#### SOUTHERN MICHIGAN AMATEUR RADIO SOCIETY



## FEEDBACK

AUGUST 2010



#### **COMMENT**

I need to apologize to Bev and Chuck for my poor handling of their ad in last month Feedback. A better copy of the ad appears later in this issue. Also, I did the common mistake of accepting an article from the net as being correct. The interesting but false article on the original signers of the Declaration of Independence really belongs into story land. It's one of those "feel good" things accepted without verification.

As I write this issue, I received a note from Dave Smith, KC8COT, announcing his retirement from the E. C. position he has held for the last several years. Dave has worked hard at a job that has occupied far too much of his time and effort. Dave, you've done a good job and deserve a break!

In an adjoining column there is an explanation of the problems that hit our repeater system as a result of a lightening hit. Thanks Don for getting the system back into a functional operation.

The club members seemed enjoy the recent fox hunt training exercise that the Branch County club managed for us and as a result a club fox hunt is planned for September. Keep tuned for details



#### ZAPT

I expect all remember the thunderstorms that passed through town, two on July 22 and one July 23. The late storm on the 22nd appears to have allowed a bolt of lightning to find a path to ground via the antenna tower used by the W8DF facilities. Damage was significant and took all three repeaters, the Digigate and Echolink out of service. Note the following damage report.

#### 146.66 Repeater:

Receiver pre-amp Integrated circuit on audio & squelch board Seven integrated circuits and two resistors on CAT300 controller

#### 224.24 Repeater:

One transistor in repeater
One integrated circuit on CAT300 controller

#### 443.95 Repeater:

No damage, but inoperable as it was linked and con trolled by 224.24 controller

#### APRS Digigate and Echolink:

Destroyed Power Amp module on transceiver Evaporated phone line DSL filter

The 224.24 and 443.95 repeaters were quick repairs and returned to service July 24. A loaner transceiver was placed in service on July 24 also. The DSL filter was bypassed which restored Echolink and the Digigate to service.

The 443.95 controller was "loaned" to 146.66 repeater and temporary fixes were made to return the 146.66 repeater to use late on July 26. Ongoing efforts produced final repairs returning the repeater to normal operation on August 3. Complete re-programming of the CAT300 controller was necessary. Operation of 443.95 was not affected as it remains linked to 224.24.

Don-W8RVT



#### **Board of Directors**

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P. O. box 934 Battle Creek, MI. 49016

#### WHO DO YOU CALL?

When the weatherman says that storms are approaching, you want to find a lost child, you want to spot oil covered animals so they can be cleaned, who do you call?

The answer is simple. In addition to calling the police, sheriff?s office, or other law enforcement agency, you might want to call a bunch of amateurs\_\_\_ amateur radio operators that is.

Most people don't know that there is a group of highly trained and dedicated amateur radio operators that volunteer not only their time, but their radio equipment, vehicles, and fuel to do just this job. ARES (Amateur Radio Emergency Service), RACES (Radio Amateur Civil Emergency Services), Battle Creek Emergency Services Search and Rescue Team, and SKYWARN, are all available to the residents of Battle Creek and Calhoun County. These groups are not just in our local area, but are all across the country.

When the National Weather Service issues a severe weather warning and the rain starts to pound down, these men and women get into their vehicles and go out to specific locations to watch for tornado activity and other signs of dangerous weather. The members are trained weather observers and have to take classes to become certified.

When other civil emergencies arise, such as the recent oil spill in the Kalamazoo River, Battle Creek Police Department's Emergency Services office swings into action. Headed by Officer Mike McKenzie, Battle Creek Police Department's Emergency Manager, Mike contacts David Smith, City of Battle Creek and Calhoun County ARES-RACES Emergency Coordinator and the process begins.

Armed with mobile radios in their vehicles and hand-held portable radios and field packs, the group forms up and are briefed in what the activity entails. Nothing is left to chance when these volunteers gear up. They are briefed with military precision and assigned a specific task and given an area to cover. They break up into teams the better to accomplish their task, and for their protection.

Armed with a 35 foot long mobile Command Post equipped with radios, antennas, computers, and GPS gear, these amateurs hit the streets, fields or other areas where they are needed. When they are working, you would hardly realize these are amateurs at anything. The term amateur radio operator comes from the radio license they study for, take FCC examinations and receive. Many of the members have been radio operators for many years and others are relatively new to the hobby. All are highly trained and very dedicated.

According to Smith, the recent oil spill emergency saw the group find over 80 animals and birds in need of cleaning. As they were found, the GPS coordinates were called into the Command Post and passed on the folks who were in charge of rescuing and cleaning the oil covered animals. The radio search teams never came into physical contact with the afflicted animals. In fact, they were told not to. They left that job to other professionals. During the 3 days the group was involved, over 300 man hours were expended, including the hours of many resident volunteers that came to help. According to McKenzie, over 40 civilian volunteers showed up to take part in the search for these animals, and worked along side the radio operators in teams. They all wanted to do something to help.

Smith says that communications is paramount during any emergency, and few do it better than his group. ARES-RACES does the community a service every time they go on duty.

So the next time the weather gets bad, someone is lost, or there is another type of emergency, you can rest a little easier knowing the situation is in good hands with a bunch of amateurs lending a hand.

(This article was written and submitted to the Battle Creek Enquirer by Dave K8OLY.)

#### **VISITING CANADA?**

Summer is travel season and Canada is a popular destination—what about an American operating a ham radio in Canada? Since 1952, a reciprocal operating permission has been in place between our countries and all that is required is to carry a copy of your license, identify properly, and operate by the host country's rules. Append the appropriate suffix to your call - such as N0AX/VE7. For further information on US/Canadian operation, visit the Radio Amateurs of Canada (RAC) Web site. (Thanks, N0RMZ)

#### AN ASTEROID NAMED ARRL

It's a Bird, It's a Plane! No, It's an Asteroid -- Asteroid (31531) ARRL, To Be Exact!

John, Paul, George and Ringo are on the list. Mozart, Bach, Beethoven and Brahms -- even Frank Zappa and Elvis (but not Madonna). Of course Asimov and Sagan made the cut, Mr Spock, too, but not Captain Kirk. And now ARRL -- more precisely, (31531) ARRL -- joins this prestigious company as one of more than 16,000 named minor planets in our solar system. A minor planet -- such as an asteroid --is an astronomical object in direct orbit around the Sun that is neither a dominant planet -- such as Mercury, Saturn and Neptune -- nor a comet. The first minor planet -- named Ceres -- was discovered in 1801. Since then, more than 200,000 minor planets have been discovered, most of them lying in the asteroid belt. But as of July 27, 2010, only 16,005 had been named.

Approximately 2.5-4 miles (3-7 km) long -- (31531) ARRL orbits the Sun at a distance of 2.7 Astronomical Units (AU) (1 AU is the distance from the Earth to the Sun, about 93 million miles, or almost 150 million km). It is currently located near the boundary of the constellations Scorpio and Libra and is about 2.1 AU distant from the Earth. It takes (31531) ARRL almost five years to orbit the Sun.

At a magnitude of brightness of 19.5, (31531) ARRL is extremely faint. This is almost 15 magnitudes fainter than the human eye can see from most cities and towns; 5 magnitudes is a factor of 100 in brightness, so this object (at its time of discovery ) was about  $100 \times 100 \times 100$ , or 1 million times fainter than the naked eye can see. The asteroid remains about 19th magnitude most of the time and does not brighten considerably, so (31531) ARRL will never be seen with the naked eye (unless via space craft). Even though it is faint, it is probably within the range of a moderate to large amateur telescope equipped with a CCD.

Joe Montani, W7DXW -- senior research specialist with the Spacewatch Near-Earth Asteroid Project Lunar and Planetary Lab at the University of Arizona -- told the ARRL that he had discovered (31531) ARRL in his work discovering and observing Near-Earth Asteroids NEAs). He said he had received confirmation that the asteroid had been officially named as of July 27; it can take 10 years or more for the smaller objects -- such as asteroids, dwarf planets and comets -- to receive names. (31531) ARRL was discovered in 1999.

The naming was proposed to the International Astronomical Union (IAU) Committee on Small Bodies Nomenclature (CSBN), and was accepted by the CSBN and published to the world on July 27, 2010 at about 1900 UTC, Montani said. The full name of the object is (31531) ARRL. The number in parenthesis is the so-called "permanent number" that an asteroid receives after its orbit is sufficiently accurately determined so that it can

never become lost. ARRL, is, of course, the acronym of the American Radio Relay League.

All proposed names are judged by the CSBN, which is comprised of professional astronomers with research interests connected with minor planets and/or comets from around the world. The name must also be 16 characters or less in length, preferably one word, pronounceable in at least one language, non-offensive and not too similar to an existing name of a minor planet or natural planetary satellite. The names of individuals or events principally known for political or military activities are unsuitable until 100 years after the death of the individual or the occurrence of the event. Names of pet animals are discouraged, and names of a purely or principally commercial nature are not allowed.

In proposing to name an object, the proposer must supply the IAU committee a brief written citation, no more than four lines of ASCII text of 78 characters per line, formatted in a special way. The full text of the citation I wrote for (31531) ARRL contains information about the ARRL that I gleaned from the ARRL Web site, Montani explained. With the announcement of the naming, the citation is published and recorded for all time. The citation serves as an explanation of the naming and gives a sense of the motivation for it.

The citation for (31531) ARRL reads: Since 1914, the American Radio Relay League has been the largest membership organization of radio amateurs in the US. ARRL promotes interest in ham radio and experimentation, maintains high standards of conduct and fraternalism among hams and represents their interests in matters legislative.

Prior to the object receiving its permanent number, Montani said that (31531) ARRL was known by its permanent designation of 1999 CQ137. "I selected this object for naming from among the many thousands discovered by Spacewatch," he told the ARRL. It seemed fitting to me that CQ should be in the designation. In addition, the number 137 is also significant to physicists and engineers and perhaps to radio amateurs: It is the reciprocal of the fine-structure constant that depends on the square of the charge on the electron, the speed of light, Planck's constant and the permitivity of free space. This object seemed to have it all for us!

Montani discovered (31531) ARRL using the .9 meter (36 inch) Steward Observatory Spacewatch telescope, located on Kitt Peak outside of Tucson, Arizona. The telescope. which saw first light in 1921, was also the telescope that was used to discover the 30 Hz pulsar located in the center of the Crab Nebula. In 1980, Tom Gehrels and Bob McMillan founded the Spacewatch program. The primary goal of Spacewatch is to explore the various populations of small objects in the solar system and study the statistics of asteroids and comets in order to investigate the dynamical evolution of the solar system. CCD scanning studies the Centaur, Trojan, Main-Belt, Trans-Neptunian and Earthapproaching asteroid populations. Spacewatch also finds potential targets for interplanetary spacecraft missions, provides follow-up astrometry of such targets and finds objects that might present a hazard to the Earth.

ARRL

(The column "Surfin" on the ARRL site is always interesting. A recent column is presented to entice you to look the site over.)

#### Hamming by Pinging

By Stan Horzepa, WA1LOU Contributing Editor

This week, Surfin' suggests scattering signals during the Perseids meteor shower.

Meteor burst communications -- also referred to as meteor scatter communications -- is a radio propagation mode that exploits the ionized trails of meteors during atmospheric entry to establish brief communications paths between radio stations up to 1400 miles apart.

The next meteor shower is the Perseids on the night of August 12. During the peak of Perseids, the rate of meteors reaches 60 or more per hour. Perseids is often the best meteor show of the year, which means (to hams) that it affords a lot of opportunities for successful meteor scatter propagation.

Personally, I had successful meteor scatter contacts on 144 MHz using about 100 W into a small beam, so you don't need a behemoth of an amplifier and huge aluminum array to work the meteors; however, if you are not that well equipped, just listening for pings is an interesting and fun endeavor.

Steven Wamback, KK2W, describes the basics of how to bounce radio signals off meteors at eHow.com. For beyond the basics, visit the Radio Meteor Echo Page of Sam Barricklow, K5KJ.

Other sources for this installment of Surfin' include Star-Date Online and two articles on Wikipedia (Wikipedia [1] and [2]).

Until next time, keep on surfin'.

ARRL Editor's note: Stan Horzepa, WA1LOU, has high hopes for the 2010 installment of the Perseids meteor shower. To contact Stan, send him e-mail or add comments to his blog.

#### **HINT ON SKIP**

Vince Varnas, W7FA of Aloha, Oregon wrote to say this about E-skip: "As the Sporadic E skip distance on the lower frequencies shortens, the E skip on higher (VHF) frequencies appears and is longer in distance (single hop). Thus, VERY short skip on 10 meters means longer skip on 6 meters and probably E skip on 2

meters at a still longer distance". He says that one way to spot 6 meter openings is to watch ten meters.

#### COAX

Coax is an abbreviation for coaxial cable. That simply means you have concentric conductors. Concentric means one conductor surrounds the other, or in other words, there is an inner and outer conductor. These two conductors are usually incorrectly called a center conductor and a shield. The outer conductor is not a shield. The radio signals are contained between the two conductors, thus there is typically no Radio Frequency (RF) outside the outer conductor. The word typically is used, since it is true if the load (antenna) the coax is connected to is the same impedance as the coax. This is one reason so much effort is placed on proper matching of all system components. Normal transmitters are designed for 50 ohms; therefore, we use 50-ohm coax and match the antenna to 50 ohms. Antennas are typically narrow band, which means that their impedance will be low only over a very narrow frequency range.

#### SIXTY METERS

Acting on a 2006 Petition for Rulemaking filed by the ARRL, a Notice of Proposed Rule Making (NPRM), ET Docket No 10-98 to modify the rules that govern amateurs' secondary use of five channels in the 5 MHz frequency range known as 60 meters. The proposed changes would substitute a new channel for one that is seldom available because of occupancy by the fixed service, which is primary in this range. Also proposed is an increase in power from 50 to 100 W effective radiated power (ERP) and the addition of CW, PSK31 and PACTOR-III modes with provisions to ensure that such operations would be compatible with the primary service. The proposed changes can be found beginning on page 8 of the NPRM.

The ARRL is pleased that the Commission has opened this proceeding to increase the usefulness of the limited 5 MHz Amateur Service allocation said ARRL Chief Executive Officer David Sumner, K1ZZ. We are gratified that the Commission and the NTIA agree that the responsible manner in which amateurs have been using the five USB channels warrants some expansion of privileges so that the Amateur Service can be even better prepared for service to the public.

#### GREAT TRUTHS THAT ADULTS HAVE LEARNED:

- 1) Raising teenagers is like nailing jelly to a tree.
- 2) Wrinkles don't hurt.
- 3) Families are like fudge...mostly sweet, with a few nuts
- 4) Today's mighty oak is just yesterday's nut that held its ground.
- 5) Laughing is good exercise. It's like jogging on the inside.
- 6) Middle age is when you choose your cereal for the fibre, not the toy.

#### ARES / RACES Report for JULY, 2010 in Calhoun County

RACES / Skywarn Nets and Training

Total 205hrs

Public Service Events

1 Siren Test 1hrs each @ 17 People = 17hrs

Total 17hrs

Administration Hours Total 18hrs

**Emergency Operations** 

5 Server Weather Nets 1 Oil Spill Event 3hrs each @45 People = <u>225hrs</u> 5.3hrs each @ 64 People=338.5hrs

Total 563.5hrs

**Equipment Hours** 

RACES Trailer Maintenance 8hrs @ 1 Person = <u>Total 8hrs</u> Travel Hours = Total 4.5 hrs

<u>Expenses- Out of Pocket</u> = <u>Total \$75.00</u>

Travel Miles = Total 105

Members (ARES / RACES) = Total 35

<u>Total Nets, Events, Sessions</u> = 29

<u>Total Hours</u> = 816

Contributed Value = \$15096.00

Dave Smith KC8COT E-12

City of Battle Creek and Calhoun County RACES, Emergency Coordinator

**OIL SPILL** 

The following were functioning in communications during the recent oil pipe line breakage.

KC8COT David Smith KD8MNQ James Heckman

N8LS Jack Cox

KD8NJA Michael Schmieder
K8OLY David Ashbolt
KB8CFT Richard Stormer
KD8FJI Bronson Reed
KC8MQU Paul Lopp
KD8LPL Kelly Lyon

#### **RETIREMENT**

After nearly five years as the City of Battle Creek and Calhoun County RACES Emergency Coordinator I have decided to retire. I have enjoyed my time as your E.C. But now I feel that I need to spend more time with my family and other activates.

I intend to remain active in Battle Creek Emergency Service, RACES, Skywarn and Search and Rescue. I will act as a advisor to the new RACES Emergency Coordinator as required.

I have endorsed Ken Nierman KC8QNQ as my Replacement. Ken has been Assistant RACES Emergency Coordinator, Active in Net Control, Skywarn and is President of Search and Rescue. Ken is also a member of Battle Creek Emergency Service (E-46)

Ken Nierman can be Contacted at:

E-Mail: klnierman@yahoo.com Tx: (269) 317-8954 Cell Phone

(269) 964-0579 Home Phone (after 3:30pm)

Other Business, I have appointed two new Assistant RACES

**Emergency Coordinators** 

David M. Ashbolt K8OLY

Dave will be assisting Ken in Communications and Public Rela-

tions

E-Mail: Tomahawk\_jockey@Yahoo.com

Tx: (269 924-4269 Cell Phone

(269) 223-7141

And

James H. Heckman KD8MNQ
Jim will be assisting Ken in Organizing Events

E-Mail: jimfatherof2vs@aol.com Tx: (269) 317-4363 Cell Phone (269) 964-1213 Home Phone

Dave Smith (RETIRED)

KC8COT

E-12

City of Battle Creek and Calhoun County

RACES Emergency Coordinator E-Mail: kc8cotham@aol.com

Tx: (269) 317-8440

#### **HAMFESTS**

#### 09/19/2010 ADRIAN MI

Adrian Amateur Radio Club

Location: Lenawee County Fairgrounds

602 North Dean Street Adrian, MI 49221

Website: http://www.w8tqe.com/ Talk-In: 145.370 (PL 85.4)

Public Contact: Mark Hinkleman , NU8Z 108 East Kilbuck Street Tecumseh, MI 49286

Phone: 517-423-5906 Email: nu8z@comcast.net

#### 08/15/2010 LAPEER, MI

Lapeer County Swap and Shop

Lapeer County Amateur Radio Association

Website: http://www.w8lap.com

Location: Lapeer County Center Building

425 County Center Drive Website: http://www.w8lap.com Talk-In: 146.620- (PL 100)

Public Contact: William Miller, KD8VP 3605 Pratt Road Metamora, MI 48455

Phone: 810-797-5329 Email: kd8vp@arrl.net

#### 08/21/2010 OWOSSO, MI

SARA Inside & Outside "Trunk" Sale Shiawassee Amateur Radio Association Website: http://www.W8QQQ.org

Location: Baker College Welcome Center

1309 South M-52 Owosso, MI 48867

Website: http://www.W8QQQ.org

Talk-In: 147.02 (PL 100)

Public Contact: Don Warner, WB8GUS 10008 Lehring Road Byron, MI 48418 Phone: 810-266-4897 or cell 810-

Email: wb8gus@arrl.net

#### 09/11/2010 WYOMING, MI

GRAHamfest

Grand Rapids Amateur Radio Association

Website: http://www.grahamfest.org Location: Home School Building 5625 Burlingame Avenue SW

Wyoming, MI 49509

Website: http://www.grahamfest.org

Talk-In: 145.260 (PL 94.8)

Public Contact: Mike Bowen, N8ILU PO Box 3282 Grand Rapids MI 49501

Phone: 616-531-2338

Email: mikeN8ILU@yahoo.com

#### OTHERS OF INTEREST

08/15/2010 Lafayette, IN Http://w9reglorg/hamfest/index.htm 08/21/2010 La Porte, IN Http://www.pcarc.net 09/12/2010 Findlay, OH Http://www.findlayradioclub.org

### Income and Expense Statement 7/1/10 Through 7/31/10

		- A		
Category Description		7/1/10- 7/31/10		
50 50 Dues Interest Inc: Checking		0.70	4.50 10.00	
TOTAL Interest Inc			0.70	
TOTAL INCOME			15.20	
EXPENSES				
Field Day: PortaJohn		83.00	unoleti re ya neme	
TOTAL Field Day Maintenance: Repeaters		20.14	83.00	
TOTAL Maintenance Meetings; Refreshments	A	9.97	20.14	
TOTAL Meetings Utilities: Telephone	4, -	65.88	9.97	
TOTAL Utilities		3	65.88	
TOTAL EXPENSES			178.99	
TOTAL INCOME - EXPENSES		N. Kar	-163.79	

#### THE BATHTUB TEST

During a visit to my doctor, I asked him, "How do you determine whether an older person should be put in an assisted living home?"

"Well," he said, "we fill up a bathtub, then we offer a teaspoon, a teacup and a bucket to the person to empty the bathtub."

"Oh, I understand," I said. "A normal person would use the bucket because it is bigger than the spoon or the teacup."

"No" he said. "A normal person would pull the plug. Do you want a bed near the window?"

#### SMARS Board Meeting

August 2, 2010

Called to Order: 6:03 PM

Officers Present: Don W8RVT John W8JRD

Gary N8QC

Topics:

Marion WA8MFL asked to be reimbursed for fuel used during Field Day. Payment of less than \$20 was approved.

Don W8RVT reported on the on-going repairs to the repeaters damaged in the storm of July 22. The digipeater sustained damage to a power amp. The 220 had a damaged IC. The 2 meter had a damaged preamp. Don has everything up and running again, with total repairs being approximately \$150 (plus a lot of Don's time and gas). Don also reported little or no activity on the 220/440 repeaters while the 2 meter was down for repairs. He asks "Why?".

There is a date set for the next Fox Hunt of September 25. Details will still need to be worked out of how this one is going to be set up.

New membership cards need to be obtained ASAP,

Corporation papers were received from the state and need to be submitted by October 1. Burt K8HLQ is listed as the club registered agent and there was some discussion about changing this.

Don W8RVT asked about placing a buy/ sell page in Feedback.

Adjourned: 6:48 PM

Respectfully Submitted, John Davidson W8JRD SMARS Secretary

#### **FOR SALE**

Chuck, WD8LJF, Has many items for sale:. Radios and other ham necessities. Call 269-964-3197 for info.

#### SMARS Club Meeting

June 15, 2010

Called To Order: 7:09 PM

Officers Present: Bob AC8GL Don W8RVT John W8JRD Gary N8QC

Russ N8UU

Pledge of Allegiance

Introductions

Secretary's Report: approved as published in Feedback.

Treasurer's Report: approved as reported at the Club Meeting.

Committee Reports:

Hamfest: No report.

Field Day: There was light participation.Lack of CW hurt the point count. Bad band conditions overnight didn't help. The airport Manager reports that SMARS will have a place next year. PSK may be tried next year.

ARES/RACES: No report.

VE Testing: June 24's session yielded 3 new hams, with 2 being college age. No upgrades at this session. August 26 is the next exam session.

Technical Engineer: Weather station installed and working properly, no other issues with the repeaters.

Old Business:

How to attract new members to Club meetings. Some of the suggestions were to mail all hams in Calhoun county, have club project nights, or promote the entertainment at the meeting.

The Fox Hunt was held on July 10 with excellent participation, with more than 20 showing up. Don W8RVT's grand-daughter Kira KD8JGO was the first to find the Fox, with Dave KC8COT not far behind. All but one did eventually find the Fox with sometimes blatant assistance.

**New Business:** 

None.

**Entertainment:** 

None.

Adjourned: 8:15 PM

Respectfully Submitted, John Davidson W8JRD SMARS Secretary

# FEEDBACK



**AUGUST 2010** 



SMARS P.O.BOX 934 BATTLE CREEK MI 49016

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#### **SMARS NETS**

Before Lunch Bunch Monday-Friday 11:30 A.M. 146.66

Sunday Evening 8::00 P.M. 146.66

Monday 7:30 P.M. 224.24

Wednesday 7:00 P.M. 443.95

Wednesday 8:00 P.M. 28.365

Saturday 8:00 P.M. 443.95

#### ARES/RACES/SKYWARN.NET

Monday 7:00 P.M. 147.12

## **ACTIVITY CALENDAR**

THIS MONTH SMARS CLUB MEETING AUG 19
HAMFEST
HAMFEST
SMARS BREAKFAST SEP 4
SMARS BOARD AUG 30
B4LUNCH BUNCH LUNCH AUG 12
HAMFEST
NEXT MONTH SMARS CLUB MEETING SEP 16
HAMFEST