGOs can get online.

Basic telecommunications aid was quick to arrive, but it was limited to helping first responders. [Telecom sans Frontieres](#) based in Pau, France sent two teams shortly after the quake at the request of UNICEF and the UN Nations Disaster Assessment and Coordination teams. According to TSF, its engineers "installed reliable and durable connections for local authorities and emergency responders."

The Geneva-based [International Telecommunications Union](#) also dispatched engineers to assess the damage to telecom infrastructure along with 100 satellite terminals—and the personnel to operate them—in an effort to help coordinate rescue efforts. According to a press release, "ITU will also set up a Qualcomm Deployable

Base Station (QDBS), a reliable, responsive and complete cellular system designed to enable vital wireless communications aimed at strengthening response and recovery mechanisms in a disaster zone.”

[Trilogy International Partners](#), which owns the Voila-Comcel cellphone company, says that its network is operating 80 percent of its cell sites and is providing 20,000 phones and service to relief agencies at no charge. Meanwhile, Digicel Group, which serves 2 million Haitian cellphone customers, said five days after the Jan. 12th quake that it is working to restore [30 percent of its base stations](#); the other 70 percent are functional.

Bahamas Telecommunication Company, owner of the [Bahamas Domestic Submarine Network](#), which links to Haiti, said that there's no telling how long it will be before the fiber cable is repaired. However, most ISPs in Haiti -- and in much of the developing world -- rely on satellites for Internet connectivity and so were not affected.

To help increase bandwidth availability in Haiti, [SES World Skies](#) announced on January 14 that it "is donating satellite capacity on five of its spacecraft and access to teleport facilities in support of relief efforts, disaster recovery and in order to cover vital communications needs....The SES WORLD SKIES satellites provide inbound and outbound connectivity for the disaster zone as well as internal communication links."

At least one NGO network wants to take advantage of satellite connectivity to coordinate relief efforts. [NetHope](#), a “collaboration of 28 of the world’s leading international humanitarian organizations” is working with San Francisco-based [Inveneo](#) to provide “Internet connectivity via long range WiFi links in Port-au-Prince and surrounding areas. This connection will be available to all of NetHope's members in Haiti. Requests for access points are chosen based on power, security, and line-of-sight.” --Edited from IEEE Spectrum

EXEMPTION FOR AMATEUR RADIO TO BE ADDED TO HOUSE BILL 1060

We are writing to let you know that if House Bill 1060 (HB1060) concerning the use of handheld communications devices had made it through the House to a vote, an exempt for Amateur Radio would have been added. We have established some new friends in the House of Representatives, who are aware of the importance that Amateur Radio can bring to the citizens of Indiana.

Some of you may know that we have an Amateur in the House of Representatives named Matt Pierce, N9VKU. He also spoke with the Chairman of the committee we were contacting and asked for an exemption as well.

Here is a paragraph from the email I received from Representative Trent Van Haaften, the Chairman of the House Public Policy Committee: "A colleague of both of us, Rep. Matt Pierce of Bloomington, has spoken to me about the concerns of amateur radio operators. I have told Rep. Pierce, and I am telling you, that if the language of any bill interferes with the service you provide, then I will change the language. Rep. Pierce has also committed himself to working with me in ensuring any language does not interfere with your service."

We would like to thank those of you who wrote polite and honest emails, letters, or made telephone calls in support of our request. We must always remember the old saying you can achieve more with kindness. Writing letters that are not sincere, and offer threats only hurt our causes. Luckily, we had very few of those.

John, W3ML, ARRL Indiana Section Manager and David, N9KT, ARRL Indiana State Government Liaison have been actively following this bill and wrote to all state level representatives to express our concern and they listened.

SPECTRUM IN TRANSITION: REPEATERS IN THE UK WARNED TO USE IT OR LOOSE IT

The world-wide spectrum crunch is becoming a major concern to hams in the United Kingdom. That's where putting up and maintaining a repeater may soon become more complex as an item posted on the website of the RSGB Emerging Technology Co-ordination Committee indicates that the criteria for processing repeater applications will be tightened. It could also impact negatively on both the owners and users of current UK systems on 70 centimeters and above. Frank Haas, KB4T, has the details: Published on January 3rd, the article titled "Taking Stock" says that it is likely that strict criteria will be applied in the new year for new United Kingdom repeater applications. It says that against the backdrop of low activity levels, and poorly performing repeaters, the need to justify new applications is likely to be enforced to a far greater extent.

The article also includes a warning to those system operators whose currently operational repeaters have failed to meet the current criteria. It says that long-term non-operational repeaters, repeaters licensed but failing to ever begin service and repeaters nominally operational but widely reported as being either deaf or inaccessible for other reasons has become all too prevalent. In simple United States terms, the addage "use it or loose it" would likely be apropos and be applied.

Along those lines the article post goes on to state that the recent interest in digital modes has been a welcome boost to the repeater sector of the hobby. But it notes that challenges to amateur use of bands above 2 Meters is likely to require even greater proof that hams need and value these bands. This, to support their society in fending off commercial interest at 70centimeters and above.

The article ends by noting that the focus on radio spectrum in the UK is going to intensify in the coming decade. It says that radio amateurs in that nation have to be seen as having their house in order and make good use of the valuable spectrum at their disposal in the so called "sweet-spot" of the radio bands. (From <http://www.ukrepeater.net/> via Southgate)

FCC CHAIRMAN'S BIG VISION FOR UNIVERSAL BROADBAND, BUT SHORT OF SPECTRUM

At the Consumer Electronics Show last January in Las Vegas, Julius Genachowski, the Federal Communications Commission chairman talked about the agency's ambitious national broadband plan. When asked several pointed questions about government regulation. His responses were big on vision and nuance, but when asked to describe his goals for the country in a single sentence, Genachowski punted.

Genachowski did note that the FCC has been ordered to look into ways to promote universal access to broadband. That means making sure broadband infrastructure reaches everywhere in the country. But the government also needs to address the 30 percent of the populace that has access to broadband infrastructure but chooses not to use it, either due to unaffordable costs or other issues.

“One of the things that we’re working on is articulating goals for the country in the plan that are both aspirational, that are inspirational, that are also pragmatic,” he said. In other words, one of the goals in preparing the plan is to figure out the goals of the plan.

Genachowski discussed the future of wireless, particularly how to deal with the fact that there’s not enough wireless spectrum to meet the demand. “Our data shows that there’s a looming crisis,” he said. “Not tomorrow, not next week, not next year, but at some point in the future, the system is going to be overloaded.”

To avert the crisis, more spectrum needs to be found, but the existing spectrum also needs to be used more efficiently, Genachowski said. Hopefully, the private sector can come up with some solutions. If not, the FCC will get involved.

Genachowski said “One of my goals at the FCC is to help turn it into a 21st century agency.” To that end, the FCC launched a site to invite citizen participation in the process of revamping the Commission.

NAB, MSTV FINDS CEA/CTIA PLAN TO TRANSITION TO LOW POWER DTV IMPRACTICAL

The National Association of Broadcasters (NAB) and the Association for Maximum Service Television (MSTV) jointly filed comments with the FCC promising "full and constructive participation" in the agency's National Broadband Plan. While offering support for several aspects of submissions but concluded that their proposal to transition over-the-air digital television to a low-power distributed transmission system (DTS) technology would result in coverage loss and interference. "Coverage gaps are the unavoidable consequence of trying to use a fill-in technology such as DTS as an across-the-board substitute" for the current deliver system of over-the-air DTV, the broadcast groups explained.

The CTIA/CEA proposal drastically underestimates the cost burden associated with such a transition, while overestimating the spectrum that could be freed up and the costs of implementing DTS would be orders of magnitude higher than the estimates provided by CTIA/CEA.

Additionally, the CTIA/CEA proposal could not and would not make available significant amounts of contiguous spectrum in the congested areas where the wireless industry claims the greatest spectrum shortfalls" even if transmission spacing requirements were substantially reduced.

The broadcast groups endorsed the DOJ's call for greater use of secondary markets in spectrum and NTIA's urging of a spectrum inventory analysis. While noting that neither the DOJ nor NTIA called for the reallocation of broadcast TV spectrum, NAB and MSTV called "particularly problematic" the agencies' assumption that a lack of spectrum is the key impediment to increased competition in broadband.

"There is no necessary nexus between allocating additional spectrum and increased broadband deployment and use. Many countries with higher broadband usage rates

than the United States have less spectrum allocated for broadband purposes," NAB and MSTV said.

Regarding the agencies' prediction of increased demand for mobility, technical speed and HD video, NAB and MSTV noted that mobile digital TV, offered by local TV broadcasters, provides consumers with "real-time, high-quality video on-the-go."

"Point-to-multipoint broadcasting is simply a more efficient way to deliver mass-audience video content to the public than wireless point-to-point technology, and it is more immediately deployable," NAB and MSTV said.

OLD SOL FLARES UP

The predicted solar flux for February 1-2 is 80, 82 on February 3-4 and 88-89 for the following six days. We don't see any geomagnetic upset predicted until February 16, with the planetary A index only rising to 10. An M2.3 Flare - The first registered M-Class flare of Cycle 24 has taken place at 13:41 UTC Tuesday January 19 around the new region on the Eastern Limb. New sunspot 1041, which is really old sunspot group 1039, emerged from the east, bursting with solar flares (five so far) and as a result. Several C-Class flares have taken place as well. This event did cause a G1 Radio Blackout according to NOAA. Both the planetary and high latitude K index jumped to 5 at 1800 UTC on January 20.

The M-class solar flare on Wednesday caused an SID, or Sudden Ionospheric Disturbance, and Friday's bulletin will talk about a Stanford University project encouraging homebrew SID detectors for ham station and classroom, allowing you to detect these events when they happen -- no more guessing as to why your receiver suddenly seems dead.

MOBILE DTV COMES TO THE DC AREA

Six TV stations in the Washington DC area are equipped with the Harris MPH ATSC mobile DTV broadcast system. This is part of the Mobile DTV Consumer Showcase initiative sponsored by the Open Mobile Video Coalition.

Five stations that are already on the air are: WUSA, (CBS); WDCA, (Fox) ; WPXW, (Ion); WHUT, (PBS); and WNVC, (an independent). The sixth station, TeleFutura affiliate WFDC (owned by Univision Television Group), will go on the air following the CES show. All together, Harris MPH equipment will support six of the eight stations participating in the Mobile DTV Consumer Showcase.

ATSC Mobile DTV will allow consumers the ability to receive up to 20 different programs on handheld phones, netbook computers, mobile digital television sets and other devices. "These shows will be coming The Open Mobile Video Coalition's Consumer Showcase in Washington will be the first time for everyday viewers will be able to experience of the flexibility and robust reception characteristics of ATSC Mobile DTV in a real world environment.

from local broadcasters throughout the Washington area. It's the first time that local news, weather and entertainment from ATSC Mobile DTV transmissions will be seen and heard in the hands of real viewers.

ISS SSTV EXPERIMENT –

The Russian Federal Space website lists the International Space Station (ISS) MAI-75 experiment (Slow Scan TV on 145.800 MHz) scheduled to take place from Wednesday January 27 to Friday January 29.\

This may mean Amateur Slow Scan TV (SSTV) may take place on one or more of these days. Previous activations of the SSTV system have produced some good images that can be seen on the ARISS SSTV picture gallery site.

The ISS puts out a strong signal on 145.800 MHz FM and a 2m handheld with a 1/4 wave ground plane antenna will be enough to receive it. The FM transmission uses 5 kHz deviation which is standard in much of the world.

Free PC sound card Slow Scan TV software such as MMSSTV can be used to display the pictures and you can use software such as the IZ8BLY Vox Recoder to save the audio for later decoding if you are away at work.

Russian Federal Space - ISS Experiments January 25-31 (Google English)

<http://tinyurl.com/yhy49t4>

Information on the MAI-75 SSTV experiment

[http://www.energia.ru/eng/iss/research...cation-26.html](http://www.energia.ru/eng/iss/research/research-26.html)

How to access the ISS Slow Scan TV

<http://www.marexmg.org/fileshtml/howtoissstv.html>

SHORTS

WEB SDR NOW COVERS 7 BANDS - -The popular **WebSDR** online receiver site has been upgraded to cover 7 bands including 500 kHz. The amateur radio club **ETGD** at the University of Twente provide the WebSDR HF receiver for use by Radio Amateurs and listeners around the world. In contrast to other web-controlled receivers, this can be tuned by multiple users simultaneously, thanks to the use of Software-Defined Radio. Tuning is done either by clicking or dragging with the mouse on the waterfall display, by typing a frequency into the text box, or by using the up/down buttons. The bandwidth can be changed by clicking the appropriate buttons, and by 'dragging' the edges of the yellow passband indication.

The receiver now covers VLF, MF, 160m, 80m, 40m, 30m and 20m.

To use the WebSDR HF/MF/LF radio receiver go

<http://websdr.ewi.utwente.nl:8901/>

Experimentele Telecommunicatie Groep Drienerlo (ETDG)

<http://www.etgd.utwente.nl/>

PA3FWM's Software Defined Radio page

<http://wwwhome.cs.utwente.nl/~ptdeboer/ham/sdr/>

MORE -- If you found the WebSDR interesting, you might check these links:

WebSDR and Fldigi, decoding amateur digital signals without a radio -

<http://www.oz9aec.net/index.php/component/content/article/63-sdr/290-fun-with-websdr-and-fldigi>

The reverse beacon network - <http://www.reversebeacon.net/>

John Melton, G0ORX/N6LYT, has released a test version that will run from your favorite browser as EITHER a `_JAVA_APPLET_` or in the `_JAVA_WEB_START_` which opens a separate window on your desktop. You will have beautiful audio, a panadapter and waterfall!

I believe this is the **FIRST WEB BROWSER HPSDR** receiver demonstration ever shown. John is a Java guru but will only admit to being a person with a dedicated experimental mind. The OpenHPSDR group is so lucky to have John on board.

Please point your browser to <http://g0orx.homelinux.net/jmonitor.html> and give it a test yourself.

Tuning is point and click or mouse drag or mouse wheel. Bands and Modes are easily selected from his menu.

You are listening to the signal Copthorne England (UK) using John's HPSDR Mercury Rx system.

Please join me with a big round of applause and a *WELL DONE* for John with this breakthrough demonstration. -- N9VV

HAM BAND HIGH SPEED MULTIMEDIA NETWORKING SEMINAR -- The HSMM-MESH(tm) Networking Seminar will cover all aspects of the HSMM-MESH software developed in Austin, TX. The Webinar will begin with an explanation of High-Speed Multi-Media (HSMM) and the subset of this topic which uses modified Linksys WRT54GL 2.4 GHz Wireless Routers to form a mesh network, handy for high speed digital communications in the ham band - for emergencies, special events and field day. The Webinar will cover applications, antennas, hardware, and the software. You will learn how to load the software and how to configure it. We will actually load the software into a router and configure the router in the second part of the session. You will need a Linksys WRT54GL (any version) or a WRT54G (Version 1.1 through 4 - version 5 or higher will NOT work.)

See this link for details

<http://hosted.verticalresponse.com/166853/6d93bc0e83/99001050/6e7609d662/>

The link to join the webinar is <https://www1.gotomeeting.com/register/959766065>

The Webinar will be online at 8:00 a.m. Central time to give you a chance to get logged in and test your setup before something starts happening.

Training starts at 9:00 a.m. with 10 minute breaks about every hour. We will finish in the afternoon after a lunch break.

You should register before Saturday morning if possible. If you have a microphone and headset you will be able to ask questions verbally over VOIP. Otherwise you can type in questions to be able to interact with the speaker.

The Webinar is provided through the courtesy of Ham-Com and is presented by members of the NTMS-HSMM and Austin-HSMM groups. For more information, please contact kip@kdream.com.

2010 CES - The attendance at the Consumer Electronics Show (CES) in Las Vegas this year was up from the low last year. There was a tremendous buzz surrounding all things TV — especially super thin models, [3D](#), [mobile DTV](#), [FloTV](#), and a variety of TV/Internet convergence applications. Another part was the enormous array of cutting-edge technologies such as smartphone apps, touch screens, “no-touch” and voice controls, to connected electronic vehicles and houses. Green and energy harvesting technologies were very proximate.

CES was awash in technologies that could change our lives as dramatically as projection TV, the PC and the VCR did 30 years ago.

K9STH PETITIONS THE FCC TO ESTABLISH A 4 METER BAND -- Glen E. Zook, K9STH, Richardson, Texas has submitted a petition to the FCC to establish an Amateur Radio allocation from 70.0 MHz to 70.5 MHz (4 Meters). The 4-meter (70.000 MHz to 70.500 MHz) amateur radio band has been authorized in a growing number of European and African nations. The recent migration of broadcast television stations to primarily the UHF frequencies basically eliminates any probable interference to television channels 4 or 5 which otherwise might have occurred because the 4-meter band.

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