



The Zero Beat

Table of Contents

- 1-2 Club Information
- 3 On Frequency
- 4 In the Shack
- 5 On the bench
- 6 Radio-Activity
- 6 A.R.E.S. Information
- 6 Radio-Activity
- 7 For Sale

Events Calendar

May

- 12 SMARTS Meeting 7PM Auburn Manor
- 16 VE Testing – Chanhassen Library 6:30PM
- 21 ARES Breakfast 8:30AM

June

- 09 SMARTS Meeting 7PM Auburn Manor
- 18 ARES Breakfast 8:30AM
- 20 VE Testing – Chanhassen Library 6:30PM
- 25 – 26 Field Day**

July

- 14 SMARTS Meeting 7PM Auburn Manor
- 16 ARES Breakfast 8:30AM
- 18 VE Testing – Chanhassen Library 6:30PM

SMARTS CLUB MEETING

Thursday May 12, 2011

7:00PM

Auburn Manor, Chaska

S.M.A.R.T.S Club Officers

President - Dwayne Kaelberer KC0ORL
V. President - Dave Zellman, WB0YDF
Secretary - Bob Minor, W0NFE
Treasurer - Tom Carlson, N0QNY
The Zero Beat - Scott Kolar, KC0VNK
Net Coordinator - Stan Gunn, KB0CQ
Interference & Operating - Dave Zellman, WB0YDF
Repeater Trustee - Tom Carlson, N0QNY

Articles and information for the Zero Beat can be sent to:

Scott Kolar (KC0VNK)
P.O. Box 84
New Germany, MN 55367
(612) 297-5627
email:

[mail to:scottkolar@frontier.net](mailto:scottkolar@frontier.net) or
newsletter@smartsonline.org

[Club Web Page http://www.smartsonline.org/](http://www.smartsonline.org/)

We would like to thank the following members for their years of service to the S.M.A.R.T.S Radio Club:

President - Chris Zellman KC0RIS
V. President - Dwayne Kaelberer KC0ORL
Secretary - Terry Zellman KB0FXK
Treasurer - Tom Carlson, N0QNY

Membership Application/Renewal

If you are not currently a member of SMARTS and would like to join, fill out the following application and send it (along with \$12.00 dues specified) to:

SMARTS, Inc.
PO Box 144
Chaska, MN 55318
(All memberships include a subscription to the Zero Beat)

Name: _____
Call Sign: _____
Current License Class _____
Address: _____
City: State: _____
Zip: _____
Phone: _____
Email Address: _____
ARRL Member (circle one) Yes No

When all else fails Amateur Radio



147.165+600 (PL 107.2)
On the Carver Water Tower
High above the MN. River Valley.

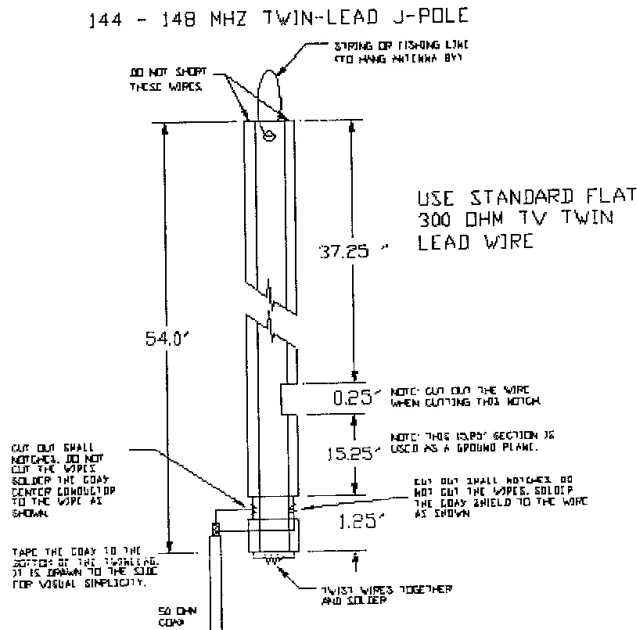
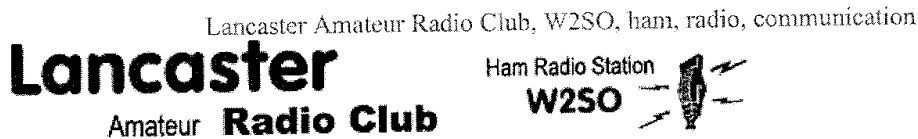
The S.M.A.R.T.S Radio Club holds their weekly A.R.E.S. net every Sunday evening at 8:30pm on the WBØRMK repeater. All ARES members regardless of county are invited to participate. Immediately following the ARES net is an Open net. Any and all ham radio operators are invited to check in and say hello.

On the bench...



(Simple projects you can build)

Here is a simple little antenna you can build for you hand held radio that works great and is easily transportable. Just roll it up and stick it in your suitcase or carry on bag. You can use it when you are on vacation to get into the local repeaters when you are away from home. It hangs from a curtain rod or any hook in your hotel room or a tree branch and will provide you with those much needed QSO's when there is no one else to talk to.



The following is a description of a J-Pole antenna made from 300 ohm TV twin-lead. They have quite a few advantages which include improved performance for HTs, portability, and low cost.

For a center frequency of 146 MHz:

1. Start with @54" of TV twin lead (flat, NOT foam core)
2. Strip 1/2" of insulation at bottom and solder wires together.
3. Measure 1 1/4" from soldered wires and strip insulation on both sides. This is the solder point for a coax feedline.
4. Measure 16 3/4" from coax shield solder point and cut out 1/4" notch.
5. Measure 50 1/3" from coax center conductor solder point and trim off twin lead at that point.
6. Feed with a length of RG58U coax. Tape coax at feedpoint to the twin lead for strength and seal coax for weather protection.

To get the best possible match, in step three above simply MARK the "solder points" and measure from the mark for step 4 and 5. Now solder straight pins to your conductor and your shield. Insert the pins at the marked point and test for VSWR at the design frequency (146MHz).

If necessary, probe up or down till you reach 1:1 (close as possible).

Solder at the best points. To try this, you may want to start with the twin lead a little long and trim down to resonant length - note: you'll need to trim in a 3:1 ratio to maintain the 3/4 to 1/4 wave.

It has been noted that this design can lead to rf coupling onto the feedline. To avoid, put ferrite beads on the coax at the feedpoint, or use 3-5 turns of coax (1"-2") taped together at the feedpoint.

You may attach an alligator clip to the plastic on the top of the antenna in order to easily hang it. Alternately, punch a hole near the top and use a length of fishing line to hang.

This design appears on many BBSs, in club newsletters, and in books; the earliest reference that I know of is a Jan. 1984 D.A.R.C. antenna article by James Burks, KA5QYV. This antenna is relatively broad-banded and will be more than adequate if simply built as noted in steps above.

FYI, the 1/4 wave sections for other center frequencies are:
144 MHz =17 inches, 145 =16.88, 146 =16.75, 147 =16.65, 148 =16.54

I usually just go ahead and solder the coax in place and trim down to as close to 1:1 vswr as I can get. I use the MFJ vhf antenna analyzer and a frequency counter then afterwards test with a radio and in-line swr/power meter. When done, the antenna should also present 1:1.2-3 vswr in the center of 444MHz band as well (demonstrated on my dual-band meter and Alinco DJ-580).--

Ed Humphries Texas Instruments, Inc. 512-250-6894
N5RCK Internet ed.humphries@hub.dsg.ti.com

Minnesota A.R.E.S. Information

The **Amateur Radio Emergency Service (ARES)** consists of licensed amateurs who have voluntarily registered their qualifications and equipment for communications duty in the public service when disaster strikes. Every licensed amateur, regardless of membership in ARRL or any other local or national organization, is eligible for membership in the ARES. The only qualification, other than possession of an Amateur Radio license, is a sincere desire to serve. Because ARES is an amateur service, only amateurs are eligible for membership. The possession of emergency-powered equipment is desirable, but is not a requirement for membership.

Join Now!



Radio-Activity

JUNE

June VHF QSO Party: Second full weekend in June, 1800 UTC Saturday through 0259 UTC Monday.

Field Day: Fourth full weekend in June, 1800 UTC Saturday through 2059 UTC Sunday.

Is the frequency in use? / QRL?