



The MAARC EXITER

Editor: Joshua Beeson, N9GQA

MAARC, PO BOX 1441 MUNCIE, INDIANA 47308

OCTOBER 2006

MAARC Officers:

- President:
- Gary Lee, KB9ZUV
- KB9ZUV@ARRL.NET
- Vice President:
- Robert Ullman, KC9CQZ
- KC9CQZ@ARRL.NET
- Secretary:
- Glen McIntire, W9GLM
- gmcin43211@comcast.net
- Treasurer:
- Jeff Neal, KA9HIJ
- KA9HIJ@ARRL.NET
- Station Trustee:
- Sonny McCoy, WA9DOL
- Membership Information:
- Membership in the Muncie Area Amateur Radio Club (MAARC) is open to all Amateurs. Applications should be submitted to the club secretary. The purpose of MAARC is to bring together, for their mutual benefit, persons interested in the various areas of the Amateur Radio Service. Any interested person is cordially invited to attend one or more of our regularly scheduled meetings. We meet on the third Sunday of the month at the Maring-Hunt school library in Muncie at 2 PM. October's meeting will be on October 15, 2006 at 2 PM.
- Please send general club correspondence to:
- MAARC President
- PO Box 1441
- Muncie, IN 47308

Club Officers Election

It is that time again,...election time! The election only has one contested position, that of station trustee. The contest is between incumbent Sonny McCoy, WA9DOL and Bill Walker, N9RI. You should have already received your ballot in the mail if you are a paid member of the club. We are still looking for a nominee who will accept the treasurer position.

For the position of President, Gary Lee, KB9ZUV, will remain in office.

For the position of Vice-President, Skip Ullman, KC9CQZ, will remain in office.

For the position of Secretary, Jim McDonald, KB9LEI, will be replacing Glen McIntire, W9GLM. Thanks for your work last year Glen!

Thanks to Jeff Neal, KA9HIJ, for his great work as the club treasurer. He does not want to continue in this position so it is imperative

that we find a club member who is willing to accept nomination to the treasurer position before the next club meeting. If you know of anyone or wish to take the position yourself please contact Gary Lee, KB9ZUV, right away.

Be sure to bring your ballot to the club meeting or mail it in so it will be received before the club meeting. If you did not receive your ballot contact Skip Ullman, KC9CQZ, at the club meeting about it and he will make sure you can vote. 73, Josh

Indiana Radio Club Council Fall Meeting

IRCC Fall 2006 Meeting Announcement: October 14, 2006 2P-4P

Where: Indianapolis Training Center 2820 N. Meridian, Indianapolis, IN Meeting Room on 13TH floor Talk-in available on 443.75 PL100 Escort available from lobby to meeting room.

Hosted by Indianapolis Radio Club— Dave Miller K9RTT— Site Host

Be sure to attend if you are available. The council does many things to promote Indiana Amateur Radio Clubs and needs help to do this.

M3 Electronics Semiconductor Review

By: Dave Vanhorn, KC6ETE

Anyone with a junk box, or a wall of parts, can use this little gizmo!

Pluses: Very nice assembly instructions

Minuses: 1% resistor color codes were impossible to read reliably, a meter was needed to sort them.

M3 Electronics,
<http://www.m3electronix.com/>

makes a cute little semiconductor analyzer that is a worthwhile addition to any bench.

This is a "one net" project, in that I started it at 9PM Sunday night while the net was starting up, and finished it before the net was done.

The kit consists of an LCD display, a PIC processor, three chips, a transistor, and a few other parts, on a professionally done two layer PCB with solder mask and silkscreen. I got the optional enclosure. Assembly went so well that I have very little to say. The instructions couldn't be clearer, and I had no issues other than reading the 1% resistors, because of the paints that the resistor vendor used. Since the values were widely spread, 100 ohm, 1K, 10k, and 100k, it was dead easy to sort them with a meter. Once assembled, there is a short and easy calibration procedure, which was completed in about 30 seconds. Then I put it to the test. First, a signal diode using the outer two of the three test leads. The M3 analyzer correctly identified it no matter which direction I tried. It read off the forward

voltage at a forward current of 10mA and 0.77mA, and reverse leakage at 5.00 volts. It draws the schematic symbol of the diode in the direction that the diode is connected, which is a cute feature if you have trouble remembering which is A and which is K. Schottky diodes correctly identified, with much lower forward voltages as you'd expect. UV LEDs showed up with a forward voltage of 3.3V, and Infrared LEDs at 1.00V I didn't have any low voltage zener diodes, so I couldn't test that. Bipolar transistors were correctly identified as NPN or PNP, Silicon or Germanium. Hfe (gain) read out correctly at a measured current, as well as Vbe at a measured current, and Io(leakage current), and each lead correctly identified per test lead. Next I tried a 2N7000 logic level mosfet. This tran-

The President's Corner

FROM THE LITTLE BROWN SHACK OUT BACK

Well, it's been an eventful month. First, I hope you all received your ballots for club elections this month. After all, this is your club. Second, the autopatch has been returned and installed. My thanks to N9RI and KA9HIJ for installing and testing the autopatch. It was a long night for both.

This month we have a full agenda. First are elections, then the Christmas party, repeater etiquette and preparations for the New Year. At this time, I would like to remind everyone that articles for the newsletter are always welcome. They can be emailed to Josh,



Gary Lee, KB9ZUV
President

N9GQA at N9GQA@ARRL.NET.

There is another technician licensing class in progress at this time. Once again, the Church of Jesus Christ of Latter Day Saints has another group of prospective hams. What a find this group has been! We have already gained a few new members and hopefully this trend will continue.

You may have noticed a new net on Monday nights. After consultation

with the executive committee, it was agreed to host the Muncie Area LDS Emergency Communications Net on the 146.73 repeater on Monday nights at 9PM. We welcome this new net and hope it will encourage the new hams in this group to get on the air more often.

Finally, the club has received a generous donation from Barbara Carter, Dr. Dave Doiron's relative in charge of his estate. This donation was on behalf of Dr. Dave Doi-

ron, WA1MKE, estate. As you may know, the club assisted Dave's sister, Barbara Carter, with the sale of Amateur Radio related items from the estate. Over \$5000 have been transferred to the estate as of this writing. Barbara Carter has graciously agreed to donate the remainder of the items to the club in recognition of our efforts and Dr. Dave's dedication to the club and Amateur Radio in general. I am writing a letter to her in thanks on behalf of the club. 73 to Dr. Dave, RIP, and save us

sistor is used in many designs where a TTL or CMOS chip needs to drive a relay, like in the KPC-3 TNC. I connected the leads without any thought as to which might be which, and the meter correctly identified gate, drain, and source, and called the device out as an Nmos transistor with V_{to} of 2.04V for a drain current of 2.7mA

Next up, an MPF102 Jfet, which was identified as an NJFET, with I_d of 8.14mA, R_{ds} of 146 ohms, and V_{to} of -2.39V, and of course all three leads identified properly. Next, a 2N4401 identified as PNP silicon, H_{fe} of 164 at 2.51mA, V_{be} of 0.63V at 15.2uA, and I_o of 0.0uA Trying something a little bigger, an NDB6020P PmosFet read out as PMOS V_{to} -0.8V at 3.70mA Ok, I'm not catching any mistakes, so I head for my Zetex drawer. Zetex makes some VERY unusual transistors. To make a long story short, it correctly identified every transistor or diode I could throw at it. What this device does not do, is identify whether this is an audio or microwave transistor, or anything in between, but it does give you enough information to get a good handle on what the device is, at least in general terms. Overall, a very well done little box. The optional enclosure was well worth it, and the kit fits nicely into it. A little double-stick tape would be a good idea to secure the battery, but this was not provided with the kit. Overall, grade B+ A good device for sorting out and identifying two and three legged whatsits.

For Sale/Wanted List

I still have lots of items for sale. Call me or email me at N9GQA@ARRL.NET Here is a partial list and I will get a complete list posted on the website soon. (765)212-9904

1. ADI AR247 220mhz Mobile rig.
2. Yaesu FT-847 HF/6/2/440 rig w/ Yaseu desk mike, original handmike and operating manual.
3. (2) Astron Power Supplies
4. B+W Folded All Band Dipole
5. 2 meter Ringo Ranger
6. Yaseu GS800 Rotor Control w/cable
7. Lots of hardline with connectors.

For Sale/Wanted List

It's free so contact me at N9GQA@ARRL.NET if you have anything you want to list before next month's newsletter deadline which is November 13, 2006.

See Dave, WA1MKE list's of equipment on the club website at WWW.WB9HXG.NET.

Editor's

Greetings to my fellow club members! Please attend the club meeting and exercise your right to vote and express your opinion of which direction the club will go in the New Year. Also make sure you exercise your right to vote in the local, state, and federal elections too.



Josh Beeson, N9GQA

The new look for the website is not complete yet but I am

Notes

getting closer everyday and am hopeful that it will be online before Nov. Meeting. I do need articles and photos for the newsletter and website so please help me out and send me some articles, photos, or ideas. The deadline for next month's newsletter is November 13, 2006. Thanks and 73's, Josh Beeson, N9GQA

MAARC
P.O. Box 1441
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some DX. Gary Lee, KB9ZUV.

Hope to see everyone at the
meeting this month!

Muncie Area Amateur Radio Club

