

BACK

GEORGIAN BAY
AMATEUR RADIO CLUB

BOX 592

OWEN SOUND, ONT.
N4K5R1

VOL. 5 N° 3
NOVEMBER, 1978

ROSE

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THE ANNUAL GBARC PARTY

- DETAILS INSIDE

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Box 1666
PORT ELGIN, Ont.
N0H2C0

146.34

VE3 OSR

146.94

CLUB CALL**CLUB CALL**CLUB CALL**CLUB CALL**CLUB CALL**CLUB CALL**CLUB CALL**CLUB C

Last month's meeting was held on October 19th with twenty-three members in attendance. Proceedings were as follows:

Following adoption of the previous month's minutes and a financial report, mention was made of the possibility of obtaining a two-letter call for the club to be used for all club activities (Field Day, etc.). It was pointed out that this would be virtually impossible, and it was decided to continue using a member's call for future events.

Jim, VE3CRV gave a report on negotiations with KWARC regarding purchase of their facilities at the CKCO-TV tower site. It would appear that this is going to be an expensive project, and negotiations will continue, with a report expected at the next meeting.

Ted, VE3AEO, gave a preliminary report on the GBARC party and further details are available elsewhere in this issue.

Club crests will cost approximately two dollars and could be available in about two weeks, according to Cy, VE3DQA.

Dick, VE3BIS displayed one of his summer projects, a home brew 2-metre ground plane antenna, and Ian, VE3HIP gave an interesting talk on computer concepts. The meeting was followed by a transmitter hunt conducted by Vern, VE3BSF, and Dave, VE3DXO was the winner and recipient of a beautiful set of primary/secondary bookends handcrafted by Ian, VE3HIP.

Next meeting is Thursday, November 16, 1978, at 8 p.m. at the CIAG computer building.



PLEASE FILL IN COMPLETELY, INCLUDING YOUR POSTAL CODE.

If you have already paid your dues for 1979, please check here (___) and fill in and return this form.

GEORGIAN BAY AMATEUR RADIO CLUB,
BOX 592, OWEN SOUND, ONT. N4K5R1.

Please renew my membership. I enclose \$___. (\$5 if paid before Dec. 31st, \$7.50 after. \$2. for pensioners, white caners, and students.)

NAME _____ CALL _____
ADDRESS _____
PHONE _____ POSTAL CODE _____

I also belong to: RSO ___ CARF ___ ARRL ___ Other _____

NEWSFRONT NEWSFRONT NEWSFRONT NEWSFRONT NEWSFRONT NEWSFRONT NEWSFRONT NEWSFRONT NEWSFRONT NEWSFRONT

THE GBARC REPEATER, VE3OSR is sounding great these days, thanks to a few hardy souls who worked on it on Sunday, November 5th. VE3's IDS, BIS, FOT, EFX, CRV, GVL, & AEO assisted Ivan, VE3INQ in refitting the antenna and running new 3/8" foam heliax transmission line. Although a problem developed with attempting to install the new changeover mechanism for standby power, it was soon resolved and "OSR" is sounding better than ever. Ivan, VE3INQ ("I Never Quit") deserves a big thank you from the club for spending six hours suspended 185 feet above the ground. Thanks, Ivan.

THE SISTER CITY NET looks like it's on its way. As reported last month, we are trying to set up a net between Owen Sound and its sister city in Miamisburg, Ohio. Ian, VE3HIP advises that John, W8STB will be on 7.225 MHz on Sundays at 2 p.m. Let's check in with John and show him our interest in helping out with communications between Owen Sound and Miamisburg. Miamisburg stations also monitor daily on the Ohio Interstate Net (3.985 MHz @ 8 p.m.) and the Ohio SSB Net (3.972 @ 9 p.m.).

SWAP SHOP: Bill, VE3FOF has for sale: a Kenwood 7200, with ten channels (OSR, MTR, TIV, etc.) for \$200.; a 5/8 trunk mount whip for \$25.; a 1/4 wave whip for \$10., or buy the whole package for \$225. Bill's home phone number is 353-5830.

T H E 1 9 7 8 G B A R C P A R T Y

YOU ARE CORDIALLY INVITED TO ATTEND THE ANNUAL
GEORGIAN BAY AMATEUR RADIO CLUB PARTY

S A T U R D A Y , N O V E M B E R 2 5 , 1 9 7 8

AT

THE OWEN SOUND YACHT CLUB

8 P.M.

DANCING TO R.E. CORDS (Bring your Favourites).

- SALAD PLATES & NIBBLINGS
- SIX DOLLARS PER PERSON.

(Please, let Ted, VE3AEO know if you are attending as soon as possible.)

FORUM (cont'd)

CARF has 4000 members and the CRRL has over 6000. The solution: get more Canadian radio amateurs to join CARF. However, this may be difficult. The majority of the amateurs belonging to CRRL undoubtedly retain membership because of QST, by far the best amateur technical journal in the world. Moreover, CARF itself has been the instigator of its own problems. Many amateurs are reluctant to join, or renew membership, because of the childish actions of CARF over the past year. "The Canadian Amateur" carried several supposed "tongue-in-cheek" articles (e.g., "American Newsfront") that were, at best, nothing but garbage. With the exception of CARF's policy statement in October's TCA, they have behaved, time and time again, like kids whining about the bully down the street.

As radio amateurs, we are hobbyists, and we derive enjoyment from our activities. Because of the nature of our hobby, we need effective representation at the national level. If and when CARF shows signs of maturity in dealing with the CRRL/ARRL in a responsible manner, I am quite certain that they will receive the support they deserve.

Bill, VE3IHV.

JAMBOREE ON THE AIR REPORT

Saturday, October 21st dawned bright and warm, and saw an unusual sight at the Saugeen Bluffs Conservation Area. Twelve Boy Scouts and three Scout leaders of the 1st Port Elgin Scout Troop could be seen climbing trees, unravelling antennas, and measuring out the distance between trees, looking for four trees on a twenty metre square. By afternoon, as the last lead-ins were being strung, John, VE3IYF, drove in to meet an eager group. In about ten minutes, John had connected up his rig to a suspect looking antenna, (a jamboree special) and amazingly, it loaded up. Band conditions were good, and almost immediately we were listening to a Scout group in England describe the camp they were at. That was only the beginning of a most enjoyable day.

The boys and leaders were really grateful to John for the time he spent with us, and one way the boys said thanks was by cooking his dinner over the hot coals of the campfire.

Saugeen Bluffs is a beautiful area and with the good weather and camping fellowship we all had a great time. The boys learned a lot about amateur radio, we were able to show some Scouting visitors from Paisley and Port Elgin an introduction to the Jamboree, and good contacts with England, Texas, Florida, Colorado, New Mexico, Ontario, and National Scout Headquarters in Ottawa gave us all a chance to learn something about "the other guy".

One thing sure was said after the camp. For us, the third weekend in October next year is already booked. We hope you will keep it in mind for your calendar too.

Bill, VE3DGP.

JAMBOREE SPECIAL ANTENNA

BILL VE3DGP

BANDS: 10 - 15 - 20 - 40 - 80

IMPEDANCE: $\approx 50 \Omega$ (BEST MATCH ON HIGH BANDS)

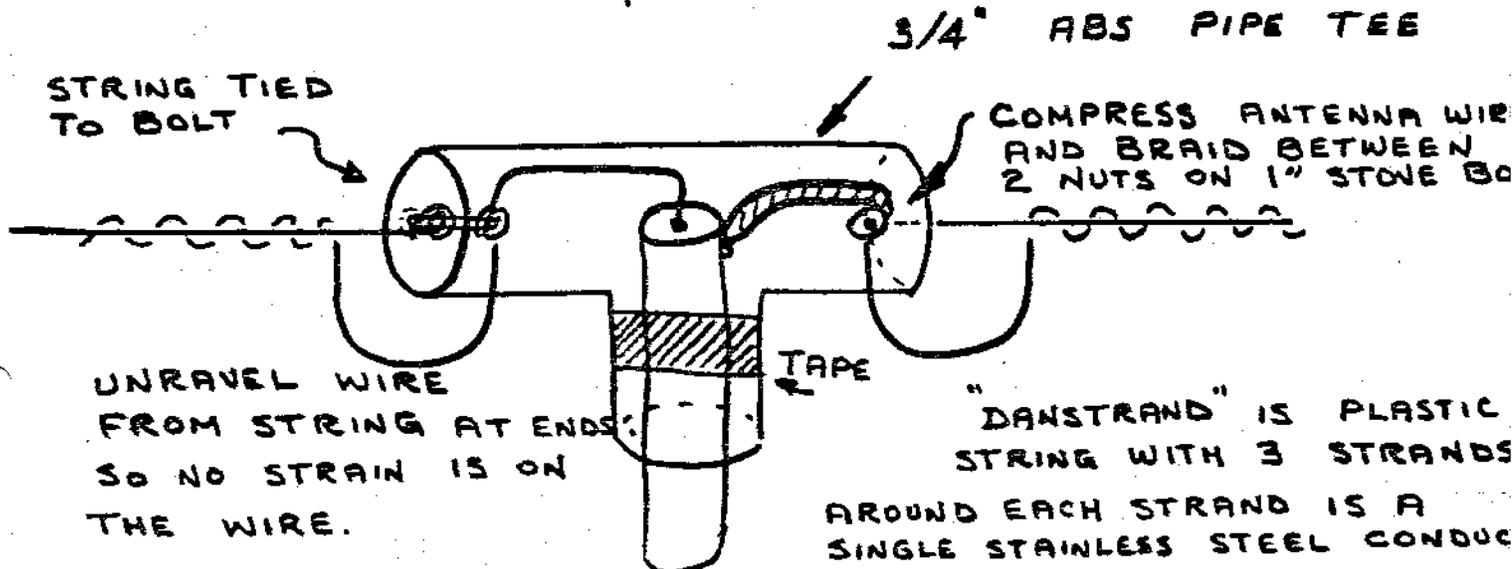
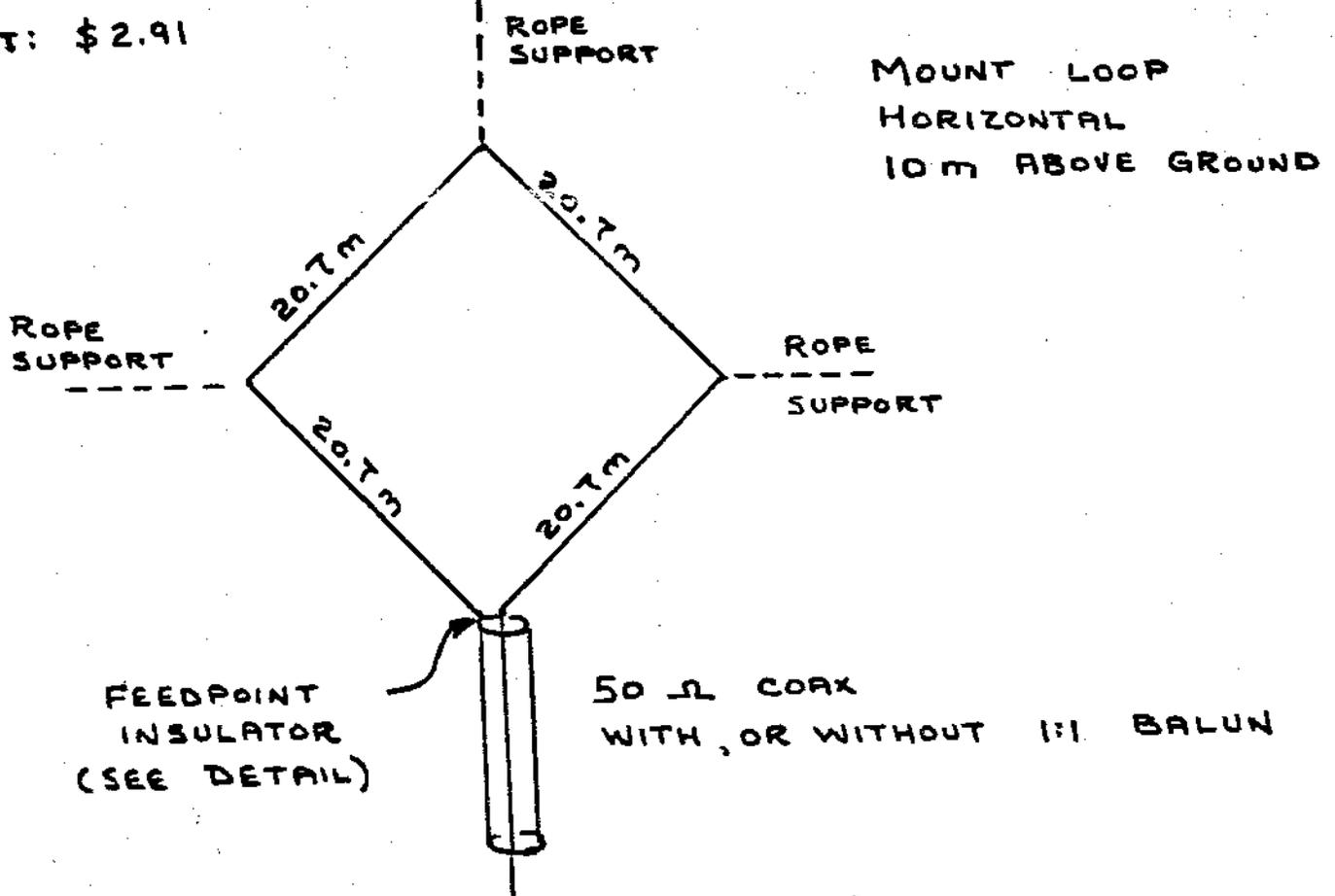
RADIATION PATTERN: ESSENTIALLY OMNI-DIRECTIONAL
(MULTI-LOBED)

MATERIAL: 82.8 m "DANSTRAND" ELECTRIC FENCE WIRE
(\$7.99 FOR 250 m FROM CO-OP STORES)

1 - 3/4" PIPE TEE (\$0.22)

2 - 1" x 1/4" STOVE BOLTS (\$0.02)

COST: \$2.91



LINE OF SIGHT PATH PROFILE MAPS

Communication via two meters depends largely on line of sight limitations, that is the transmitting and receiving antennae should be visible one from the other. ie. if one used a telescope at antenna height the other antenna should be visible.

The practical people know we can do better than this, with beams at each end there is a lot of signal scattered beyond line of sight distance. We all know that the scatter from a car's headlights are visible before we see the main beam.

The purpose of this article is to show the requirement of transmitter power, receiver sensitivity, and antenna for any particular path i.e. station "A" to Station "B" for two meter operation.

The signal is radiated in a pattern dependent on antenna type and transmitter frequency.

For two meter operation the signal leaving the antenna should be directed horizontally. It will intersect the earth at the horizon and this will constitute the distance limit. ~~See Figure 1.~~
The complication comes in when we recognize that the earth's contours are uneven due to hills. ~~See Fig #2.~~

To estimate the effect of hills on a two meter signal it is necessary to plot the distance and relative height of all hills between stations. For this purpose use appropriate map and contour graphs Fig 3 and Fig 4.

Example 1 from Southampton to Woodford

VE3 BLS to RPTR VE30SR

Graph horizontal division 5 miles/ ~~cm~~

Graph vertical divisions = $10 \times (\text{miles})^2$ per ~~cm~~

Graph vertical divisions = 250 ft/ ~~cm~~

Altitude at VE3B1S is approximately 600' plus

Antenna total 670'

Altitude at VE30SR 1S 1150 plus antenna height
total 1350'

- (1) Draw a direct line between these two points. See Fig 4.
- (2) Draw a direct line between Southampton and Woodford. See Fig 3.
- (3) Locate distance and height of each point and transfer to contour graph. See Fig 4.

(Note high point see "A") This will interfere with path, Point B and C are just below interfering points, point 'R' is repeater antenna height.

This is a guide to path conditions, any intervening hills will restrict path.

A good reference comparison may be gained by noting the poor reception in Owen Sound especially on the east side.

The "shadow" is easily visualized by referring the path profile map cut in Fig 4, with mobile at about 620' and repeater at 1350' and only 10 miles away.

The path is blocked all the way and only scatter is getting through.



F193

1 MILE = 1/4

SOUTH DOWN

DOWN

ANTRIM

TYRONE

LONDONDERRY

FERMANAGH

WICK

WICKLOW

DUBLIN

KERRY

Southampton
County Tyrone

Port Elgin

GREY COUNTY
BRUCE COUNTY

CANADIAN

NATIONAL

SAGGIEN

NIDARSJÆ

GRESHAM

WILLOW CREEK

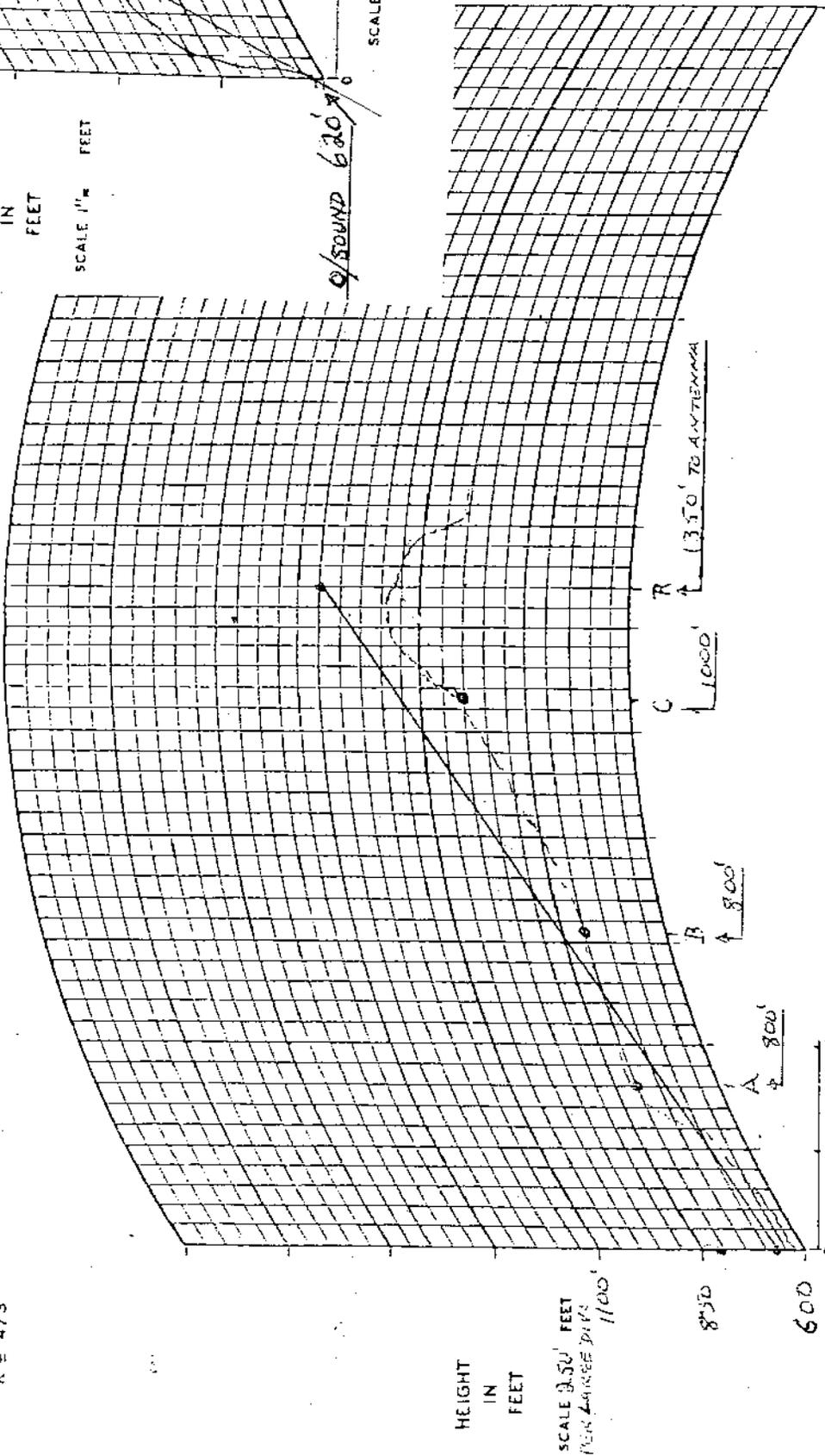
WILLOW CREEK

WILLOW CREEK

WILLOW CREEK

WILLOW CREEK

HORIZONTAL SCALE = X MILES PER DIV X = 5 MILES
 VERTICAL SCALE = 10X² FEET PER DIV = 10 X 25 FT.
 K = 4/3



SCALE 9.50' FEET
 PER LARGE DIV
 1100'

850'

600'

HEIGHT IN FEET
 SCALE 1" = FEET

0/SOUND 620'

SCALE MILES

DOTTED LINE IS APPROX FROM INCLINED

PYE ELECTRONICS LIMITED

FIG 4

Oct meeting

Oct. meeting was held in C146
Bldg. on Thurs Oct 19 with 23
in attendance

Minutes ~~was read~~ & financial report
was read & moved by VE3ZAS 2nd by
VE3CRV were adopted as read

Mention was made of the possibility
of obtaining a 2nd lot for the Club but
after some discussion it was decided that
that it would be almost impossible to
buy VE3CRV gave a report on the
efforts to purchase the cable from the
CKCO Turner as well buying the Car Rally
& from his report it would seem to be rather
an expensive project however further
investigation will be carried out & report
given at next meeting.

Ed VE3AE gave a report on the plans for
a Xmas party & reported that a set back
had occurred but he felt sure due to his
element with the aim of the Committee is to have a
small party at the Club. A motion was
made by VE3AE seconded by VE3BSF
that we have a small party at the Club before
at an much earlier date carried

It was decided to invite the members of
the Base Club

It was reported that the verification for
Jadbach are now available & will allow it
to run on our next license

It was reported by the Committee that
work would be done on the repeater & antenna
next Sat. or Sun weather permitting
Knowledge talk on Computer Concepts was given
Friday by Don VE3HVF which was very interesting

Adrian VE3CHV
VE3HVF