

back

georgian bay
amateur radio club

c/o Cy Weaver, Ve3DQA
197 8th St., Hanover, Ont.
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146.34 **VE3OSR** 146.94

send FEEDBACK correspondence to R. James Harron, rr2 Kemble, Ont. N0H 1S0

A MESSAGE FROM YOUR PRESIDENT

To all GBARC Members

Greetings everyone. There are a few things happening this month to take note of. First, the meeting night has been changed to a week earlier to December 13th. This change has been made so as not to conflict with holiday plans. This is the month when membership dues become due and payable, so be sure to set aside some of your hard-earned cash-HI! We have recently learned that our program director, Fred Ve3KPK, has been admitted to the G&M hospital. We wish him a speedy recovery. On the home scene, I have finished moving in and hope to have the antennae and the shack set up soon. This month's QST has an excellent project that could be a good club venture. It is a 2-watt solid state transmitter that is quite simple but looks very good. I have reviewed the article and I think it could be easily built for \$10.00. I can obtain the coils at a reasonable cost in a bulk order and the transistors for about 10 cents each. Future articles in QST are supposed to include accessories for the QRP rig such as a QRP Transmatch, SWR Bridge, a VFO, and a mating receiver. See me after the meeting if you are interested and let's see if we can organize a winter construction project.

73's Don, Ve3IDS.

Notice -Don's new address is: Mr. Donald Richards, Ve3IDS, Box 44 Hepworth, Ont. N0H 1P0. Phone number is 534-2327.

A GBARC QUIZ

1. If an antennae contains 150 watts of RF power, and the antennae current is 100 ma., what is the RMS RF voltage present?
2. If a transformer has 10 turns in the primary and 5 turns in the secondary, what secondary voltage will be produced when 50 volts AC is applied to the primary?
3. If the frequency of an AC current through an inductor is increased, what will happen to the inductive reactance?
4. If the frequency of an AC current through a capacitor is increased what will happen to the capacitive reactance?
5. In a standard 5-element yagi, what is the name of the shortest element?

Bring your answers to the meeting-a prize will be awarded.

Don, Ve3IDS.

MINUTES OF THE NOVEMBER GBARC MEETING

This meeting was held on Nov.15th in room 114 of the Owen Sound Collegiate and Vocational School. In attendance were 25 amateurs and visitors. The Vice-president, Mr. Harvey Smith, Ve3FOT, took the chair and called the meeting to order at 20.05 hours. Several new amateurs and two guests were cordially welcomed to the club. The October minutes as reported in FEEDBACK were motioned as being adequate and correct by Jack, Ve3DTS, and seconded by Verne, Ve3BSF.

Dick, Ve3BIS, made a comment regarding the sensitivity of the repeater, Ve3OSR. Those present were urged to check into the GBARC net on 3783 at 09.30 on Sunday mornings, and the 2 meter net at 2100 hours on Wednesdays.

The business part of the meeting adjourned at 20.15 hours. Coffee was available at the cafeteria accompanied with a gab-fest. On returning to room 114 the technical side of the meeting commenced. Ted, Ve3AEO, gave a demonstration and talk on converting power transformers from one use and voltage to a different voltage. He also showed how to correct for low line voltage.

Jim, Ve3BFV, demonstrated the voltage turns ratio in transformers. He then connected up a pair of selsyn motors to illustrate what could be an antennae direction indicator or any other remote indicator system.

Fred, Ve3KPK, gave a talk both verbally and from the blackboard on propagation and his methods of calculating the gain required to reach a particular part of the world using sunspot numbers and the solar flux density. This information is transmitted regularly from WWV, Boulder, Colorado, on 5, 10 and 15 mhz.

Dick, Ve3BIS, showed a video tape on transistor theory using equipment supplied by Jim, Ve3CRV.

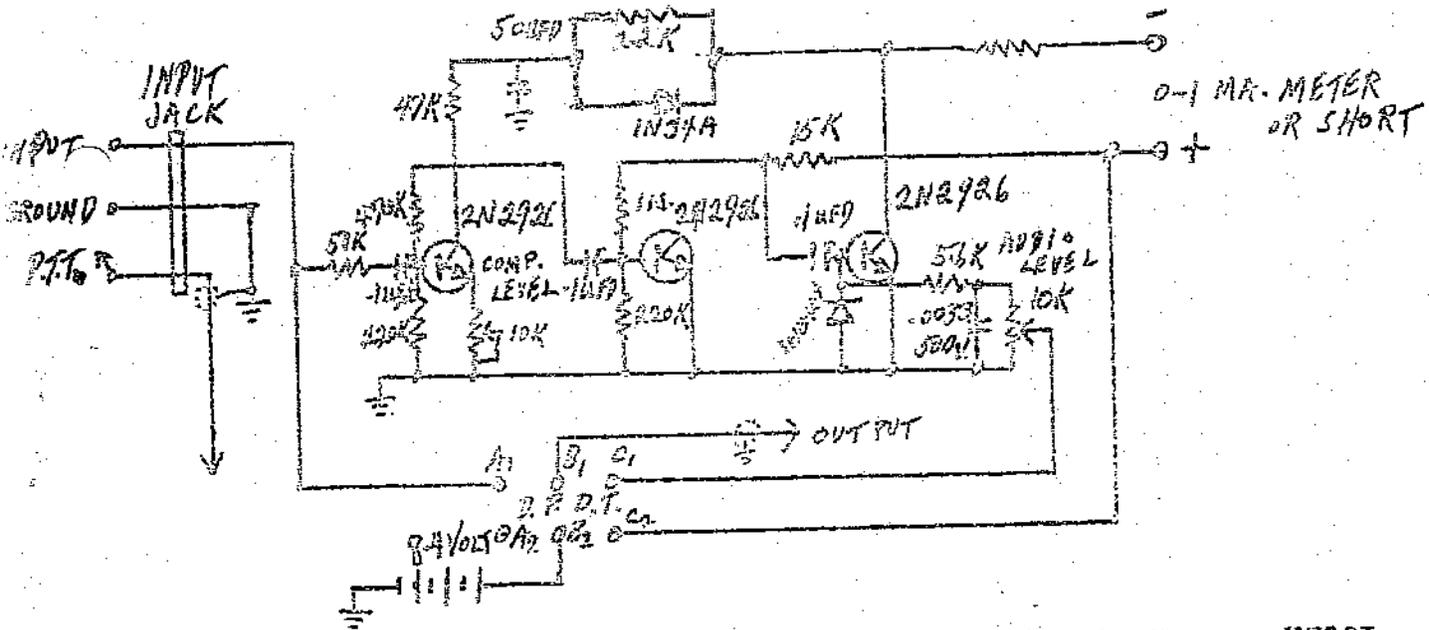
Jim, Ve3CRV, told us that we may have to equip the repeater with touch tone access to eliminate the cycling problem.

The meeting closed at 2200 hours.

ANNOUNCEMENTS

There will not be a Christmas party this year. In its place the executive hope to arrange a social affair in the spring.

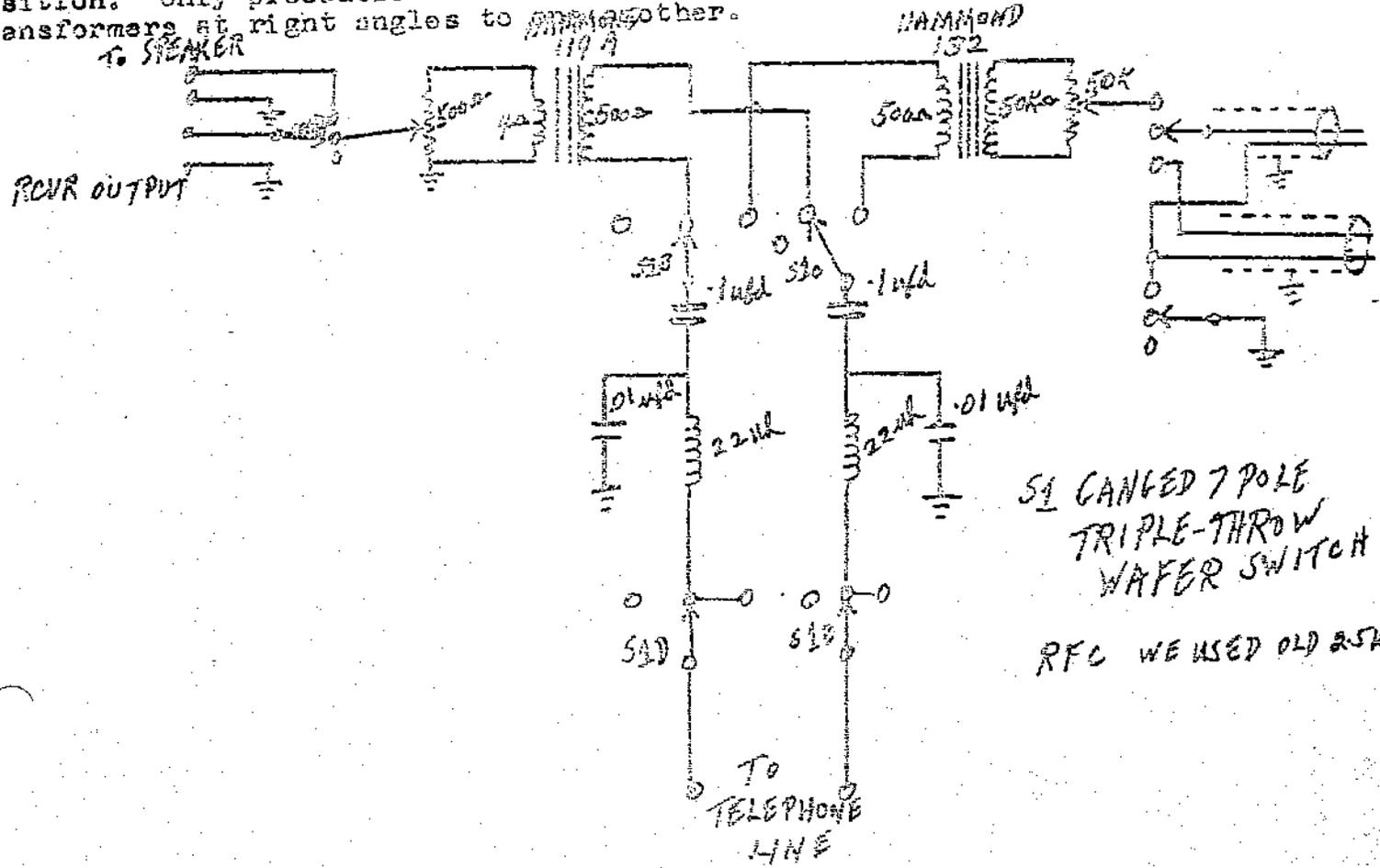
The next meeting of the GEORGIAN BAY AMATEUR RADIO CLUB will be on December 13th at 2000 hours in room 114 of the OSCVI school.



Speech Compressor Circuit of A.B. Morgan VE3OI
 Redrawn by VE3BSF. All resistors are 10% $\frac{1}{2}$ watt All Capacitors are 50 volt
 Layout not critical and parts layed out just like circuit works quite nicely.

A PRACTICAL PHONE PATCH

Received this from VE3CAA. Switch is shown in center or receive position. Only precaution here is to use well grounded leads and place transformers at right angles to each other.



S1 CAN BE 7 POLE
 TRIPLE-THROW
 WAFER SWITCH

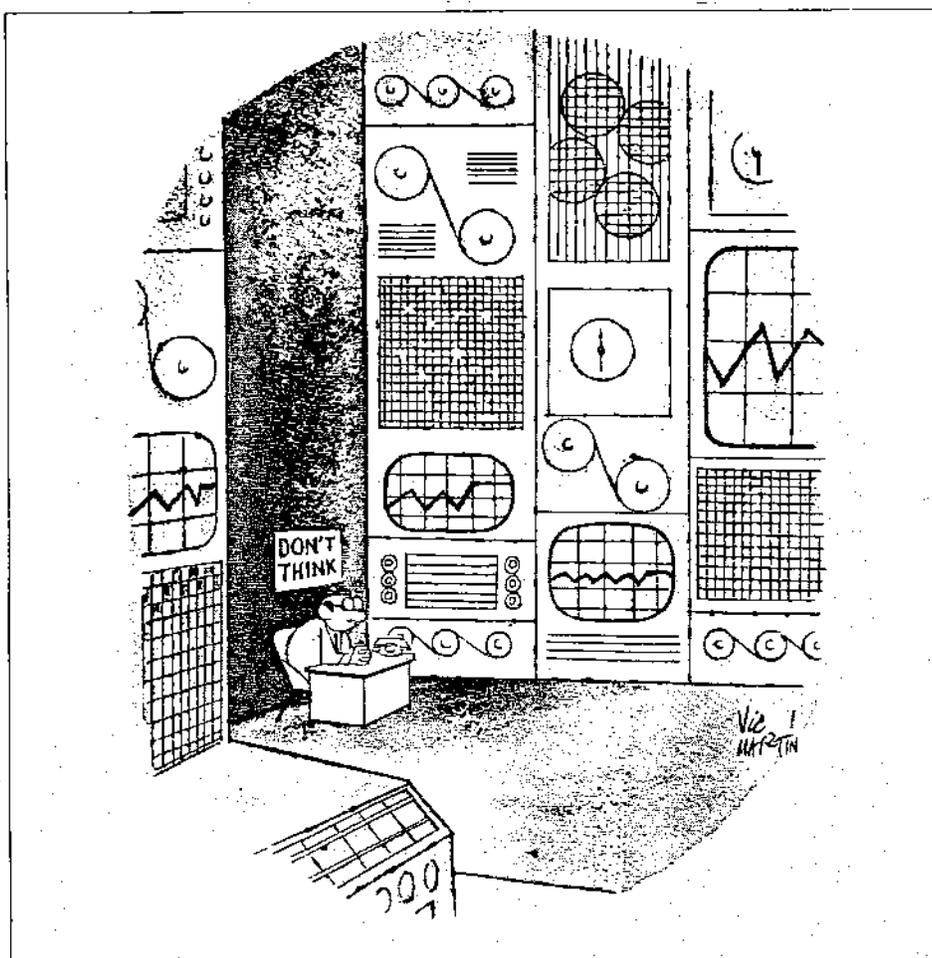
RFC WE USED OLD 25MR

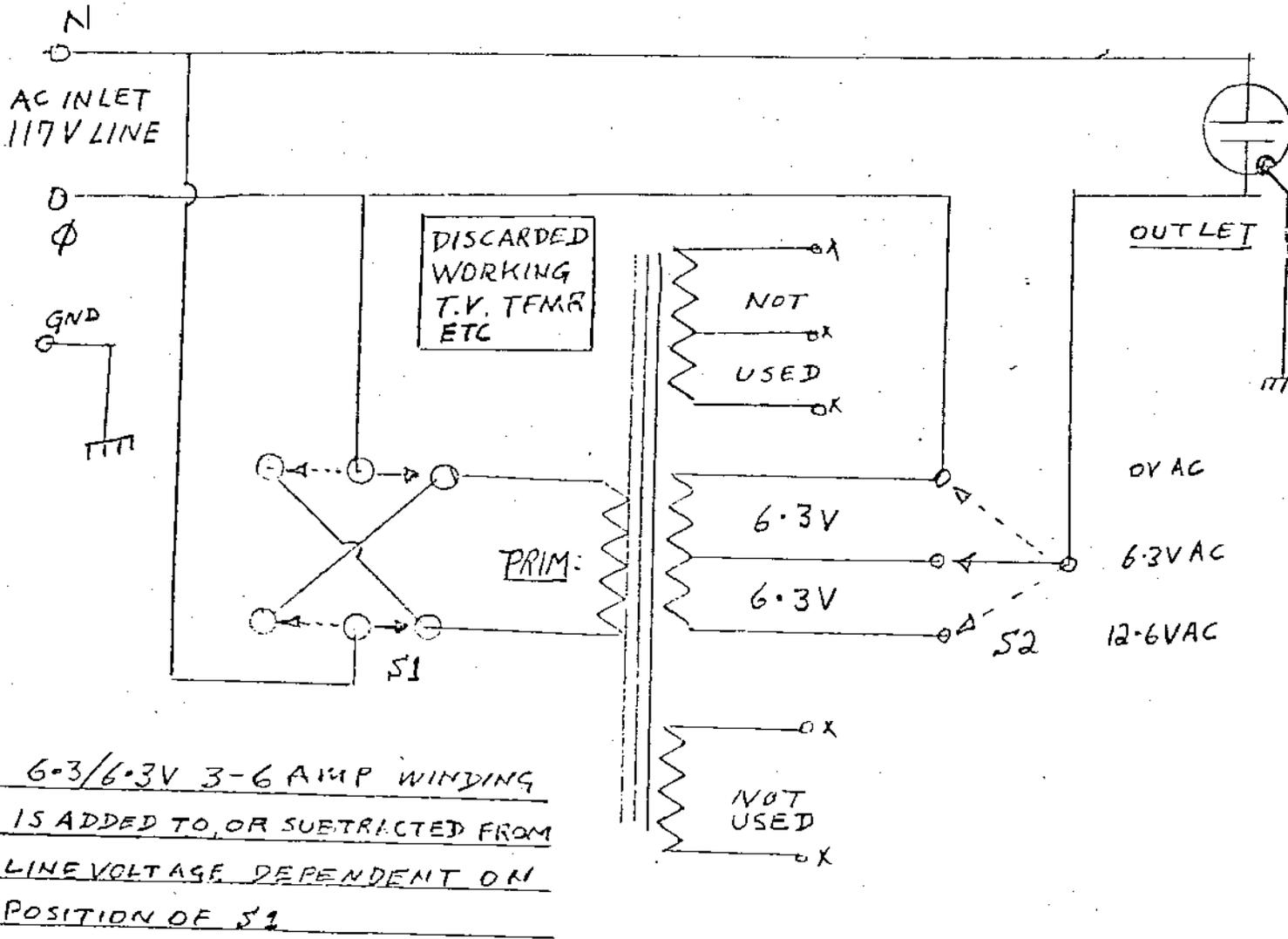
COMING EVENTS

At a future meeting, we hope to have an illustrated talk by Terry, VE3CAB, about how he has gone about added logic control for VE3MTR. He has the repeater practically putting out the garbage and sweeping the floor. He promises that his presentation will not be too technical for his audience, (which gives this writer encouragement) but we think we can guarantee you an interesting and instructive meeting.

We also hope to have a meeting in the near future on computers and microprocessors, along with an expert programmer and with a real live unit complete with input and video readout. VE3IYW, Walter, is making the arrangements.

Remember, you heard it first in Feedback. Watch for Definite Dates in later issues.





LINE VOLTAGE CONTROL CIRCUIT

The filament winding of the transformer should have a current rating equal to the line current to be drawn at outlet.

The circuit is connected as an autotransformer. The secondary voltages are added to or subtracted from line voltage. S2 will switch 0V, 6.3V, 12.6V, in series with line to outlet. S1 will provide the addition or subtraction feature.

^{Tip}
THE FOLLOWING SAFETY WAS CONTRIBUTED BY VE#LPG, MAL. IN MARKDALE.
WHILE WE ARE ON THE SUBJECT OF SAFETY, THE LAST TIME YOU STUCK YOUR FINGER IN THE RIG OR THE POWER SUPPLY, DID YOU THINK TO PULL THE PLUG AND TO DISCHARGE THE CAPACITORS FIRST. REMEMBER, JUST AS SMART MEN AS YOURSELF HAVE MADE THAT MISTAKE AND EITHER LIVED TO BE SORRY OR DIDN'T LIVE TO BE SORRY.

REMEMBER, Always Be Careful

"In the last 60 days the U.P. Railroad has had two fatal accidents caused by butane lighters. These accidents occurred in welding areas when an employee was welding with a butane lighter in his pocket. A spark from the welder landed on the butane lighter, burned through, exposing the fluid in the lighter which exploded. One lighter was in a shirt pocket and killed the individual instantly, the other lighter was in the pants pocket, and caused an amputation. The man later died. There is the same amount of force in a butane lighter when it explodes as there is in approximately three sticks of dynamite"

When Your Rotator Dies?

Carl C. Drumeller WSJJ
5824 NW 58 St.
Warr Acres OK 73122

The Problem: After several decades of faithful service, the control unit of my Ham-M rotator ceased functioning. A postmortem examination revealed a

dead 130-microfarad, 50-volt alternating-current motor-starting capacitor.

The Non-Solution: A quick survey of electronic supply stores showed that no such capacitors were available. A visit to electrical supply houses revealed numerous motor-starting capacitors, but none was physically small enough to fit into the space within the control unit housing.

The Solution: Two 150-microfarad, 50-volt electrolytic capacitors and two 100-volt, 3-Ampere silicon rectifiers were used in the

circuit shown. The control unit was resuscitated.

Another interesting situation came to light during the repair job. The meter had been intermittent, sometimes operating normally, sometimes quite dead. The cause was the 1/16-Ampere fuse used in series with it. This is indeed unusual. A fuse normally is fully conductive or unmistakably open. This one probably had a mechanical discontinuity instead of having been blown. The original one was soldered in place, an action fraught with peril to the delicate in-

terior conductor. A clip-type fuse holder was installed to minimize the probability of future trouble.

For those interested in the theory of the functioning of the circuit, the explanation is simple. During any half-cycle, one capacitor is shorted by its associated diode. It might be presumed that having two capacitors in series, the resultant capacitance would be halved. This, however, is not the case because the diode acts as a bypass for the capacitor during every half-cycle. ■

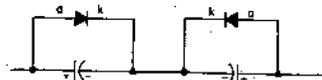


Fig. 1.

Have a HAPPY HOLIDAY !

Our Legal Department! there is NO Sanity Clause."