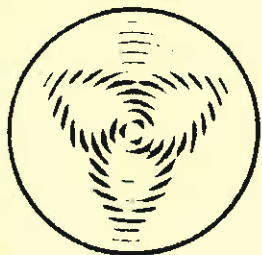
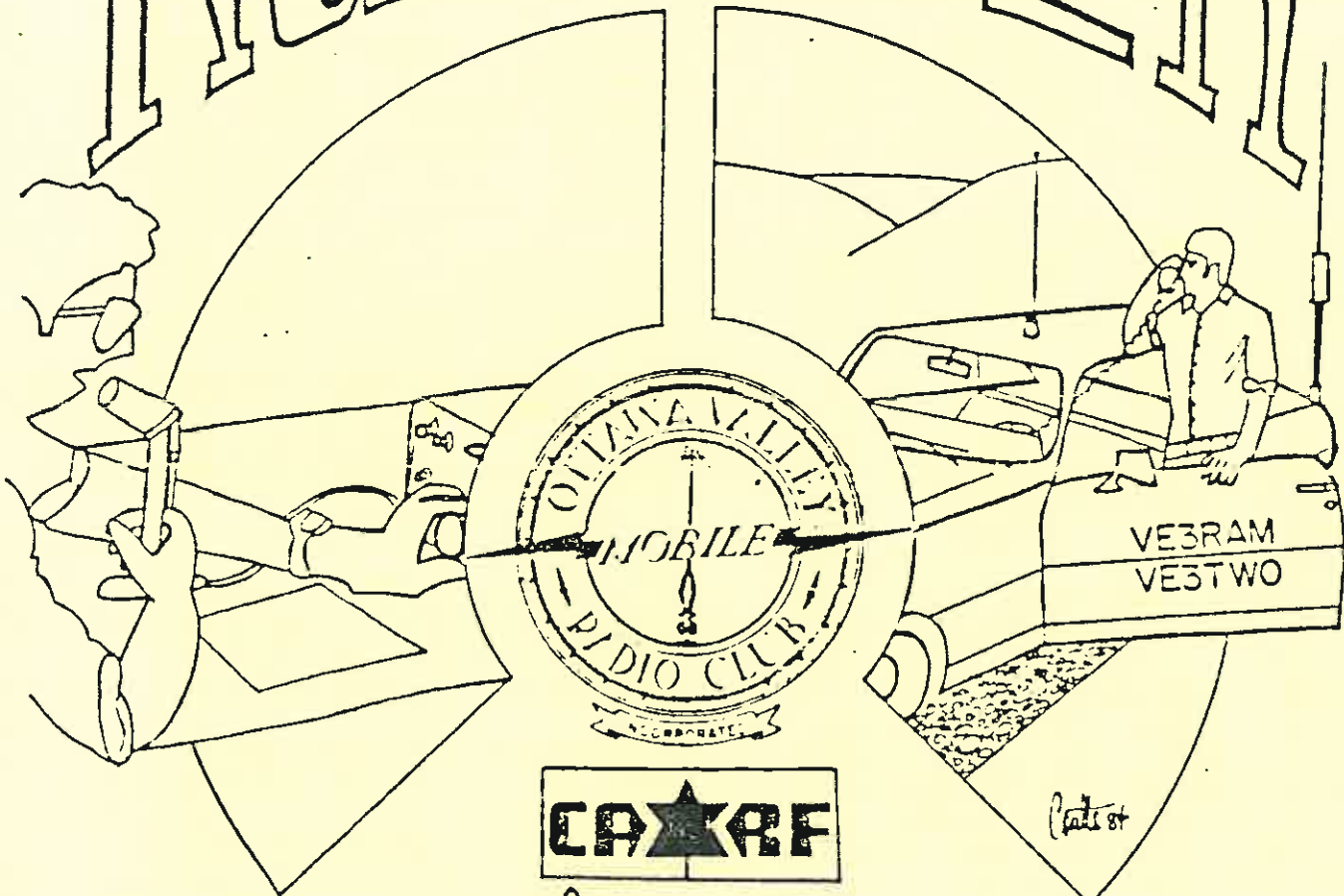


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RÄMBLÄR



NEXT MEETING
MAR 17

THE OTTAWA VALLEY MOBILE RADIO CLUB INCORPORATED
1987 - 1988 EXECUTIVE

PRESIDENT	BILL SEYLER	VE3OAI	836-5818
VICE-PRES	IAN MCINTYRE	VE3CZ	731-7617
SECRETARY	KRIS ANDERSON	VE3OWE	225-4152
TECH ADVISOR	ALAN BOYCE	VE3LNH	737-4937
PUBLIC REL	LEO DESJARDINS	VE3NVL	225-0902
TREASURER	HENRY GREENWAY	VE3OMU	729-3804
PAST PRES.	VANCE JOHNSON	VE3OAO	824-9555
EDITOR	JERRY WELLS	VE3CDS	225-7374
MEMBERSHIP	PAT BREWER	VE3KJQ	820-9309

CLUB SPONSORED ACTIVITIES

POT HOLE NET - OVMRC Net -
Every Sunday, 1000 local time
on 3760 kHz. SSB. All radio
amateurs are welcome to
participate.

THE WISE OWL NET - OVMRC Net -
Ragchew net every Friday
evening at 2000 local time on
the club repeater VE3TWO -
147.30/90 MHz.

VE3JW - Amateur radio station
of the National Museum of
Science and Technology. The
OVMRC helps maintain the
station and schedules
operators for the station as
part of an Amateur Radio
public relations display.
VE3JW operates on all HF
Bands, both CW and phone.
Slow scan TV is also
demonstrated. For information
or if you wish to operate the
station, contact the Public
Relations Coordinator.

LOCAL AMATEUR RADIO ACTIVITIES

POT LID NET - Sponsored by Ed
VE3GX. An informal slow speed
CW net meeting each Sunday
(except July and August) at
1100 hrs. on 3620 kHz, to
provide and stimulate interest
and proficiency in CW
procedures.

CAPITOL CITY FM NET -
Sponsored by the Ottawa
Amateur Radio Club Inc. every
Monday evening at 2000 hrs
local time. Conducted on
VE3CRA repeater 146.94/146.34.

SWAP NET - Sponsored and
conducted by Ed, VE3GX, each
Sunday as part of the Pot Hole
Net and each Monday as part of
the Capitol City FM Net
(except July and August). Ed
may be reached at 733-1721 for
listings and queries.

THE MILITARY NET - Sponsored
and conducted by Frank,
VE3MSC, Tuesday at 2000 hrs on
VE3TWO 147.30/147.90 MHz.

Membership in the OVMRC is
open to all those interested
in Amateur Radio. Regular
meetings are held on the third
Thursday of each month (except
July and August) at 2000 hrs
unless otherwise posted.
Meetings normally take place
in the auditorium of the
Museum of Technology on St.
Laurent Blvd (south of the
Queensway)

The OVMRC provides code
practice 24 hours a day. Dial
825-6786.

How do I begin? and what can we do about it? I am referring in this instance to the deliberate QRM of the Trans-Provincial Net (T.P. Net) on 7.055 MHz (upper-side band). We have all heard him the lid who gets his jollies by tuning up on frequency by loud and obscene noises and this past weekend by doing his best to destroy a net which by its very nature is a meeting place for not only those who are looking for others but for those less fortunate among us who through no fault of their own are "housebound". The "Creep" in this instance is on his "high horse" about the net being on upper side band. The book reads "By custom LSB on 80/40 USB 20-15-10. This is not an order but a convenience. If it is felt that it would be more convenient as to encourage novices to check-in on C.W. so be it. The point at this time is that criticism is fine, the other persons point of view fine. But deliberate QRM and refusing to identify: If this person has a licence it should be lifted, if he hasn't the DOC/FCC should make every effort to locate him and prosecute! Further do not aid his ego and reply to him, this person only will stay on with encouragement from the distress he is causing to others. Report him and his kind to the authorities both here and across the border. We must be our own conscience and policeman. If this is worthwhile please for the sake of all the dedicated persons who have gone before and those we hope to attract as amateur radio ops, do not let these persons represent us or dictate to us how we conduct ourselves on the air. Remember don't reply to anyone without a Call Sign and; Report any incident to the authorities.

Bill VE3OAI

MINUTES FEBRUARY MEETING

The meeting was opened at 20:08 by President Bill VE3OAI who welcomed approximately 40 in attendance, including Jack Ravenscroft VE3SR. The two proposed revisions to the Constitution By-Laws were published in the January Rambler and were brought up for a vote by the members. The first proposed revision was that By-Law 9c (4) read..."that all nominated executive members are full members". In the discussion a motion from the floor was put by Kris VE3OWE, seconded by Ray VE3FN it was proposed that Bylaw 9c (3) be amended to include reference to full members "that the nominees for the new executive are licenced Radio Amateurs and are full members in good standing. It was also proposed that By-Law 9C (4) be deleted. The motion was approved by a vote of the members. The second proposed revision concerned the addition of a Membership Coordinator to the executive and the removal of these duties from the Vice-Presidents duties. This was voted on and approved by the members. The minutes of the January meeting were approved as published.



President Bill VE3OAI announced that Dick VE3BYH of Sudbury had the misfortune to lose his home in a fire recently and that any donations to help him would be welcome.

Vice President Ian VE2CC reported that he handled the net control duties on the Pot Hole Net last Sunday and there were only 10 check-ins. Hugh VE3WM commented that when he was in London, Ont. that they had the same problem with only 3 or 4 check ins from a membership of 160. He was of the opinion that the days of HF nets are over. Merv VE2CV reminded members that the preamble for the Pot Hole Net is on page 5 of the February Rambler. He asked that members keep it for reference and volunteer as active or stand-by net controllers. He commended Norm VE3JDJ who has done an outstanding job as net controller for the past several years but reminded members that there is a need for more volunteers for net control. The net has operated for the past 28 or 29 years and draws listeners from wide areas. He also commented that in the latest federal budget, the duty was removed on facsimile equipment for amateur use. The exemption number is 8527-90.10. The exemption number for regular amateur radio equipment is 8525-20.10.

Technical Director Alan VE3LNH spoke briefly on the Canada-USSR transpolar ski expedition. The Canadian members have raised about half of their expected \$500,000.00 expenses. They will use amateur radio to maintain contact with the outside world using VHF to contact supply aircraft and 10 watt HF to contact bases at Alert and Resolute. He put a motion that the Club donate \$100 to the expedition and issue a challenge to other area clubs to also show support. The motion was voted on following discussion and was approved by the members present.

Public Relations Coordinator Leo VE3NVL commented that the operation of VE3JW is going along well with the scheduled weekend operators.

Treasurer Henry VE3OMU will provide a quarterly financial report at the next meeting.

President Bill VE3OAI passed along information from membership Coordinator Pat VE3KJQ who was not able to attend. There are four students who have qualified for an amateur radio license. They are:

J.P. Gendron	VE3PXZ
Norm Dupuis	VE3NDU
Bert Tremblay	call sign not known yet
David Leigh	call sign not known yet

Congratulations to these new amateurs and welcome to the radio waves!

Memberships are now half rate at \$7.50. The OARC is revising their membership directory and are looking for any changes of address. Please contact Pat VE3KJQ.



CARF representative Dan VE3EBI noted that CARF has a membership drive on between March 15 and May 15, 1988. New applications or renewals that are processed through the club will result in a 20% rebate to the club. He provided a number of application forms. Those interested should contact membership Coordinator Pat VE3KJQ. He also mentioned that the Kingston repeater is now linked to VE3ULR at London. When Dan VE3EBI was operating VE3JW last year, the Russian transpolar ski team dropped by for a courtesy visit.

CRRL representative Ray VE3FN commented that CRRL and CARF representatives will meet with DOC on Saturday February 20th to discuss the proposed restructuring of the Amateur Service. With reference to the January minutes, Ray explained that there is no longer a Canadian Division of ARRL and consequently no Canadian Division Director. He also noted that DOC have published the Townsend Report considering the constitutional powers of the Federal Government versus municipalities to regulate antenna structures.

Jack Ravenscroft VE3SR announced that he had just received a copy of the judgement in the Appeal heard last month. The key points were summarized by Jack. (see letter in this issue of the Rambler) Jack concluded by commenting that the total costs are not yet known in full but they are known to far exceed expectations and additional financial support will be required to meet them.

The guest speaker Paul Newell of Ontario Hydro was introduced by President Bill. He presented a well documented talk on the health effects and magnetic fields and on RF interference from power systems. Research was started in the 1960's on the health effects of electric and magnetic fields. No public health risk has been established. Radio noise caused by power systems falls into two categories:

- Corona discharges cause interference below 30 MHz
- Discharges due to arcing cause interference above 30

MHz

There is a CSA Std C108.3.1 that specifies limits below 30 MHz. Noise sources such as cracked or dirty line insulators or defective hardware are usually difficult to locate.

President Bill thanked the speaker for an interesting and informative presentation. The next general meeting will be on March 17. The executive meeting will be at Leo's VE3NVL QTH on Feb. 25th at 19:30.

The meeting was adjourned at 21:40.

Kris Anderson VE3OWE
Secretary



The following is a copy of a letter which Jack VE3SR received from his lawyer.

February 15, 1988

Mr. Jack Ravenscroft
34 Binscarth Crescent
Kanata, Ontario
K2L 1S1

Dear Jack:

Re: Ravenscroft vs Houghton

Please find enclosed for your review a copy of the judgment rendered in the above noted appeal.

This appeal was argued on January 28th, and 29th, 1988, with judgment being given following completion of the argument. The Court of Appeal allowed both the appeal and the cross-appeal in part, subject to certain conditions. We summarize below the arguments submitted to the Court of Appeal and the Court's disposition of those arguments.

The first argument submitted to the Court of Appeal was that to the extent that the provincial law of nuisance affected an integral part of a federally licenced undertaking, the provincial law was unconstitutional. This argument was not accepted by the Court of Appeal.

The appellants also submitted to the Court of Appeal that to the extent that the radio station's transmissions were found to constitute a nuisance, such transmissions were statutorially authorized by the provisions of the Radio Act and the regulations made thereunder, and accordingly the defence of statutory authority applied. The Court of Appeal decided not to determine the case on this ground, as it had not been raised in the pleadings or at trial. Accordingly, while this argument received a sympathetic hearing from the Court of Appeal, the Court did not express any opinion on its applicability.

The final argument raised before the Court of Appeal was that in the circumstances of this case, nuisance had not been established because the plaintiffs had been unreasonable in refusing to co-operate in suppressing their electronic equipment. While this argument was not accepted by the Court of Appeal, the Court did accept that the injunction granted, being an equitable remedy and therefore discretionary, should be vacated in view of the unreasonable conduct of the plaintiffs.

The Court's order may be summarized as follows:

- (i) The injunction granted by the District Court Judge is vacated forthwith;



- (ii) You have 90 days to arrange for the modification of the electrical appliances of the Houghtbys so as to suppress the interference emanating from your radio station to a standard approved by the Department of Communications. If more than 90 days is required, then an application may be made to a District Court Judge for such additional time as is necessary.
- (iii) The suppression shall be at no expense to the Houghtbys.
- (iv) If the Houghtbys equipment cannot be suppressed to standards acceptable to the DOC, then the injunction shall be reinstated.
- (v) If the Houghtbys refuse to co-operate or to permit reasonable entry to their premises for the purposes of affecting the suppression, the injunction will be permanently vacated.
- (vi) Damages to the Houghtbys are increased from \$2,500.00 to \$5,000.00, in order to provide additional compensation for the inconvenience to which they will be subjected as a result of the suppression.
- (vii) Each side will be required to bear their own costs of the appeal and the cross-appeal. You will be required to pay the Houghtbys' costs at trial.

We note that you have the right to seek leave to appeal the decision of the Court of Appeal to the Supreme Court of Canada. Should you decide to seek leave to appeal to the Supreme Court of Canada, an application for leave to appeal must be filed within 60 days of the judgment.

As advised, efforts to suppress the susceptible appliances of the Houghtbys should begin as soon as possible. In view of the possibility that the Houghtbys will be seeking to reimpose the injunction, it is imperative that all steps taken be documented as carefully as possible. In this regard, all correspondence or conversations between yourself or Mr. Cameron, and the DOC, Angela Henry, or the Houghtbys should be confirmed in writing.

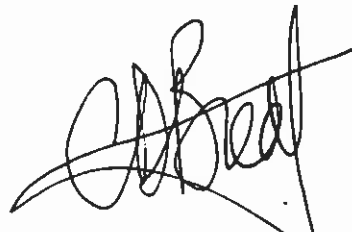
If you have any questions with respect to the above, please do not hesitate to contact me directly.

Yours very truly,

CDB:lb

Enclosures

c.c. Mr. Ralph Cameron



BOOK REVIEW by BILL WILSON VE3NR

"Transmission Line Transformers", by Jerry Sevick, W2FMI; ARRL; 133 pages; \$C14.75,

My interest in baluns over the past years and their performance led me to buy this book and I was both rewarded and disappointed as I thought it would be useful to me, an average Amateur, trying to build a really good antenna system. The book is good in that it shows a great variety of ways to build baluns and transformers for various input/output impedance ratios. But, when it comes to evaluating the performance of the baluns and transformers it describes, I found it much less helpful.

To start with, it would have helped Amateurs to understand the basics of these popular components had the author given a good version of the equivalent circuit of transformer and shown how the inductance, leakage reactance, resistance, core loss, stray capacity, etc. of a transformer affects their performance as the frequency is increased over its working range.

When one sets out to build an RF transformer, one usually wants to know how well it will transform an impedance from one value to another over the desired frequency range. However, this book evaluates most of the designs on the basis of their power handling efficiency over a range from 0.1 to 100 MHz. and on this characteristic, most of the suggested designs look to be very good. Had the author evaluated his designs on how well they transform the secondary impedance to the desired primary impedance, he would have been able to show us those designs that were good performers and, ranging down the scale, those designs that were not worth building.

There are at least two methods of evaluation that would have produced more useful results. The author could have loaded each transformer with the desired output impedance, say a 50 or 75 ohm resistor, then connected the input to an SWR Bridge adjusted to the desired input impedance, say 50 ohms. Then, using a low-powered transmitter, he could have measured the SWR over the transformer's design frequency range. A low SWR would be an indication of good performance. Alternatively, he could have used the method suggested by Doug DeMaw in his December '87 article in QST entitled "A Laboratory Style RX Noise Bridge". In that, DeMaw suggests the use of an RX bridge and a receiver. This will reveal even more about the quality of a transformer in terms of the resistance and reactance, $(R+jX)$, that it contributes to the circuit across its frequency range.

How well an RF transmission line transformer will work as a balun and keep RF voltages off the outside of a coax cable used to feed a doublet, is a lot more difficult to evaluate. If an Amateur can get a fairly good match between his doublet and his transmission line, keeping RF off the outside of his feeder is simplified. Arranging his feeder so it falls away from the doublet at



right-angles for a quarter wavelength or more will complete the job quite well.

In this business of transmission line transformers, the interesting question these days is whether one should twist or not - that is the wires that are wound around the core. Sevick prefers ribbon or flat wound coils; Moxon in his book, "HF Antennas for all Locations" (PSGB), says twisting will give better results. I found that twisting does improve transformer performance. But, I went one step further - instead of using #16 solid enamelled wire, I used 5 strands of #30 enamelled twisted together to make a sort of Litz wire. Then I took three lengths of this kind of this home-made stranded wire and twisted them together to make my transformers. I found it easier to wind toroids and rods with this kind of wire as it is more flexible than large size solid wire and, more importantly, I got better transformer performance in terms of bandwidth and consistency of impedance ratio.

By the way, Sevick gives some good designs for useful and interesting test equipment though he does not relate them to the evaluation of the transformers he describes in his book.

It is a book that one should review very carefully before committing one's self to its purchase.

MEMBERSHIP MEMO

This seems to be a month for endings. The Ravenscroft case has finally come to an end and I imagine that Jack, and Ralph Cameron too, are relieved. They still have some work to do, but the seemingly endless court days are over. The club's Amateur radio course is also over and we have had a very successful year. Four students have their license as of this writing; J-P Gendron VE3PXZ, Norm Dupuis VE3NDU, Bert Tremblay VE3PYO and David Leigh VE3PYN. Four more only require their code to have their licenses and we expect that to happen very soon. We had a good bunch of people this year which made the course that much more enjoyable for Russ, Jim, and I to teach. Following the course we had a dinner at the Sombrero restaurant on Baseline where 14 people enjoyed the good food and plentiful conversation. This marks the end of course number six and we look forward to starting number seven in September.

I would remind you that club memberships are only \$7.50 right now. If you know someone who might like to join our club why not encourage them to give us a try with this six-month membership. Club membership now totals 136.

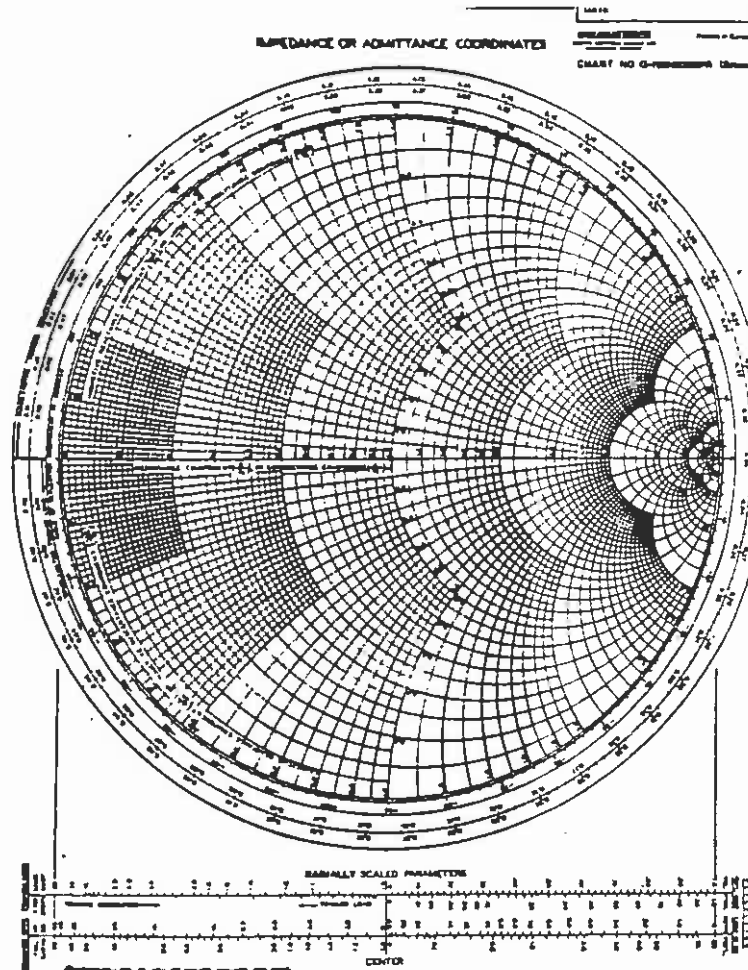
Pat Brewer
VE3KJQ

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ANTENNA TOPICS

It rose to fame in song and myth,
And now stands quite alone,
The trusty, twisty, Chart of Smith,
Comes from the Twilight Zone!



Scaled down copy of a "Smith Chart"

This column is also published in the Ottawa Pioneer ARC bulletin "Teleparc". This resulted in a letter from John Lester, Secretary of the Quinte ARC with reference to my first article on the 80 meter horizontal loop antenna. The letter is reprinted with permission.

continued next page



PARC Ottawa
Kris-VE3OWE

Your article on the 80m loop caught my eye. I too put up a loop in 1985. My new home, just north of Belleville has a heavily wooded area, with the trees going at about 100 ft. average height.

As hoped, the loop did the trick. I get out like crazy. Mine has 6 supports, so is a hex shape. I use 50 ft. of RG59 to step the impedance down to 50 ohms.

Next project (when it gets really cold in Feb.) is a loop on 160. The 529 ft. of #14 copper wire is on hand. I plan 9 or 10 supports. So far, I plan a 25 foot piece of RG11 as a transformer from the 100 ohm antenna to the RG8 50 ohms to the rig. Your comments were interesting on the novel approach to the impedance match. I don't have a convenient set up for the 85 ft. of RG11 I should use for the quarter wave transformer.

73 John Lester VE3MB Q.A.R.C.

In my response to John VE3MB, I congratulated him on his very impressive installation and on the excellent results that he has enjoyed using it. I also attached the results of some calculations on a series section matching transformer to match the 100 ohm loop impedance to 50 ohm RG8X coax. This involved the use of the Smith Chart referred to above. The ARRL Antenna Handbook (1984) has an excellent section on this, on pages 5-10 and following. The series section transformer has advantages over the quarter wave section sometimes used. It may be less than a quarter wavelength and it provides a considerable range in the choice of impedances for the matching section. It is inserted in the feedline at a predetermined distance from the antenna. In the particular case of matching a 100 ohm load to 50 ohm coax, the results of using the Smith Chart were as follows:

$L1 = 0.0415$ (distance from the antenna to the series matching section)

$L2 = 0.1595$ (length of the series matching section)

(Note that $L2$ is shorter than a quarter wave section)

These are wavelengths in free space. The velocity factor for the coax is taken to be 0.66. Converting these to feet for 3.500 MHz gives $L1$ as 7ft. 8 in. and $L2$ as 29 ft. 7 in. The selected matching section was a length of RG11U (75 ohms). As a matter of interest, the corresponding figures for 160 metres (1.800 MHz) are $L1 = 15$ ft. even, $L2 = 57$ ft. 7 in.

It will be interesting to see how this works out if John tries it. He has the right approach to antenna work "when it gets really cold in Feb." Hi

Comments from other readers on any antenna topic are most welcome. Please send them to the Editor, Jerry VE3CDS or to the undersigned.

73 de Kris VE3OWE



JOE NORTON TRUST AWARD
FOR AMATEUR RADIO

The Ottawa Amateur Radio Club Inc. awards annually the Joe Norton Trust Award for the advancement of amateur radio. The amount of the award this year is \$780, which may be shared by more than one recipient.

ELIGIBILITY

To be eligible a candidate must:

1. Be a resident of the National Capital Region as defined by the official federal government map;
2. Have received a Certificate of Proficiency in radio from the Department of Communications during the period April 1, 1986, to April 1, 1988;
3. Send a written submission of no less than 600 words and no more than 900 words to the Executive of the Ottawa Amateur Radio Club Inc., setting out his/her interests, achievements and plans to contribute to the advancement of amateur radio; and
4. Present him/herself for an interview if so requested by the judges.

RULES

1. Entries must be received on or before April 1, 1988. No entries received after that date will be considered.
2. The club will send acknowledgement in writing upon receipt of an application.
3. A panel of judges appointed by the Executive of the Ottawa Amateur Radio Club Inc. will evaluate all entries submitted before the deadline.

4. Finalists may be interviewed by members of the Executive of the Ottawa Amateur Radio Club Inc. or the panel of judges or both.

5. Submissions will not be returned unless accompanied by a self addressed stamped envelope.

6. If the judges do not select a candidate in any year, no award shall be made in that year and the monies shall return to the Fund to be awarded in subsequent years.

7. The decision of the Executive of the Ottawa Amateur Radio Club Inc. in the selection of a recipient of this award is final.

8. The winner will be notified on or before August 1st.

9. The winner will notify the Ottawa Amateur Radio Club Inc. of his or her acceptance of the award no later than August 15th.

10. The award will be made during the regular club meeting in the month of September.

11. The winner agrees to have his or her name, photographs and address published in club bulletins, trade papers and on the airwaves.

12. The winning submission will be published in the Groundwave.

SEND YOUR ENTRY TO BE RECEIVED NO LATER THAN APRIL 1, 1988, TO:

The Joe Norton Trust
Award for Amateur Radio
The Ottawa Amateur Radio Club
P.O. Box 8873
Ottawa, Ontario
K1G 3J2



SCHEDULE FOR VE3JW

Schedule for march 19 to april 17, 1988.

		<u>Morning 9 AM - 1 PM</u>		<u>Afternoon 1 PM - 5 PM</u>	
Mar 19	Sat	Chris	VE3PAE		OPEN
Mar 20	Sun	Dan	VE3EBI	Henry	VE3OMU
		Bill	VE3OAI	Bill	VE3JMC
Mar 26	Sat	Alan	VE3EEC	Ed	VE1EJ
		Fred	VE3NJF	Leo	VE3NVL
Mar 27	Sun	Kris	VE3OWE	Jerry	VE3CDS
				Bob	VE3JDB
Apr 2	Sat	Ric	VE3NJM	Vance	VE3OAO
		Gord	VE3OSM	Leo	VE3NVL
Apr 3	Sun	Paul	VE3CEF	Don	VE3ATJ
		George	VE3DWW	Chuck	VE3PDK
Apr 9	Sat		OPEN	Paul	VE3NFD
				Leo	VE3NVL
Apr 10	Sun	Dave	VE3JTZ	Joan	VE3OSE
		Mark	VE3OWL	Susan	VE3OSP
Apr 16	Sat	George	VE3BNO		OPEN
		Otto	VE3HCD		
Apr 17	Sun	Doug	VE3OMZ	Fred	VE3BAJ
		Doug	VE3ATY	Jim	VE3GJY

This is a list of operators who have express a desire to operate VE3JW, the amateur radio station at the Museum of Science and Technology. Anyone else interested to operate the station is welcome to call Leo, VE3NVL at 225-0902.



Sharpen up those pencils. Here are a couple more questions from the DOC question bank for the Amateur, Advanced, and Regulations exams. If you would like your own copy of the question banks contact CRRL or CARF.

3.24 The highest frequency that will be reflected back to the earth at any given time is known as:-

1. FOT.
2. MUF.
3. OWF.
4. LUF.

4.50 When antenna feedlines must be placed near grounded metal objects, which of the following feedlines should be utilized?

1. 75 ohm twinlead.
2. 300 ohm twinlead.
3. 600 ohm open-wire.
4. coaxial cable.

207. An unmodulated carrier may be transmitted:-

1. during distress conditions.
2. in frequency bands below 51 MHz.
3. when transmitting SSB.
4. for brief tests on frequencies below 51 MHz.

Pat Brewer
VE3KJQ

OVMRC
P.O.Box 5530 STN F
OTTAWA ONTARIO
K2C 3M1



FIRST CLASS

FIRST CLASS

JIM HAMILTON VE3GJY
2038 ARCH ST.
OTTAWA ONT.
K1G 2H1