



# Hamgram

*Newsletter of the Winona Amateur Radio Club, Inc.*

[www.w0ne.org](http://www.w0ne.org)

*June 2010*

---

## June Program Activity Announcement

The June program of the Winona Amateur Radio Club will feature a review of how to get the most from a handheld amateur radio transceiver. Participants are encouraged to bring their personal handhelds and the related operators manual. The program will also include final planning for Field Day 2010 radio station operations and related activities.

The program will begin at 7:00 PM on Thursday, June 17, at the Mississippi River cabin of club member Dick Kolter, NØVV. Directions to the meeting location are on the club website, [www.W0NE.org](http://www.W0NE.org).

All amateur radio operators and other interested persons are encouraged to participate.

---

## Extra Antenna for Field Day

By Matt Burt, KFØQ

### Part one

I was thinking about field day and how the antenna setup was looking for this year's event. Sure we will have the usual suspects; the vertical for forty and eighty, maybe another one for the higher bands twenty through ten and the old standby the G5RV or something close to it. But its Field Day and everyone will be S9 running a hundred watts or so and the signals will probably generate into one big lump of blended noise that make it pretty tough to punch through. Any station a few dB louder could make a few more contacts and have some fun I thought.

Some twenty years ago I was looking for a way to snag some DX from my home station in downtown Winona. Cycle 22 was near its midway point and I thought that a simple yagi for ten meters would be easy to build for a low cost. After some research I had decided that two elements would meet most of my criteria of simplicity, small footprint and a bit of gain over a dipole or vertical. I learned that it was possible to use the driven element also a director and thus keep the length of the boom down and not be too concerned with interactions and design challenges associated with a three or more element designs. With little direction I headed out on my own and built a two element yagi. The material in hand was not lightweight aluminum; rather copper tubing. In spite of its shortcomings the antenna did work and several contacts made it in to my log on ten meters. When my station expanded with the addition of a four element tri band yagi I had to remove the smaller single band unit to make room after just one season of use.

So here we are in 2010. Ten meters has been opening up with cycle 24 under way<sup>1</sup>. It always seems to be a hassle to assemble a competitive Field Day station with limited time and resources. Over the years our club has installed tower sections with tribanders and whatnot for some better performance but simple is always better. My thought was for this years setup "why couldn't we have an extra antenna to use that would be

---

<sup>1</sup> VE3EN has a great site with tons of scientific data pertaining to solar cycle 24:  
<http://www.solarcycle24.com/>

lightweight, simple, have a small footprint” that would be simple to erect on a warm weekend morning in the end of June?

Like I do with all potential projects I started my initial web search with the key words: “ten meter two element yagi”. As one might expect; my search netted a large volume of hits. Some of the hits were antennas I had not considered such as moxons and quads. One web page from a fellow amateur in Italy<sup>2</sup> mentioned a project design by a stateside home brew antenna enthusiast, Albert Alvareztorres, AA1DO that fit my specification right down to the four foot boom!

After careful review of the suggested construction I went to my store of used aluminum tubing in the basement that I have been collecting for projects like this. The element lengths required over 35 feet of tubing that ranges in diameter from 1/2” to 7/8”. The length of the driven element is derived from the basic formula of  $492/f$  which ends up 17.3feet for a center operating frequency of 28.4 MHz. The reflector needs to be 18 feet and 1/2” (very close to five percent longer than the driven element).

My stock pile of old tubing contains several pieces of tubing of adequate length but not equal to the diameter listed in the recipe. My project will undoubtedly be different than the example if I choose to take the most economical path and use the material in hand. The balance of required hardware is nothing more than some small pieces of aluminum angle, a four foot light weight aluminum boom, circular hose clamps, u-bolts and bolts to mount the element plates to the boom.

The construction article suggests using a gamma match feed which negates the need to insulate the driven element from the boom. This method of construction has been called “the plumbers delight”. A variant of the feed system would be to treat the feed point as a direct fed dipole with the driven element cut into two equal pieces that are insulated both from the boom and one another. The insulated boom method adds another layer of complexity to the construction that I chose not to do.

Over the years I have made it a point to not have too high of hopes for the performance of project antennas. If I set my sights low then my level of disappointment will be minimal. If things work out well and the antenna exceeds my expectations I will be pleased with the effort. As of this writing I have nineteen more days left to complete the project. So many questions have yet to be answered: Will I get it done in time? Will the antenna work at all? What about ten meters opening up during Field Day weekend? How many contacts will we get with the antenna? I guess you may have to venture to the Field Day site this year and find out. More on the project next month; until then I hope to see you at Field Day 2010!

**To be continued.....**

---

<sup>2</sup> <http://www.iw5edi.com/>

## May 20, 2010 Bi-Annual Meeting Minutes

The meeting was called to order by President, Len Litvan (KCØRSX) at 1901.

The minutes were corrected to include the following two members present: Jim Jarvis (KBØTHN) and Dan Goltz (WKØW), The vote to approve the new constitution and by-laws was amended to read as follows:

KØBAD moved and KØNY seconded: To adopt the implementing resolution as follows:

### Winona Amateur Radio Club

#### Implementing Resolution – Constitution and By-Laws adopted March 18, 2010

Be it resolved that the WARC Constitution and By-Laws revisions dated March 18, 2010 be adopted as the official documents of the club and that they be implemented upon their adoption with the exception of implementation relating to makeup of the Executive board and club officers, which will be implemented on November 18, 2010.

In the interim between adoption of the revisions and November 18, 2010, the officers and board member-at-large elected on February 18, 2010 for the 2010 year shall continue to fulfill those roles but in the new structure and responsibilities as specified in the revised Constitution and By-Laws. In addition, the Station Custodian shall become a member of the executive board upon adoption of the revised Constitution and By-Laws with full voting rights of a board member.

It is recognized that during the interim period until November 18, 2010, the executive board will consist of six members instead of the seven members as spelled out in the revised constitution.

Resolution adopted this 18th day of March, 2010.

Secretary, Winona Amateur Radio Club

This motion passed by a vote of 19 for and 0 against. This count did not include any proxy votes.

Clare (KØNY) moved and Paul (KØZYV) seconded that the minutes be approved as amended. Motion passed.

The treasurer's report was given verbally with supporting documents and show a current balance of \$1,854.12. Paul (KØZYV) moved and Les (KØBAD) seconded that the Treasurer's report be approved as delivered. Motion passed.

Upcoming operating activities were announced: June 13 – Second annual TRInona triathalon  
June 26-27 – ARRL Field Day

The President directed the *Hamgram* editor to update the Operating Activities schedule in the *Hamgram* by copying the one published on the club's WIKI to the newsletter (Done – ed).

The meeting was adjourned at 1922.

Respectfully submitted,

*Leslie D. Hittner*

Leslie Hittner, KØBAD

Secretary

Attendance:

1	Leslie Hittner, KØBAD	Y	8	Bob Seaquist, KC9IWE	Y
2	Len Litvan, KCØRSX	Y	10	Syed Farufiel, KDØKTB	Y
3	Clare Jarvis, KØNY	Y	11	Tom Wilmot, WØMK	Y
4	Kenneth Spittler, NØJP	Y	12	Mike Davis, N8MD	Y
5	Paul Schumacher, KØZYV	Y	13	Jordon Benson, KDØKTD	Y
6	Terry Peterson, WØEUU	Y	14	Dick Kolter, NØVV	Y
7	Matt Burt, KFØQ	Y	15	Dan Goltz, WKØW	Y
9	Lance Tagliapietra, KLBØYJU	Y			

## Treat List 2010

Month	Name	Call
January		
February	Len	KCØRSX
March	Ken	NØJP
April		
May		
June	Dick	NØVV
July	Club Picnic	
August		
September	Matt	KFØQ
October		
November	Tom	WØMK
December	Clare	KØNY

Please consider providing treats on one of the open months.

## New Field Day site approved

By Len, KCØRSX

This afternoon the Winona Port Authority approved use of one of their lots on Innovation Drive (east of Menards) for the club's use as the field day site this year. This will be a good site for the club and will allow more Winona area hams, their families, and others interested in amateur radio to participate.

The exact location is shown on the [ARRL field day site locator](#). Just put WØNE into the first search field and click on "Search". Then specify "satellite" view when the search returns the site map.

## Balloon launch to be a featured Field Day activity

Kyle Marek-Spartz, who was one of the WARC Technician graduates a little over a year ago, will make an AnaSonde / Ballooning presentation during Field Day. Kyle is a member of the NASA Minnesota Space Grant Ballooning Team at the University of Minnesota. They use APRS for most of their tracking, and most of the team members have amateur Radio licenses. For Field Day, the bulk of the team will be in Stillwater with SARA doing an ATV and balloon tether presentation, but Kyle is interested in coming back to Winona to show off some of the equipment they use and to visit with us. Kyle doesn't believe he will have the capacity to a full size launches, but he does hope to be able to bring examples of launch packages and perhaps a smaller system that they sometimes use. With luck, he may even be able to conduct a small launch during Field Day.

(Kyle Marek-Spartz contributed to this story.)



## 2010 Club Project List

**Blue** indicates project has been completed and goal fulfilled.

Project	Description	Target Date	Leader(s)
Technician Class Course	Public course to prepare persons for Technician Class license testing.	Jan-Feb 2010	Len KCØRSX & Les KØBAD
VE License Testing	Public license testing following Technician Class course.	Mar 8, 2010	Dick NØVV
TRInona Communications Support	Provide back-up route communications support to the triathlon in Winona--primary communications in select areas.	Jun 13, 2010	Les, KØBAD
Repair Club Beam Antenna	Repair antenna for Field Day 2010.	Jun 25, 2010	TBD
Field Day 2010	Club participation in ARRL Field Day 2010	Jun 26 & 27, 2010	TBD
GRSF Special Event Station - 2010	Run a really fun special event station in support of Winona's Great River Shakespeare Festival.	Jul 10-11, 2010	TBD
Weekend on Wheels Communications Support	Provide "SAG" support and other communications support for the WoW bicycle event.	Unknown	TBD
Repair/Upgrade 146.835 Repeater	Repair and program controller, install CTCSS capability as necessary.	Jul 31, 2010	Voice repeater committee
Remote Receiver - KHME site	Install remote receiver at KHME site to extend range of the 146.640 repeater to the south and east.	Aug 31, 2010	Len KCØRSX
Equipment Upgrade/Replacement - KAGE Site	Plan to replace and upgrade equipment at KAGE site (2 meter and 70 cm) to prevent reliability issues due to advanced age of equipment and components. Consider adding digital capability.	Oct 30, 2010	TBD
General Class Course	Public course to prepare persons for General Class license testing.	Oct-Nov 2010	Len KCØRSX
VE License Testing	Public license testing following General Class course.	Mid-Nov 2010	TBD
Kiwanis Christmas Tree Collection Support	Provide communications and APRS support for the Kiwanis Christmas tree collection program	Early Jan 2011	TBD

**The Winona Amateur Radio Club, Inc.**  
**PO Box 1264**  
**Winona, MN 55987-7264**

**Executive Board**

President: Len Litvan (KCØRSX) Vice President: Lance Tagliapietra (KBØRJU)  
[KCØRSX@arrl.net](mailto:KCØRSX@arrl.net)

Secretary: Leslie Hittner (KØBAD) Treasurer: Clare Jarvis (KØNY)  
[kØbad@arrl.net](mailto:kØbad@arrl.net) [jarvis@jarviscomputer.com](mailto:jarvis@jarviscomputer.com)

Ken Spittler (NØJP) Club Station Custodian, Dick Kolter (NØVV)

Dues: \$25.00 per calendar year per license holder.  
\$30.00 per calendar year for all licensed members of the same family within  
the same household.  
Dues should be sent to: Clare Jarvis, Treasurer

***Hamgram is published monthly by The Winona Amateur Radio Club, Inc.***

Distribution is electronically by email and via the club's WEBSITE (WØNE.org).

Distribution to individual members by USPS is available upon request.

Editor: Leslie Hittner (KØBAD)

Please address comments and *Hamgram* correspondence to: Leslie Hittner  
1340 Conrad Drive - Winona, MN 55987 or email to: [KØBAD@arrl.net](mailto: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.



*Hamgram*

**C/O The Winona Amateur Radio Club, Inc.**

**PO Box 1264**

**Winona, MN 55987-7264**