CQ CHATTER

VOLUME B10 • Issue #2 WOOD COUNTY AMATEUR RADIO CLUB March 2009

P.O. BOX 534, Bowling Green, OH http://wcarc.bgsu.edu

President/Vice President	**K8OVO/K8NEA**	**Don Buehrer/Duane Ashbaucher**
Secretary	**N1RB**	**Bob Boughton**
Treasurer	**WD8JWJ**	**Bill Wilkins**

WCARC *Minutes*

Meeting of February 9, 2009

Present: K8BBK - Steve, WD8JWJ -Bill, Matt Maurer, WB8NQW - Bob, WD8ICP - Chuck, K8LD - Mark, K8JU -Jim, K8OVO - Don, N1RB - Bob.

The meeting was called to order at 7:35 pm by Don, K8OVO. Treasurer, WD8JWJ reported that the attendance at the annual banquet was 24.

Old Business:

- Brett Luna's call sign and station was discussed. We need another call sign to "trade in" for Brett's call if we want to use it as a memorial station. Bob, WB8NQW, mentioned that there was in existence a BGSU Radio Club and it might be worth resuscitating it.
- Jim, K8JU, described Brett's repeater as operational. It consists of a Master II with a CAT 300 controller and is capable of 25 to 30 W output.

New Business:

- Don mentioned that the Mansfield Hamfest was being held the next weekend.
- He also reported that he did not have a slate of officers yet in order to hold elections. This will be taken care of at the next business meeting in April.
- The question was raised as to where the TMRA was going to move the Toledo Hamfest next year, but nobody has been informed yet.
- Consensus was reached that Field Day would be held at the Historical Museum grounds as in previous years. Bob will contact the Historical Society to make arrangements.
- Don announced that the Great Ohio Bicycle Adventure (GOBA) will be coming through Bowling Green this summer. Details will be provided through the ARES unit.

Meeting adjourned at 8:15 pm.

Respectfully submitted, Bob, N1RB,

WCARC Secretary. ■

WCARC Weekly Net:

Tuesdays at 2030 EST

(0130 Z Wed year-round)

147.18 MHz 67 Hz PL

Next Meeting

Breakfast

SATURDAY, MARCH 7th

TIME: 9:00 AM

PLACE: Couzin's Restaurant

Grand Rapids, OH

Net Check Ins

Feb 3
N1RB (NC)
N8QMV
K8BBK
WD8ICP
WD8JWJ
WB8VUL
WA8VQP - Ken
WB8NQW
K8OVO (9)

Feb 10
K8OVO (NC)
N8QMV
WB8NQW
WB8JWJ
WB8VUL
KD8DWO
WD8ICP (7)

Feb 17
N8QMV (NC)
WB8NQW
KC8ZJW
WD8JWJ
WB8VUL
KG8FH
KD8JWO - Anthony
KD8DWO - Ken
N1RB
K8BBK
K3RC (11)

Feb 24
N8QMV (NC)
WB8VUL
WD8ICP
K8BBK
WB8NQW
WA8VQP - Ken
KC8ZJW

WCARC

2 m Net Control Roster

Net meets every Tuesday at 2030 EST

Mar	**3**	**WB8NQW**
Mar	**10**	**N1RB**
Mar	**17**	**K8OVO**
Mar	**24**	**WD8ICP**
Mar	**31**	**N8QMV**
Apr	**7**	**WB8NQW**
Apr	**14**	**N1RB**

Brain Teasers

1. How are VHF signals propagated within the range of the visible horizon?

a.) by sky wave
b.) by line of sight
c.) by plane wave
d.) by geometric refraction

2. What does the abbreviation RTTY stand for?

a.) "returning to you", meaning your turn to transmit
b.) radioteletype
c.) a general call to all digital stations
d.) Morse code practice over the air

3. For the lowest RF exposure to passengers, where would you mount your mobile antenna?

a.) on the trunk lid
b.) on the roof
c.) on a front fender opposite the broadcast radio antenna
d.) on one side of the rear bumper

March Contests

The contest lineup for the month of March is given below. Please note that the WARC bands (60, 30, 17 and 12 m) are never open to contesting.

REF (France) DX 'test		**SSB**
Feb 27-28	*2100 to 2100 Z*	160 m to 10 m
Russian WW PSK 'test		**PSK31**
Feb 28-Mar 1	*1300 to 1300 Z*	80 m to 10 m
UBA (Belgium) DX 'test		**CW**
Feb 28-Mar 1	*1500 to 0300 Z*	80 m to 10 m
Mississippi QSO Party		**all modes**
Feb 28-Mar 1	*1800 to 0600 Z*	80 m to 10 m
North American QSO Party		**Digital**
Mar 1-2	*1700 to 0300 Z*	80 m to 10 m
North Carolina QSO Party		**all modes**
Mar 7-8	*0000 to 2400 Z*	160 m to 10 m
ARRL International DX 'test		**SSB**
Mar 14-15	*1900 to 1900 Z*	160 m to 10 m
Idaho QSO Party		**all modes**
Mar 15-16	*1800 to 0100 Z*	80 m to 10 m
Wisconsin QSO Party		**all modes**
Mar 21-23	*1800 to 0100 Z*	160 m to 10 m
Virginia QSO Party		**all modes**
Mar 21-22	*1200 to 1200 Z*	160 m to 10 m
Russian DX 'test		**all modes**

Brain Teaser answers: 1-b, 2-b, 3-b

DON'T FORGET!

10 meter informal net meets each Sunday at 2030 EST

on 28.335 MHz

Type to enter text

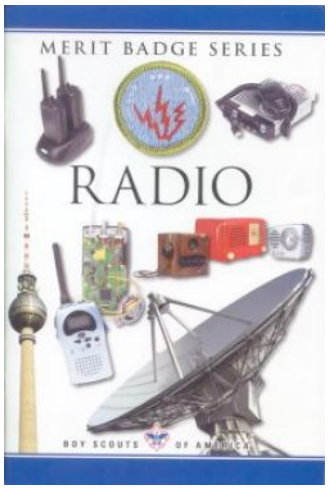
March Hamfests

Mar 15 TMRA. Toledo Hamfest/Computer Fair. Lucas County Fairgrounds, Maumee, OH. Contact Brian, WD8MXR, (419) 385-5624. brian.harrington@utoledo.edu http://tmrahamradio.org

Mar 21-22	*1400 to 20000 Z*	80 m to 10 m
Oklahoma QSO Party		**all modes**
Mar 28-29	*0000 to 2400 Z*	160 m to 10 m
CQ WPX 'test		**SSB**

BSA Updates Radio Merit Badge Requirements

from ARRL Letter



The Boy Scouts of America (BSA) has updated the requirements needed to earn the Radio merit badge. The new requirements became effective with the publication of *Boy Scout Requirements 2009*. While no new content has been added to the program, the new merit badge pamphlet features lots of new information -- including color pictures and updated charts and text -- that reflects the changes in the Amateur Radio Service since the last pamphlet update in 2002. Approximately 4000 Radio merit badges are earned each year.

According to ARRL ad hoc Scouting Committee member Larry Wolfgang, WR1B, the new Radio Merit Badge pamphlet had been in the works for some time. "BSA has been replacing all merit badge pamphlets with new booklets using color graphics and more modern presentations," he said. "With attractive color photos and clear text explanations of the requirements, the new merit badge pamphlet is a pleasure for the Scouts to read. The new text is due in large part to the efforts of longtime Radio Merit Badge Counselor and K2BSA National Jamboree Staff member Mike Brown, WB2JWD. I am looking forward to using the new pamphlet to teach Radio merit badge at our Council's Merit-Badge-O-Ree this spring, and to having a supply of the new books available for Scouts during the 2009 summer camp season."

RESCUE RADIO: NEW STUDY SAYS SOLAR STORMS COULD BRING DISASTER

from Amateur Radio Newsline

A new study from the National Academy of Sciences outlines dire consequences on Earth for a worst-case scenario giant solar storm. Scientists involved in the study say that damage to power grids and other communications systems could be catastrophic. Even ham radio would be affected. Burt Hicks, WB6MQV, has the rest of the story: While the sun is in now in a lull period, solar activity is expected to rise sharply in coming years and what is known as severe space weather will ramp up a year or two before the peak in 2012. At its worst, severe space weather in the form of solar flares and other phenomena can produce a storm electromagnetic energy. Once it hits Earth it can disrupt power distribution grids and cause blackouts and also downgrade both terrestrial wire-line and satellite to ground communications.

Severe solar storms can even damage satellites if they are not fully hardened against radiation. Ground based communications, especially on the High Frequency bands used by most radio amateurs would also be adversely impacted during such a solar event.

Daniel Baker, the director of the Laboratory for Atmospheric and Space Physics at the University of Colorado in Boulder was the lead researcher in this study. He says that in the event of a high magnitude solar storm that the social impact could be enormous. This is because emergency services could wind up being strained, and command and control might be lost.

The National Academy of Sciences says that its prediction is based in part on a major solar assault back in 1859. That storm is believed to be the reason that telegraph systems short circuited in both the United States and Europe. According to the new study with the advent of modern computer controlled power grids and relay satellites on-orbit, much more is at risk. ■

BSA from page 4

Wolfgang said that the requirements for the badge have been shifted around: "The old Part 4 of Requirement 7(b) Broadcast Radio was pulled out and placed in the main body of the requirements as Requirement 8. In addition, the old Requirement 8 (to visit a radio installation and discuss what types of equipment, how it was used, what types of licenses are required to operate and maintain the equipment, and the purpose of the station) was moved up to Requirement 7, so that now the three options appear as Requirement 9. The main result is one additional full requirement." The new requirements for the 2009 Radio merit badge are (as they pertain to Amateur Radio):

1. Explain what radio is. Then discuss the following: (a) the differences between broad cast radio and hobby radio, (b) the differences between broadcasting and two-way communications, (c) radio call signs and how they are used in broadcast radio and amateur radio, (d) the phonetic alphabet and how it is used to communicate clearly.

2. Do the following: (a) sketch a diagram showing how radio waves travel locally and around the world. Explain how the broadcast radio stations, WWV and WWVH can be used to help determine what you will hear when you listen to a shortwave radio, (b) explain the difference between a DX and a local station. Discuss what the Federal Communications Commission (FCC) does and how it is different from the International Telecommunication Union.

3. Do the following: (a) draw a chart of the electromagnetic spectrum covering 100 kilohertz (kHz) to 1000 megahertz (MHz), (b) label the MF, HF, VHF, UHF, and microwave portions of the spectrum on your diagram, (c) locate on your chart at least eight radio services such as AM and FM commercial broadcast, citizens band (CB), television, amateur radio (at least four amateur radio bands), and public service (police and fire).

4. Explain how radio waves carry information. Include in your explanation: transceiver, transmitter, amplifier, and antenna.

5. Do the following: (a) explain the differences between a block diagram and a schematic diagram, (b) draw a block diagram for a radio station that includes a transceiver, amplifier, microphone, antenna, and feed line, (c) explain the differences between an open circuit, a closed circuit and a short circuit, (d) draw eight schematic symbols. Explain what three of the represented parts do. Find three electrical components to match to three of these symbols.

6. Explain the safety precautions for working with radio gear, including the concept of grounding for direct current circuits, power outlets, and antenna systems.

7. Visit a radio installation (an amateur radio station, broadcast station, or public communications center, for example) approved in advance by your counselor. Discuss what types of equipment you saw in use, how it was used, what types of licenses are required to operate and maintain the equipment, and the purpose of the station.

8. Find out about three career opportunities in radio. Pick one and find out the education, training, and experience required for this profession. Discuss this with your counselor, and explain why this profession might interest you.

9. AMATEUR RADIO Tell why the FCC has an amateur radio service. Describe some of the activities that amateur radio operators can do on the air, once they have earned an amateur radio license. (a) using proper call signs, Q signals, and abbreviations, carry on a 10 minute real or simulated radio contact using voice, Morse Code, or digital mode. (Licensed amateur radio operators may substitute five QSL cards as evidence of contacts with amateur radio operators from at least three different call districts.) Properly log the real or simulated ham radio contact and record the signal report, (b) explain at least five Q signals or amateur radio terms you hear while listening, (c) explain some of the differences between the Technician, General, and Extra Class license requirements and privileges. Explain who administers amateur radio exams, (d) explain how you would make an emergency call on voice or Morse code, (e) explain the differences between handheld transceivers and home "base" transceivers. Explain the uses of mobile amateur radio transceivers and amateur radio repeaters.

ARRL Rocky Mountain Division Director and Chairman of the League's ad hoc Scouting Committee Brian Mileshosky, N5ZGT, called the Radio Merit Badge "a perfect avenue to introduce Scouts and Scouters to the wonderful world of ham radio. Ham clubs across the nation should locate a local Boy Scout Troop, secure permission from their Scoutmaster and/or committee to teach the merit badge and deliver an exceptional Radio merit badge class. What the boys -- and their leaders and parents -- will learn in the process is a fair amount of what is part of the Technician license exam, so the next logical step after a merit badge class is an all-out recruiting effort to get that Troop involved in Amateur Radio. They'll meet new friends and have a great way of communicating while in transit to and from the field, as well as additional peace of mind through an effective means of emergency communications while in the backcountry." ■

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