

# SMARCalling



October 2002

Volume 2

Issue 10

Southwest Missouri Amateur Radio Club <http://www.smarc.org>

P.O. Box 11363 Springfield, MO 65808 PH: 417-886-4152

## *Let's Make Some Antennas!*

Next Meeting  
Monday, the  
21st at 7 PM, at  
the American  
Red Cross 1835  
E. Chestnut Exp.  
Just East of  
Glenstone

*Hope to see you  
there!*

~~~~~  
Hamfest

November 9th  
Expo Center

~~~~~  
Christmas Dinner  
Dec. 16th

Western Sizzler  
Glenstone & Kearney

~~~~~  
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Visitors Always  
Welcome!

Hello everyone... Several things to report this month...

### T-Hunt

Last month we had the club picnic and a T-Hunt in Silver Springs Park in Springfield. The weather was nearly perfect! Tim Smith used one of the directional beam antennas we made at a club meeting last year, and found the transmitter first. Everyone seemed to have fun finding the "Fox" which was hidden inside a drainage culvert, bouncing the signal a little bit.

### Pocket J-Pole Antenna

Speaking of making antennas... during our October meeting we will construct pocket j-poles! These are 2-meter antennas made from 300-ohm ladder line and they roll up nicely for easy storage. A simple, yet useful item to make.

We need everyone to bring what tools you can: solder, soldering gun/pencil, exacto knife, electrical tape, SWR meter, antenna analyzer, diag's, measuring tape/ruler, perminate marker (fine point is best), wire stripper, extension cord, and maybe even some finger nail polish (non-metallic).

Lee and Lora are going to bring some coax, and I've gotten the 300-Ohm ladder line, however, everyone needs to bring their own coax connector so it'll fit your radio.

### Christmas Dinner

Louise has booked our room at the Western Sizzler, located on Kearney just West of Glenstone, on the South side of the street. SANTA WILL BE THERE! So, if you have kids under 10 years old, please contact Lora Smith and let her know their age and sex. Those of us 10 or over will be lucky to get a candy cane (Santa knows us all too well!), but don't let that stop you from bringing the little ones!

### Christmas Donation

Our club membership has continued its multi-year decline. We have just under 50 members this year, down from something on the order of 90 last year, which was itself a decline from 2000. For this reason the board feels we do not have the membership to sustain adopting an entire family this year. When doing so, you are completely responsible for bringing that family Christmas! Instead, we will donate our member's gifts to a larger organization, such as the Red Cross, or Marine Corps. Please bring your suggestions to the next meeting.

-- 73's Erik Weaver, n0ew (n0ew@arrl.net, 869-4947)

### SMARC Net Worth Report – 9/1/02 through 9/30/02

|                             |            |                     |            |
|-----------------------------|------------|---------------------|------------|
| Assets                      |            | Transfers           |            |
| Checking                    | \$481.36   | from Savings        | \$260.00   |
| Savings                     | \$2,929.27 | to Checking         | -\$260.00  |
| Total Assets                | \$3,410.63 | Expenses            |            |
| Communication Trailer Funds | \$2,375.00 | Insurance, Property | \$255.00   |
| Total Discretionary Funds   | \$1,035.63 | 146.640 Phone Line  | \$ 28.28   |
| Total Income                | \$0.00     | Total Expenses      | \$283.28   |
|                             |            | Overall Total =     | (\$283.28) |

SMARC Meeting Minutes for September 16th, 2002...

Members & Visitors Present:

WBØONM, HARMON, WILLIAM;  
W2RRX, HAVEL, JERRY;  
KCØKBL, RIFFLE, LANCE;  
K0GL; HIGINBOTHAM, DICK;  
N0MBW, CHAMBERS, BILL;

K0RFI, RAINS, MIKE;  
WØODY, MOORE, WOODIE;  
WØTLS, SHAFER, LEE;  
KB0VKV, BUCK, LOUISE;  
(GUEST) NASS, JOHN.

KC0KAV, KAPP, LARRY;  
NØEW, WEAVER, ERIK;  
KCØEPD, SMITH, LORA;  
K0OKN, FARRAR, CAROLYN;

Aug. Minutes:

August minutes were NOT approved because there was a problem with the emailing this month. Only two people present had seen them, so we did not vote to accept/reject the minutes or the financial report. This will take place at the next regular meeting on October 21st.

September Minutes:

To promote the upcoming Hamfest (Nov. 9th) we discussed giving away a small number of tickets via local radio morning shows. This will be explored to see if a radio station is interested.

Our Hamfest was written up in a News-Leader article in response to an early news release.

The Registration Form to obtain a table at this years Hamfest is to be included with the Oct. newsletter.

The idea of holding a Special Event Station at the Wilson Creek Battlefield was brought up, and this too will be pursued with a target date of Aug. 2003.

The idea of taking part with this year's JOTA (Jamberee On The Air) with the Scouts will be investigated.

What shall the club do for it's Christmas Donation? We need any member that has an idea as to who may be in need this year to bring this to our attention at the next meeting, or contact one of the board members. Suggestions were to donate to one of the educational clubs in town or discover if there is a needy kid who is a ham, but there were no ideas as how to go about finding this youngster.

There was some error in e-mailing the newsletter the week preceding the Sept. club meeting. Only two people received their newsletter of those present. The newsletter is to be re-sent following the meeting.

**NEXT MONTH**

In October we will host an antenna building project. We will construct "pocket" j-poles made from 300 ohm twinlead (TV antenna wire). If you have a soldering iron, please bring it, as well as any devices for measuring the effectiveness of the antennas built (field strength meter/antenna analyzer). The club is supplying the 300 ohm twinlead. Please bring your own coax connector, as well as anything else you may have to help with the construction (see page one for the list of suggestions).

Officer / Board Member positions are to be selected for 2003. The Nominating Committee is busy at work developing their list. If you have any ideas, or would like to serve, contact one of them (Ken Baremore, w0krb; Woodie Moore, w0ody; Michael Blake, n0nqw).

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**3.963 Every Sunday at 6:15 PM the Missouri Emergency Service Net meets.**

***Please join us!***

As my work schedule allows I will accept 2-Meter relays on the 146.91 (-) PL 162.2 repeater.  
Listen to this frequency on Sunday evenings prior to the Missouri Traffic net (5:45 pm) and the MESN.  
Erik, n0ew

## Member Interview... Lee Shafer, w0tls...

Lee holds an Extra Class license and his occupation is a computer programmer. He is also our club's Treasurer, perhaps the most under-rated job on the Board and one of the positions with the most responsibility! Lee is also organizing this November's Hamfest and doing a great job. Tables are still available. Please see the registration form in this newsletter or go to the club's web site for more information ([www.smarc.org](http://www.smarc.org)) and contact Lee if you can lend a hand. It is a very big job and everyone's help is needed and greatly appreciated. Lee has also helped the club and its members by volunteering as an examiner for FCC exams, and teaching classes to help new hams obtain their first license.

### WHEN DID YOU FIRST BECAME A HAM?

"1964, but there was a long period of time when I wasn't licensed. After my General ticket lapsed in 1974, I didn't get active in ham radio again until 1998."

### WHAT WAS YOUR FIRST RADIO?

"Knight Kit T-60 crystal controlled transmitter (60 watts output) that I built myself and a Hallicrafters SX-100 receiver that I still own."

### WERE YOU THE FIRST HAM IN YOUR FAMILY?

"In my immediate family, yes. But I have an uncle on my mother's side that was trained as an airborne radio operator in the USAF in the late 1950's who became a ham after his training."

### DID YOU HAVE AN ELMER?

"No. I learned by doing and reading anything I could find about ham radio."

### WHY DID YOU BECOME A HAM?

"I was always intrigued by the idea that a person could solder together a few resistors, capacitors, tubes, and coils and create something that could transmit and receive a message through the air; to places as near as the next house or as far as halfway around the world."

### WHAT IS YOUR PRIMARY MODE OF OPERATION?

"These days it has been VHF/UHF FM. But my primary interest has always been CW."

### WHAT IS YOUR MAJOR HAM INTERESTS?

"Operating CW mobile. Well, I guess I should say CW from a stationary vehicle. I'm not quite comfortable enough with dividing my attention between CW and controlling a moving vehicle. In the past, I've operated CW from my truck during my lunch hour when at work, but nowadays work has become a little too intense to allow me to take the time to make a really good CW contact."

### WHAT IS YOUR FAVORITE PAST HAM EVENT?

"It may sound strange, but my "favorite" event was helping out with communications when three tornados passed through Omaha, Nebraska one day in the early 1970's. I didn't do very much during that time, but I felt pretty good about being there with a 2 meter transceiver (a very primitive one by today's standards) and being able to support the disaster response activities."

### WHAT IS YOUR FAVORITE SMARC PAST HAM EVENT IS?

"The antenna parties. I like creating something tangible that serves a purpose."

### WHAT WAS YOUR MOST INTERESTING "HOME-BREW" PROJECT?

"When I was Novice, one of my contacts on 80 meters was picked up by an FCC monitoring station in Grand Island, Nebraska. In the Advisory Notice, it said I was heard on a "Measured frequency approximately 7410 kc/s." and "Presumed harmonic radiation. Potential source of interference." That's rather understated compared to some of the warnings from the FCC you hear about today, but at that time it scared the heck out of me. I didn't get back on the air again until I had built and tested a low pass filter to suppress any harmonics above 80 meters. I followed design specs I found in the ARRL Handbook which I guess worked pretty well since I never got another Advisory Notice from the FCC."

### WHAT IS YOUR MOST INTERESTING CONTACT?

"There have been many contacts that I thought were interesting, but I guess the one that surprised me the most was the one that introduced me to QRP operation. One night on 15 meters CW, I answered a CQ from KC7YTL in Victor, Montana. Tom didn't tell me what his rig was right away although we had traded RST reports of 549. After I sent my QTH, rig, antenna, and power (60 watts), he sent back that he was using a Wilderness Sierra running 1.5 watts. I could hardly believe that so little power could produce such a readable signal. That contact sparked an interest in low power operation that should me occupied for a long time."

Thanks Lee!

Lance kicked off our "Show & Tell" this evening. He brought two items along. Erik then followed with two home-brewed items.

The first item is made by Electric Radio and is a switching device which allows one to tune up while on the air without sending out a strong signal on the air. It will allow a seek signal to the antenna, something on the order of 500m watts, and the rest is diverted to a dummy load (not supplied). There are three SO-239 connections on the rear of this device: Transceiver, Dummy Load, and Antenna. This is especially nice with the tube rigs which need to be retuned when there is a change in operating frequency.

Oak Hills Research offers a 100 watt dummy load kit. It is rather small, measuring in at approximately 1.5 x 3 x 5 inches. Lance says it is a very easy kit to build. It is a dry dummy load. One solders together the supplied resistors and everything is placed inside the nice looking enclosure which comes with the kit.

Erik brought in a little code practice oscillator. This is a very simple design which uses a piezo alarm as the sounding device. Added was a LED which also lights as the key is depressed. There is a small variable resistor which allows one to change the volume, but there is no way to alter the frequency of the generated tone.

Following the schematic listed in the Aug. 2002 issue of QST Erik built a field strength meter. There were two lessons in building this little device: (1) Radio Shack is continuing to discontinue their inventory which ham radio enthusiasts need to build projects, and (2) wait until the next issue before building something out of QST, or independently double check the supplied schematics. They had the diodes improperly placed in the original diagram, and this was correct in the following issue. In this case the difference in the design was significant.

### Heil Sound Video

We watched a video entitled "The Science of Audio" by Bob Heil, k9eid. This was an interesting video and nearly everyone learned something from watching. Two things of special interest were seeing the curve representing our hearing, from which one can determine the proper frequencies to boost or cut in your station set up, and the demonstration that a 3dB gain is nearly impossible to hear. It is stated that 5 or 6 dB is where one will normally hear a noticeable change in sound level. Speaking of level, our ears are fairly flat when hearing sounds in the 120 dB level and have a very noticeable 'null' around 2K at the 70 to 80 dB level. This is why music sounds better loud – you hear more of it. In the video Bob Heil suggest one visit his web site as it has quite a bit of information contained on it which they are always updating.

<http://www.heilsound.com/>

Greene County ARES meets the 4th Wednesday of each month, 7 PM, at the Brentwood Library (just east of Glenstone & Seminole; 2214 South Brentwood, in the community room). Questions should be directed to Ken Baremore, Greene County ARES EC (w0krb@arrl.net). It's rewarding.

## 2002 Board Members ...

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Note: All board members may be reached by email at: ["theircall"@smarc.org](mailto:theircall@smarc.org) , except for Louise Buck.

### Public Welcome!

**Bring a friend or just  
drop by to see what  
we are all up to these  
days! Hope to see  
you at the next  
meeting!**

SMARCalling is a monthly newsletter published by and for the Southwest Missouri Amateur Radio Club, Inc. All submissions for publication must be received by the last day of the previous month. SMARCalling reserves the right to edit all submissions for spelling and, when necessary, length. All comments on SMARCalling may be made to [editor@smarc.org](mailto:editor@smarc.org) or by direct mail.

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