

AN ARRL AFFILIATED CLUB  
SINCE 1961



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# BRANCH SIGNALS

OFFICIAL NEWSLETTER OF THE BRANCH COUNTY AMATEUR RADIO CLUB, INC.

Club Repeaters: 147.300 + 100 Hz 443.300 + 123 Hz

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## YOUR CLUB OFFICERS

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## Effort Underway to Abolish Leap Second

Effort Underway to Abolish Leap Second - Needless to say that "time" (and the measurement of it) is very important to everyone. Time originally was measured using the sun with a mean solar day being 24 hours. But that was not highly accurate due to variations in the earth's rotation. That changed in 1955 when an atomic clock was developed that measured the vibration of an atom of cesium, leading to the adoption of International Atomic Time.

Over decades, that resulted in tiny differences between precise Atomic Time and astronomically determined Greenwich Mean (Universal) Time. Since 1972 it has been the practice to periodically re-synchronize them, by inserting a leap second. The Earth's rotation rate is unpredictable more than six months in advance, so these leap seconds are added either at the end of June, or December.

Leap seconds can be a big deal, affecting everything from communication, navigation and air traffic control systems to the computers that link global financial markets. The last leap second was added in 2005.

There's an international effort underway to consider getting rid of leap seconds and replacing them with a leap hour, or simply let the time variation accumulate to 3600 seconds (60 minutes.) In about 600 years atomic time will be ahead of solar time by half an hour, and in about 1000 years the difference will be a full hour.

An ITU study group is now debating the pros and cons of a United States proposal for a leap hour that would be needed once every century or so. The recommendation will be voted on by ITU member states during April 2008. If 70% agree, the next World Radio Conference (WRC-11) scheduled for 2011 will approve the recommendation and the leap second will be eliminated in 2013. *Source W5YI*

## Build Something!

A couple of years ago, a group of us were talking on the club repeater, and the talk got around to building stuff. One of the guys said, "You can't really build anything anymore." I almost fell out of my chair. That's simply not true. Heathkit may be just a fond memory, but there are still many companies out there selling kits that are not only fun to build, but are useful additions to the ham shack.

### Here are a couple of sources:

Elecraft ([www.elecraft.com](http://www.elecraft.com)). In my mind, Elecraft has become the premiere ham radio kit company, if not the premiere ham radio company, period. The new K3, for example, outperforms just about anything on the market by many accounts. Personally, I have built the KX-1, which is a real blast to operate from a park bench or to take on vacation. I also have and use the W1 wattmeter. TenTec ([radio.tentec.com/kits](http://radio.tentec.com/kits)). While perhaps known more for their ready-made rigs, they also sell a line of single-band transceivers and receiver kits. QRP Kits ([www.qrpkits.com](http://www.qrpkits.com)). QRPKits.Com sells kits that were originally projects of the Northern California QRP Club. My current General Class students are going to build the DC40A kit (\$40) as an exercise in building and as a way to learn about how radios work.

### Below are some other companies whose kits have good reputations, but with which I have no personal experience:

Small Wonder Labs ([www.smallwonderlabs.com](http://www.smallwonderlabs.com)) Wilderness Radio ([www.fix.net/~jparker/wild.html](http://www.fix.net/~jparker/wild.html)) Milestone Technologies ([www.mtechnologies.com](http://www.mtechnologies.com)) Almost All Digital Electronics ([www.aade.com/index.html](http://www.aade.com/index.html)) FAR Circuits ([www.farcircuits.net](http://www.farcircuits.net)) Jackson Harbor ([home.att.net/~jacksonharbor/ham.htm](http://home.att.net/~jacksonharbor/ham.htm)) QRPme ([www.qrpme.com/](http://www.qrpme.com/)) Linear Amp UK ([www.linamp.co.uk](http://www.linamp.co.uk))

QRP clubs are also a good source of cool kits. The problem with QRP clubs is that they order parts only for a very short run of kits. Once they sell out, the kits are no longer available. Even so, here are some clubs that are worth checking out: American QRP Club ([www.amqrp.org](http://www.amqrp.org)) Four State QRP Club ([4sqrp.com/kits/kits.htm](http://4sqrp.com/kits/kits.htm)) NORTEX ([www.kk5na.com/nortex.htm](http://www.kk5na.com/nortex.htm))

**Ready to rock and roll? Here are a couple websites that you might want to check out before you dive in:** Electronic Construction from A to Z ([www.mtechnologies.com/building/atoz.htm](http://www.mtechnologies.com/building/atoz.htm)). This site includes a page that lists all the tools you'll need to become a successful kit builder. Crystal Sets to Sideband: A Guide to Building an Amateur Radio Station ([www.qsl.net/k3pd/book.html](http://www.qsl.net/k3pd/book.html)). This site not only discusses kit building, but also radio theory. The Art of Kit Building ([ww2.netnitco.net/users/wt9w/kit%20building.html](http://ww2.netnitco.net/users/wt9w/kit%20building.html))

I hope that I've whetted your appetite for building a kit or two. They're a lot of fun to build, and you really do get a rush from operating a radio or using a piece of test equipment that you built yourself.

What have you built lately? Let Dan know. Email him at [cwgeek@kb6nu.com](mailto:cwgeek@kb6nu.com).

## HAMFEST CALENDAR

<p>March 15th 2008</p> <p>48th Annual Michigan Crossroads Hamfest</p> <p>Southern Michigan ARS &amp; Marshall High School Industrial Arts Club</p> <p><a href="http://www.w8df.com">http://www.w8df.com</a></p> <p>Talk-In: 146.660 (PL 94.8) -600 offset &amp; 146.520 simplex</p> <p>Contact: Stephanie Halbert, W8AEZ</p> <p>20960 NE Capital Avenue</p> <p>Battle Creek, MI 49017</p> <p>Phone: 269-966-0770</p> <p>Email: <a href="mailto:daffne25@yahoo.com">daffne25@yahoo.com</a></p> <p>Marshall, MI</p> <p>Marshall High School</p> <p>701 North Marshall Avenue</p> <p>Div: Great Lakes</p> <p>Sect: Michigan</p>	<p>April 5th 2008</p> <p>ARGYL Hamfest</p> <p>Amateur Radio Group of Youth in Lowell</p> <p><a href="http://www.argyl.org">http://www.argyl.org</a></p> <p>Talk-In: 146.620 (PL 94.8) &amp; 145.270 (PL 94.8)</p> <p>Contact: Al Eckman, WW8WW</p> <p>725 Bowes Road, Apt. K6</p> <p>Lowell, MI 49331</p> <p>Phone: 616-897-7659</p> <p>Email: <a href="mailto:AEckman@lowell.k12.mi.us">AEckman@lowell.k12.mi.us</a></p> <p>Lowell, MI</p> <p>Lowell High School</p> <p>11700 Vergennes Street</p> <p>Div: Great Lakes</p> <p>Sect: Michigan</p>	<p>April 19th 2008</p> <p>Milford Swap and Shop</p> <p>Milford Amateur Radio Club</p> <p><a href="http://www.qsl.net/w8ydk">http://www.qsl.net/w8ydk</a></p> <p>Talk-In: 145.49 (PL 67); 146.52 backup</p> <p>Contact: Rose Moore, KC8NQJ</p> <p>1383 Sylvan Drive</p> <p>Hartland, MI 48353</p> <p>Phone: 810-632-5174</p> <p>Highland, MI</p> <p>Milford High School</p> <p>2380 Milford Road</p> <p>Div: Great Lakes</p> <p>Sect: Michigan</p>
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## DXpedition

The HQ8R DXpedition - to the rare Swan Islands is planned for March 15 to 23, 2008. Swan Islands has never before been activated before using the HQ8 prefix. Headed up by Javier HR2J, the DXpedition has the support of the Radio Club de Honduras. The Swan Islands are a chain of three islands located in the Caribbean Sea, approximately 144 nautical miles northeast of port of Castilla off the coastline of Honduras. The islands are uninhabited, except for a small Honduran Navy garrison. During the 1960's, Swan Island served as an outpost for the U.S. Central Intelligence Agency for transmitting clandestine radio broadcasts into Cuba. HQ8R is looking for 10 operators to work two phone, one CW and one RTTY/PSK31 station (a total of four stations) from 160 to 6 meters. Cost is around \$700 per operator. Logs, photos and videos will be uploaded via a high speed internet satellite system. More information is available on their website. **Source W5YI**

**Next Meeting - Tuesday April 15th—7 P.M.**

**Topic HF and The Air-Lines**

**Skywarn March 11th 2 P.M. at the 911 Center & 7 P.M. at the Branch area Career Center**

**BRANCH COUNTY A.R.C.**

Meeting Every Third Tuesday  
Branch County Communications Center  
At The Branch County Airport  
7:00 P.M.



**WE'RE ON THE WEB!**

**WWW.BRANCHCOUNTYARC.COM WE**

Thanks & a tip of the hat!

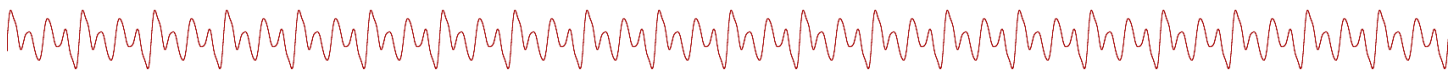


Not that there isn't a deserving soul this month. I need your help in recognizing someone for their contributions to Ham Radio and the Club.

Thanks!

Email [deprow@comcast.net](mailto:deprow@comcast.net)

**JOIN US ON THE WEEKLY TWO METER NET  
TUESDAY - 7:00 P.M. - 147.300 - ALL WELCOME!**



**NOTES FROM  
THE PRESIDENT**

Is everyone sick of the snow yet? I know I am. Don't forget Skywarn Training next week on the 11th. More info on page 7.

Don't forget for April's meeting we will have Carl And Vicki from FT Wayne doing "HF and The Air Lines"

Also please send me content (Especially Pictures) for the newsletter. Thanks!

**FOR SALE ITEMS**

Evidently there has been "For Sale Items" in the past newsletters. Space will be reserved for those such items. Please send this information to me by the first of the month so I can get this into the current newsletter for that month.

Send to: [dspro@comcast.net](mailto:dspro@comcast.net)

**VE TEST SESSIONS**

Nothing Schelduled

## Personal Locator Beacons.

### NOAA Satellites Help Rescue 353 People in 2007 Emergency Beacons to Soon Operate Under New Frequency

Armed with personal locator beacons to send a distress signal, 353 people were rescued in the United States and its surrounding waters in 2007 from potentially life-threatening emergencies. These signals were transmitted to rescue teams via a NOAA environmental satellite more commonly known for providing information to weather forecasters.

NOAA's polar-orbiting and geostationary satellites, along with Russia's Cospas spacecraft, are part of the high-tech, international Search and Rescue Satellite-Aided Tracking System, called COSPAS-SARSAT. This system uses a network of satellites to quickly detect and locate distress signals from emergency beacons on board aircraft and boats and from handheld personal locator beacons (PLBs).

Now in its 25th year of operation, COSPAS-SARSAT has been credited with more than 22,000 rescues worldwide, including more than 5,700 in the United States and its surrounding waters.

"Each person rescued was a tragedy averted," Mary Kicza, assistant administrator for NOAA's Satellite and Information Service. "This satellite-based rescue program is a key NOAA contribution to protecting American lives."

When a satellite pinpoints a distress location within the United States, or its surrounding waters, the information is relayed to SARSAT Mission Control at NOAA's Satellite Operations Center in Suitland, Md., and then sent to a Rescue Coordination Center, operated either by the U.S. Air Force, for land rescues, or U.S. Coast Guard, for water rescues.

Alaska and Florida recorded the most rescues in 2007 – 73 each. North Carolina was third with 16 rescues. Twenty-four states experienced a SARSAT rescue. Of the 353 rescues for 2007, 235 people were saved at sea,

30 were rescued from downed aircraft, and 88 were saved with help from their PLBs – the highest total since PLBs became operational nationwide in 2003. The total rescues in 2007 mark an increase from 272 the previous year.

"Anyone with plans to hike, or camp, in a remote area, where cell phone service is not reliable, or sail a boat far from shore, should not leave home without an emergency locator beacon, registered with NOAA," said Chris O'Connors, acting program manager for NOAA SARSAT. He added the number of beacon registrations in 2007 climbed to 29,710 compared with 23,383 in 2006.

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### Urgency Noted in Changeover to 406 Frequency

Older emergency beacons, which operate on the 121.5 and 243 megahertz frequencies, will be phased out by early 2009, when 406 megahertz beacons will become the new standard. A key advantage of some the 406 megahertz beacons is they use Global Positioning System technology for instant detection, leading to faster rescues.

All of the rescues in 2007 from emergency locator transmitters carried on planes, used the older 121.5 MHz frequency. But beginning February 1, 2009, this 121.5 MHz signal will not be processed. "It's critical that everyone gets the message now to make the switch to the 406 MHz beacons," added O'Connors.

**2007 SARSAT Rescue Highlights** Four people were rescued in Lake Michigan, when a powerful storm knocked out communications to their boat, which was running low on fuel.

Near Kanatak, Alaska, four people and a dog were pulled to safety from their sinking boat; Three people were rescued after their raft capsized in the rough rapids of the Green River in northeast Utah.

A U.S. Coast Guard helicopter hoisted three people from 70-foot high seas, after their boat sank 200 miles off the coast of North Carolina.

A 71-year-old hiker, too exhausted to continue his outdoor trek along the Pacific Crest Trail, was rescued in Wrightwood, Calif.

[www.noaa.gov](http://www.noaa.gov)



# Coordinator's Corner



EC Column - March 08

You would never know it by recent weather conditions, but spring is on the way. I have already come across one of the sure signs of spring in that I saw a skunk taking his final rest in the center of a local road. When the skunks come out of hibernation, spring cannot be far behind.

Another sure sign is the scheduling of our annual Severe Weather Spotter Training program. This year's event in Branch County will take place in two sessions on Tuesday, March 11.

Session one will be held at 2:00 pm in the basement Training Room at the 911 Communications Center near the airport in Coldwater and is intended primarily for Law Enforcement, Fire, and other Public Safety personnel and other professional persons such as school administrators, hospital officials, etc who will be attending as part of their job responsibilities.

Session two will be held at 7:00 pm in the Mall area of the Branch County Career Center at 366 Morse St in Coldwater. This session is intended for ham radio operators and the general public. This is a good opportunity for your children of an appropriate age to learn more about severe weather as part of your plan for family safety and security.

For those that cannot attend the evening session, all interested persons are welcome at the afternoon session. Training the maximum number of people is our goal and we do not want to leave anyone out.

We have a large area for seating at the Career Center and we can accommodate in excess of a hundred people with no problem. We hope to have a very large crowd. See you there!



## Coordinator's Corner Continued



Next up on the list will be our ARES/RACES "Training after the Training" which is scheduled for Saturday, April 5 at 10:00 am in the basement Training Room of the 911 Communications Center.

We will be again presenting our Branch County Skywarn Operations Training Program. This will be more straight forward storm spotting information aimed at cutting through the scientific jargon. In addition, we will be reviewing the standard operating procedures for our local Skywarn effort. Many new changes have been implemented this year in an attempt to improve our performance. This program will last about an hour to an hour and a half. ANYONE INTERESTED in Branch County Skywarn or storm spotting in general is encouraged to attend.

In the event we need a secondary date due to personal scheduling conflicts, we may offer a second opportunity for this training later in April or early May.

This spring will be a busy time with training in preparation for the severe weather and it is time for all of us to review our personal plans and equipment to make sure that we are prepared for action. Severe weather season officially kicks off on March 1 and as you all know after the wacky weather that we have had over the winter, severe weather can and does happen in any month of the year. Being ready with a plan in advance is the key and training is a big part of that preparation. We look forward to seeing everyone at the scheduled training sessions.

Larry Camp, WB8R

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Emergency Coordinator/RACES Officer

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