

# SMARCalling



March 2003

Volume 3

Issue 3

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

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

## *President's Corner . . .*

Regular Meeting  
7:00 PM at the  
American Red  
Cross Building  
1835 E.  
Chestnut, just  
East of  
Glenstone Ave.  
3rd Monday of  
Every Month

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March 17th  
Power Supply  
Conversion  
Dick, k0gl

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**Public  
Always  
Welcome!**

Hello everyone!

At this month's club meeting Dick, k0gl, will walk us through the steps of converting a salvaged computer power supply into a regulated power supply for your ham radio. This topic was discussed in the May 2002 issue of OST. Please read through this article to get a feel for this project.

Dick has a Power Point Presentation for us and will then walk us through the steps of making these modifications. He has done a lot of research for this project and it'll be really, really interesting! Oh yes, you may wish to brush up on your Ohm's Law, as that is important when figuring out these circuits.

**Caution: There is enough voltage and amperage  
found in a computer power supply to kill you!**

Next month, April 21st, our club meeting will involve antenna tuners. How they work, how to best tune them up, and other related topics will be discussed. We will also bring in a number of them, and allow those present to see the inner workings, which is always interesting!

We will use one or more of these to actually tune up some "strange things" such as a pair of metal folding chairs, or painting easels! Then Saturday May 10th at Evangel library our club is hosting the k0s, Kurt N. Sterba Strange Antenna Challenge Special Event Station. Starting concurrently will be a VE testing session for anyone wishing to obtain, or upgrade, a license.

See you at the meeting!

-73 de Erik, n0ew

### Upcoming Events – Write Them in Your Calendar Now & Come Play!

|              |                                                                                                                        |
|--------------|------------------------------------------------------------------------------------------------------------------------|
| March, 17th  | 7 PM SMARC Meeting: Converting a Power Supply                                                                          |
| April, 5th   | Joplin Hamfest                                                                                                         |
| April, 21st  | 7 PM SMARC Meeting: Using an Antenna Tuner                                                                             |
| May, 2nd-3rd | Lebanon Hamfest                                                                                                        |
| May, 10th    | Evangel Library, Spfd, k0s, Special Event Station,<br>"Kurt N .Sterba Strange Antenna Challenge"<br>VE Testing Session |
| June, 28-29  | Field Day 2003                                                                                                         |
| August, 10th | w0c, Wilson Creek Battlefield Special Event Station                                                                    |

*It's time for membership renewals! Please use the enclosed form to do so and bring it to this month's meeting or mail it to the club PO box. Thank you all for your support last year and in the coming year! Thanks to those that have already renewed, it helps!*

**January 2003, SMARC MINUTES****Attendance:**

Louise Buck, kb0vkv

Dick Higinbotham, k0gl

Erik Weaver, n0ew

Bill Chambers, n0mbw

Don McCroskey, wa0gvh

Jerry Havel, w2rrx

Woodie Moore, w0ody

Lee Shafer, w0tIs

Mike Rains, k0rfi

Lance Riffle, kc0kbl

Ken Baremore, w0krb

Skip Crane, ak0c

**Guests:**

Patrick Boyle, kc0jpb

**Meeting Discussion, Voting & Announcements:**

Previous Minutes, with noted correction to Secretary, and Treasurer's Report were accepted.

**Repeater Controller with a Digital Voice Recorder (DVR) has been Purchased**

We have received the new DVR board for our 91 repeater. Cost was just below \$1,000. Club trustee Michael Blake, n0nqw, has begun work to get this installed as quickly as possible. This is his #1 assignment, although he is quite busy at work too, he is making progress.

**91 Repeater Antenna**

Nothing new. The tower climbers await good enough weather to climb up 600 feet. The antenna remains at the tower site, available to them whenever they climb.

**Board Meeting Notes**

Field Day 2003 will be held at Lake Springfield. Lance Riffle, kc0kbl, is the chairman. Ern DeCamp has notified us we have been granted permission to camp in the park overnight. We need a small group of volunteers to get up before dawn and occupy the pavilion. The pavilion is always on a "first come, first served" basis, however, people are expected to be polite and share as needed.

**Amateur Radio Spectrum Protection Act of 2003 Introduced**

The Amateur Radio Spectrum Protection Act of 2003 has been introduced in the US House of Representatives. The measure is an ARRL legislative initiative. Florida Rep Michael Bilirakis filed the latest version of the bill, HR 713, on February 12. It has been referred to the House Committee on Energy and Commerce.

HR 713 is aimed at ensuring the availability of spectrum to Amateur Radio operators. It would protect existing Amateur Radio spectrum against reallocations to or sharing with other services unless the FCC provides "equivalent replacement spectrum" elsewhere.

The previous version of the Spectrum Protection Act attracted more than 50 cosponsors. An effort will be made to encourage additional House members to sign onto HR 713 as cosponsors. Additional details are on the ARRL Web site ([www.arrl.org](http://www.arrl.org)).

To help ensure this is well received by our congress, each of us should dust off our trusty-rusty ink pens and write a physical letter to our Senators and Representative. You can find the addresses you need at one this web site: <http://www.sos.state.mo.us/library/reference/feddocs/fedcong.asp>

**Websites of Interest:****Power Supply Conversion:**[www.qsl.net/vk4ba/projects/](http://www.qsl.net/vk4ba/projects/)**PSK-31:**[www.psk31.com](http://www.psk31.com)[www.arrl.org/tis/info/digital.html](http://www.arrl.org/tis/info/digital.html)[www.packetradio.com](http://www.packetradio.com)**Lance's PSK-31 Software Review:**[www.qsl.net/hamscope](http://www.qsl.net/hamscope)[www.qsl.net/ae4jy/winpsk.htm](http://www.qsl.net/ae4jy/winpsk.htm)[www.winpskse.com](http://www.winpskse.com)[www.digipan.net](http://www.digipan.net)[www.qsl.net/kc4elo/](http://www.qsl.net/kc4elo/)[www.qsl.net/winwarbler](http://www.qsl.net/winwarbler)[www.halpin.tomaatnet.nl/](http://www.halpin.tomaatnet.nl/)[dxfile.free.fr/dxpsk.htm#Smartpsk](http://dxfile.free.fr/dxpsk.htm#Smartpsk)[www.mixw.net](http://www.mixw.net)

**Micro Review of some PSK-31 Software Packages by Lance Riffle, kc0kbl**

**Hamscope** – This software package is freeware. In addition to PSK31, it also offers RTTY, CW, and Packet. I find it works well with RTTY. I have not played with it much on CW but it does work. I have not tried it on Packet. This package will allow you to monitor two signals. The author acknowledges that Hamscope is built upon the work of WinPSK. I find it an easy to use package. Get it at [www.qsl.net/hamscope](http://www.qsl.net/hamscope)

**WinPSK** – This is a freeware package. It is a basic package on offers PSK31 only. Simple packages are a plus when beginning. Although basic, it includes macro buttons. Macro buttons lets you set up canned sequences to transmit with the touch of a button. Standard macros include routines for calling CQ, BTU, End of Call, Brag Files, and others. Honestly, I had a little trouble with WinPSK. I am sure it was just me. You can get it at [www.qsl.net/ae4jy/winpsk.htm](http://www.qsl.net/ae4jy/winpsk.htm)

**WinPSKse** – This is another freeware package. It seems to me to sit in-between WinPSK and Hamscope. It has a few more features than WinPSK including the ability to monitor 2 channels like Hamscope but it only does PSK. Find it at [www.winpskse.com](http://www.winpskse.com)

**DigiPan** – This is another freeware package. It is also a basic package and only offers PSK31 modes. It also seems to be a very popular package. It has a clean, uncluttered look on the screen in my opinion. Works well. Has a couple of Macro buttons as well. Find it at [www.digipan.net](http://www.digipan.net)

**Zakanaka** – And another freeware package. Not as popular as some of the above, it is a basic program with a single receive and transmit widow. I did try it once but my advice is to find something you like and learn it well. If you get board with it try something else. You can find Zakanaka at [www.qsl.net/kc4elo/](http://www.qsl.net/kc4elo/)

**WinWarbler** – Yet another freeware package. (We hams are either really lucky or PSK31 software is really easy to write or both). WinWarbler raises the bar just a bit by allowing you to monitor 3 channels at once. It also does RTTY. I have not tried this package but it has a good reputation from what I have heard. You can get it at [www.qsl.net/winwarbler](http://www.qsl.net/winwarbler)

**PSKDeluxe** – And yet another freeware package. This is a deluxe package in that it monitors up to 20 channels at a time. It works PSK modes only. If you are looking to grab the next CQ and/or perhaps work a contest, this may be the package for you. I find it a little harder to work however than say Hamscope. That's just my inexperience showing. I am sure that packages such as PSKDeluxe will be your pick if you really get into it. Larger monitors are a plus with this software. Get it at [www.halpin.tomaatnet.nl/](http://www.halpin.tomaatnet.nl/)

**Treasurer's Report as of February 28, 2003**

|                            |            | Expenses            |          |                         |              |
|----------------------------|------------|---------------------|----------|-------------------------|--------------|
| Assests                    |            | Bank Charge         | \$0.00   | TOTAL INCOME            | \$ 250.56    |
| Checking                   | \$ 761.73  | Newsletter          |          |                         |              |
| Savings                    | \$3,730.71 | printing            | \$ 8.00  | TOTAL EXPENSES          | \$1,348.22   |
| TOTAL ASSETS               | \$4,492.44 | sales tax           | \$ 0.00  |                         |              |
| Income                     |            | stamps              | \$ 0.00  |                         |              |
| Needy Family Donation      | \$ 20.00   | Liability Insurance | \$325.00 | (INCOME) – (EXPENSES) = | (\$1,097.66) |
| EBay Sale – Grid Dip Meter | \$ 40.56   | Repeater Equipment  | \$987.00 |                         |              |
| SMARC Dues                 | \$ 190.00  | 146.640 Phone Line  | \$ 28.22 |                         |              |



Year 2003  
SMARC MEMBERSHIP APPLICATION  
(Southwest Missouri Amateur Radio Club)  
P.O. Box 11363  
Springfield, MO 65808

Name \_\_\_\_\_ Call \_\_\_\_\_ Date \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Home Phone \_\_\_\_\_ (Other Phone \_\_\_\_\_)  
License Class \_\_\_\_\_ or \_\_\_\_\_ Associate member (no license)  
Email address \_\_\_\_\_  
Sponsor (if any) \_\_\_\_\_

Check membership level below:

\_\_\_\_\_ Single membership is \$25.00 per year

\_\_\_\_\_ Family membership is \$35.00 per year  
(family members in the same home)

Only for 1st-time membership  
joining after July 1<sup>st</sup>:

\_\_\_\_\_ \$12.50 Single

\_\_\_\_\_ \$17.50 Family

Family members who are licensed amateurs

Name:

Call:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Would you prefer the club newsletters sent by:

\_\_\_\_\_ US Mail or/and \_\_\_\_\_ Email PDF \_\_\_\_\_ I have text only Email

I am \_\_\_\_\_ I am NOT \_\_\_\_\_ an ARRL Member currently.

I would like to have my name shared with the various Emergency Preparedness groups in this area. \_\_\_\_\_ Yes \_\_\_\_\_ No

Please bring (or mail) this application form to a monthly meeting and give to the club treasurer/secretary. Applications must be accompanied by payment of annual dues.

I would like to donate additional funds for: Repeater Maintenance \$ \_\_\_\_\_  
PR/Educational Efforts \$ \_\_\_\_\_

New memberships are granted after review by the board.

**SmartPSK** – And still free, SmartPSK is similar to PSKDeluxe in that it can monitor up to 25 channels. I think it is a little easier to follow the multiple QSO's on SmartPSK than PSKDeluxe but found it a bit harder to set up. In any case, this program really benefits from a larger screen. The author of this program also has dual channel program called DXPSK but I am not sure of the download site. SmartPSK can be found at: [dxfile.free.fr/dxpsk.htm#Smartpsk](http://dxfile.free.fr/dxpsk.htm#Smartpsk)

**MixW** – MixW is shareware package. It costs \$50. It is very popular for good reason. It supports SSB, AM, FM, CW, BPSK31, QPSK31, FSK31, RTTY, Packet (HF/VHF), Pactor (RX only), AMTOR (FEC), MFSK, Hellschreiber, Throb, Fax (RX only), SSTV, MT63. It allows you to control several different antenna rotors. You can even record you own voice for playback in phone mode. If there is anything MixW doesn't do, they are probably working on it. If you like to tune across the dial and sample all the different modes, you may want to purchase this product. Don't buy it just for the PSK though. It's not worth it. MixW's primary benefit is that it allows switch modes without switching software and almost automatic logging. Find it a [www.mixw.net](http://www.mixw.net)

Hope that gives you an idea of available software for PSK31. All packages require some setup. If you have trouble getting one package to work, don't labor over it. Sometimes another program will *wake up* in a configuration that works for you and/or may be easier to set up. Help files vary from program to program but are usually a good source of both specific software and general PSK31 information. Have fun! – *Lance Riffle, kc0kbl*

Thanks Lance for those great reviews! This only leaves me about half a page to fill in this month to complete the newsletter! ;^D

Bill Besore, w0wb, passed along an interesting piece of software. This allows you to save a variety of software profiles, or set ups, required by your various programs. One of the problems that at least Lance and Erik have had, they believe, are sue to the configuration settings changing from one use to the next use of the software. Both have noted this occurring with their PSK-31 setups. Sometimes one piece of software works, the next time the second one works. Sometimes it depends which radio you are using. It can be frustrating.

"The program Quick Mix will allow you to save files of your (sound) card settings so you can load them whenever you start up a different sound card application. Once saved using a name, like "WINPSK Sound Card Settings" the file can be reloaded quickly and easily. Anyone who is going to work PSK CW or RTTY or SSTV using sound card programs needs this handy tool." [www.msaxon.com/quickmix/](http://www.msaxon.com/quickmix/) – *Bill Besore, w0wb*

For those of you who missed our meeting last month, it was a lot of fun and very interesting. I (n0ew) gave a Power Point Presentation on the building of the RASCAL interface kit, and Dick, k0gl, and Lance, kc0kbl, gave a very effective demonstration of actually using PSK-31 using a number of software packages. It was very informative. They spoke with another station as part of their demo, and were able to answer many questions regarding actual operation.

Essentially, you only need a few pieces of equipment to run PSK-31. A transceiver, computer (100+ MHz) that has a sound card, and an interface between the rig and PC. This "interface" can be as simple as "audio coupling" – holding the microphone to the speakers, or as complex as building a kit that electrically isolates the computer from the rig (a good idea) by using transformers for the two audio circuits, and optical isolators in the PTT circuit. – *Erik, n0ew*

## 2002 Board Members ...

### Southwest Missouri Amateur Radio Club

P.O. Box 11363  
Springfield, MO  
65808

PHONE:  
(417)886-4152

E-MAIL:  
[smarc@smarc.org](mailto:smarc@smarc.org)

E-MAIL Editor:  
[Editor@smarc.org](mailto:Editor@smarc.org)

We're on the Web!  
[www.smarc.org](http://www.smarc.org)

Public Welcome!

**PRESIDENT:**  
Erik Weaver, NOEW .....869-4947

**VICE\_PRESIDENT:**  
Lance Riffle, KC0KBL.....890-5856

**SECRETARY:**  
Chris Smith, KCOGOX.....883-6169

**TREASURER:**  
Lee Shafer, WOTLS .....823-8766

**PUBLIC RELATIONS DIRECTOR:**  
Lora Smith, KCOEPD.....886-4152

**DIRECTOR-AT-LARGE:**  
Dick Higinbotham, KOGL,725-5929

**DIRECTOR-AT-LARGE:**  
Woodie Moore, WOODY.....883-2248

All board members may be reached by email at:  
["theircall"@smarc.org](mailto:theircall@smarc.org)

#### Some Useful Web Sites

FCC ULS Info: <http://wireless.fcc.gov/uls/index.html>

Practice Tests: <http://www.qrz.com/p/testing.pl>

License Renewals: <http://www.qrz.com/i/renewals.html>

New Hams - Search for Your 1st Listing! [http://www.qrz.com/new\\_hams.html](http://www.qrz.com/new_hams.html)

Congress: <http://www.sos.state.mo.us/library/reference/feddocs/fedcong.asp>



*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 preceding 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.

SMARC  
P.O. Box 11363  
Springfield, MO  
65808