



FEEDBACK

The Official Newsletter of the Georgian Bay Amateur Radio Club



October 2023

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Roughing It in Style! Dan VA3DNY

In September, Doug McDougall VE3DGY hosted an outdoor mini field day style event at his property just outside of Dornoch. The plan was for everyone to meet at his driveway and he would use

an ATV to shuttle us and the equipment back through the trails to the site. I arrived a bit late and found several vehicles that I recognized but no sign of people anywhere. Doug mentioned that he would be monitoring VHF simplex, so I tried calling on my HT but didn't get a reply. I could have walked in to the site but I had no idea which trail or direction to travel! The weather was really nice, so I decided to sit on my truck's tailgate and wait for a bit.

Luckily, I didn't have to wait long. Doug showed up in a side by side ATV and let me climb aboard for the ride out. What a fun ride it was! We bounced along the trails that wound through the forested property to where the rest of the group were busy setting up stations.



The first station that I saw was covered in a tarp lean-to for shelter. It was a very comfortable and organized arrangement by John Corby VA3KOT. He told me that it was his regular setup that he uses for his POTA activations. I believe it was a Yaesu FT891 with battery power and a wire vertical

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2023/ 2024 Executive

President Marvin VE3VCG

Vice-President..... Tex VE3USI

Treasurer.....Doug VE3DGY

Secretary..... Dan VA3DNY

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antenna tossed over a tree branch. John operated with CW for the day, and managed to log the very first QSO of our event.

Just down a few feet and across the trail was the next station being set up. It was Doug's Icom 7300 on battery and attached to a dipole fed by ladder line to an external tuner. Someone had brought a compact folding table to make operating a lot more comfortable. Tom VA3TS made the final



connections and programmed the radio to use the microphone up or down button to transmit a continuous CW tone making it easier to tune. Bobby VE3PAV and Tom took turns operating and logging while making some SSB contacts.

A little further down the trail was a fine example of how to be comfortable during an outdoor activation. We have all heard of an "armchair QSO" but our host Doug took it to the next level! After tossing his end fed antenna into the trees, he strung up a hammock and settled right in. He sure looked relaxed swaying in the breeze making SSB contacts with his KX2. I'm not even sure how he stayed awake because the only movement was his thumb on the PTT once in a while. Talk about hard work! Hi Hi. Frank VA3GUF took a few pictures (thank you) to be submitted as evidence in the newsletter.

Adam VE3FP called on VHF to ask for directions, and Doug headed off in the ATV to meet him. Apparently, Adam had been riding the trails on his mountain bike looking for us, but must have zigged when he should have zagged a couple of times. He said that he even found a lake somewhere, but wasn't sure where to find our site.

All of that fresh air and fun made us hungry, and Doug provided everyone with delicious handcrafted sandwiches for lunch. Now that I think about it though, the packaging looked suspiciously like it was from a grocery store deli...either way they sure hit the spot!

In total there were 8 of us at the event, plus our impromptu mascot Skipper. Carl VE3APY brought his happy dog with him, and Skipper got lots of attention from all of us. Here is the list of attendees: Adam VE3FP, Bobby VE3PAV, Carl VE3APY, Dan VA3DNY, Doug VE3DGY, Frank VA3GUF, John VA3KOT, and Tom VA3TS.



All too soon, it was time to pack up and head home. Once again Doug was our shuttle bus driver making a couple of trips back to our vehicles in the ATV. Adam chose to ride out on his mountain bike rather than the ATV and he still managed to get back before us. It was an enjoyable and



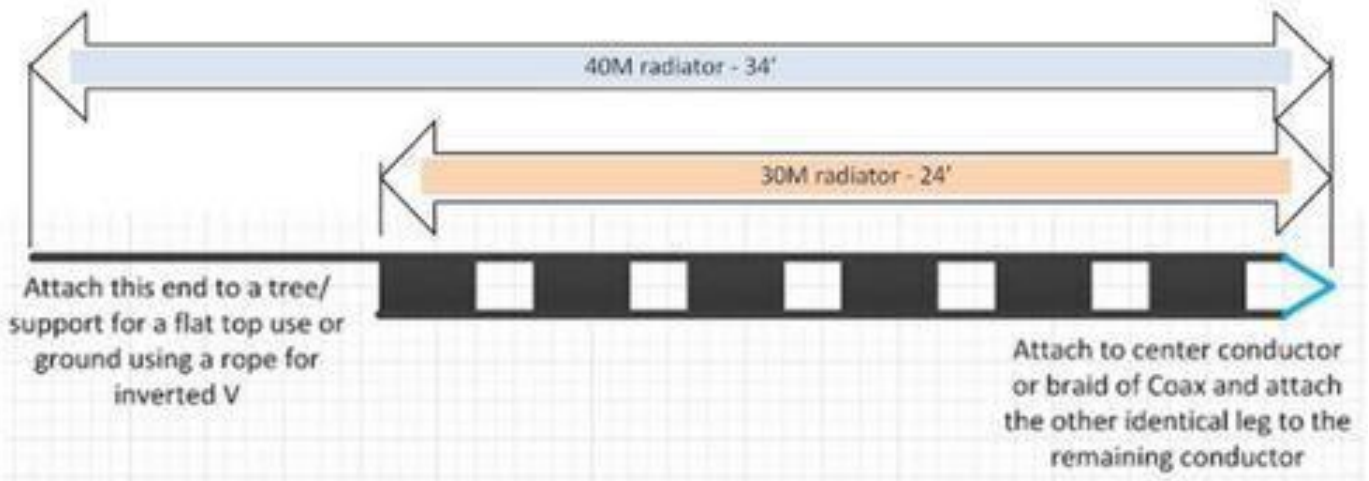
successful event for all of us. Thank you Doug for your hospitality and all the effort you put towards our mini field day! Dan Mills VA3DNY

Ladder Line Antenna Mike VE3MKX



A dual band HF wire antenna made from ladder line where you have one of the balanced wires for one band and another for a higher band below it. You simply measure and get the 2 wires of proper length. Similar to the images below. Then plug it right into the back of your open wire terminals of your tuner. There, of course are options to connect to the feedline and tuner, via a balun or choke. Whatever you decide on, this should make a lightweight option for POTA or portable operations.

GBARC Mini Field Day September 2023



**Join us for our weekly get together
"On the Air"**

The club meets each Wednesday evening on VE3OSR 146.940 T97.4 hz at 7:30 pm local time, and on 3.783 Mhz +/- immediately following.

Net Control Stations (and Roster)

VA3MFO Jim		Nov 15th
VE3RQY Greg		Nov 22nd
VE3BQM Bernie	Oct 18th	Nov 29th
VE3VCG Marvin	Oct 25th	Dec 6th
VE3OZW Richard	Nov 1st	Dec 13th
VA3TS Tom	Nov 8th	Dec 20th





Minutes of Meeting

By Dan VA3DNY

GEORGIAN BAY AMATEUR RADIO CLUB

Minutes of the Monthly Club Meeting

26th of Sept 2023

Call to order by Doug VE3DGY at 7:00 PM

ATTENDANCE

Executive:

Dan Mills VA3DNY Secretary, Doug McDougall VE3DGY Treasurer, Tex Brown VE3USI Vice President

Members:

Tom St. Amand VA3TS, Adam Karasinski VE3FP, Bobby Pavlovic VE3PAV, Philip deKat VE3DPB, Dave Newcombe VE3WI, Mary Watson VA3ILT, Jim Reeves VE3JMD, Greg Laroque VE3RQY, Bernie Monderie VE3BQM, David Rosenfeld VE3BAK

QUORUM: Yes

TECH TALK:

Doug (VE3DGY) HF Portable with less than 3 pounds.

Doug presented his full setup for portable QRP operation. It was centred around a KX2 with an internal battery and tuner. The internal battery will allow him to operate for 3 to 4 hours at 10W SSB. An external battery can be used if a longer run time is needed.

For an antenna, he uses a lightweight end fed wire that attaches to an unun and it keeps within range of the internal tuner. Doug deploys the antenna by throwing an arborist's sandbag over a tree branch. With a good toss, he can be set up and operating in about 5 minutes.

Dave (VE3WI) Recent electronic projects completed.

Dave presented 3 of his recent projects. One was an inline AC Volt/Ammeter that was purchased as a digital display panel and needed to be wired into a power cable. It works well and Dave plans to build it into a more waterproof box and possibly use it to monitor generator loads at field day.

The second item was an antenna autotuner purchased as a board and display only. He built it into a small project box and added all of the required connections and switches. The tuner is designed by N7DDC and can tune up to 4:1 or 5:1 with a maximum power of 100W SSB.

His last project presented was an SDR receiver based on a single IC that integrates complete functions from antenna input to audio output. The unit covers 100 kHz to 30 MHz and uses a touch screen. The main board comes fully assembled and the files for a 3D printed case is available from Tindy.com

PREVIOUS MINUTES:

Minutes of the June Meeting were published in the newsletter. The minutes were accepted as written. (motion: Dave VE3WI, second: Adam VE3FP)



TREASURER'S REPORT:

Doug VE3DGY presented the financial report.

The main transactions for the month comprised of a payment of \$130.00 for the Field Day dinner, bank fees, a deposit for 3 memberships, and a deposit of \$150.00 from the sale of donated equipment organized by Jim Reeves VE3JMD.

The closing balance for the month was \$xxxx.00

The treasurer's report was approved.

(motion: Tex VE3USI, second: Philip VE3DPB)

OLD BUSINESS:

Bernie VE3BQM now has the portable repeater at his QTH if needed.

Doug VE3DGY has updated the club information on QRZ.com.

There was continued interest by some members in placing an order for GBARC hats and shirts. Frank VA3GUF volunteered to do some research for an order at RAM Trophies and will report back. Frank was absent from the Sept meeting so we will carry this forward until October.

Doug VE3DGY will proceed to design and place an order for club business/QSL cards(1000 cards for \$99 expected). Still in process as of this meeting.

Dave VE3WI will bring tickets to be used for the 50/50 draws at each meeting going forward. A vote to keep the prices for tickets at \$2 each or 3 for \$5 was passed.

NEW BUSINESS:

A vote was passed for the club to send flowers (\$100) and a card signed by all in attendance to Maureen VE3MIO after hearing about her health. Doug VE3DGY will make the arrangements.

Jim VE3JMD along with help from Dave VE3WI and Marvin VE3VCG have been collecting, testing, and selling donated equipment and presented \$150 to each of the GBARC and Port Elgin clubs. Jim and Dave also set up a table of items still for sale so that we could purchase anything we liked.

There was an MFJ antenna analyzer and the club voted to keep it for use at field day etc rather than selling it. It will be stored with the portable repeater at Bernie's QTH.

There is a new net controller for the Wednesday evening net. Jim VA3MFO has added his name to the list. Also, Greg VE3RQY will be returning to the net control roster as well.

There was a discussion about Operation Dark Skies taking place on October 14th. This is when data will be collected about propagation during an eclipse. Operators are requested to register prior to the day and provide signal reports over the span of the eclipse. Not enough members were interested enough to plan a club event for it.

Bernie VE3BQM proposed a club project where anyone interested will build a tape measure yagi antenna that could be used for the next fox hunt. It was suggested to add it to the tech talk list and have some completed ones brought in as examples.

A design will be picked and plans handed out. A time will be set at an upcoming meeting for everyone to bring in their parts and build them at together.

GBARC is having its 50th Anniversary and suggestions were made for possible events. Bobby VE3PAV suggested an on-air event for the anniversary. It was decided to try to get a special event callsign and also use it for multiple occasions (over the anniversary year) such as the Ontario QSO Party etc.

A vote was passed that Dave VE3WI will proceed to get a callsign arranged and Doug VE3DGY will look into advertising it in QST, Ontars etc. Tom VA3TS suggested that everyone should consider designing a QSL or EQSL card for the anniversary and we could make it a club contest.

Tex VE3USI asked the group about the date and location for the Christmas Luncheon. A vote was passed to hold it at Elsie's Diner on December 9th. Tex will begin to make the arrangements.



Meeting **Adjourned** at 9:50 PM
(motion: Bernie VE3BQM, second: Doug VE3DGY)

November Meeting Agenda

TECH TALK: Richard Osborne VE3OZW - 3D printing.

PREVIOUS MINUTES: Secretary Dan VA3DNY

TREASURER'S REPORT: Treasurer Doug VE3DGY

OLD BUSINESS: Business/QSL cards, Hats & Shirts for interested members, GBARC 50th Anniversary.

NEW BUSINESS: TBD

ADJOURNMENT

Interesting Websites

Random Nerd Tutorials helps makers, hobbyists, and engineers build electronics projects

<https://randomnerdtutorials.com/>

Raspberry Pi HamClock

<https://www.tomshardware.com/news/this-raspberry-pi-hamclock-is-perfect-for-amateur-radio-enthusiasts>

Interesting AI to remove noise

<https://ournetplace.com/rm-noise/>

Links from Richard VE3OZW

[Forums](#)

THINGS YOU SAY AFTER 50

1. Where the h*** is my phone?
2. How did I get this bruise?
3. That isn't my password either? WTH!?
4. How do they expect you to read this small print?
5. Where did I put my glasses?
6. I don't care if it doesn't look fashionable, it's comfortable!
7. Who the heck is calling at 9:30pm??
8. Does anyone say please and thank you anymore?
9. Geez, how do you throw your body out of whack just sleeping wrong?? WTH?
10. This scale can't be right!!
11. WTH is wrong with people nowadays??
12. Why did I come into this room?

Christmas Luncheon 2023 At Elsie's restaurant, 9th December 1 pm [Directions](#)

Turkey dinner \$19.99 Dark and white meat, mashed potatoes, stuffing, cranberry sauce, seasonal veg. and gravy.

Ham dinner \$23.99

Honey glazed ham, mashed potatoes, seasonal veg., corn bread, brown mustard sauce.

Dessert \$3.99 piece of apple or pumpkin with whipped cream.

\$5.99 apple crumble small.

Or you may order off the menu.

Please RSVP me at ve3usi "at" gmail "dot" com with your choice and number in you party by 20th of Nov. so I can give Elsie's a heads up.

Thanks Tex VE3USI



QCX Rig by Don VE3IDS



In 2017 a new QRP rig in kit form appeared and was an immediate hit. It is called the QCX. It was designed, kitted and sold by QRP Labs aka Hans Summers G0UPL. Since then, it has been



superseded by the QCX+ and the QCX mini. They are single band 5 watt CW only rigs with full band coverage, digital display, built in memory keyer, dual VFOs, built in alignment equipment, 200 Hz filter with no ringing, a super hot receiver, a receive and transmit CW decoder that actually works, and many more features for \$55 USD. An amazing bargain. To date there have been more than 20,000 kits sold.

I built my first one, a QCX original version and housed it in a canned ham tin for fun. It is my true "ham radio" I have built two QCX+ rigs for a friend recently. If you are wanting to try your hand at building, this is a good choice. The build and operating manuals are amazing. They are full colour and step by step and put the Heathkit manuals to shame and they were really good! Hans sells nice aluminum cases to fit them at a really good price as well. Here are a few pics of what you get in the box and what they look like during the build.



If you take the plunge, there is lots of support on the QRP Labs forum and I can offer help or advice if you get into a tough spot.



73 and happy building! Don ve3ids

<https://qrp-labs.com/qcxp.html>

Letters to the Editor

Wind Profiler Network (O-Q VHF Net) Data Bernie VE3BQM

I was at the Negro Creek <https://photos.app.goo.gl/3VEzfqpy7AZ2kBEp9> antenna site again yesterday, it was raining so it was a quick take pictures and see my photos, did a bit of research and found 10 more sites like it. The ten profilers have been installed and operated over the past 9 years primarily in southern Ontario, I came across this site at Negro Creek many years ago by luck on a day trip, like all hams we look for shiny antennas, I found this site but could not find many that knew what it did making this a very well hidden project. [Google Map](#)



[Tech Report](#)

You see, wire telegraph is a kind of a very, very long cat. You pull his tail in New York and his head is meowing in Los Angeles. Do you understand this? And radio operates exactly the same way: you send signals here, they receive them there. The only difference is that there is no cat.

Albert Einstein

John Corby, VA3KOT HamRadioOutsideTheBox.ca



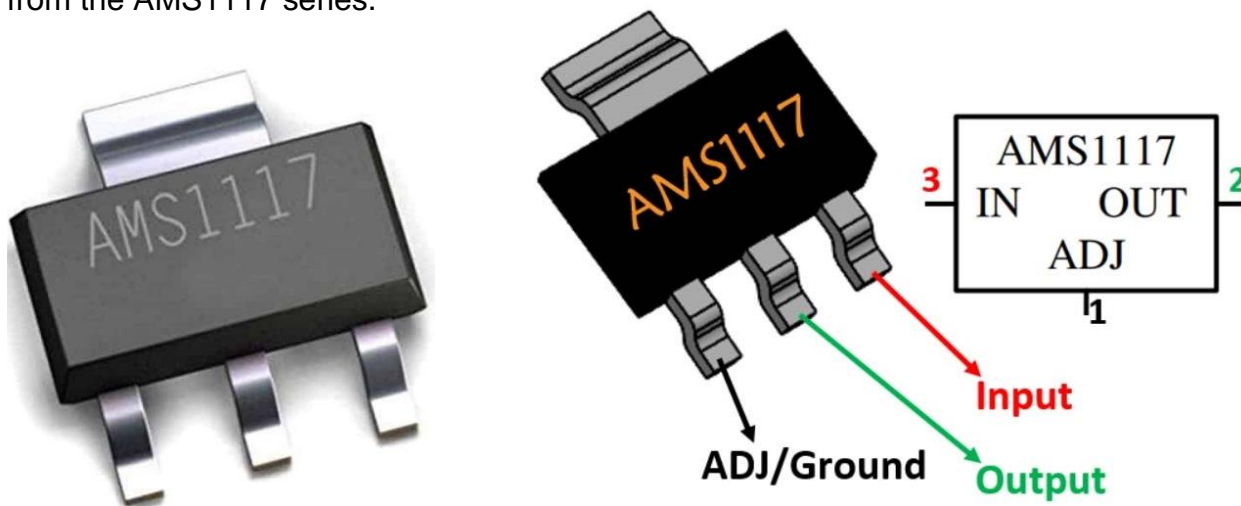
Stabilized Power

by Daniel Romila VE7LCC

I use switching power supplies for power supplying my projects. They are cheap and efficient. Their size is smaller than the linear ones. They might radiate some radio frequency, but generally they are more than OK for my requirements.

I still need to use linear power supplies on the boards themselves, for varicap diodes, oscillators and various integrated circuits which do not consume much, but either require further stabilizing and/or a smaller voltage than the whole project. I like very much the integrated linear stabilizers, which have 3 pins. I mostly use those with 3 pins: input, ground, output. They have fixed output voltage. Some of them have the adjustment pin instead of the ground pin - the ground is connected through the adjustment resistor(s).

I found online cheap 3-pin linear stabilizers, and I could not stop myself and bought them. They are from the AMS1117 series.



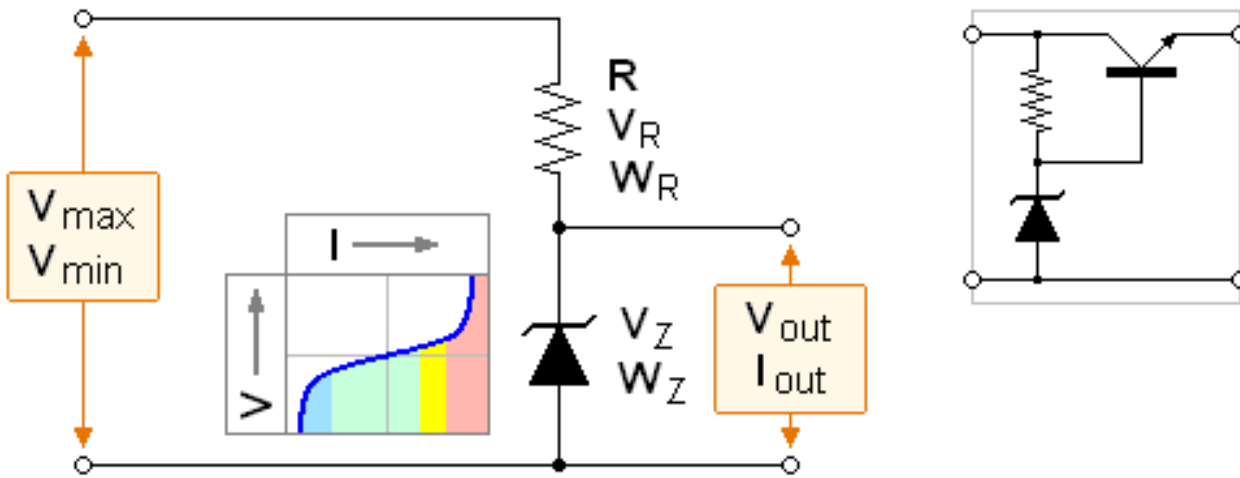
From: <https://a2itronic.ma/product/ams1117-3-3v-1a-regulateur-de-tension-sot-223/>

I bought 3.3V, 5V and adjustable ones. Instead of AMS1117 one can find the same integrated circuits with other names. I bought such devices because while they are designed to be surface mounted, they can also be put through the holes. There is on top a metallic surface which can be soldered to a bigger surface radiator, eventually the copper surface from the prototyping board itself. They are declared as allowing a 1 Amp current through them (<http://www.advanced-monolithic.com/pdf/ds1117.pdf>) but such high values are not for normal functioning.

So, the problem to be solved is to use those integrated circuits as linear stabilizers for power stabilizers supplying more power than the integrated circuits alone can.

If you remember, the same problem hobbyists had with Zener diodes, and they added a power transistor:



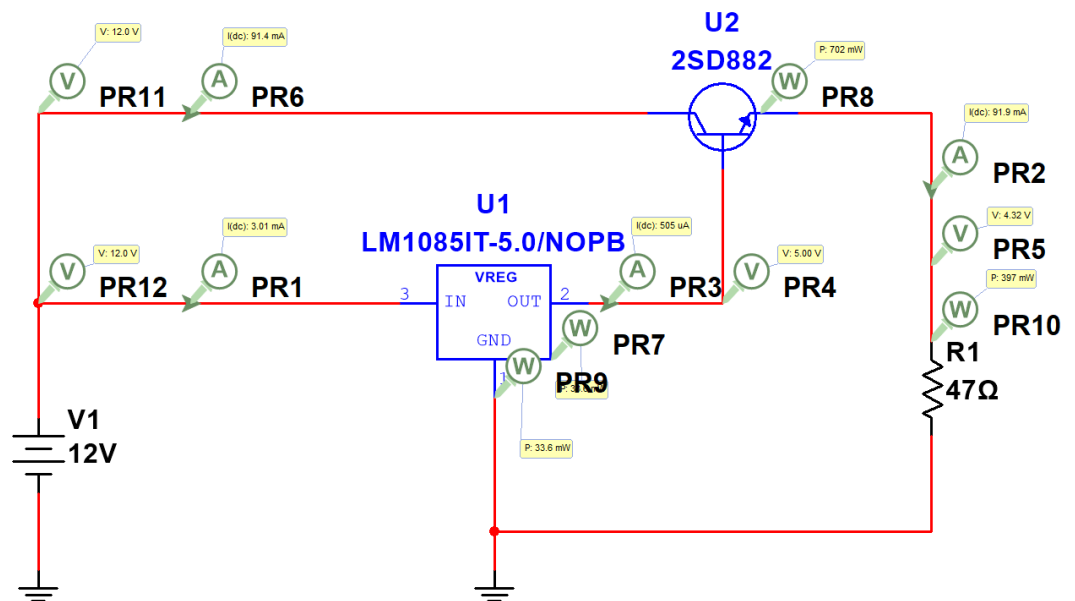


From: <https://www.claredot.net/en/sec-Electronics/zener-voltage-regulator.php>

One can immediately notice the stabilizing element, the Zener diode, is no longer connected to the output of the linear voltage stabilizer; it is in series with the Base-Emitter junction of the npn power transistor. The transistor junction is known to have some 0.65 Volt drop, and the actual voltage is very dependent on temperature and the current that passes through the transistor. In other words, the output voltage after the transistor is less stabilized than at the Zener diode pins.

The same happens with the 3-pin integrated circuits, if a npn power transistor is used to take the power load in it and protect the integrated circuit. I drew myself the schematic and simulated in [Multisim 14.3](#):

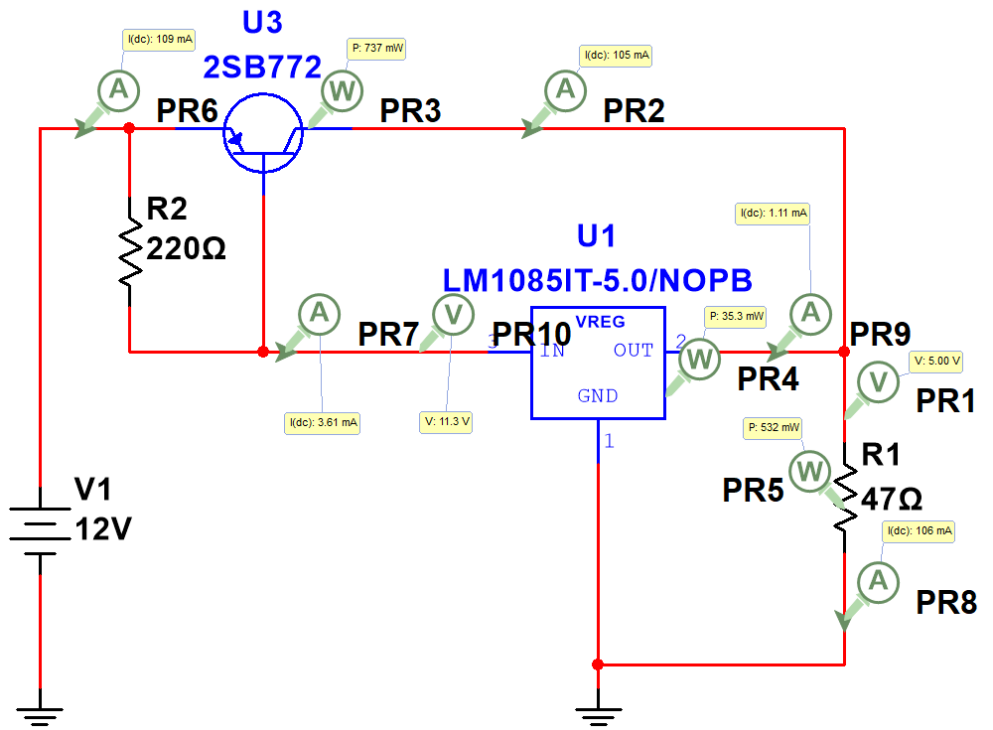
One can notice in the above schematic I want to obtain some 5 Volt from 12 Volt on a relatively small load (47 Ohm), which would consume some 90 mA. The transistor itself consumes and radiates 0.7 Watts, while the integrated circuit is in a lower stress, just 33.6 mWatts.



The schematics is simple, but one of the problems is I do not obtain 5 Volt at the output, but 4.32 Volt, and no longer so stabilized as the 5V IC could do it. The solution is to arrange a different schematic, with a pnp transistor. The drawing and simulation are also done by me in Multisim 14.3:



This time I indeed obtain 5 Volt at the output. The current going through the integrated circuit is only 1.11 mA, while the big stress is taken by the pnp transistor, 105 mA. The power radiated by the IC and by the transistor are similar with the previous schematic (737 mWatt for the transistor and 36.3 mWatt for the IC), but the output stability is now dictated by the performance of the 3-pin integrated circuit stabilizer. The R2 assures the biasing for the transistor and also a normal value current through the IC (in the range of milli Amps, not micro Amps as in the previous schematic) for best performance.



I did not invent those schematics and the found solution was found by many other hobbyists before me. Computer Assisted Design allows radio amateurs to burn less devices and to start on the practical soldering with a solution that already promises to work, so the improvement stage is shorter and more efficient.

More Donated Equipment Available Jim VE3JMD

Swan 350D HF transceiver, overs 80 to 10 metres, no WARC bands. AM/SSB/CW

Analogue tuning with a digital frequency display.

Originally rated at 200 Watts PEP, Built-in power supply and speaker.

Includes original operation manual and Swan VX-2 VOX unit.

The receiver has been tested with reasonable sensitivity on all bands.

Transmitter has not been tested.

Available for a \$5 donation to GBARC.



Heathkit package:

HX-20 HF transmitter

HR-20 HF receiver

HP-20 12 V power supply

Original specs:

CW and SSB

Coverage 80m to 10m
(transmit and receive), no
WARC bands.

Transmit power up to 50 W.

Also included are the 8-
conductor cable to connect the
HP-20 and HX-20, adapter
cable RCA plug to SO-239.



Requires an 8-conductor cable, 8-pin plug, 11-pin socket (to connect HX-20 to the HR-20).

The equipment has not been checked. If you are a Heathkit collector and/or like a challenge, this may be for you!

Available for a \$5 donation to GBARC.

Contact me for further details or more photos: [ve3jmd at gmail dot com](mailto:ve3jmd@gmail.com). 73 Jim VE3JMD

The Last Word

A few words of appreciation to those that contribute to this newsletter by submitting news stories or interesting web links or ideas. If you have something then send it in, any format, any size, anytime, but if you want it to appear in the current month's newsletter, then send it by the 3rd Tuesday of the month.

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