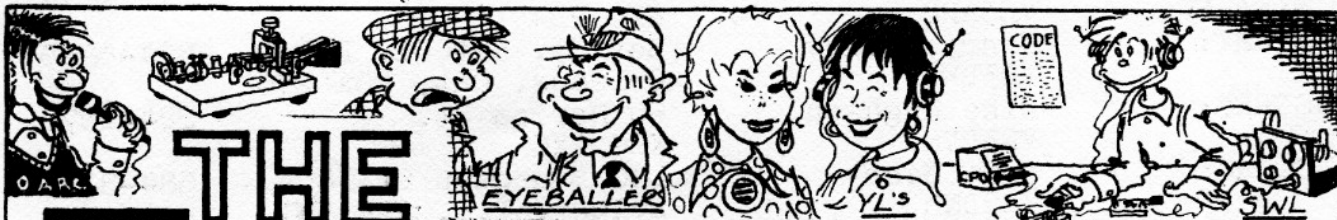


OCT 74



# THE GROUNDWAVE

THE OFFICIAL BULLETIN OF THE OTTAWA AMATEUR RADIO CLUB  
 P. O. BOX 8873, OTTAWA, ONT. K1G3J2



THE OTTAWA AMATEUR RADIO CLUB, P.O. BOX 8873, OTTAWA, ONTARIO GW OCT 74 1

PRESIDENT:	Larry O'Brien VE3GRJ		828-9191 (Office)
VICE-PRESIDENT:	Cary Honeywell	164 Clemow Ave.	234-8765
NET MANAGER:	VE3ARS	K1S 2B4	
SECRETARY:	Henry Harley VE3BR	Box 25, Site 1, R.R.2, Orleans, Ont. KOA 2VO	824-3895
TREASURER:	Mike Hughson VE3DVH	60 Norice St. K2G 2X6	224-2376
DIRECTORS:	John Henry VE2DNM	200 Bourgeau St. S. Aylmer, P.Q. J9H 5M1	684-8255
	Bud Punchard VE3UD	3193 Riverside Drive K1V 8H8	733-8384
	George Roach VE3BNO	104 Strathcona Ave. K1S 1X6	234-0885
GROUNDWAVE EDITOR:	Stan Hill VE3DQ	206 Cluny Street K1G 0K2	733-9563
ASST EDITOR:	John Ellis VE3HAT	2984 Hyde Street K1V 8H9	731-4995
ASSOC EDITOR:	John Ellingham VE3GUW	1225 Southwood Drive K2C 3C2	828-3577
TECH. EDITOR:	Ken Scrivens VE3LJ	202 Second Ave. K1S 2H7	237-0524
GROUNDWAVE PUBLISHERS:	Cy Chapman VE3CVK	2244 Kipling St. K1H 6T5	731-6172
	Ian Hamilton VE3AMK	128 Osgoode St. K1N 6S4	232-9110
PROGRAM:	Larry O'Brien VE3GRJ	(See President above)	
MEMBERSHIP:	Vic Cyr VE3DEP	1969 Belcourt Blvd. Orleans, Ont. KOA 2VO	824-1204
BEGINNERS' CLASSES:	Bob Clayton VE3HBQ	1174 Tawney Road K1G 1B7	731-2691
ARCHIVIST:	Nick Krauchuke VE3FFW	39 Charkay St. K2E 5N5	224-7179
COFFEE:	Gerry Martin VE3CNJ	1771 Hutton St. K1G 1M1	731-3220
CANADIAN ASSETS:	Croft Taylor VE3OR	60 Pineglen Cres. K2G 0G8	825-3434
VISITORS' BOOK:	Greg Heppenstall VE3GIH	2198 Regency Terr. #6 K2C 1H1	825-0821

EDITORIAL EMISSIONS:

\*\*\* We had a few technically-oriented pieces lined up for inclusion in this issue, but there is such a backlog of Ottawa Area News items that will become dated if we hold them longer that we have to hold off the technical stuff. That doesn't mean that the backfile is crammed full! Not by any means. So write it up and send it in!

\*\*\* Was it Aristotle who said, "There is nothing new under the sun"? Obviously his crystal ball did not foresee the electronic age! Who would imagine a hundred years ago that man would be sending voices and pictures through the ether & setting foot on the moon? For that matter, what Amateur 30 years or so ago could envisage that Amateurs would have their own satellites circling the earth and DX would be accomplished by relay through them? So there are still lots of experiments for the basement tinkerer to invent and try to make perform some new miracle! Somehow that doesn't read right, but you get the idea, don't you? Break out the soldering gun amigo!

\*\*\* Was going to say something about plagiarism here, but let's skip it. Just wondering about an article we received.

\*\*\* Forgot to mention the RSO Convention at Hamilton Holiday Inn Oct. 25-27/74

\*\*\* Beginners' Classes are Friday nights at NRC Sussex Drive.

\*\*\* Deadline for copy for the NOVEMBER GROUNDWAVE - Tuesday, Oct. 8th, 1974

MINUTES OF MEETING

The regular monthly meeting of the Ottawa Amateur Radio Club was held on September 4th. in the auditorium of the NRC. The meeting opened at 2005 hours with VE3GRJ in the Chair.

The President first welcomed all visitors and requested that they identify themselves. Among the numerous visitors were VE7ATU, W3GBN, VE2DNW, HM1BB, VE3's ECN, GWW, CUG, GVI and many non-licensed but interested persons.

The first item of business was the discussion on the minutes of the last meeting as published in the Groundwave. There being no discussion, it was moved by VE3AUM that they be adopted. Seconded by VE3FFW. CARRIED

The next item was the calling for reports from committees.

The RSO Convention Committee report was presented by VE3BNO who reported that the dates of October 3 and 4, 1975 were confirmed and that the Skyline Hotel would be the location. Publicity for presentation at the 1974 convention in Hamilton was now being prepared.

The Nominating Committee had nothing to report at this time. The President announced the membership of that committee as VE3FFW, VE3GSA and VE2BMH. He requested the co-operation of the membership in preparing a slate for the election of an executive for 1975.

There being no further committee reports, the meeting was turned over to VE3GSA. Dave is co-ordinator for Shinerama participation. Dave spoke of the commitment of the OARC to provide communications for this event. He then introduced the representatives from the University. Ron, their spokesman, outlined the past accomplishments of the OCU and attributed their continuing success in part, to the close co-operation and communications provided by the club.

Bob Clayton VE3HBQ, who has taken on the task of organizing Beginner's Classes for this year, outlined his thoughts on the value of the course to it's participants. Bob then suggested that a higher monetary value be placed on the course, primarily as a factor in motivating the students to stay with the course until the end. He went on to suggest that it would not be out of line to raise fees to \$20.00 plus membership, with the greatest portion of the fee being reimbursed to successful graduates in the form of the club purchasing their initial license, free texts, etc. It was then moved by VE3HBQ thè the fees for the beginner's course be raised to \$25.00, that this fees be allocated for disbursement as follows: \$5.00 club membership fee, \$10.00 for the purchase of first license, \$5.00 for texts and the remainder retained for unforeseen expenses, purchase of equipment, repairs, etc. Seconded by VE3ARS. CARRIED.

Turning to new business, the President suggested that it might be appropriate to have some form of dinner meeting in place of or included in a regular meeting. A showing of hands indicated that there was strong support for such a meeting in the form of a social evening rather than conjoining it with a business meeting. The executive will therefor look into arrangements and will present their findings or proposal at the next regular meeting.....p3

"If a man does not keep pace with his companions, perhaps it is because he hears a different drummer." .....Thoreau.

The club annual fall auction will be held on October 19th. at E.M.O. Headquarters. Assistance of the membership in organizing and conducting this project was requested.

The program for the evening was started with a very informative talk by Art Stark, VE3ZS on radio-telephone procedures and the proper conduct of net operations by voice. Art is particularly knowledgeable on these matters as this was part of his specialties in his former work with the Department of Communications. It is hoped that those who were fortunate enough to hear this talk take heed to Art's suggestions.

The second talk of the evening was given by Larry Bradley VE3CRX. Larry is the official ARRL Emergency Co-ordinator (EC) for this area. He outlined many of the problems encountered in emergency operations and suggested preparations that the average amateur can make to meet these emergencies. Preparedness was one of the themes of his talk and he demonstrated some of his own preparedness with the showing of his portable 2 meter emergency station adapted from a well-known commercially available rig.

Each speaker was presented with a scroll as a token of appreciation for their fine presentations.

Finally, the President congratulated VE3DQ, Editor of our own Groundwave, for the acceptance of one of his writings for publication in CQ magazine.

There being no further business, it was moved by VE3HAT and seconded by VE3ARS, that the meeting adjourn. CARRIED

Meeting adjourned at 2140 hours.

Henry Harley, Secretary

#### OCTOBER MEETING

Time and Place: Wednesday, October 2nd, 1974, 8 P.M.

Program: National Research Council, Sussex Drive

Larry Kayser VE3QB will give us a talk on the AOB bird, which will be known as OSCAR 7 after launch. By meeting time the bird will likely be in orbit, so come out and get the lowdown on this state-of-the-art facet of Amateur Radio. Fascinating!

While Larry is giving his talk, Gerry's marvelous Steamboat Coffee Boiler, filled to the brim with his Secret Formula Ingredients, will be gurgling merrily in the background. His brew alone is worth the trip, so come out and enjoy! C U there!

#### OTTAWA AREA NEWS

##### Nomination Committee:

See the report in the Minutes of the September Meeting on Page 2 above. Since the last meeting, Gord Grant VE3DY, has been named as Chairman of this Committee. Other Members are Nick VE3FFW, Dave VE3GSA and Ralph VE2BMH. Gord VE3DY spoke at the Executive Meeting on the Nominating Committee plans and a planning meeting was held on Sept 12th. It was stated at the Executive meeting that there are many members of our club who are just aching to take a more active role in club activities and are just waiting to be asked, so submit your nominations to the Committee toot sweet! This promises to be a very active and important year (1975) in our club's history, especially with the club-sponsored RSO Convention scheduled for October 3rd and 4th, 1975, so give your nominations very careful consideration.

RSO Convention 1975 - No 1 Priority - No 1 Priority - No 1 Priority - No 1 Pr:

See report in the Minutes of the September meeting, Page 2 above.

Membership

From the Minutes of the Executive Meeting held Sept. 10th - "There was a discussion on the concept of reducing the membership fee to \$2.50 for those joining after July the first. It was moved by VE3ARS and seconded by VE3UD that membership fees paid subsequent to July 1st be \$2.50. Carried. The application for membership for the 1975 year will appear in the next issue of the Groundwave." Fee for the full year still \$5.00.

Groundwave Financing

From the Minutes of the Executive Meeting held Sept. 10th - "Increases in the cost of materials, additional pages in the Groundwave necessitate the request of additional budget allowance in order to maintain publication. An immediate request for the amount of \$50.00 was received followed by a motion by VE3ARS, seconded by VE3UD that the sum of \$50.00 be made available to the Groundwave Editor and Publisher. Carried

The staff of the Groundwave will prepare an estimated budgetary requirement for the balance of the year and prepare a proposal to be presented at the next regular club meeting."

Fall Auction - October 19th, 1974 at EMO Headquarters 495 Richmond Road.

Registration of items starts at 9 AM and ends at 12 Noon. The auction proper starts at 1 PM and continues until approx. 5 PM. Gerry will be on hand with his coffee boiler and eatables. The Auction Committee this time are John VE3HAT, Nick VE3FFW and Larry VE3GRJ. They need luggers with good strong backs to move the 1 and 2- hernia jobs! The following rules apply:

1. Limit of articles presented by one person - 15.
2. No time preference to be granted to out-of-town persons.
3. All items offered to be suitably identified as to what they are and who is offering them for sale.
4. Items once registered must not be withdrawn from sale before the auctioneer has put them up for bids.
5. A minimum bid of \$1.00 is established on all items offered for auction. Minimum increments of 25 cents per bid.
6. A flea market will be available for all items valued at less than a buck.

Ham auctions are always rootin' tootin' fun affairs! But in your exhilaration, please keep the noise level down so as the Auctioneer can hear bids from those of us who have ruined our lungs and larynxes with too many coffin-nails and tons of "Stable Sweepings" pipe tobacco! Rid your basements of those white elephants and make your XYL happy! Have FUN and BRING MONEY!

OARC Picnic - Sunday July 21st, 1974 at Vincent Massey Park.

The weather co-operated wonderfully on that day and gave us a warm, sunny picnic. As a bonus, the NCC provided a band concert nearby at the bandstand, and when the band was finished, we were treated to a church service with good hymn singin' and a sermon by an unctuous fire-and-brimstone preacher.

Murphy struck early in the afternoon, however, as the ice for cooling the ice cream didn't cool, and the kids and adult kids soon began asking for "milk-shakes" instead of "I scream." John VE3HAT, in charge of the treats, struggled valiantly with the situation and we found that ice cream "drunk" instead of "spooned" tasted A-OK. Then CY VE3CVK, manning the galley, discovered that the club's huge preserving kettle for cooking the weiners had sprung a leak. Using the famous ham ingenuity, Cy solved the problem by changing the pot. He sure whopped up tasty hot dogs! In the chow line, Cary VE3ARS wondered about how much real meat goes into weiners these days. "About 5%," someone allowed. "That much!" exclaimed Cary. "Gimme half-a-dozen, Cy!"

George VE3BNO supervised the games and races, and some of us found we are not as spry as we used to be! My old eye is still pretty good though, as I won a record in the frisbee-throw. My YF is delighted with the Longines Symphonette record, but Stompin' Tom's "Bud the Spud" and Wilf Carter's "Blue Yodel No. 3" are more my speed!

Marg VE3HAL busily sold tickets, kept track of the prize draws and helped John VE3HAT with the refreshments, while hubby Don VE3CUZ wheeled Veronica in the pram. Honestly, with all the ham functions that cute li'l troll attends, wouldn't be surprised if she gets her ticket at age four!

All the harmonics had a rip-roarin' time and everyone enjoyed the eye-ball ragchews. Subjects ranged from ham radio, to the Expos, to ham radio, to Watergate, to ham radio, to mountain preachers, to ham radio, to women, to ham radio, to the Middle East, to ham radio, to Gray Dorts, 490's and Duesenburgs (them's automobiles son), to more ham radio, ham radio, ham radio, ad infinitum! The ladies appeared some frustrated and bored at the trend of confab and soon formed their own splinter groups. Since they don't have ham radio to discuss, what they found to keep their confabs rolling so well I have no idea. Anyway, the picnic was well attended and a good time was had by all. Sincere thanks to the Picnic Committee!

Stan VE3DQ

#### AREC Notes

Congratulations for a job well done to those who participated in Shinerama 74. If the high quality of this operation is an indication of how Ottawa Amateurs will act in a real emergency, my job as EC will be an easy and pleasant one. A special round of applause for Dave Parks VE3GSA who organized the communications effort.

Those of you who have not registered your equipment and capabilities with the AREC, please contact me by phone, letter, or 2 meters and do so. My goal is to have every Ottawa Amateur on file, even if some people cannot be very active except in a true emergency.

#### News Item..The Wakefield Search

A group of Ottawa Amateurs recently gave up a weekend of their time to provide communications for the search for a drowning victim. Boats, cars, a helicopter and foot patrols were equipped with 2-meter gear and used to search about 15 miles of the Gatineau River and its shores, near Wakefield, Q.Ue. Operating mainly on 146.52 MHz, with occasional use of repeater VE2CRA for contact with Ottawa, the network allowed careful coordination of the search parties. A group of GRS people participated in the operation and cooperation between the groups was excellent.

The search lasted Saturday and Sunday, July 6th and 7th, and on the following Tuesday, a helicopter and a boat, both with 2-meter gear aboard, made a final search. The victim was not found during the search, but was later discovered by some loggers on the river.

Participating were VE3's EKS, GRJ, UD, ZS, LJ, EEU, GYZ, BAP, plus VO2AH/3.

Larry Bradley VE3CRX  
EC Ottawa-Carleton

#### Shinerama 1974

"Rise and Shine" was the Ottawa Amateur Radio Club response to a request for communications for the Ottawa University Shinerama on Friday and Saturday, Sept. 6-7/74, in aid of the Canadian Cystic Fibrosis Foundation. With a 2 meter base station at University Center and nearly 40 mobiles in three shifts, Friday night and Saturday, the local repeater VE2CRA was kept humming. Those who participated wondered how a city-wide event of this kind could have been successful without good communications. The mobiles, with a student co-ordinator on board, kept circulating between shopping centres to see that all was well with the student groups tagging and shining. Supplies and people were transferred, and money cans were collected and whipped to the bank in a continuous operation that kept everyone interested. The net control operators were excellent and speeded up the whole effort by using abbreviated call signs; then calling for full identification every half hour. Statistics reports from each mobile were requested every hour or so in order to keep track of the number of shiners in action at each location. This made the final round up and transport...

ation back to the University relatively easy.

The bus driver arriving at Westgate Shopping Center late Saturday afternoon had no instructions to pick up 27 shiners at Carlingwood Shopping Center. Good radio communication from one of the mobiles arranged to have the bus redirected, thereby avoiding some sore feet or a long city bus trip!

All in all, another notch in OARC's belt and a very satisfactory exercise to those who participated. Good experience and training for a real emergency operation!

Bud VE3UD

#### Shinerama 1974 - CO-ordinator VE3GSA's report.

A successful communications exercise took place on Friday Sept 6th and Saturday Sept 7th in aid of the University of Ottawa Student campaign to raise funds for Cystic Fibrosis research by shining shoes throughout the Ottawa area. The Ottawa Amateur Radio Club repeater VE2CRA was used for more than 15 hours of net time. Some communications also took place on simplex channels to increase the efficiency of the net operation.

More than 25,000 dollars were raised this year, breaking the national record that the University of Ottawa students set in 1973 for Shinerama fund raising.

More than 30 mobile units participated in the weekend event. The Amateurs participating were: VE2BMH, 2DNW, 2DNM, VE3ARS, 3ARU, 3BNO, 3BR, 3BMJ, 3CNJ, 3CVK, 3DU, 3DY, 3DYD, 3EKS, 3FFW, 3ARJ, 3FMR, 3GPR, 3GWY, 3GJG, 3CDG, 3GGA, 3GRJ, 3GYZ, 3GSA, 3HAT, 3EPK, 3HLU, 3LJ, 3YT, 3ZS, 3TT, 3UD.

Many thanks to all those who gave their time and/or equipment to help this project to succeed.

Dave Parks VE3GSA

#### Field Day 1974 - VE3RC/3 Club Call

Field Day has come and gone and those who participated were well rewarded. Blessed by good weather, not too hot and not too cold, no flies or mosquitoes, the group at the Hazeldean location worked hard to make this exciting operation a success. Hank VE3BR furnished two transceivers, one of which unfortunately packed up, and a five-band vertical which developed an "S" curve after one of the guys let go! Bud VE3UD came equipped with miscellaneous dipoles, ladder and beams for 20 and 2 meters, Collins exciter and receiver. The Club's 1,500 watt gas-electric generator had been serviced and performed well, but the main power was provided by a 3KW MG set supplied by George VE3BNO and CFRA. This machine shook itself to pieces in the first hour or so, but George did a beautiful job of putting it together and from then on it ran perfectly and continuously hour after hour. Ron VE3AUM supplied 300 watt and 1,500 watt Honda MG sets which were kept in reserve.

Excitement mounted as the setup starting time Saturday afternoon approached. When the gun sounded at 18:00 GMT, we were off - just like any race against time. Cars were unloaded, generators were started, cables laid out, tents erected, people climbing trees to support dipoles. The vertical, (bent almost double), was quickly balanced skyward on the top of a knoll. Equipment was set up - the CW station in a tent (we forgot to bring a table for it!) - the phone station in a comfortable tent trailer owned by Dick Gagne, an interested non-ham from Edelweiss. First contact was made at 18:45 GMT and from then on operation never stopped until 21:00 GMT Sunday.

Contest bring out and develop the best operating skills. We were disappointed we did not have more younger hams to try their hand at this type of competition, where time is of the essence. CW operators Hank VE3BR, Bryan VE3GRJ, Ron VE3AUM, Ernie VE3EPK, Bill VE3EKA, Claude VO2AH, Bud VE3UD and Charlie VE3GPX carried the main load on keyer and bug. Fone operation on 80, 40, 20 and 15 meters was handled by Gerry VE3EEU, Don VE3CUZ, Glen VE3GWY, Larry VE3GRJ, Ron VE3AUM and Bud VE3UD, who kept hammering out the call sign "Victor Echo Three Radio Canada Portable Three"

Field Day Cont'd

until their heads were whirling. Many other operators and SWL's operated or assisted in logging including Bob VE3HBQ and Craig VE3EKP. Gerry VE3CNJ was Johnny-on-the-spot with slugs of his famous delicious brew.

Later the gang did a masterful job of erecting a 20 meter mini beam on top of a 20-foot guyed ladder jammed into rock crevices on another knoll. Murphy was active as usual and caused a break in a new control cable, apparently caused by stretching, putting the rotator out of commission. To boot, the beam had such a high SWR due to rain soaked center loading coils that it could not be tuned properly. The 80 meter dipole (trapped for 40) was used on 20 late Sunday afternoon and performed remarkably well as a mismatched two half-waves in phase (?). 2 meter direct operation with 10 watts output on 146.76 and 146.52 was disappointing because there were not many stations on the air. A 3 element quad on a 35 foot mast gave fair performance when stations to contact could be found, but 2 meters was not contest stuff and was used only for communication with the city.

On Sunday, Glen VE3GWY set up a QRP transmitter and in spite of severe QRM from other xmtrs, managed to make a few CW contacts using a hastily assembled dipole which he scrounged from home.

On Sunday morning, Glen cooked the pancakes and Hank the bacon and eggs - a communal breakfast for the night's survivors!

When the finishing gun sounded at 5:00 PM Sunday, 622 contacts had been made and everyone relaxed in a sigh of relief - tired but happy. One and a quarter hours later, everything had been packed in cars, the gate closed and only the down-trodden grass gave evidence of a real fun weekend.

We learned a few lessons - just wait until next year!

Bud Punchard VE3UD

#### HOW DOES A TRANSISTOR TRANSIST?

Question: What is a simple bias circuit for setting up the proper D.C. condition for transistor operation?

Answer: Fig. 1 shows a simple circuit which will bias up and operate as an amplifier. We are primarily interested in resistors designated R1, R2 and RE. Those resistors have one main function and that is to define the value of the emitter current which then defines the collector current.

R1 & R2 act as a voltage divider and it places a D.C. bias voltage on the Base of this NPN transistor. If the base emitter diode is turned in we will have a .65 volt drop across it and whatever voltage is left will cause a current to flow in RE. For Example, if there is 1.65 volts on the base and we lose .65 volts across the base emitter diode, that leaves 1.0 volts to generate a current in the emitter resistor. Fig 2. (Circuit Page) gives an example using a 1K emitter resistor which yields an emitter current of 1.0 ma. If 1.0 ma. flows in the emitter, very slightly less flows in the collector. If the supply voltage is 10.0 volts and the value of Rc is 5K ohms, then we can see that  $V_{cc} - I_c R_c = V_c$  which yields us an answer of 5.0 volts as a D.C. output bias voltage.

Question: Hold it! You covered quite a lot. Let me think about this for a month or so!

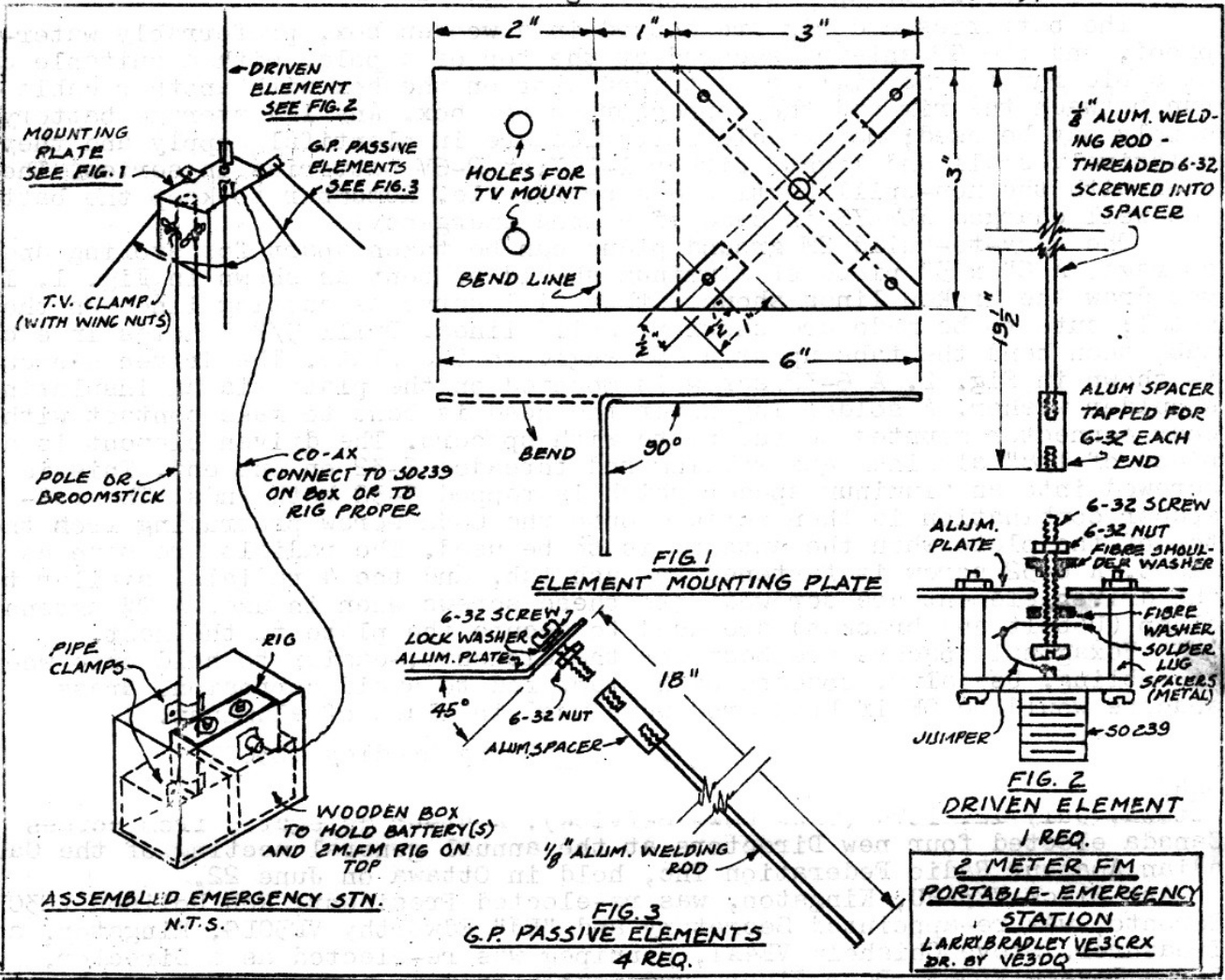
Answer: OK!

STAFF

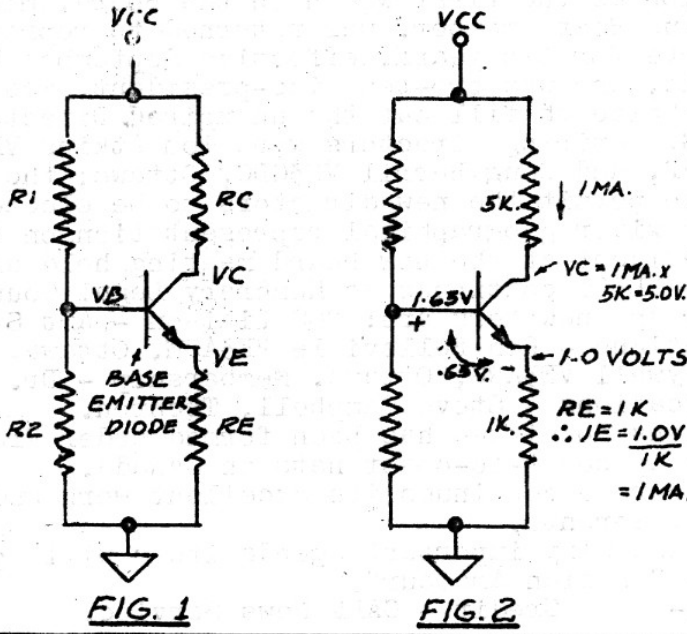
#### A 2 Meter FM Portable-Emergency Station - By Larry Bradley VE3CRX.

The Wakefield Search in July pointed up the wisdom of devising a take-apart, portable-emergency station that could be quickly assembled. For one thing, there was always the worry of the water sloshing in the bottom of the boat damaging the transceiver, and there is an advantage in getting the radiator up just a little higher. After a bit of thought, the set-up shown on the Circuit Page was evolved.

Cont'd P 10..



HOW DOES A TRANSISTOR TRANSIST?



VESUVIUS SEZ:





## 2 M FM Portable-Emergency Stn..Cont'd

The batteries and rig are housed in a wooden box, preferably water-proof, and the GP antenna secured at the top of a pole, with a suitable coax cable run to the rig; or to a connector on the box with another cable run between the rig and the connector on the box. Any 12V storage battery supply may be used;—motorcycle batteries are in plentiful supply and they're relatively small and light; either 1-12V; or 2-6V batteries in series. The ones with the non-spill bottles are preferable. Remember to keep the batteries well charged ALWAYS in case of a long emergency!

The easy-to-build 2M ground plane can be taken apart for storing and storage. A 6" x 3" piece of aluminum should be bent as shown in Fig. 1. If you draw the broken lines shown, they will serve as cutting lines on the metal; cuts to be made are shown as solid lines. Drill 9/64" holes in each tab, then bend the tabs up at a 45° angle to the plate. The driven element is shown in Fig. 2. A 6-32 screw is mounted on the plate via an insulating shoulder washer. A solder lug under the head is bent to make contact with a coax connector mounted to the plate with spacers. The driven element is a piece of 1/8" aluminum gas welding rod threaded 6-32 on one end. This is screwed into an aluminum spacer which is tapped 6-32 both ends. The rod-spacer combination is then screwed onto the 6-32 screw protruding from the top of the plate when the antenna is to be used. The radials are made as in Fig 3. A 6-32 screw is fastened to each tab, and the 4 radials, similar to the driven element are screwed onto these screws when in use. A TV antenna clamp (U-bolt and bracket) are used to secure the plate to the mast.

Hexagonal spacers are best for the elements;—easier to hold onto when assembling. Use alum. spacers with alum. rod to avoid corrosion. Brass spacers would be OK if brass rod were used in place of aluminum.

- \* \* \* - Larry Bradley VE3CRX.

CARF

Ottawa, July 12, 1974 (CARF News Service). Amateur delegates from across Canada elected four new Directors at the annual general meeting of the Canadian Amateur Radio Federation Inc, held in Ottawa on June 22.

Art Blick VE3AHU, Kingston, was re-elected President; Ken Rolison VE3CRL, Toronto, was re-appointed Secretary and "Ed" Edworthy VE3CLG, Kingston, as Treasurer. Steve Chisholm VE4AI, Winnipeg was re-elected as a Director. Lorne Doreen VE3SZ, Deep River, and Stella Broughton VE6VF, Edmonton, are new Directors. Stella, ably representing the Amateur Radio League of Alberta breaks new ground for the Federation as the first woman on the Board. Mike Koval VE1AJI, Saint John, a previous Board member, was returned to represent the Atlantic Region. They will serve for two years, effective September 1.

Frank Merritt VE7AFJ, Parksville, who was pro-tem vice-president, was confirmed as the Board's earlier choice to fill out the unexpired Director's term of the late Jim Strain VE3BSG. Retiring directors were Tom Atkins VE3-DCM, Toronto; Clarence Humber VE1HD, and Doug Burril VE3CDC, Ottawa; the latter withdrew from the election to permit the new directors to be elected by acclamation, thereby ensuring a wider geographical representation on the Board. Doug was appointed vice-president at the new board meeting held after the general meeting. Charlie Grove VE3CT continues as Honorary Legal Counsel.

Standing committee chairmen for the new term are: DOC Liaison - Art Stark VE3ZS, Ottawa. Emergency Communications - Ron Belleville VE3AUM, Ottawa. Auto Repeater Advisory - Cary Honeywell VE3ARS, Ottawa. Membership - Dr. Herb Greenridge VE3DWA, Kingston. Publications - Steve Campbell, Trenton.

An interim national communications committee has been formed under Frank Merritt to study methods of setting up coast-to-coast nets in Canada.

The CARF national incoming QSL Bureau continues its excellent work under the direction of Len Sumner VE3DOR, Toronto.

A report of the discussions on the many important agenda items will appear in the September issue of "The Canadian Amateur".

- \* \* \* -

Credit - CARF News Service.

ARCOVERS: Bernie VE3SH's IC22 took the deep six when his voltage regulator quit regulating....Cy VE3CVK's new SB162 sounds FB..Shux! Outa space!73 .....