



North Ottawa Amateur Radio Club

SPARK for JANUARY 2007

HAPPY NEW YEAR!

- JANUARY 4 MAARC BATTERY PROGRAM**
- JANUARY 14 WINTER FIELD DAY**
- JANUARY 22 HARC CLASSES**
- JANUARY 27 NOARC HAM-IN-A-DAY CLASS**

President	John Fischer ,KC8UNY	846-8998
Vice President:	Don Smith, N8HCS	846-1938
SPARK editor	Paul E. Zellar W8IQE	844-0807
Secretary	Roger Simmons N8RXC	
	Phyllis Simmons KB8NLN	846-3496
Treasurer	John Sundstrom N8YQD	847-4249
Activities Director	Vacant — volunteer needed!	

*The Muskegon Area Amateur Radio Council is pleased to present a special program on January 4, 2007, at the Norton Shores Public Library, 705 Seminole Rd, Norton Shores, Michigan. 7 p.m. sharp! The program will be presented by David Clow, CEO of Harding Energy, Inc., a world leader in rechargeable battery technology.

*From the ARRL's Contest Branch web site:

Winter Field Day -- all modes, sponsored by the Society for the Preservation of Amateur Radio (SPAR) from local noon Jan 13 to local noon Jan 14. Frequencies: 160-10 meters. Categories: SO, Two Op, Multi, Indoor, Outdoor, Home. Exchange: call sign, RS(T), category, local outside temperature. QSO points: 1 pt/QSO. Score: QSO points x modes operated on each band. For more information and bonus points: <http://www.spar-hams.org/contests/winterfd/index.php>. Logs due Feb 15 to winterfd@spar-hams.org.

***HAM RADIO CLASS COMING**

Again the Holland Amateur radio club offers to the community a licensing class. It is designed for those who are new to the hobby and for those who want to up-grade their license to General. With a Technician license you can talk to others across the country and around the world (free), build electrical devices and antennas, as well as serve the community with communication skills.

WHEN: Beginning January 22 for nine Mondays.

WHERE: HOLLAND AMATEUR RADIO CLUB Technology and Training Center 280 E. 8th Street Holland

TIME: 7:00 until 9:15 p.m.

FEES: \$20 plus the cost of book for \$18.

CONTACT: Ed Heyboer

Phone: 616-772-4811

e-mail: kf8ev@arrl.net

*NOARC: This January 27 2007 at the Spring Lake Presbyterian Church starting at approximately 8:00 am to 2:00 pm with a break for lunch testing to start at about 2:00 pm this will be a tech class and testing for everything, ie; Tech, Gen, and Extra. The cost of the test is \$14.00, the cost of the Tech book is \$20.00. We are using the Gordon West book and have 6 books. If you need a book, contact KC8UNY John Fischer at kc8uny@arrl.net or 616 846 8998 leave a message we hope to get a lot of new hams or those who want to advance to the next class.

Treasurer's Report For January 2007 by John Sundstrom N8YQD

As of December 8th ,2006, the balances for the Chase/Bank One accounts are:

Bank One Checking	1,255.40
Bank One Savings	3,391.86
Sub Total	<hr/> 4,647.28

Grand Haven Community Fund 4,279.58 as of 9/30/2006

Total All accounts \$ 8,926.86

The December meeting was transformed into a Christmas Potluck. Held at the Middle School cafeteria a week early because of the holiday, it became a great meal spiced with pleasant conversations. N8YQD provided a delicious cake, KB8NLN usually brings her exceptional goodies, and this time they were extra special. Please notice the rave reviews for the sweets, thanks to the editor's sweet tooth, but the rest of the food was great, too, and there was plenty of it! Those that couldn't make it missed a good time.

I LEARNED ABOUT HAM RADIO FROM THAT

By W8IQE

With a Technician ticket in my pocket, I was anxious to get on the air. I had no equipment or a budget to purchase any. Through the Grand Haven Amateur Radio Club I was loaned a Red Cross owned Gonset Communicator for six meters. This was an AM transmitter/receiver with a 12 volt/120 volt power supply. It was the size of a small suitcase, and fairly heavy, it had a tunable receiver and a crystal socket for the transmitter. A homebrew ground plane antenna allowed me to reach a number of local hams and often the skip brought in stations from around the U.S. This was in 1956, at a time when all the new cars had 12 volt electrical systems. I didn't have a new car, so mine had a 6 volt battery. A second battery was mounted in the trunk and wired through a DPDT switch. In one position the second battery was in parallel with the car's battery for charging, in the other it was in series. This provided the 12 volts for the radio. The regular broadcast antenna worked pretty well, but one that could be cut for 54 inches was much better. Many of the hams used a "three ring halo" on a car top carrier, providing horizontal polarization and better range with beam equipped base stations.

Through a swap I acquired an RME VHF152A converter, which was a tunable device that converted 2, 6, and 10 meters to 7 Mhz. This was connected to my WW2 HF receiver, a BC342. I rebuilt an old 35 foot TV tower and mounted it on the roof of the house. I had a ground plane and a halo antenna on the tower so I could work both polarities. Joe Kolenic, W8ESZ, gave me a homebrew transmitter, built right out of the ARRL Handbook. It used three tubes, two 5763s as oscillator and multipliers, and a 6146 for the power amplifier. This was just the transmitter, however, with no power supply, VFO, or modulator. It used crystals of about 8 Mhz to multiply to the 50-54 Mhz output. I racked my brains to find a way to get this transmitter on the air. An old transformer from a junked TV provided the 6 volts for the filaments, and they lit up nicely. I obtained an old commercial power supply with 866Jr mercury vapor rectifier tubes that put out 750 volts. The tubes had a lovely purple glow when they were working. I discovered the hard way that 750 volts was too much for the 5763s, although it was perfect for the 6146. An old novice transmitter had a 300 volt supply, so that was used for the lower stages. On connecting everything up I realized that I needed to turn on the 300 volts before the 750, so the power amp had some drive. OK, I just had to remember the sequence, and reverse it for switching to receive. I didn't have a meter to measure the final plate current, which needed to be "dipped" to resonance. This was solved when I realized that off resonance the current was so high the plate of the 6146 turned cherry red. I tuned for minimum red. Now I needed to switch the antenna from transmit to receive, and another switch was used for this purpose.

(Continued on next page.)

***** Net Control Schedule *****

If you are unable to keep your appointment as Net Control, **please** arrange for a replacement.

NOTE: This information is also found on the NOARC Web site at [yahoo groups/w8cso/calendar](http://yahoo.groups/w8cso/calendar)

Jan 2	N8FQ	Joe Veldhuis
Jan 9	N8RXC/KB8NLN	Roger/Phyllis Simmons
Jan 16	N8LBG	Woody Alrich
Jan 23	W8IQE	Paul Zellar
Jan 30	Kc8UNY	John Fischer

Now I had to remember to place the antenna switch in the proper position before turning on the lower high voltage, then the higher voltage. This system would provide about 75 watts of RF to the antenna, but I still needed to modulate it. For 100% modulation, I needed about a 40 watt audio amplifier. Looking through my junk, I found another military surplus device, called a TG-10 Keyer. This had been built for code instruction, having a motor driven reel for punched paper tape going through an electric eye. The signal then went through a hefty audio amplifier. Aha! The amp used a pair of 6L6s in push-pull, providing the power level I needed. The problem was that it wasn't designed for a microphone input. That was all right, I used a telephone ear-piece for a dynamic microphone, connected it to a Heathkit Audio Signal Tracer, which was really just a high gain audio amplifier, and fed it into the TG-10. The output of the TG-10 was 4 ohms, designed for a loudspeaker. To modulate my transmitter, I needed a much higher impedance. Back to the junk box, and another TV set transformer. I connected the 4 ohm output of the TG-10 to the six volt winding of the transformer, and connected the high voltage winding in series with the 750 volt power to the transmitter. A CQ brought back a station in Kalamazoo, some 70 miles away. He helped me find the right audio adjustment that sounded right.

What I wound up with worked like this: with everything in receive and wanting to transmit, I needed to first switch the receiver to standby. The antenna switch could then be operated, then the lower high voltage, then the very high voltage. Now I was transmitting. When the transmission was complete, I had to turn off the very high voltage, then the lower high voltage, switch the antenna to receive, and turn the receiver back to "operate". The wrong sequence had dire results!

I just loved it when a contact asked me what rig was I using!

The Classified Section)

For Sale: Assortment of nice Zenith Transoceanic all band radios. Contact John Sundstrom , N8YQD

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W8CSO (NOARC) Repeater information: If the NOARC repeater goes down , use 145.490 simplex

145.490 (- offset) tone 94.8 main receiver ; Grand rapids link receiver tone 91.5

Codes : Time of day 400; DTMF Test 325; signal report 750

Phone patch Instructions:

* followed by phone number

t o disconnect

6 + auto patch number to use your assigned auto patch number

911 calls Ottawa County Central Dispatch

912 call Muskegon County Dispatch

Club Net is every Tuesday night at 8PM. Net Controllers please note your assignment found on the calendar and be sure to get a substitute if you cannot take the net. Club Web Site <http://www.qsl.net/noarc/>. Site has information on Te Ne KE, club events and net schedules. All licensed amateurs are eligible for membership in the North Ottawa Amateur radio Club. Board meeting held 1 hour before meeting at meeting site. Annual dues are payable in December . 2007 Dues are \$ 25.00 individual and \$ 35.00 family or \$70 for 3 years. Please send dues to NOARC Box 44, Ferrysburg, MI 49409. Please keep the club Treasurer (sundstrj@gvsu.edu) informed as to your CURRENT e-mail address if you get the newsletter electronically or US mail address if receive it postal.

North Ottawa Amateur Radio Club

Box 44

Ferrysburg, MI 49409

Postmaster: Return Requested