

Hamgram

Newsletter of the Winona Amateur Radio Club, Inc. May 2006
www.w0ne.org

Meeting Announcement

The May meeting of the Winona Amateur Radio Club will take place on Thursday, May 18, at 7:00 p.m. in the lower level conference room of the Winona County Annex Building on West 3rd Street. The meeting is open to all licensees and radio enthusiasts.

Minutes of the April 2006, meeting of the WARC

The April 2006 meeting of the Winona Amateur Radio Club, Inc. was held at the Winona County Courthouse Annex Building on Thursday evening, April 20, 2006. The meeting began at 1900 with a presentation on lightning arresting by Red Haynes, WOØW.

Some important points of Red's presentation were:

1. A grounding system is essentially a capacitor that charges instantly during a strike and then slowly discharges through the relatively high resistance of the earth. The challenge is to create a capacitor that can absorb the strike.
2. Multiple 8 foot ground rods spaced 16 feet apart serve as conductors to charge the ground capacitor.
3. Multiple lightning arrestors in the antenna coax are better than a single arrestor.
4. References:
Lightning Physics and Effects by Vladimir A. Rakov and Martin A. Uman (ISBN 0-521-58327-6)
Lightning by Martin A. Uman (ISBN 0-486-64575-4)

The business meeting was called to order by President Darlene Tagliapietra (KCØCTH) at 2001.

The minutes were approved as published in the April 2006 *Hamgram*.

Treasurer's Report was approved as presented:

Current bank balance is between \$1,600 and \$1,700.

Vice President's Report: Clare continues to be interested in programming ideas.

Old Business

SKYWARN: Walt (KEØXI) noted that the use of multiple grid systems has caused the La Crosse National Weather Service to ask that SKYWARN position be referred to by names or numbers that can be cross-referenced to a latitude-longitude designation at the Weather Service office. During the ensuing discussion it was suggested that the SKYWARN Handbook and the various maps be published on the web site and that maps also be published in the *Hamgram*.

Great River Bike Festival (Thursday, June 15): Lance (KBØYJU) noted that event sponsors are boking for improved information transfer from the race to event headquarters. The event will run from 7:30 a.m to about 6:00 p.m. Amateurs who are able to participate are asked to contact Lance as soon as possible.

Field Day: Jim (KBØTHN) will coordinate Field Day. The Winona Sheriff's communications trailer and the Rod & Gun Club site have both been confirmed.

GRSF: Les (KØBAD) and Len (KCØRSX) did not have a report.

Licensing Classes and VE Session: These events will be coordinated by the Executive Board.

June meeting: Dick (NØVV) will host the June meeting at his river cottage.

New Business

Red Cross: A request by the American Red Cross – Winona Chapter – to obtain the names and callsigns of people interested in

assisting during emergencies was passed around with instructions to indicate if you did **not** wish to participate. The Executive Board will then prepare a response with all club members names included except those who had opted out.

Membership Committee: A suggestion was made to form a Membership/Fundraising Committee

Voice repeaters: Walt (KEØXI) moved and Clare (KØNY) seconded that \$150 be set aside for the purchase of new backup batteries for the KAGE FM repeater site. The motion was carried.

Hello: Les (KØBAD) was directed to research the ARRL Hello program. The Executive Board will propose a level of participation on the part of the WARC.

Bob NØPDD: Is doing well after a fall off a ladder.

Jim KCØTXJ: Jim discussed his recovery after a serious automobile accident earlier in the year.

Treats Schedule: April: **KØNY** May: *
June: **NØNUO** July: **PICNIC**
August: **NØJP/NØNUO** September: *
October: * November: **KØBAD**
December: **KC9ERJ/KC9CRM** (* = OPEN)

Respectfully Submitted,

Leslie D. Hittner

Leslie Hittner, Secretary

Meeting attendance:

Guest: Tony Lynch, WØIU from Lake City, MN

Darlene, KCØCTH	Les - KØBAD	Ken – NØJP
Dick - NØVV	Matt – KFØQ	Delores – NØNUO
Clare - KØNY	Terry – WØEUU	Jim – KBØTHN
Walt - KEØXI	Paul – KØZYV	Dan – WKØW
Duane – W9HWQ	Gordon – NØTNC	Jake - KC9CRM

Pete - KC9ERJ

Lance – KBØYJU Jim – KCØTXJ

Test Your Amateur Radio Knowledge – Part A

By Len Litvan KCØRSX

The following are from the FCC exam pool—Technician, General and Amateur Extra.

#1 - What unit of measurement specifies RF electric field strength?

- A. Coulombs (C) at one wavelength from the antenna
- B. Volts per meter (V/m)
- C. Microfarads (uF) at the transmitter output
- D. Microhenrys (uH) per square centimeter

#2 – In what segment of the 80-meter band do most data transmissions take place?

- A. 3580 - 3620-kHz
- B. 3500 - 3525-kHz
- C. 3700 - 3750-kHz
- D. 3775 - 3825-kHz

#3 - What is the term for the ratio of the radiation resistance of an antenna to the total resistance of the system?

- A. Effective radiated power
- B. Radiation conversion loss
- C. Antenna efficiency
- D. Beamwidth

Answers to Exam Pool Questions:

#1 - (B); #2 - (A); #3 - (C)

Dayton Hamvention this week

Several area amateur radio operators will be in Dayton this week. Jim Brown (NØWE) Ken Spittler (NØJP) Mike Mullen (NØBUI) and Tom Wilmot (WØMK) will be **living it up** in Dayton during the club meeting this week.

That should make for a good program in June!

Test Your Amateur Radio Knowledge – Part B

by Len Litvan KCØRSX

The following are from the FCC exam pool—Technician, General and Amateur Extra.

#1 -- What is the most important safety precaution to take when putting up an antenna tower?

- A. Install steps on your tower for safe climbing
- B. Insulate the base of the tower to avoid lightning strikes
- C. Ground the base of the tower to avoid lightning strikes
- D. Look for and stay clear of any overhead electrical wires

#2 – What happens at the base feed-point of a fixed length HF mobile antenna as the frequency of operation is lowered?

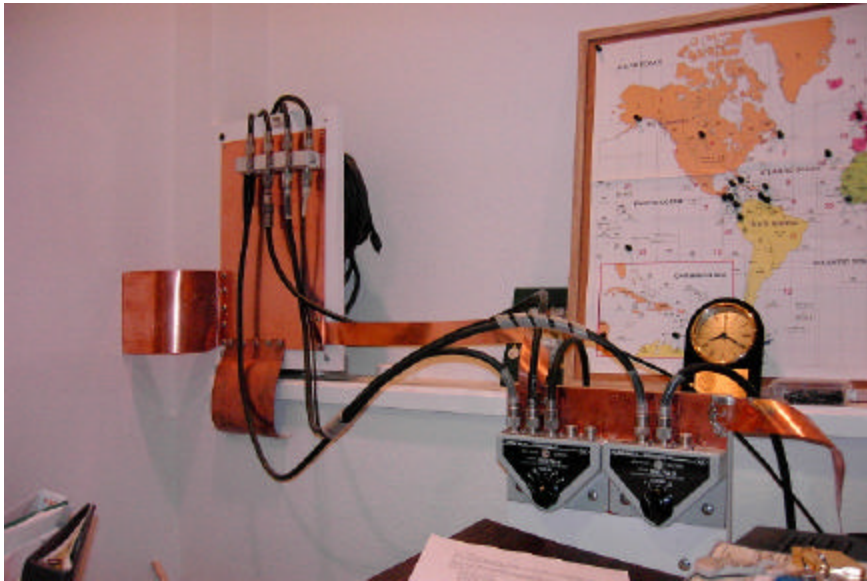
- A. The resistance decreases and the capacitive reactance decreases
- B. The resistance decreases and the capacitive reactance increases
- C. The resistance increases and the capacitive reactance decreases
- D. The resistance increases and the capacitive reactance increases

#3 - For a 3-element beam antenna with horizontally mounted elements, how does the main lobe takeoff angle vary with the downward slope of the ground (moving away from the antenna)?

- A. It increases as the slope gets steeper
- B. It decreases as the slope gets steeper
- C. It does not depend on the ground slope
- D. It depends of the F-region height

Answers to Exam Pool Questions:

#1 - (D); #2 - (A); #3 - (B)



The single point grounding system at KØBAD

The Winona Amateur Radio Club, Inc.

President:	Darlene Tagliepietra darlenet@hbc.com
Vice President:	Clare Jarvis cjarvis@hbc.com
Secretary:	Leslie Hittner lhittner@hbc.com
Treasurer:	Richard Kolter kolter@luminet.net 1128 West Mark Street Winona, Minnesota 55987
Member At Large:	Phillip Streng 01/01/06 to 06/30/06

Dues: \$25.00 per calendar year per license holder.
\$30.00 per calendar year per license holder and members of the same family within the same household.

Dues should be sent to: Richard Kolter, Treasurer

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or KØBAD@arrl.net

Board meetings are announced in advance (WEPNet)

Monthly club meetings are held on the third Thursday. The submission deadline for the *Hamgram* is Wednesday of the week *prior* to that of the club meeting.

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C/O The Winona Amateur Radio Club, Inc.

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