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DECEMBER
1983

The Canadian Amateur Radio Magazine
La Revue des Radio Amateurs Canadiens

VE3NAR Field-Day '83

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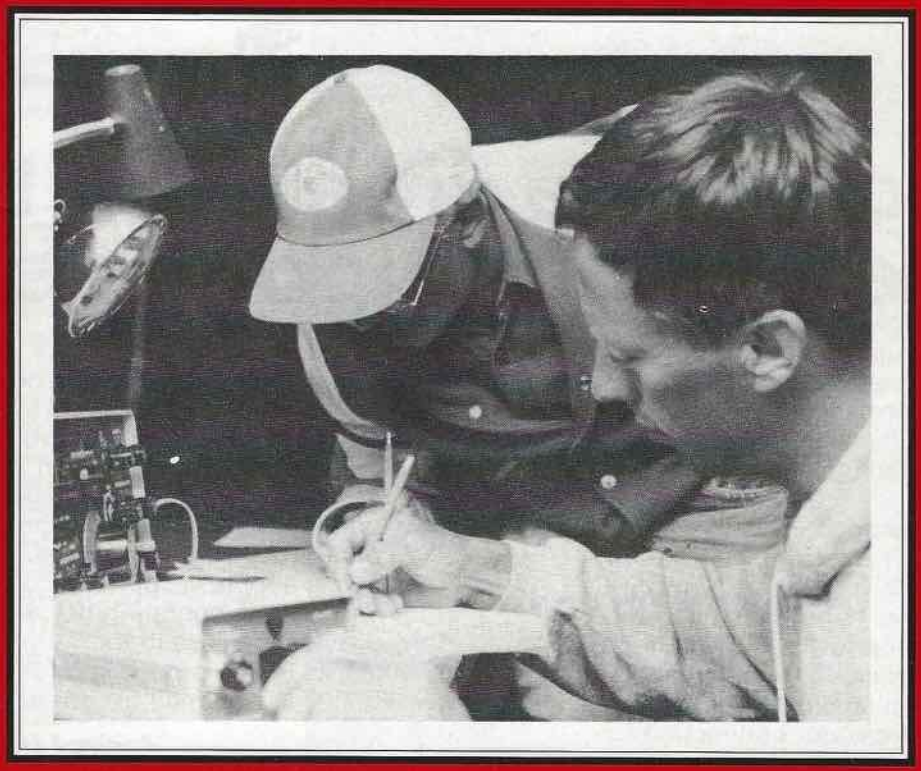

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This Transmatch is designed to match virtually any receiver, transmitter or transceiver in the 160 to 10 meter range, (1.8 to 30MHz) with up to 1500 watts RF power to almost any antenna. A 1:4 balun is built in for connection to balanced lines. Circuit uses the series parallel capacitor connection for improved harmonic attenuation. Units use the highest quality ceramic roller inductors and switches.

VS 300A Transmatch

This unit contains high quality components and is designed for lower power equipment up to 300 watts. It will match any receiver, transmitter or transceiver in the 160 to 10 meter range. (1.8 to 30MHz) with up to 300 watts RF power to almost any antenna. A 1:4 balun is provided for connection to balanced lines.

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This unit eliminates spurious conduction from transmitters operating below 30 MHz. It effectively eliminates 2nd and 3rd harmonics appearing in the TV bands when operating on 10, 15 and 20 meters providing excellent attenuation to TV frequencies above 36 MHz.

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TCA

THE CANADIAN AMATEUR

DECEMBER, 1983 Vol. 11 No. 11

Contents

TCA — The Canadian Amateur is published in Canada 11 times per year to provide Radio Amateurs, those interested in radio communications and electronics and the general public with information on matters related to the science of telecommunications.

Unsolicited articles, reviews, features, criticisms, photographs and essays are welcomed. Manuscripts should be legible and include the contributor's name and address. A signed article expresses the view of the author and not necessarily that of C.A.R.F. Publications Limited.

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Indexed in the Canadian Periodical Index: ISSN 0228-6513

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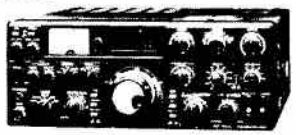

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ARX-2B Ringo Ranger II	79.00
ARX-2K kit for Ringo ARX-2B	37.00
A14-3 3 el beam 20 mtrs	349.00

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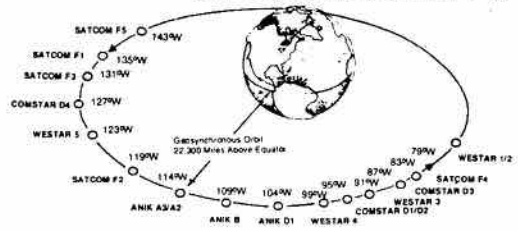

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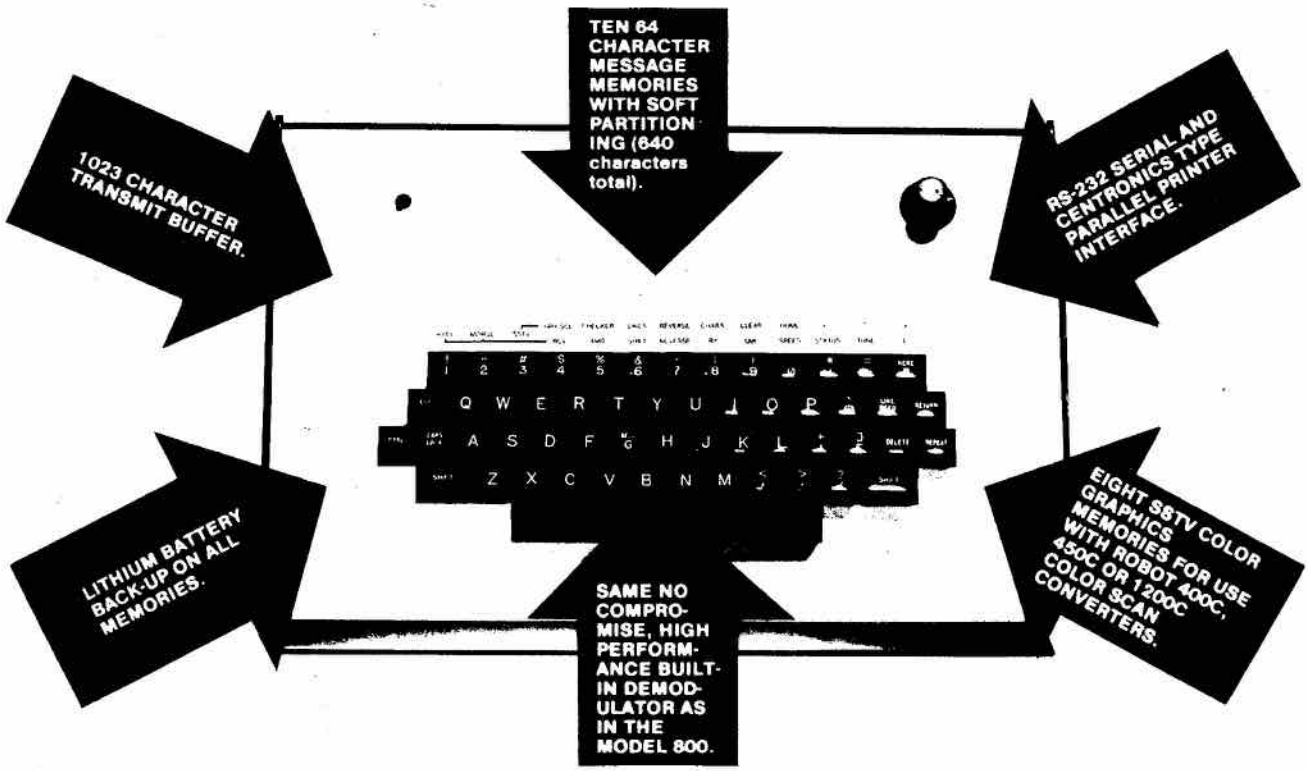

The new Model 800C offers the same fine quality construction, high performance, and outstanding features as the popular Model 800, plus the many new operating features shown above. It is a complete specialty mode communications terminal offering unmatched ease of operation. The 800C is designed expressly for amateur radio and nothing else! By focusing our attention on this simple concept we are able to provide a product that works better, costs less and is easier to operate than systems that try to do "everything" and do nothing very well.

OUTSTANDING BUILT-IN DEMODULATOR

The Model 800C has the same high quality demodulator acclaimed by thousands of users of the Robot Model 800 in daily use world wide, with its ability to copy those weak signals that you usually give up on. The demodulator employs separate active two-tone discriminator filters for optimum demodulation of RTTY signals. It is available with the IARU standard "low tone" frequencies or "high tones" for use on VHF-FM.

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Autotrack on receive. Side tone oscillator. Morse code trainer. On-screen speed indication.

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ATTENTION ROBOT MODEL 800 OWNERS: All of the "new" features found in the Model 800C are available by adding the Model 800C Update Kit to your unit. All necessary parts and hardware are included for an easy single evening installation.

For complete information on all the Robot 800C's features write for literature or visit your Robot dealer.

*The Model 800C does not receive SSTV pictures. A scan converter is necessary for this.

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- IC-EX243 Electronic Keyer
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- IC-FL54 270Hz 9MHz CW Filter
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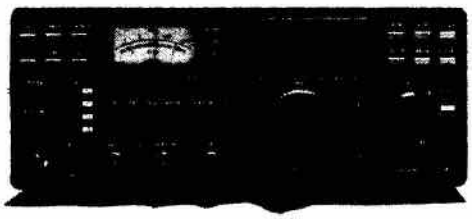
Options. Voice Frequency Readout. External frequency controller, external PS-15 power supply, internal power supply, high stability reference crystal (less than 100Hz, -10°C to +60°C), HM12 hand mic, desk mic, filter options:

SSB: FL30
CWN: FL52A, FL53A
AM: FL33

IC-271A

2 Meter/FM/CW/SSB



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- *25 Watts*
- *Built in Subaudible Tones*
- *32 Memory Channels*
- *12VDC*
- *Internal Power Supply Option*
- *Fluorescent Display*

ICOM presents the most advanced all mode, two meter base station available today . . . the IC-271A. 25 watts of power from 12VDC or from 117VAC with the optional internal power supply/32 full function memories/multimodes/ subaudible tones/PLL locked to 10Hz/high visibility, multi-color flourescent display/RIT readout/scanning/dual VFO's new size. • 25 Watts • 32 Full Function Memories that hold frequency, offset, offset direction, mode, and subaudible tone. Frequency, tones and offset are selected by rotating the main tuning knob. 7 year lithium memory backup. • Subaudible Tones are selected by rotating the main tuning knob and may be stored into memory. • PLL locked to 10Hz • ICOM's new high visibility, multi-color display gives easy to read at-a-glance display of frequency, mode, offset, VFO in use, memory channel, and RIT offset direction and amount. • Scan Memories, programmable sections of the band, or modes. • Mode-S Scan is a mode scan and can be used to scan memories with a particular mode. • Dual VFOs. ICOM's dual VFO system is now even more versatile with the ability to transfer from memory to VFO. • New Size. Only 11¼"W x 4⅜"H x 10¾"D the IC-271A is styled to look good and engineered for ease of operation. • Computer Interface.

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- *PL Tones*
- *12 VDC Operation*

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INTRODUCTION

We have been supplying crystals for nine years to commercial and private customers in Canada, many of whom have been with us the whole time. As a Canadian company, we hope to develop any crystal business which might go outside the country for want of knowledge of our service.

Most of our work is with repeat customers, for whom our regular delivery is 2 - 3 weeks on average, for custom crystals. There is no premium for rush orders, and crystals in stock are sent out immediately.

HOW TO ORDER

Give us at least the information suggested in the sample order below. If we need more information, we will request it. In most cases, this is enough to proceed.

QTY	XTAL FREQ	T/R	CARRIER	Make and/or model Additional data
1		T	146.34	INOUE IC22
1		R	146.94	"
3		T	157.845	GE ROYAL EXEC
3		R	152.585	"

PRICING

If the pricing is obvious, total the amount, add $1.00 for First Class mail, and send in your money order, or cheque, with the order.
If there is any doubt about the formula and/or price, send in the order without the money. We will price the order and inform you by return mail. In the meantime, your order will be made up and shipped on receipt of your payment.

In the example, the amateur band crystals are $8.00 each, and the custom or commercial crystals are $9.50 each. The total is $73.00 plus $1.00 = $74.00. Ontario residents add 7% sales tax.

1983 PRICES

	HC-6/U	HC-25/U
AMATEUR		
Amateur bands	8.00	8.00
CUSTOM		
6 - 55Mhz	9.50	9.50
5 - 5.9	10.55	12.75
4 - 4.9	11.60	16.95
3 - 3.9	12.75	16.95
Below 3	16.95	-
55 - 100	12.75	12.75

MODULES

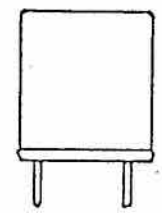
Mocom 70	31.75
Mocom 35	24.85

REWORK MODULES to new frequency

Generally	19.95
More difficult MT500, MX, Wabco	29.95

COMMON HOLDERS

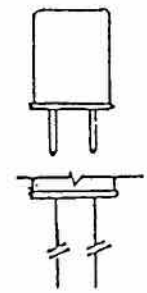
MIL Designations



3/4 x 3/4 x 5/16 approximately
HC-6/U 050 pins

HC-17/U .093 pins

HC-33/U wire leads



1/2 x 3/8 x 1/8 approximately
HC-25/U .040 pins

HC-18/U wire leads

The above holders accommodate the majority of requirements. We list requirements for most sets.

Editor's Comments

by Cary, VE3ARS

This has been an interesting year for TCA. We had a multitude of typesetting and proofing problems at the start of 1983, but have managed to control them. We changed printers and assistant editors. We gained a YL column. Bill Deacon's "Life on the Ocean Wave" series set a new standard for an historical series in TCA.

It has been hectic. I am not about to make any predictions for the new year, except to say that I feel that we will be even better than last year. We have a better organization than we had at the beginning of 1983. The editor is still months behind in his correspondence but catching up.

There is room in TCA for more columns, if someone would like to write them on a regular basis. We are sorry that Ron Hessler's QCWA column received little support from the Canadian chapters, but we still hold a space for them with no strings attached. Someone once suggested that we start a computer column. That is a good idea. Now all we need is for someone to write it. How about QRP? Experimental? SSTV? RTTY? Packet? You name it.

I would like to take this opportunity to thank those of you who have used the TCA Newsline. A special thanks to those of you who passed on a message and indicated that no reply was necessary. At twenty minutes a call, an evening can be gobbled up very quickly with just a few calls. I call back if requested and I am more than happy to help out if I can. Once in a while, I get some crackpot who makes some outlandish comment and hangs up before identifying him or herself. They are the easiest to answer and provide the occasional chuckle. No one can say this job doesn't have its moments.

About a year ago, I had the pleasure of visiting Jean Evans, VE3DGG, at the CARF QSL bureau in Toronto, Ontario. I had a first hand look at the operation there, and was totally impressed. Thousands of cards go through that bureau each month, and are handled by a very dedicated and efficient crew. I am sure there are times that these people wonder if anyone appreciates all the work that they do. I can assure them that they are appreciated by those who use the bureau, and those who know of the work that they do. In an upcoming issue of TCA, I will give you an in-depth look at the operation and the people who run it.

By now we are all aware of the recent allocation of special calls to a couple of off-shore islands. I wonder if the federal Privy Council is aware that someone has designated part of Nova Scotia as a new country. It is an interesting point when you consider that several off-shore oil rigs could end up as separate countries as well. What's to stop them? Most are outside Canada's 12 mile limit and as long as they are connected to the ocean floor, their legal status can be questioned. How about CY0OR (oil rig) or CY1OIL. Any takers? More to the point, since the feds can't make up their minds as to how to handle the situation, I suggest that a few DX'ers get together and settle the issue. Unilaterally declare them as separate countries. That should smarten the boys in Ottawa up a bit. Say, how about the Royal Duchy of Manhattan, or the Republic of Toronto Island? There's always the Thousand Islands on the St. Lawrence river to consider. Why stop part way? If you work someone on an oil rig, give them the benefit of the doubt. Official answers are hard to come by these days.

Congratulations to the CARF and CRRL negotiators who hashed over the TRC 24 changes for the DOC this fall. The CARF side was well represented by Art Blick, VE3AHU and Ron Walsh, VE3IDW, the main TRC 24 workers in our midst. Is this the beginning of a new era? Let's hope so.

Last spring, I received an invitation from the CNIB in Toronto to attend the presentation of an award the Bill Choat, VE3CO, for his long hard years of work to promote the White Caners. I was very pleased to attend and managed to renew a few acquaintances that had been neglected over the years. When I was a struggling student at university, a few years ago, (a few?) I always managed to get on the air a couple of times a week. One evening, while trying to study, I was aware of a conversation taking place on 75 metres between several women and one man. They were discussing funny names. I guess it was one-upmanship that got the better of me when I heard them comparing names like "Fran", "Devon", and "Jo", so I harped in with my name. "Cary" is an unusual name for a man, and even the spelling is not the usual. I am still not sure who won that contest, but I feel that I won by just meeting Fran Berry, VE3EYL, Devon Raymond, VE3DEV, (then VE3ATO) and Jo Churcher, VE3ETN. I am sorry that I don't remember who the male was; however, these three ladies kept me quite busy with conversation on 75 for several nights to come. I met them all in person several months later on two different occasions. Devon and Denny Wilkinson, VE3EUI

came to Ottawa to see the city. It is quite an experience giving a sightseeing trip around the Nation's Capital to two white caners. If you know Devon, you would see how easy a task this turns out to be. She is an accomplished poet, and has had some of her works published. Considering our conversation at the CNIB event, she seems to have a good memory too. I hope, someday, all her talents will be appreciated.

I met Fran and Jo on a visit to London later that summer. I was impressed with the enthusiasm and effort these ladies put into all their activities. Fran's husband, Bob, is also an Amateur and a White caner. Between them all, one could hardly say that being blind is a handicap. I guess in some people it brings out something that most of us have, but few use. Courage.

Devon, Jo, Fran and Bob, it was a great pleasure seeing you again and I hope we do it again soon.

The main reason for starting this train of thought was to mention Bill Choat's work with the CNIB. How better than to mention some of the people who benefit from the work he has done. The ceremony, held in the auditorium of the CNIB in Toronto was attended by over 90 well wishers and friends. MC'ing the event was Phil Jackson, VE3LCX. Phil also organized and promoted the reception, and a great deal of credit must go to him for its success.

Most of the people who attended were white caners, and it must have been a thrill to them when, one at a time, each and everyone got up and introduced themselves. All of these people were there to acknowledge the work that Bill had done over the past many years on their behalf. Bruce Carveth, VE3BC gave us all a thumbnail sketch of Bill, based on an article that appeared in "The Ontario Amateur" during 1973. It is reproduced here in full.

Recognition well deserved Bill.

New Horizons

Photo: courtesy Chris Christiansen

Bill Choat was born in Toronto in 1904. While in high school in 1919 he got interested in "wireless" and became a ham. With entirely home brew equipment he was first on the air as "3CO" in January 1920. In 1923 Bill obtained his Second Class Commercial ticket and sailed the Great Lakes on the SS Canadian Sower, a grain boat. He worked for Toronto Radio the following winter.

In 1924 with a First Class Commercial and also his Amateur licence Bill became the first shortwave maritime mobile operator to both send and receive messages in the Canadian North. He built and installed ham apparatus on the Government ship "Arctic", an old wooden sailing ship with an auxiliary steam engine for maneuvering on ice. This allowed him to communicate regularly with Ottawa in the long summer daylight hours which was not possible with the regular commercial apparatus on board. The story of Bill's 7,500 mile trip to within 680 miles of the North Pole and stops at Baffin and Ellesmere Islands, Greenland and other points is a fascinating one which he has told to many amateur radio clubs. The pictures he took in fair weather and foul are unusually interesting. He is still an ardent amateur photographer.

After his trip to the north, Bill became a radio receiver salesman for Canadian Westinghouse in November 1924 and spent 46 years in their Electronic Tube Division. He retired in 1970. During the war he was on loan for over three years to Research Enterprises Ltd.

A member of the American Radio Relay League continuously since January 1920, Bill served as Ontario SEC for many years, as Assistant Director (Ontario) 1970 to 1972 and received the ARRL Certificate of Merit. He was Secretary of the Wireless Association of Ontario in the 1920's when the late Keith Russell, 3AL, was President. As Ass't. Sec'y. of OARF Inc. from its formation in 1957, Bill was involved in its amalgamation with OARA and the formation of the Radio Society of Ontario Inc. in 1963. He became Vice President and then, as President, Bill encouraged RSO to adopt the CNIB Amateur Radio Club as a public service project in February 1967.

Bill himself was one of our earliest Sponsors and became Chairman of our Sponsors Committee in 1968. He was appointed Manager of CNIB A R C in 1970 and Secretary of the Administrative Board. As might be expected, Bill has many other reated interests. He was a founding member of the Canadian Section of the Institute of Radio Engineers (now IEEE) in 1926 and is now a Life member. He is President of the Canadian Vintage Wireless Association. A founding member of the Toronto Society of Model En-

gineers, Bill was Secretary from 1933 to 1946, has been President more than once and is still active. One of the earliest radio-controlled model boat enthusiasts, Bill has a 7 foot model of the H.M.S. Hood which he built and sailed many years ago. In 1928 Bill was one of the charter members of the Toronto Flying Club and received his private pilot's licence in 1929. His wings were clipped, however, by his marriage to Lorene Ball and the responsibilities of a family. His son John is a High School teacher and has produced two grandchildren for Bill. His daughter Nancy is a Registered Nurse and at present teaching skiing at Whistler Mountain in British Columbia.

During the past 50 years Bill has been at innumerable hamfests and conventions in Ontario and some in Quebec, the Maritimes and the United States. On a recent trip to Great Britain he visited the RSGB. Bill is a capable speaker and has addressed many radio clubs, service clubs and Church groups. He has been an Elder in the Kingsway United Church for 15 years but is neither an A.A. nor a member of the Sons of Temperance. Hi.

Bill much prefers radio traffic instead of mail correspondence and is very active on 80 to 20 metres. He checks in to Ontars and C-J nets almost every day and is frequently on Trans-Canada, Ontario Phone and Ontario-Quebec nets. In case anyone has CNIB A R C traffic for him, any Toronto station can phone 231-0483, his home number. Since retiring from Westinghouse he has spent most of his time in managing the CNIB A R C program. With over 210 licenced whitecaners and more than 1,100 items of equipment on loan from coast to coast, Bill is an active and busy man.

— VE3AW

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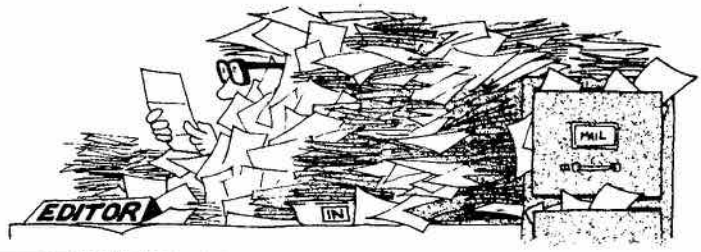


Dear, CARF

We of the North Okanagan Radio Amateur Club (NORAC) are going to have a special station set up during our winter carnival, (Western Canada's largest). We would like to put the information about our station in your magazine in the February issue if this is possible. This is a free award but we would sure appreciate $1.00 or 2 IRC's to cover the postage. The award is available to all amateurs world-wide who contact 3 Vernon area stations, or one QSO with our club station VE7NDR, any mode or band is permissible. Our special station will be operating daily from February 1st until February 12th, 1984, times will be from 21.00Z to 24.30Z. Look for us in the general portion of each band about 50 KC's up calling "CQ Winter Carnival Award".

Kevin Kienlein
VE7EGD
Sec., NORAC
Vernon, B.C.

RADIO NEWS

The postponed space shuttle flight is definitely "on" for November 28th, according to NASA public relations officers contacted by CARF News Service. The Amateur radio activity from the shuttle is still planned.

Winding up their admirable work on the new requirements for Amateur certificates, CARF officials Art Blick, VE3AHU and Ron Walsh, VE3IDW, met with DOC on October 29th, in company with CRRL officials, to finalize the bank of 400 questions from which the new exams will be made up. The original research and work, including meeting with DOC, was done by Art and Ron over a three-year period and resulted in suggested revisions to the Amateur requirements in TRC-24 and to the associated questions. These brought the technical requirements down to a realistic level for a hobby. Subsequently, at the request of DOC, they met with CRRL this past summer to discuss the proposed changes. These were agreed to and then submitted jointly to the Department. As a result the new TRC-24 was printed in October. The revised question bank will be used beginning with the February 8th set of exams.

Here's this week's goody for special call and award fans. From December 1st to 15th, Amateurs in the thriving Ontario metropolis of Wallace may use the prefix XK3 instead of VE3. This is to mark the 125th anniversary of their town. The Vernon. B.C. North Okanagan Radio Amateur Club is sponsoring a special award for contacting its club station, VE7NDR, during the big winter carnival there, from February 1st to 12th. The award is also available to any station contacting three Vernon stations. VE7NDR will be on 2100 to 0030 hours Zulu during the carnival and will be active on various bands calling "CQ Winter Carnival Award".

Speaking of special calls, the ones assigned to Sable Island and St. Paul's Island, CY0SAB and CY0SPI are not assigned to any one individual but can be used by any visitors to the islands by applying to the Atlantic Region DOC office in Moncton, N.B.

Here's some news from the U.S. The FCC has adopted a policy of licensing Amateur stations for ten years as an economy measure. It also will permit California stations to use the digits "23" or "84" next summer during the 23rd Olympiad in 1984. On a more practical plane, Amateur pressure on a cable company in Torrance, California through the town council and the franchise terms, has resulted in the cable company not using channels E, J, K, WW and XX, which fall in the ham bands. Also left unused will be others on aeronautrical and maritime frequencies. (Thanks W5Y1 Report.)

Due to skyrocketing costs and postage rates CARF memberships will go up to $20 in price after the first of the year.

73

Doug VE3CDC

MAKE THE EDITOR'S JOB EASIER. Include a stamped, self addressed envelope with your story or article for TCA. This guarantees a written reply.

The TCA Newsline is automatically monitored 24 hours a day. Leave your message for the Editor of TCA or the CARF News Service. There is no time limit so you may submit a full CARF News Service report, or advertise your club event. Pick up the phone and call. The number is (613) 824-3467. A message for the CARF office? Then call (613) 544-6161, **24 HOURS A DAY.**

Symposium Report

Doug Burrill VE3 CDC

Sixty-seven Amateurs attended the seventh annual CARF National Amateur Radio Symposium in Halifax on October 15th. DOC officials from Ottawa and the Atlantic Regional Office heard various recommendations from the four working groups and answered questions during the general assembly in the afternoon. The day-long meeting, held in the Nova Scotian Hotel, drew Amateurs mostly from VE1, with a few from VE3, VE2 and VO. The most distant call registered was VE5AAB, who had just been posted to Halifax.

Workshop moderators Jim Shand, VE1 ASN and Don Bower, VE1 AMC.

The new TRC-24, hot off the press, was distributed by Larry Greatham from DOC HQ but little time was available to study it in detail. A quick scrutiny of this DOC document, which outlines the requirements for the Amateur Service certificates, brought out the consensus that it is a great improvement on previous bulletins and that it is satisfactory in its comprehensive presentation of practical requirements for the three Amateur tickets. The DOC representatives noted that there will be no new issue for at least two years but in that time the Department would welcome suggestions for any further improvements.

The suggestion of a no-code license above 30 megahertz was, unfortunately, due to lack of time to discuss all of the ramifications, not addressed in any detail. The only conclusion reached was that the 10 words per minute Morse requirement does not present a barrier to obtaining an Amateur certificate. It was felt by some, however, that with the rapid advance of electronic technology and the slow growth of the Amateur Service, serious consideration must be given to some means of attracting technically competent and computer-oriented people to the Amateur Service by eliminating or easing the Morse code requirements.

A proposal to ask DOC to reinstate the word "experimental" in the designation of the Amateur Service did not obtain approval when it was explained by DOC and CARF officials that Canada had been the only country to use that word and, because there is also a separate Experimental Service which is recognized internationally, the continued use of the old terminology created confusion and misunderstanding in dealings with other administrations in the International Telecommunications Union.

An overwhelming negative vote was given to the idea of reintroducing examination fees. The idea was to reduce "frivolous" exam writers. It was pointed out by some that writing an exam of any kind is not a particularly "frivolous" exercise. There was also the administrative costs and procedures involved in accounting for such fees and these would not be inexpensive.

One of the most important resolutions which received complete approval was a recommendation to ask DOC to "deregulate" the phone sub-bands in order to meet the piece-by-piece expansion of U.S. phone bands. This would leave phone and other mode operations to use sub-bands set up by informal "gentleman's agreements", as is done elsewhere. Canada and the U.S. are the only two nations which have the phone sub-bands delineated by regulation. The objection that the U.S. might follow suit was met with the observation that the U.S. system of licensing, with its many sub-band restrictions on the various classes of tickets would probably not allow any such de-regulation in that country. DOC officials noted that the Department would be receptive to the abandonment of regulated phone sub-bands. CARF DOC Liaison officer VE2ZS, an old-timer who actually wrote many of the regs many years ago, pointed out that the reason for them no longer exists. They were originally designed to protect commercial and government CW stations from the splattering of the old AM Amateur stations by leaving "guard bands" of Amateur CW between Amateur phone operations and the other services. The advent of modern modulation techniques, such as sideband, and stable transmitters has made the "guard bands" a thing of the past.

DOC officials Jim Cullen and Larry Greatham.

CARF president Don Slater (centre) and Altantic Director Leigh Hawkes VE1ZN (right) get some comments from Harry Hillyard, VE1PN.

The lack of publicity on enforcement actions taken by the Department has led many to believe that it is non-existent. The maxim that "justice not only must be done but must be seen to be done" holds true here. Much of the enforcement takes place on the Regional Office level and a means of informing the Federation and Amateur clubs' media of enforcement proceedings should be set up.

A complaint was made that Amateurs were not being informed on DOC plans or changes concerning the Amateur Service. CARF representatives, however, noted that the Federation's day-to-day liaison with DOC HQ and its monitoring of the Department's notices in the Canada Gazette and in the semi-annual "Agenda" of proposed changes to regulations enables CARF to keep clubs and individual Amateurs informed of DOC plans through the CARF News Service bulletins and the pages of its magazine, "TCA".*

(*Some 50 stations transmit the bi-weekly radio bulletins and affiliated clubs receive them monthly by mail. Individuals can receive "TCA" as a part of CARF membership . . . $15 a year until the end of December . . . $20 after that.)

The discussion on industrial RF interference ended by recommending that DOC establish a standard for the suppression of RFI from computer and similar devices. Industrial noise problems are best solved by co-operation between the complainant and the owners of the source. A good example is the usual positive response and action of hydro organizations to reasonable and well-defined Amateur complaints.

Cable television interference with the Amateur Service came in for considerable and informative discussion. The Halifax club conducted a classic operation in monitoring and reporting two-metre interference by the local cable company and intervened successfully with the CRTC to have the use of the offending channel ("E") dropped. Amateur organizations should press DOC and the CRTC to prohibit the use of channels interfering with the Amateur Service, as is done with certain public service and air-ground frequencies. The meeting also concluded that the Department should be requested to tighten the permissible leakage standard from cable systems, as laid down in its standard, BP-23.

The real problem lies in the ingress of Amateur signals into poor and leaky cable systems. The advent of two-way cable services broadens the problem and heightens the conflict. Due to the action by the Halifax club, cable systems in Nova Scotia are avoiding the use of the most noticeable interfering cable channel . . . channel "E" . . . on 145.25 megs. While in theory the Amateur is protected by the Radio Act, he is outnumbered by cable users and does not have the potent lobby which the cable industry can mount. (Note: See the March 1983 issue of "TCA" for a full discussion of the problem and ways of meeting it.)

Emergency operations came in for some discussion and a proposal to set up a national selective calling system utilizing an unique tone address for each Amateur and a standard tone alert was briefly aired.

A proposal that some provision be made for extra out-of-band frequencies for Amateur emergency operations, similar to the RACES setup in the U.S., was heard but no definite conclusion

Don Welling, VE1WF and Don Slater, VE3 BID, CARF president.

as to its feasibility was reached as it was not discussed in detail. The proposal also suggested that frequencies could be assigned for national emergency use and these could be monitored by Amateurs from coast-to-coast.

For those who like exotic call signs there was a suggestion that with all of the prefixes available to Canada there might be some new ones added to the VE, VO and VY now in use. Although DOC recently answered a request for such a new prefix for Sable and St. Paul's Islands, the consensus was that it would be a long time before the present three prefixes reach saturation and, in addition to the administrative hassle, confusion and cost it could cause, most operators prefer to keep the calls they now have. That this is a reality was attested to by a poll taken in 1980 by the Nova Scotia ARS to see if separate prefixes for the three Maritime provinces would be popular. Only 7 out of 140 replies were in the affirmative according to N.S.A.R.A. past president Bernie Donnar, VE1UT.

The symposium, sponsored by CARF and hosted by the Nova Scotia Amateur Radio Association, was the seventh annual meeting to bring Amateur matters to the attention of DOC. Open to all interested Amateurs, the excellent organization of this one was due to convenor Leigh Hawkes, VE1ZN, a CARF Atlantic director, assisted by Wayne Mills, VE1 AGU. The four workshops were chaired by Mike Pothier, VE1UG, Bernie Bonnar, VE1UT, Jim Shand, VE1 ASN and Don Bower, VE1 AMC.

From DOC HQ in Ottawa came Larry Greatham, Authorization Policy Officer, Telecommunications Regulatory Service, and from the Atlantic Regional Office in Moncton, Jim Cullen, Authorization Manager and George Richard, Engineering Manager. All three have Amateur tickets.

The plenary session which took up the afternoon listening and commenting on the four workshop reports, was chaired by CARF prez Don Slater, VE3 BID. Other CARF officials present were Art Stark, VE3ZS, DOC Liaison officer, Ron Walsh, VE3 IDW, membership committee chairman and your reporter, Doug Burrill, VE3 CDC, for CARF News Service.

(NOTE: Full details of the meeting and papers submitted to it will be available from CARF Inc., Box 356, Kingston, Ont. K7L 4W2, as soon as the minutes are printed. Send $5.00 to cover the cost of printing and mailing.)

Exam workshop moderator Mike Pothier, VE1UG.

All the way from the West, Peepe Maelde, VE5 AAB.

Avoid delays in getting your material published. *TYPE IT.* Untyped manuscripts have to be typed by the Editor before they are suitable for typesetting, With the present workload, this means that they may not get printed at all. Letters to the Editor are acceptable in handwritten form but may be condensed before printing.

Life on the ocean wave — VIII

Bill Deacon, VE3 BDO
Ottawa, Ont.

I celebrated Vancouver's Silver Jubilee of 1936 in a remote, rain-swept forest of Sitka spruce and hemlock trees on the Queen Charlotte Islands. What, you ask, is a marine radio operator doing in such lonesome far-Western reaches of the then British Empire? Glad you asked — that gives me a subject for my next episode of Deacon's Chronicles.

The events leading up to this circumstance are, in my biased judgement, worthy of recounting, so load up a glass of your favorite distilled water and read on, dear friends.

While 1935 had given me some interesting experiences such as my first voyage on an Empress liner (Empress of Asia) so that I saw more interesting ports like Yokohama, Kobe, Nagasaki, Hong Kong and Manila in addition to previously-visited Shanghai, it had not been a very busy year in all. One one coasting trip from Vancouver to Prince Rupert and way points on the Union Steamships' vessel Cardena, I met a Vice-President of Simmons — the Company that makes Beautyrest mattressses and good upholstered furniture. Eric Donegani was a frequent visitor to the radio shack to listen to my tales of travels up to then, along with associated photos of them. He said quite wistfully that he wished he had been able to encounter all my experiences. I, in turn told him that I wished I had his senior position in a thriving organization. I explained that, while my work was indeed exotic to some extent, it was not totally fruitful in supplying me with the good things of life like money.

Eric asked me what my qualifications were to branch out into the commercial world. I told him that I had been accomplished in typing and short-hand as part of my radio course. He observed that hardly qualified me for the position of "big boss" or even "small boss" in the administrative jungle of business; and that if I really wanted to get into those enterprises, I should do something about securing appropriate training in related skills. He observed that he was right then looking for a secretary for the Board of Directors. He would prefer a male secretary, because such an individual — with appropriate qualifications — could be moved up the organizational ladder to the company's and individual's mutual gain. I asked him if he could hold off on fillingthe position while I went to business school and brushed up on short-hand and took an accounting course. He replied that he couldn't make that commitment; but that if I really wanted to get into more responsible work I should acquire the necessary skills; and if his position was still open at that time, he certainly would seriously consider me for it.

Shortly after this, I was beached, so off I went to a business school and took up a refresher course in short-hand, along with an accounting course. Upon its completion, I went to Eric Donegani's office to see if the vacancy still existed. It didn't, and Eric couldn't hold out any job that would be fitting for me. However, after I had bugged him with several visits, he said that the only way I could get into Simmons at that time was by apprenticing to the upholstering branch. Since there were no ships available then, I took him up on it.

My entry into the upholstering branch was hardly heart-warming. The upholsterer to whom I was apprenticed was a nice guy and very helpful; but the Superintendent on the floor, along with many of the workers, looked askance at me, sensing that all was not well in the State of Denmark, to quote Shakespeare. I got a shock on my first pay day to find that I was only getting $10 per week. I went to see Donegani, but found, to my dismay, that he had left for a few weeks holiday in California.

After a few weeks of toil, I received a phone call at the plant from my Dad, saying that the Marconi Superintendent had called about an assignment. I immediately phoned the Super, and found that he had been asked by the A.P. Allison Logging Co. for a radio operator with some accounting expertise, so, knowing of my business school activity, he was calling me. This job was to pay $147.50 per month, which was substantially superior to the roughly $45 per month I was receiving from Simmons.

I went to the Simmons Superintendent on the floor and asked him what kind of future I could look forward to in that company. He said "Look around you and draw your own conclusions" — not a very encouraging outlook. I

therefore submitted my resignation and arranged to meet Mr. Allison to see if I were acceptable to him. I was; and I was directed to a small organization that taught First Aid, so that I could earn, in the fastest possible time, a First Aid Certificate. My job was to be radio operator, First Aid Attendant, accountant, timekeeper, storekeeper and sort of factotum. The camp, I was told, was located at Cumsheva Inlet on the east coast of Moresby Island, which is one of the Queen Charlotte Islands. For those too lazy to look at a map, these islands are off the northwest coast of B.C.

Before departing, I met with Eric Donegani to tell him personally how things had developed. He was quite upset; and he told me that when his Superintendent told me there was no future at Simmons it was in ignorance of Donegani's plans for me. It seems that he (Eric) was impressed with my drive and felt that I had potential to advance well up the organizational ladder. He had assigned me the only opening available with the thought that I would at least be picking up some of the company's background even in the lowly apprentice job. When I told him of my dismay at the low weekly pay, he told me that there had been an office error; and that upon his return from holiday he had given immediate instructions for a substantial increase. Well, que sera sera, or, as an old friend of mine often says: "that's the way the pickle squirts".

In late March of 1936, I boarded the CN steamship SS Prince John and made my way to the A.P. Allison Logging Co.'s camp at Cumshewa Inlet, an isolated spot where we saw no one else (man or animal) except for those we encountered when the

VE3BD0 — then VE5KQ — age 23. Typical of rafts we lived on.

Prince John arrived every week with mail and supplies (and usually some loggers).

Since I had seen a few logging camps on my coasting travels, it was no surprise to tie up to a string of floats or rafts that were, in turn, tied up to stumps on the shore with heavy cables. There were about ten rafts to the camp. One contained the dining room/cookhouse; one had the owner's "house" on it; one had the office and first aid shack on it; another had the blacksmith's shop; another a tool-room and the power generator; one the lavatory; and the remainder were long bunkhouses.

The office had two small rooms in the back — one for me and one for the Logging Superintendent, who, strangely enough (!), was the owner's older son. The radio gear was there, consisting of a Marconi 100W4 (100W CW and 50W phone), a commercial receiver, the details of which are now forgotten, a motor-generator and a set of four 6-volt batteries. There were shelves containing a modest supply of products for sale to the loggers. Tobacco and snuff (the latter being the highest priority item); chocolate bars, underwear, socks, pipes, soap, etc. Needless to say there were the usual office accouterments of file cabinets, ledgers, a typewriter and a safe.

The lavatory was of a most interesting design. Inside a normal wooden building, there was a narrow floor about 3 feet wide — the remainder being open to the sea water below. There were two long, shaved poles running the length of the little building. The lower one was about toilet seat height; and was intended for just that purpose. Above it and about 1 foot behind was the other pole, to provide a convenient spot to rest the elbows. It was not designed for maximum comfort. On the other hand it was truly air-conditioned, although this was not always appreciated on a cold, windy day.

I had two skeds per day with VAF at Alert Bay. I forget the frequency now; but it was somewhere in the 2 MHz area. Conditions were never very good because of our location in a cove surrounded by high mountains.

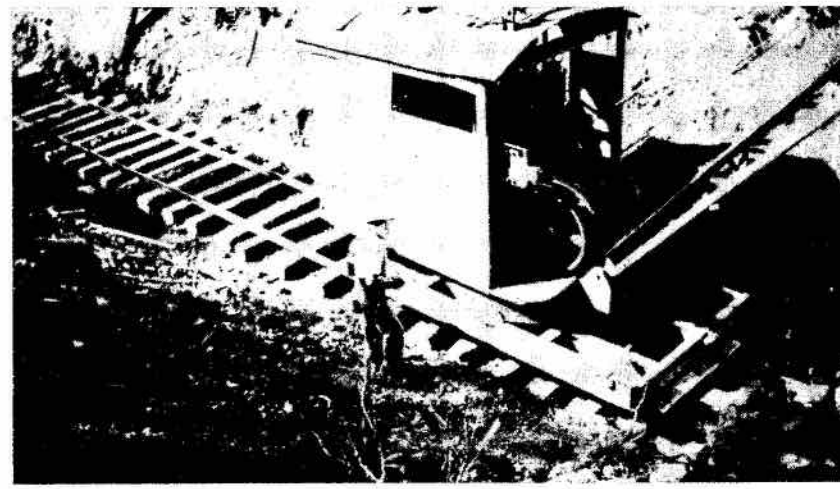
Fac Totum included running the small tug boat.

Nevertheless, we did handle all traffic without great difficulty.

I got into real trouble within the first two weeks of my arrival. I knew nothing of logging life, so I was unaware of the vital role 'snoose' (snuff to you) played in most loggers' lives. This was particularly so with the Scandinavians. I neglected to order an appropriate supply of snoose on the next boat up, so that we soon ran out of it. Man, those loggers were just about livid that I would dare to neglect that supply. Fortunately, I was able to secure the help of two snoose users who had more than ample supply. They let me have a few cans back to sell to the short-handed ones. Needless to say, the supply never ran short again.

Also, within about 10 days of my arrival I got my first emergency blasts on the steam whistle of one of the logging donkeys further up the Inlet. I dashed off in a little outboard, first aid kit in hand, worrying about my ability (or lack thereof) to handle whatever situation had arisen. A "powder man" had fallen over a log and appeared to have broken ribs. The powder man's job was to proceed to large stumps that were blocking an intended road or logging area. He would drill holes in the appropriate areas of the stumps, fill them with dynamite, fuse them, light them and run like heck before the blast. In this case, he had stumbled over the log while looking backward.

I had been warned in the first aid class about handling people with possible broken ribs. There is a danger of piercing the lung if one does not move them about carefully. This guy was lying on his stomach; and when I tried to turn him over he would shriek with agony. Being totally inexperienced in this work, I was frustrated and didn't know what to do. A couple of loggers who had been around such situations many times before just moved me aside and rolled the guy over so we could put him in a stretcher. No disastrous results ensued. The powder monkey just had a low pain threshold. We sent him up to a hospital at Queen Charlotte City via one of our launches we had there; and it turned out that he just had some bad bruises. He went back to Vancouver.



Laying the most westerly railroad in the "British Empire".

I guess it is about time to point out that logging procedures of those days were very much different from current practices. All the "donkeys" were steam-operated. Fuel, of course, was all about us — the trees we weren't selling. These were sawed up (by hand — chain saws hadn't been heard of in those days) by a bucker into lengths suitable for feeding into the firebox under the boiler. I've forgotten the actual length; but 4' sticks in my mind. These pieces had to be split by an axe into suitable sizes. So a fireman really earned his pay then. There was no such deal as turning the valve on the oil supply to raise or lower the fire. Water was piped in from the nearest stream. Used steam just went off into space — no condensing for reuse there. The "chuff-a-chuff" of those donkeys when hauling a big log just reverbrated all over the adjacent hills. This was interspersed by hoots of a steam whistle located at the donkey but operated by a "whistle punk" at the site where the logs were being attached to the line. The whistle punk had a thin flexible wire cable in his hand that had been trailed from the whistle at the donkey all through the logging debris to the operating site. The punk pulled the whistle cord the proper number of blasts upon receiving word from the rigging slinger, who was the equivalent of foreman at the site where the chokermen were attaching the cables or chokers to each log as it was due to be hauled up to the big pile in front of the donkey. The blasts told the donkeyman where to pull slowly, fast, stop or reverse. An emergency called for five blasts of the whistle repeated as often as circumstances indicated were necessary.

When I first got to the camp, the logging was being done on the steep slopes running down into the Inlet. The donkey was on a raft with a big A-frame mounted on it and pulled up to the shore. The logs simply were pulled down to the water where some of the loggers corraled them into booms. The booms, in turn, were towed to near the camp where the Davis rafts were being built up. By the way, after trees are felled a bucker moves in after activity has shifted elsewhere; and he saws (by hand) the felled tree up into 40-foot long logs. Then the scaler moves through and measures each log to calculate the board feet in each of

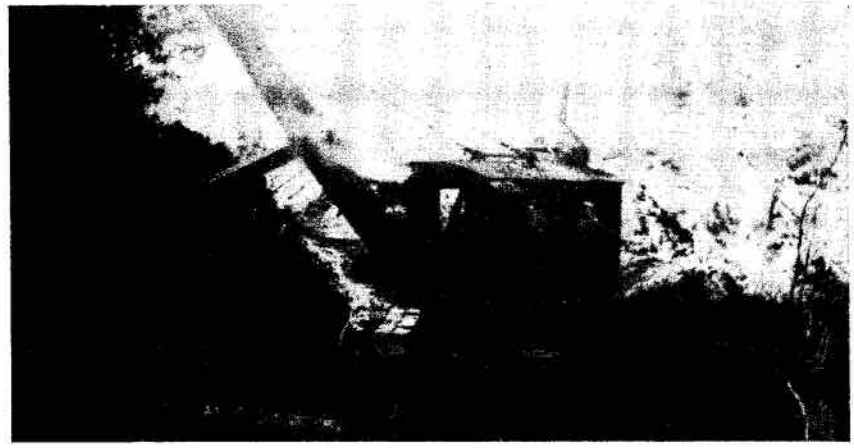
them; and the logs are also graded into quality classifications. The fallers were paid for the quantity and quality of the timber they felled.

In the meantime, timber cruisers had been assessing the quality and quantity of timber at another areas along Cumshewa Inlet. They had found a very large stand of very high grade spruce, as well as the ever-present hemlock. It was decided that this operation would be big enough to warrant building a logging railroad at that site. So, within about two months of my arrival, we towed our camp up the Inlet to the new site, where we were eventually pulled ashore and set up as a permanent camp on solid ground. We still were mounted on the rafts, so there was no big deal about putting in foundations and all that stuff.

It was very interesting to sit at the radio position during the tow job along the Inlet. As we came abeam the entrance passage, signals came up beautifully; and as we moved on to the logging site they fell off miserably again. The antenna was left mounted on the raft base, since there was no other spot conveniently near where one could be mounted to any advantage.

We now had acquired a civil engineer, whose task was to survey for the best and least costly run of railway track, taking into account the sites chosen by the owner and his elder son as appropriate centres of logging activity. The survey chain was handled by the owner's younger son who was on vacation from university.

One building that was not pulled ashore was the cookhouse/dining hall. Instead, the owner had arranged for a much larger building to be constructed on terra firma. It had a really fine kitchen in it, which did much to keep the cook and his flunkey in the proper mood for good meal preparation. As I believe was typical of most logging camps on the West Coast, the meals were very ample; and the quality of cooking was as good as anyone could hope to get in such remote locations. In this case, our cook had been with the company for a few years. He was well treated by the owner, and performed his job accordingly.



Clearing out the railroad bed.

For a newcomer to the logging scene, eating a meal in a large camp was initially quite an experience. When the food was ready, the flunkey went out and rotated an iron bar around a steel triangle. You probably have seen them rung in those old Western scenes. At the first sound of that triangle there was rapid mass movement of all and sundry to the dining hall, where the flunkey was laying down large dishes of meat, vegetables, bread, potatoes and all that good stuff. All items were spaced so that they could serve about 8 men, then another whole set-up was placed to serve the next 8 men and so on. Graciousness and courtesy were not required or even tolerated at these sittings. While no-one was rude, the whole idea was to grab your food in minimum time and set about to consume same in the minimum possible time. It was like watching human piranhas in action. If anyone dared to linger unduly, the flunkey quickly made it be known that the worker's continued presence was causing undue delay in to the cleaning up of the place. I would say that absolute maximum time per meal would be 10 minutes. In those ten minutes, consumption per individual would be near triple that of any ordinary mortals.

At breakfast time, after eating, the loggers went from the dining table to a series of tables set along the wall. These contained all the necessary "makings" for one's sandwiches to be eaten in the woods at lunch time. There were stacks of thick-sliced bread; pounds of butter on dishes; plates of cold meat (left from last night's dinner); tins of sardines; jars of pickles or relish, cheese, slices of pie (apple mostly) or cake or cookies, wax paper and bags for wrapping and carrying the lunch. There were empty cans that had been cleaned out after using their contents; and these were to be used for coffee cups on site. A larger can would be taken along as the coffee "percolator", although this coffee would be boiled rather than perked. Of course, one could make tea in the big cans, too.

Wednesdays were always "boat day", when the Prince John would arrive with fresh supplies. We always had chickens and ice cream sent in; and, probably because the chickens didn't keep as well as meat without refrigeration, we always had chicken for "boat day" supper. After that, the ice cream was served outside unless it was raining.

Going back to breakfast time, it

(Cont'd on Page 32)

KDK FM-2030

SIMPLE SCAN CONTROL

FUNCTION ring selects type of scanning as follows:

DIAL ... Band scanning. Limits, memories 5 & 10.
M-CH ... Memory scanning. Channel Nos. displayed.
M-FR ... Memory scanning. Frequencies displayed.

Just set SCAN switch to BUSY to find a busy channel and OPEN to find a vacant channel. When located, flick switch to center (-) position and start transmitting.

SIX IN ONE CONTROL

A multi-function triple switch with co-axial knobs to:

1. Dial frequencies,
2. Select memories, LED display shows memory numbers,
3. Select memories, display shows memory frequency,
4. Select CALL memory,
5. RIT control in 1KHz increments, and
6. Memory WRITE by pushing on DIAL knob.

DIAL

FUNCTION ring

HI/LO POWER BUTTON

HI - 25 watts, LO - 5 watts

COMBINATION VOLUME CONTROL, POWER AND MEMORY MODE SWITCH

Black knob controls volume. Push ON, push OFF power switch leaves volume setting unchanged. No need to re-set volume level each time transceiver is switched on. Silver ring sets memory modes as follows:

A + B ... Select and scan 10 memories, 1 - 10.
A ... Select and scan 5 memories, 1 - 5.
B ... Select and scan 5 memories, 6 - 10.
A x B ... Duplex using memories. Receive on memories 1 - 5 and transmit on memories 6 - 10. Scan 5 memories, 1 - 5.

REVERSE BUTTON

Use to monitor transmit frequency (Repeator input) during duplex operations. Functional for duplex using memories (A x B mode) and offset switch. Also functions during RIT use.

CLEARANCE SALE
$329.00
$329.00
INCLUDES FREE TOUCHTONE MIKE

ATLANTIC HAM RADIO LTD. is the Canadian Distributor for the lines on this page. Contact your favourite Dealer for these items, or you may order direct.

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HOBBYTRONIQUE INC
3667B St.Jean Bl.
DOLLARD DES ORMEAUX, QUE.
H9G 1X2 (514)620-8888

SWR POWER METER
MODEL FS-5S

This model is an easy to operate compact Power & VSWR Meter. This model consist of independent Power meter and SWR meter adaptable to 50 –52 ohm coax cable. Power meter can be measured for 0 – 1000 watts and SWR meter for 1 – 5 VSWR on antenna circuit. Equipped "On the Air" LED light up in accordance with the output power.

Specifications: $79.95

Frequency Range	1.8–150MHz	
Power Range	0 – 20, 200, 1000 watt – 3 ranges	±10%
VSWR	1:1 – 1:5	
Impedance	50 – 52 ohms	
Punctual Power	3.5 – 30MHz – 1000 watt 50 – 150MHz – 50 watt	
Connector	M TYPE (SO-239)	
Accessories	Connector cable for illumination lamp Magic Fastener x 2, pcs	
Dimensions	180(W) x 75(H) x 90(D) mm	
Weight	800 g	

BOTH HAVE LIGHTED METERS WITH 12VDC

Hansen

Available for shipment NOV 15, 1983

SWR POWER & FS METER
MODEL SWR-3S

This model is a compact through-line type Power SWR & FS meter designed for the wide frequency range measurement for the amateur radio station. Equipped "On the Air" LED light up in accordance with the output power. Reversible two antenna systems or antenna and dummy load by easy switch operation.

Specifications: $49.95

Impedance	50 – 52 ohms	
Frequency Range	3.5 – 150MHz	
Power Range	0 – 20, 200W – 2 ranges	±10%
SWR Measuring Range	1:1 – 1:3	
Punctual Power	3.5 – 30MHz (HF Band) 200W 50 – 150MHz (VHF Band) 50W	
Meter Sensitivity	100 uA F.S.D.	
Connector	M Type (SO 239) 1 x TX, 2x ANT	
Dimensions	150(W) x 65(H) x 70(D) mm	
Weight	400 g.	
Accessory	Bar Antenna 1pce.	

ANT

LM-1

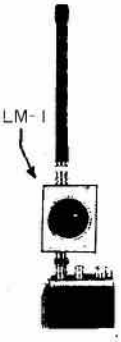
THROUGH POWER

FOR 2M & 440MHz

THE IDEAL GIFT FOR THE HAM WITH A HANDHELD

LM-1

FREQ	: 145-430MHz
POWER	: 0.5 ~ 5.0W
Zo	: 50ohms
VSWR	: 1.15
ACCURACY	: MS ± 10%
ATTNUATOR	:
OUTPUT	: ——
CONNECTOR	: BNC
SIZE	: 55×96×48.5mm
WEIGHT	: 120 g



THIS IS NOT A TOY LIKE SOME LOOK-ALIKES. PROFESSIONAL QUALITY AND MATERIALS THROUGHOUT.....

KURANISHI

DUAL BAND
LINEPASS METER

LM-1 0-5 Watt Power Meter, 2M & 440MHz---------$ 79.95

LM-1 + SK-1 includes 'S' Meter option--------$119.95

Did you ever wish you had an 'S' Meter on you Handheld ? Now it's possible. Add the SK-1 option to the LM-1 and presto you have an S/RF Meter. A small 2mm wire connects the Meter to the MC-3357 IC found in most HT's. The wire can be led into the HT through the earphone hole or you can drill a small 2mm hole. It makes your HT ideal for transmitter hunts. The finishing touch for todays HT's.

LINEAR AMPLIFIER

BE HEARD !!
GIVE YOUR HAND-HELD $99.95
THE BOOST IT NEEDS !!

THE NEW DAIWA LA-2035 2M LINEAR AMPLIFIER. A COMPACT AMP AT A COMPACT PRICE. ONLY **$99.95** Suggested Retail.

This amplifier is designed for use with hand-held transceivers in either mobile or fixed station configurations.
Because of it's light weight and compact size, the LA-2035 can be mounted under the dash, under the seat or any other convenient location.
This is a LINEAR amplifier suitable for FM, CW and SSB. It is one of the few small amplifiers that have a relative power output meter.
Easy operation. Connect the supplied cable to your HT, hook up a suitable antenna and 12VDC power source and you are ready to go.

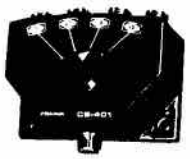
SPECIFICATIONS:
Band 144-148 MHz
Mode FM, CW, SSB
Input Power 1-3 Watts
Output Power 30+ Watts
Power source 13.8VDC @ 5A Max
Dimensions 100W 35H 125D mm
Weight 500 grams (18 oz)
Coax cable with BNC supplied
Output connector SO-239
Fused power cable supplied
Relative Power Output Meter

DAIWA GaAs FET PREAMPLIFIERS

RX-110G 144-148MHz, 15dB min gain, 13.8VDC 100ma $ 99.95
RX-430G 430-440MHz, 13dB min gain, 13.8VDC 100ma $159.95
Place directly into the antenna line. RF activated T/R switch

Reliable VHF/UHF Ga-As FET design for outstanding sensitivity and low noise. Can be placed directly into the antenna feed line.
RF activated/Manual T/R switching.

	RX-110G	RX-430G
FREQUENCY	144 - 148 MHz	430 - 440 MHz
GAIN	15 dB min	13 dB min
INPUT-OUTPUT IMPEDANCE	50 ohm	
RF POWER BYPASS RATING	30 W CW (FM)	
POWER SOURCE	13.8 V DC 100 mA	
DIMENSIONS (W x H x D mm)	90 x 25 x 92	



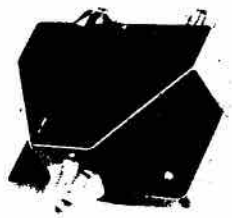
CROSS NEEDLE METER
DAIWA

DAIWA COAXIAL SWITCHES

PROFESSIONALLY ENGINEERED CAVITY CONSTRUCTION

CS-201 2 POSITION $ 35
CS-401 4 POSITION $109

Unused terminals grounded. Power 2.5kW PEP.
ISOLATION 70db@30MHz 45db@500MHz adjacent.

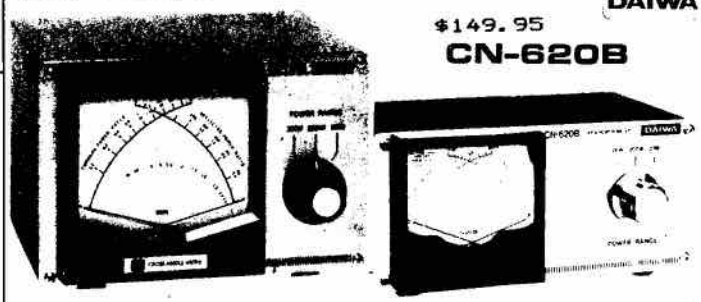


SWR & POWER METER

CN-720B $239.95

DAIWA

$149.95
CN-620B



DAIWA Power Meters are unique in the Meter Industry. All three functions of the meter are installed in ONE Meter. One scale indicates Forward Power, the other Reflected Power and SWR is indicated at the crossing of the two scales. This unique feature allows you to read Forward Power, Reflected Power and SWR all at the same time. Never again will you need to 'Forward Set' your meter. It's ready for any frequency, any band.

AN IDEAL GIFT FOR ANY HAM STATION

SPECIFICATIONS:

	CN-620B	CN-720B
Frequency	1.8-150 MHz	1.8-150 MHz
Input/Output Impedance	50 ohms	50 ohms
Ratio of FWD/REF Power	5 : 1	5 : 1
Power Range - Forward	20W/200W/2kW	20W/200W/2kW
- Reflected	4W/40W/400W	4W/40W/400W
Tolerance (at full scale)	+/- 10%	+/- 10%
SWR detection sensitivity	4W min	4W min
Input/Output Connectors	SO-239	SO-239
Dimensions - Cabinet	180W 85H 120D mm	180W 120H 130D mm
- Meter	70W 70H mm	115W 115H mm

NEW K.D.K. FM-2033

AVAILABLE IN FEBRUARY 1984

$ 389.00
$ 389.00
INCLUDES FREE TOUCHTONE MIKE

THE NEW KDK FM-2033 IS IDENTICAL TO THE POPULAR FM-2030 WITH THE FOLLOWING EXCEPTIONS:
** NEW LCD DISPLAY MUCH IMPROVED VISIBILITY IN DAYLIGHT
** STORES OFFSETS IN MEMORY
** COVERAGE 142-150 MHz

This new version will be extremely popular. It has the best of all the other FM rigs.

Wide coverage, 25 Watt output, Offsets in memory, Ability to work any split, Highly readable LCD display, 10 memories, Touchtone pad on microphone & more

DAIWA ELECTRONIC KEYERS

DK-200 8-50WPM, 9-15VDC @100ma------$ 99.95
DK-210 with LED Speed Indicator, 200ma$119.95

DAIWA makes CW easy with these Keyers. Features include semi-automatic, automatic, and tune modes as well as dot/dash memories, 8-50 WPM capability, an LED Speedmeter (210 only), and both Grid Block and Direct keying outputs to suit almost any Xceiver. A variable (500-3000Hz) frequency sidetone oscillator is also included.

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We are proud to present NEW amateur lines to the Canadian Amateur. The items shown on this page are available from selected dealers across Canada. If your favourite dealer doesn't carry the line ask him to contact us. If you have problems finding a dealer, order direct.
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INSURED SHIPPING AND HANDLING: Ont. and East add 2% MIN $3.50, Man. and West add 3% MIN $4.50 UNLESS OTHERWISE STATED. IF TWO PRICES ARE SHOWN THE FIRST PRICE IS THE REGULAR PRICE WHICH ALSO APPLIES TO CHARGES. THE SECOND PRICE APPLIES TO ORDERS ACCOMPANIED BY CHEQUE OR MONEY ORDER. FOR INFORMATION OR PRICE REQUEST, SEND 64¢ STAMP —

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HOURS: MON.-FRI. 8 p.m.-11 p.m.
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MINIMUM CHARGES $50

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UP IN THE AIR ABOUT A CHRISTMAS GIFT FOR YOUR HAM?

GIFT CERTIFICATES

LET YOUR HAM CHOOSE THE IDEAL CHRISTMAS GIFT TO ADD TO HIS STATION.

A PERFECT ALTERNATIVE WHEN YOU CANT DECIDE !!

THE GIFT CERTIFICATE COMES WITH AN ATTRACTIVE GIFT ENVELOPE !!

MINIMUM $10 NO MAXIMUM.

THE IAMBIC

Deluxe Model: $99

VIBROPLEX

VIBROKEYER

DELUXE $99
STANDARD $79

We recently took the distinctive look, quality and craftsmanship of Vibroplex and molded them into the finest Iambic paddle anywhere. The dual paddle allows operators to utilize automatic dot/dash insertion and other unique features of the modern electronic keyer. Vibroplex distinction for the modern operator.

Standard Model: $79

PRESENTATION IAMBIC (GOLD PLATED) $169
FREE ENGRAVED CALL LETTERS - 4 WEEK DEL.
ENGRAVING ON DELUXE KEYS ADD $19

24 HOUR CLOCKS

Model 173DM
Dual, independent clocks/Solid walnut case/ Functional and beautiful
~~$115~~ (plus $3.00 shipping)

$99

Model 173B
Internal backlight/Aluminum and Poly case/Portable
~~$59~~ (plus $3.00 shipping)
$49

~~$69~~ $59 DUAL 24 HOUR LCD MFJ-104

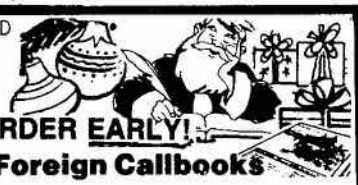
Two independant 24 hour LCD displays! Read both GMT and local times at a glance.
Six digit main display has seconds readout. Four digit auxiliary. Switch reverses main/aux.
Alarm plays 4 selectable melodies. Alarm "ON" indicator. Snooze button.
Quartz timing. Synchronizable to WWV.
Flip-top cover serves as stand.
Night light. Forward/reverse, fast/slow set buttons. Lock function prevents mis-setting. Display main time only, main/auxiliary or main/alarm time. Includes battery. 4x2x1/2 inches.

Independent Military Option

Military time format clocks by **Benjamin Michael.** Independent of power lines these units are energy efficient, secure, and free to provide accurate quartz controlled time in any setting. Used by the Military and U.S. government agencies as well as many municipal law enforcement and public safety departments, these units won't quit just because commercial power did.

Exercise your independent military option now.

ORDER MUST BE POSTMARKED BEFORE NOV 30 FOR THE SPECIAL LISTED BELOW.



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Set of 1984 U.S. & Foreign Callbooks

1984 CALLBOOKS

1984 CALLBOOKS AT 1983 $	
1984 U.S. CALLBOOK	$23
1984 FOREIGN CALLBOOK	$22
BOTH FOR ONLY	$42

INSURED S & H.
East $2 first book $1edd
West $3 first book $1add

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1984 U.S. CALLBOOK $25
1984 FOREIGN CALLBOOK $24

SAVE $$ ORDER NOW !! !!

Order today!
NEW 1984
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A.R.R.L. 1984 HANDBOOK SPECIAL

UNTIL DEC 31/83:	$12	S&H $2
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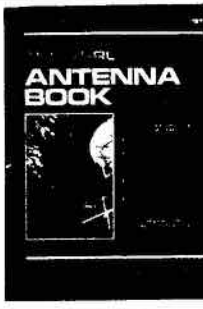
ANTENNA HANDBOOK	$10	S&H $2
FM & REPEATERS	$ 7	S&H $2

IDEAL CHRISTMAS GIFTS FOR EVERY AMATEUR !!!

1984 HANDBOOK



NYE VIKING KEYS

Quality you can feel!

Best for beginners—preferred by pro's—be smooth, adjustable action that means comfo large, goldplated silver contacts for crisp se finished in handsome black-wrinkle baked e

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ASTRON Power Supplies

Solid-state; Electronically Regulated with Fold-back current limiting; Crowbar Over Voltage Protection; Heavy Duty Heat Sink; Chassis Mounted Fuse; Three Conductor Power Cord; One Year Warranty; U.S. Made.

Switchable volt & Amp meter on RS-12M, 20M, 35M & 50M; Separate Volt & Amp meters and front panel voltage adjustment 5-15vdc on VS-20M, 35M & 50M.

105-125vac input - 13.8vdc output (within 0.05 volts) internally adjustable 11-15vdc; Ripple Less than 5mv.

Astron Model	Cont. Amps	ICS Amps	Size (") h×w×d	Ship. Wt.	PRICE	S&H
RS-7A	5	7	7×6½×9	9	$ 95	$ 5
RS-10A	7.5	10	4×7¾×10¾	11	$119	$ 6
RS-12A	9	12	4½×8×9	13	$129	$ 6
RS-20A	16	20	5×5×10½	18	$169	$ 7
RS-35A	25	35	5×11×11	27	$249	$ 9
RS-50A	37	50	6×13¾×9¾	45	$369	ASK
w/Switchable volt and Amp meter						
RS-20M	16	20	5×9×10½	18	$199	$ 7
RS-35M	25	35	5×11×11	27	$279	$ 9
RS-50M	37	50	6×13¾×11	46	$419	ASK
w/Variable output & separate volt/Amp meters						
VS-20M	16	20	5×9×10½	20	$239	$ 8

BUTTERNUT New HF6V

HF6V 10-80+30M	$189	+ $9
TBR-160HD 160M	$ 79	+ $4
STR II RADIALS	$ 42	+ $4
RMK II ROOF MNT	$ 65	+ $7
2MCV 2M COLINR	$ 69	+ $6
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ICOM SP-4 $28
MAGNETIC SPEAKER FOR YOUR MOBILE RIG

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RADIO AMATEURS
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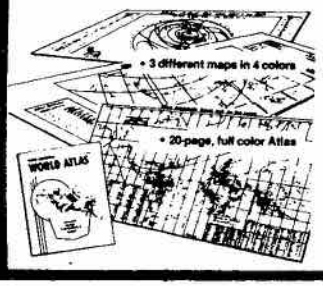

1. **Prefix Map o** World-wide map on one s other. Size 4
2. **Map of North** Includes Cen bean to the areas, zone b Size 30" x 25
3. **Great Circle C** Centered on cities, latitud bearings and

Plus special FR The Callbook's **World Atlas, FRE** the 3 maps. Co maps of the world the radio amateur

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$7.00

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MASTER" KEY

's popular new SPEED-X
has a "stay put" heavy
y die-cast base and fea-
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at keeps the keying circuit
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mbly and all exterior metal
s gold-plated silver con-
adjustable-action key arm
knob.

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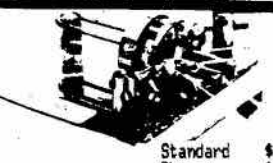
KEY



Standard $ 65
Chrome $ 79
Gold Plated $229

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AMBIC
ADDLE
CHER INC.

- Full range of adjustment in tension and contact spacing
- Self adjusting nylon and steel needle bearings
- Gold plated solid silver contact points
- Polished lucite paddles
- Precision-machined chrome plated brass frames
- Standard model has black textured finish base, deluxe model is chrome plated
- Heavy steel base, non-skid feet

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or dipoles, yagis, inverted
es and doublets
eplaces center insulator
uts power in antenna
roadbanded 3-40 MHz.
mall, lightweight and
eatherproof
:1 Impedance ratio
or full legal power and more
elps eliminate TVI
ith SO 239 connector
uilt-in DC ground helps
rotect against lightning

HI-Q Balun

Only $15

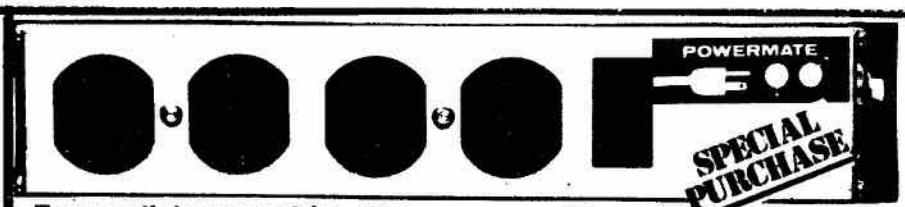
Q ANTENNA CENTER INSULATOR

- Small, rugged, light weight, weatherproof
- Replaces center insulator
- Handles full legal power and more
- With SO 239 connector

ONLY $10

SHIPPING & HANDLING INCLUDED

MFJ DRY DUMMY LOADS 300w$40 1kw$95 30sec.



Four-outlet power strip $17 INS S&H $3

Safely plug business machines, appliances and tools into this power strip. Plugs into one wall outlet. Rated 15A at 125V. Has protective push-to-reset circuit breaker. Includes 6- -foot grounded cord.

10amp RATING $45
15amp RATING $49
S&H $5

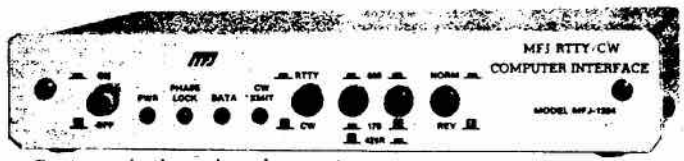
Six-outlet cord reel

So handy to have on the patio, at the cottage, in your workshop — wherever you need more outlets for appliances and other electrical equipment. Has six outlets plus a 50-foot extension cord. Grounded and overload protected.

WITH LIGHT

MFJ RTTY / ASCII / CW COMPUTER INTERFACE

Lets you send and receive computerized RTTY/ASCII/CW. Copies all shifts and all speeds. Copies on both mark and space. Sharp 8 Pole active filter for 170 Hz shift and CW. Plugs between your rig and VIC-20, Apple, TRS-80C, Atari, TI-99, Commodore 64 or most other personal computers. Uses Kantronics software and most other RTTY/CW software.



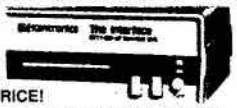
- *Copies on both mark and space tones.*
- *Plugs between rig and VIC-20, Apple, TRS-80C, Atari, TI-99, Commodore 64 and most other personal computers.*
- *Uses Kantronics software and most other RTTY/CW software.*

$159

MFJ-1224

RECEIVE ONLY MFJ-1225 $109

KANTRONICS Interface



NEW LOW PRICE!

A complete transceiver-to-computer modem capable of decoding and transmitting Morse code and all the necessary AFSK tones for RTTY, CW ID, and ASCII. An active filter at 2295 Hz for RTTY and 750 Hz for CW, and an LED bar graph for easy tuning... $209/199

HAMSOFT - Software designed to be used with the Interface, allowing reception and transmission of CW, RTTY and ASCII. Provides Split Screen Display; Status Display; 1024 Character Type Ahead Buffer; CW ID; (10) 256 Character Message Ports & Printer Compatibility. For APPLE - $49 ATARI, VIC-20 - $79; TRS-80C - $95; TI-99 - $149

HAMTEXT - Software with additional features that include VIC Serial Printer Compatibility; Store received messages to tape or disk; Variable buffer sizes; Edit received information for retransmission; Transmit time on 24 hr clock. For VIC-20, COMMODORE-64.. $149

& apple

INTERFACE II $399

A.E.A. INTERFACE CP-1

A.E.A. CP-1 Computer Patch Interface with Tuning Eye, AC Adaptor—— $319

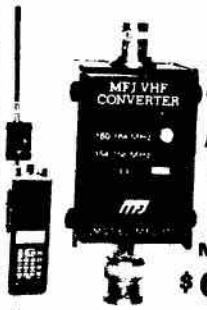
AC Adaptor for MFJ or Kantronics-$15

ALL OF THE ABOVE INTERFACES WILL OPERATE ON KANTRONICS SOFTWARE

Commodore 64, Vic-20, C2N Datasette at very special LOW prices, CALL

Hear Police/Fire Weather

on 2 Meter Handhelds with this MFJ VHF Converter.



Scanning Handhelds become Police/Fire Scanners

MFJ-313

$65

New MFJ VHF converter turns your synthesized scanning 2 meter handheld into a hot Police/Fire/Weather band scanner.

144-148 MHz handhelds receive Police/Fire on 154-158 MHz with direct frequency readout. Hear NOAA weather, maritime, coastal plus more on 160-164 MHz.

Mounts between handheld and rubber ducky.

Feedthru allows simultaneous scanning of both 2 meters and Police/Fire bands. No missed calls.

Highpass input filter and 2.5 GHz transistor gives excellent uniform sensitivity over both bands. Crystal controlled.

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Enjoy scanning, memory, digital readout, etc. as provided by your handheld on Police/Fire band.

Police/Fire/Weather Band Converter for 2 Meter Mobile Rigs.

MFJ-312

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MFJ-312, like MFJ-313 but for mobile 2 meter rigs. Transmit up to 40 watts thru converter without damage. SO-239 connectors. Mobile mounting brackets. Rugged. "ON" LED. Use 12 VDC or AAA battery. 3x4x1 in.

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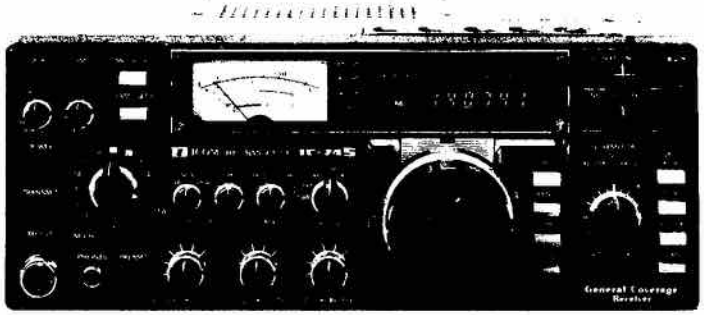

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-World Radio TV Handbook 1983

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NEW GALAXIES OF PERFORMANCE ON VHF AND UHF

The New Yaesu FT-726R Tribander is the world's first multiband, multimode Amateur transceiver capable of full duplex operation. Whether you're interested in OSCAR, moonbounce, or terrestrial repeaters, you owe yourself a look at this one-of-a-kind technological wonder!

Power Source: 115VAC or 13.8VDC (built-in supply)

Multiband Capability

Factory equipped for 2 meter operation, the FT-726R is a three-band unit capable of operation on 10 meters, 6 meters, and/or two segments of the 70 cm band (430-440 or 440-450 MHz), using optional modules. The appropriate repeater shift is automatically programmed for each module. Other bands pending.

Advanced Microprocessor Control

Powered by an 8-bit Central Processing Unit, the ten-channel memory of the FT-726R stores both frequency and mode, with pushbutton transfer capability to either of two VFO registers. The synthesized VFO tunes in 20 Hz steps on SSB/CW, with selectable steps on FM. Scanning of the band or memories is provided.

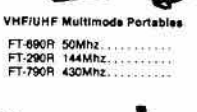
Full Duplex Operation

The optional SU-726 module provides a second, parallel IF strip, thereby allowing full duplex crossband satellite work. Either the transmit or receive frequency may be varied during transmission, for quick zero-beat on another station or for tracking Doppler shift.

High Performance Features

Borrowing heavily from Yaesu's HF transceiver experience, the FT-726R comes equipped with a speech processor, variable receiver bandwidth, IF shift, all-mode squelch, receiver audio tone control, and an IF noise blanker. When the optional XF-455MC CW filter is installed, CW Wide/Narrow selection is provided. Convenient rear panel connections allow quick interface to your station audio, linear amplifier, and control lines.

Leading the way into the space age of Ham communications, Yaesu's FT-726R is the first VHF/UHF base station built around modern-day requirements. If you're tired of piecing together converters, transmitter strips, and relays, ask your Authorized Yaesu Dealer for a demonstration of the exciting new FT-726R, the rig that will expand your DX horizons!



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FT-690R 50Mhz.....
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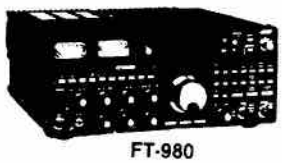

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- 10Hz Digital Readout
- All Mode Transceive—CW/SSB/AM/FM/FSK!
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- RF Speech Processor
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- IF Shift
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Computer Interface now in development—
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FT-208R 2mtr HT.....
RF Out: 300mw/2.5W

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FT-77

New 80-10mtr Compact HF Transceiver

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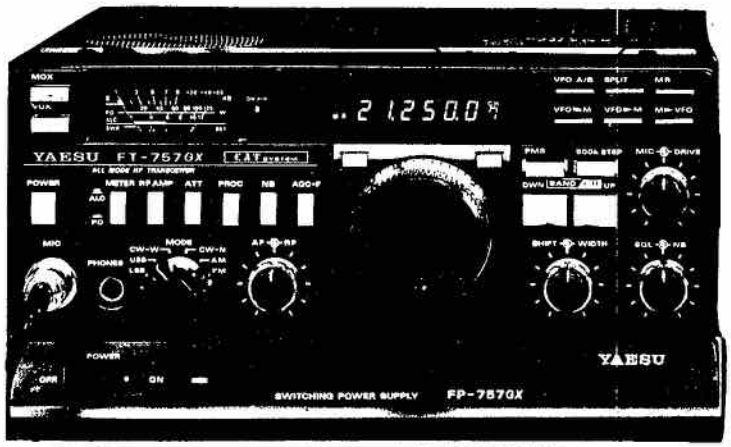

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was quite a sight to see the cook ladling out "flapjack" batter across the top of stove. He jumped about like a toy clown on a string as he turned each of the flapjacks over on the griddle, while the flunkey stood by with a couple of plates to take two loads out to one of the tables. The whole idea was to let the loggers get their flapjacks hot — not luke warm. There was nothing dainty about the way flapjacks were removed from the plates by the diners. Most of them were not in any way familiar with the social graces; and they found that the most convenient method of securing a good helping was to stab at the plate with a knife, over which was poised a grubby thumb. One jabbed the knife say 5 flapjacks down the stack on the plate, clamped the grubby thumb over the top jack; and quickly transferred the stack to one's plate. It was then a mad scramble to get sufficient butter inserted between the layers of flapjacks, then to grab the syrup jug (Rogers' Golden Syrup for my friends out West) and pour a copious quantity of the sticky mass over the stack. And don't ever think that, for all this, anyone went without their required supply of pancakes. As I said early in this article, food was the #1 morale maintainer for all except the snoose addicts, in which case it was #2.

My stately office — Marconi 100W4 in right corner.

The construction of the logging railroad, together with the complex job of bringing two locomotives and a large number of flat cars ashore from the barge in which they were brought up to Cumshewa Inlet, makes an interesting story in itself. However, I will leave that and go on to the logging process itself.

The Logging Superintendent will look over a stand of timber and determine how large an area will be logged in a specific operation, identify an appropriate spar tree, whose purpose will be explained later; and then set the fallers to work. The fallers are very strong and agile men who can use axes and large two-handed cross-cut saws with unbelievable dexterity and speed. Speed was of the essence for these men, because they were paid by the amount of timber they felled. As there were no chain saws in those days — all this work was done by pure muscle. One thing that always intrigued me was the uncanny accuracy with which those fallers could fell the trees so as to minimize damage to surrounding trees or even the one being felled.

After the selected site had been felled, the exciting job of topping the spar tree took place. Spar trees in that area were usually 200+ feet high; and they were selected for their size and proximity to the railroad. The tree was "topped" by the high rigger, who was also the man in charge of the logging operation at that particular site. He would don a climbing belt, spurs and some tools such as an axe, a smaller cross cut saw and perhaps a wedge or two. For those of you who have climbed a 40 or 50 foot tower, you can imagine how taxing it was to climb 200 odd feet without any braces to grab hold of. To take a rest, one dug in his spurs and pushed his body backwards against the belt. This kept him rigid if the tree swayed in the wind. The purpose of the climb was to remove the top 20-25 feet

Jack Allison, Logging Sup't on left and 3BD0 on right. Part of Comshewa Inlet in Background. New camp was to be in far right channel.

The powder monkey — my first case in first aid. Fuse and dynamite in his right hand and caps in his left.

of tree that had a lot of branches and a greatly reduced diameter. Once the top was removed, they had one heck of a big pole, or "spar" to which a couple of very large pulleys would be attached.

The topping of the tree was, to many of us, exciting. The high rigger chopped away at the trunk just below the little cluster of branches at the top. Then he used his cross cut saw to finish the job. You can imagine what a difficult and taxing job it was to chop and saw while one's spurs were dug into the trunk and the belt dug into one's back. The high rigger's good judgement was tested in deciding where he would chop and perhaps wedge to make the top fall away from the tree, taking into account the wind direction and force at the high level. When the top finally fell over, its sort of back EMF caused the tree to sway heavily. As the top showed signs of starting to fall, the high rigger had to release his tools and quickly jump sideways so that the top portion of the tree didn't hit him. That's easier said than done. It takes a great agility to jump sideways with the spurs, then release the tension on the belt just enough to allow one to move around the tree without losing all support. Immediately he had jumped out of the way, he pushed both hands firmly against the trunk so as to hold himself rigid against the safety belt as the tree swayed around in a sort of a circle for perhaps half a minute or so. That must be an eternity when you're holding on like that.

I should have mentioned that the high rigger also had a light line with him that had been paying out from ground level as he climbed up the tree. Now a small pulley and cable were attached to this line; and he drew this equipment up to his position. The cable was fastened into position and the pulley attached. This now was used to haul up a heavier cable and large pulley to be attached to the tree top; and, eventually, a heavy cable was reeved through the large pulley.

The spar tree was the point at which all the timber in that selected area was gathered into what is called a "cold deck". Near the base of the tree was the donkey which had a big drum of heavy cable that was rotated by the steam engine on the donkey. The cable went up through the big block (or pulley) at the top of the tree, then out to another block attacked to a large stump at the distant end of the site. It then came back to another drum on the donkey at the spar tree. Attached to the heavy cable at one point was another cable with a specially designed clamp on it. This cable cum clamp was called the "choker"; and the rigging crew would wrap it around one end of the log to be hauled. The special clamp was secured, the signal given to the whistle punk and, via the whistle, to the donkeyman to start hauling in the log. As it went down toward the cold deck, it bumped into whatever debris was in its way with thumps and clatters that echoed throughout the area. If the ground was excessively rough, the logging line (which was called a slack line) could be tightened up so as to raise the log slightly higher, thus decreasing the bumps.

After all the timber had been "cold-decked", a train of cars was moved into place by the logging locomotive; and the logs were moved using very large tongs from the cold deck to the cars. These were moved down to the shore of the inlet to be made up into the Davis rafts.

In the meantime, the further expansion of the railroad was taking place. This, of course, involved the planning of the routes and the physical identifying of them by measuring off "stations" each 100' and identifying each with an appropriately marked stake. The chain was handled during the summer by the owner's younger son. He was going back to UBC in September, so another chain man was needed. Although I had quite a bit to do in the camp; and really should have been on hand for any emergency first aid work, I wanted to get out into the bush; and I pursuaded the boss to let me run the chain. That was a terrific experience for me. It certainly put me in top physical shape; because tramping over bush, small creeks, large stumps and all that stuff really took some effort. That was a time when I could hardly wait for lunch time to arrive so that I could dig into the substantial sandwiches, etc., that I had put together after breakfast. The coffee was made in those old tin cans, boiled over a fire of old cedar, tasted all the better for the pieces of cedar ash that settled into the can during the boiling process.

By the way, all that exercise plus a matching food intake moved my weight from 129 lbs. to 145 lbs. in the period I was at the camp; and that wasn't fat, either. I came back home at the end of the assignment feeling that I could spit in the eye of a lion.

Those who know me now must be shaking their heads in amused disbelief.

One other task I was persuaded by the owner to take on was the wiring of power to all the camp from our gas generator. I had absolutely no experience along this line; but, of course, knew how the job could be done in its theoretical sense. So I ordered up reels of appropriate gauge wire, a flock of insulators, drop wire, etc., and proceeded to do the job. It sure worked OK; but any self-respecting electrician would have been horrified at the unprofessional design of the system.

When I took this job at Allison Logging, it had been with the understanding that I would stay a minimum of 6 months, and preferably until the end of November. As that time neared and the operation was reduced for the winter months, I began to talk about being back home in Vancouver before Christmas. However, it appeared as if the owner and his elder son had automatically assumed that, being the patsy I normally was, I would be glad to stay over the Christmas/New Year holiday and let the son enjoy Christmas at home. However, I already had made other commitments for Vancouver, and I was not budging from that. The air got a bit hostile; but there was nothing they could do about it. They did get a small revenge, however. Part of the original deal had been that if I stayed a minimum of 6 months, my steamer fare to Vancouver would be paid by the Company. On this they reneged. Anyway, I did get home in mid-December with a nice little nest-egg salted away in the bank. I was richer than I ever had been (all things being relative, of course). Some of that money went towards my purchasing a lovely 1935 Hudson-Terraplane coupe, which was eyed with great admiration not only by my friends but by sweet young things, which did great things for my social activities. After all, a coupe with a rumble seat, radio speaker mounted in the roof, and a very healthy guy behind the wheel was not bait that a pretty little fish would easily spurn.

Shortly after the new year, my sea-going activities got into high gear and I was back where I wanted to be. The rest you have recently been reading about. Ahh — what fond memories!

Those trend setting super sets

Nate Penney,
VO1NP

General coverage receivers have become a regular feature of the glossy page advertisements. Canadian suppliers are now offering these radios at our hamfests. Listening capability on both "AM" as well as "SSB" is now incorporated in several "top of the line" tranceivers all the way up to 30 MHz. If this trend continues, the ham shack might soon become an entertainment centre for the family.

Currently, manufacturers are finding that there is a substantial world market for good quality all band receivers. With a multitude of countries broadcasting their culture, music, news and sports; their propaganda, humour and similar diversions, there is never an unoccupied frequency. Radio Canada International transmits with the best of them, while "CHU" gives the time bilingually.

The demand for short wave radios throughout the world is growing and in response technology has developed a super set. It is interesting to note that as a direct result Amateurs are once again getting the benefit of yet another "spin off" from the communications industry. Fitted with fancy features to impress the ham operator, this new generation of short wave radios has been very skilfully adapted to Amateur radio merchandising. These receivers have precise digital readouts, push buttons, knobs and switches designed to do all sorts of marvelous things; also a noise blanker to deal with the ubiquitous "woodpecker". Our Amateur standards for sensitivity, selectivity and stability are far exceeded, and when hooked up with a typical home speaker system, delivers "hi-fidelity" but never quite "stereo".

Technical details together with illustrated brochures showing these new general coverage receivers for the Amateur are available from our stocking distributors and suppliers who advertise in this publication. They are in a position to indicate the cost and availability in Canada.

To further entice you, the following information showing the "U.S." suggested retail or listed prices may set you day dreaming. The Drake R 4245 — $3,795. The RACAL RA6790/GM — $5,000-$6,000. The Rockwell/Collins 451S-1 — $5,000. The Drake R-7A — $1,649. The Japan Radio NRD-515 — $1,399. The Mackay Dymek DR 101-6 — $1,850. The National Panasonic RF-900 — $3,800. The Sony CRF-1 — $1,795. The Grundig Satellite 3400 — $1,295.

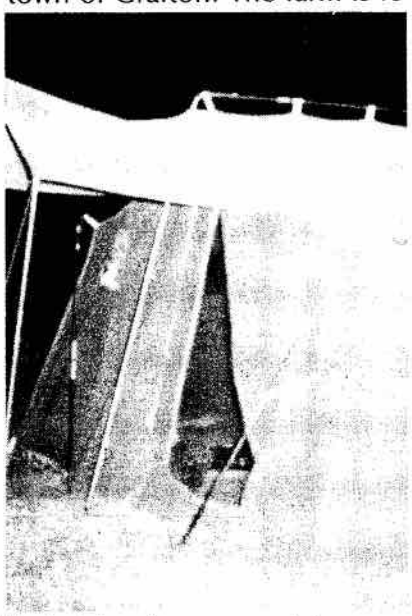
Because less expensive short wave radios may not have all the refinements that Amateur operaters want, the trend is towards the premium professional communications receivers.

CQ Field-Day de VE3NAR

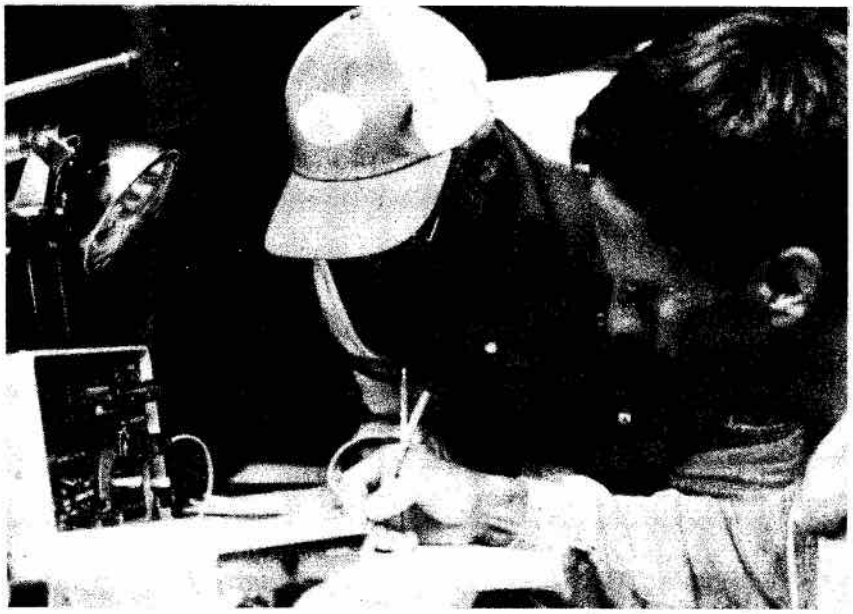
K. (Ken) Wren
VE3MCN

To a lot of people not connected with Amateur Radio, Field-day means a day of running, jumping, relay races and the like. We know better. It is a weekend of hard work, comradship with fellow Amateurs and just plain fun.

The Nortown Amateur Radio Club, which is celebrating its 35th anniversary this year, has been active in this event for many years. The first field-day weekend for the club was held back in 1949 on a farm in the Don Mills and Lawrence Ave. area and some of the early participants were Russ Buckley, VE3UW, Orv Anderson, VE3AEV, Art Meen, VE3RX and Pete Selwood, ex-VE3AAW. Since then, the club has entered the annual event at various sites in and around the Toronto area. For the last four years, the event was held at the Qth of Roy, VE3GSK and Marie Staples. Roy and Marie have a lovely little hobby farm that is located about 15 miles north of Lake Ontario, halfway between Kingston and Toronto, near the town of Grafton. The farm is located atop a high rise in the land, which allows you to see for miles in almost any direction. Appropriately the site has been nicknamed "Signal Hill".



Typical sleeping accomodations — 80 metre CW tent.



Yours truly (Ken, VE3MCN) working 160 metre CW with Bill (VE3FIS) logging in the background.

Finally the big weekend was upon us! It was Friday afternoon and with the car loaded and the trailer hooked up, my son, Chris, and I headed out at about 4:00 p.m. I was worried about the 'rush-hour' traffic that we might encounter on the 401 but I was able to contact Roger, N4ZC from Charlotte, N.C. on 14.172 and since this QSO lasted for quite a while, the time passed quickly. The VE3RPT repeater was also monitored to see if contact could be made with any of the other club members heading to the site. For the sake of my son, one stop was made at the Cobourg Golden Arches Franchise before arriving at Roy's place.

Arriving at the site, at about 6:00 p.m., we found Tom, VE3FKK, John, VE3FQJ, and a few others there to greet us. The first job for Chris and I was to set up our tent trailer and unload some of the gear from the station wagon. Once our camp (20, phone) was set up the only thing left was the assembly of the four element monobander and the thirty-foot tower. These were put together along with another four element monobander and thirty-foot tower for ten-phone and CW. Bob, VE3FIS, and Bill, VE3CUJ, who were working this band in addition to working 160 metre phone and CW, were a great help to Chris and I on that first evening. You are all probably wondering, by now, if my son is a licensed ham? No, not yet, but he was a good help and played the part of 'gopher' for most of the weekend. The others who helped me on the 20 metre phoneband, Doug, VE3EES, and Bill VE3MKU, did not arrive till Saturday morning.

Not much work was done that Friday evening, but once the sun had set a big campfire was lit and everyone enjoyed 807's, hot-dogs and marshmellows not necessarily in that order. Soon it was time to hit the sack so I put

Bill (VE3CUJ) on ten metre phone.

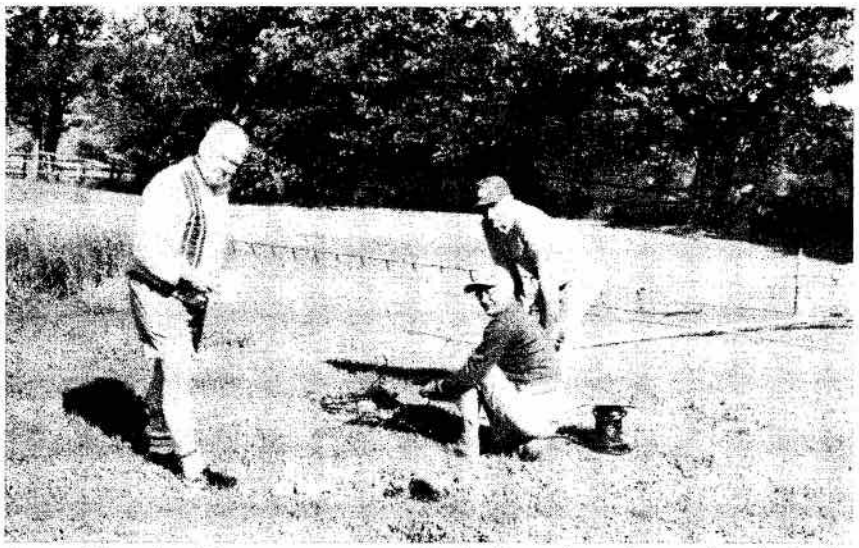
my son to bed in the tent and then made a 'bee-line' for my car. 'Skip' conditions were good that night, and with only 100 watts and the 'Hustler' bumper-mount antenna, I worked Hungary, Denmark, Belgium and then Manitoba, all on twenty metre phone, all with S-9 signals.

Early the next day new arrivals began appearing at the site. Thank goodness because we had a lot of work to do before the official starting time of 2:00 p.m. A 30 foot telescopic pole and inverted Vee had been put up on the Friday night for the 80 metre phone station. This band was operated by John, VE3FQD, Wolf, VE3DQT, Bob VE3IPP and Albin, VE3EMD. The rig used was a Drake TR-4C. Another antenna that had been put up that night was a 30 foot tower and two element monobander for the 40 metre phone station. This band was operated by Chris, VE3GUS, Brian, VE3GVR and Dan, VE3MCL. These fellows, as in the past, were using a set of 'Drake Twins' and for logging purposes were using a computer with a printer and 12 volt back-up power (in case the generator stalled or for when it was stopped).

The first antenna to be put up on Saturday morning was the four element monobander for 10 meter phone and CW. This was mounted on a 30 foot tower to which was attached an inverted Vee for the 160 metre band. The rigs used for these two bands were Yaesu FT101's.

Next came a 30 foot tower and four element monobander that we used for the 20 metre phone band. We also had two sloping dipoles suspended from this tower as an assurance that all the stations heard could be worked. I used my Drake TR-4 for this band. Then, a full wave sloper fed ¼ wave length from the high end was installed at the top of another 30 foot telescopic pole and this was used for 20 metre CW. The chaps on this band were Tom, VE3FKK and Steve, VE3GBK. The rig they used was a Kenwood TS-130. A third 30 foot telescopic pole was erected to support an inverted Vee used for the 80 metre CW crew, and this pole also supported a four element Yagi for 450 Mhz. The OP's on these bands were Bill, VE3KWX, Don VE3EVE, Dave VE3MQV and Mike, VE3OGO. The rig used was a Kenwood TS-820. Now the biggest tower of all had to be put up. This was a 50 footer that would hold an eleven-element Yagi for 2 metres and under that was mounted a four-element Yagi for 6 metres. Those looking after the 2 meter band were Harrold, VE3JPX and Lisa VE3NOW. The crew for 6 metres consisted of Roy, VE3LUC, Art, VE3AIC and Cyril, VE3OBK using a Kenwood TS-660. The fellows on 15 CW were now ready for help with their 30 foot tower and three-element tribander. This station was manned by two of the club's

The fellows on 80 metre CW and 450 MHz. Left to right are: Bill (VE3KWX), Mike (VE3OGO) and Don (VE3EVE).



Assembling the 160 metre antenna with the four element monobander in the background — left to right are Bob (VE3IPP), Bob (VE3FIS) and Bill (VE3CUJ) (standing).

more experienced CW operators, Roy, VE3GSK and Bob, VE3BXF.

Finally at about 1:00 p.m. the 40 CW boys came rolling into camp and so we quickly got them set up with an old 20 foot fence rail which was stood on end to support an inverted Vee. This band was looked after by Les, VE3ABN and Murray, VE3MDL. They were using one of the newer rigs on the site, a Collins KWM-380.

Whoops — forgot one band.

15 phone operations used a 30 foot tower and a three-element tribander. It was Johannes VE3LKR, Fran, VE3GVO, Ron O'Neill (no call yet!) and Paul Turner (no call yet either) that looked after this station. The rig used was a Yaesu FT101ZD.

At approximately 1:30 p.m. a meeting was held, with all the bandleaders, to discuss the contest. Everything seemed to be in order as far as rigs and antennas went, some of the rules were gone over and then the log sheets and cross-log sheets were handed out. The times and procedures for refueling the generators were also covered. Wayne, VE3IMI, was our generator man and he did a superb job. Nobody timed him, but the generators were hardly off before they were back on again! (For safety reasons, the generators were shut off when being refueled!).

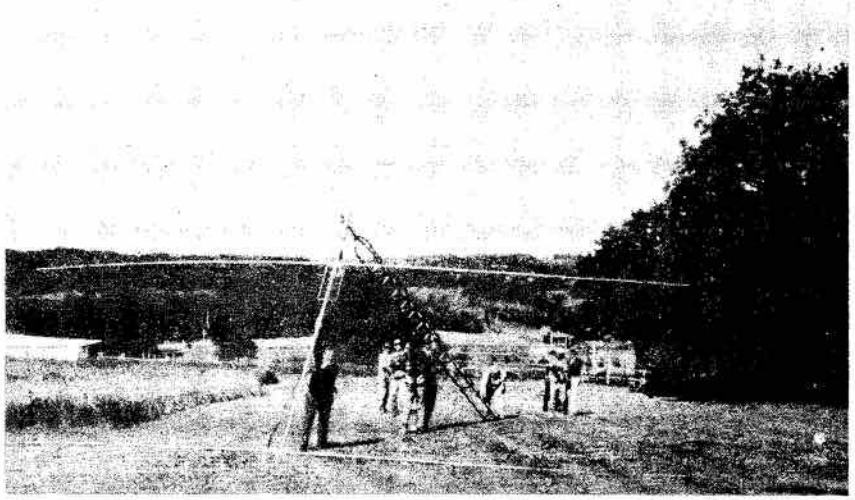
Finally 2:00 p.m. arrived and the generators were started. 20 metre phone was just hopping and by the first hour we had filled almost two log sheets (70 contacts)! By 3:30 the sun was still high in the sky and it was getting pretty warm in our tent. Ouch — another bite from a X#?@!! horse fly. Doug, VE3EES, who was cross-logging, relieved me and so I thought I would take a walk around camp and see how things were going.

160 metres wouldn't open up till after supper so Bob, (FIS) and Bill, (CVJ) were able to concentrate on 10 metres. 20 CW was very active and the guys on 40 phone were really doing some fast typing! 80 metre phone got off to a slow start and, of course, nothing much was happening on 450 MHz or 6 metres.

As time went by my son Chris reminded me that he was getting hungry. I went to the cooler and proceeded to make supper (Ritz crackers, 'brick' cheese and salami may not sound too appetizing but on weekends like this, meals are secondary, hi!).

The sun set quite late that evening; a huge red ball of fire sinking behind the green hills on the horizon. Soon the campfire was lit, and the remainder of the hot dogs were put on the grill. I have failed to mention the extra work that the 80 metre phone crew did. They organized the hog dogs and other refreshments for both Friday and Saturday nights. They also kept a full urn of coffee going all weekend. Well, it was back to the radio! "CQ field day, CQ field day, this is victor echo three, north american radio." I'm sure it took a day or two after that weekend for most of us to clear that phrase from our minds whether one was on phone or CW!

At about 11:30 Saturday night, Bob, (FIS) came over to our tent and asked if I wanted to work some CW on 160. So far they



About to raise the four element monobander for 20 metre phone — John (VE3FQJ) holding the beam.

Inside the 10 metre phone & CW trailer — left to right is Bill (VE3CUJ) and Bob (VE3FIS).

hadn't qualified that part of the band so I said OK! Within an hour we had about 12 or 14 contacts. Roy, LUC, stuck his head in and asked if we needed a hand? We said sure and he took over to work some more phone contacts. This let me put Chris to bed (he had fallen asleep in one of the other trailers) and then get back to 20 phone.

It was now well past midnight. Bill, MKU turned in for the night and I took over as cross log checker as Doug, EES, continued to bring them in — "WB4XYZ this is VE3NAR, we are 17 alpha ontario" — "VE3NAR this is WB4XYZ — did you guys say 17?" — "Yes, old man, we said 17, there's a whole bunch of us up here!" This happened many times and we were getting tired of correcting people that thought we said 7 alpha, Ont.! and not 17 alpha, Ont.!

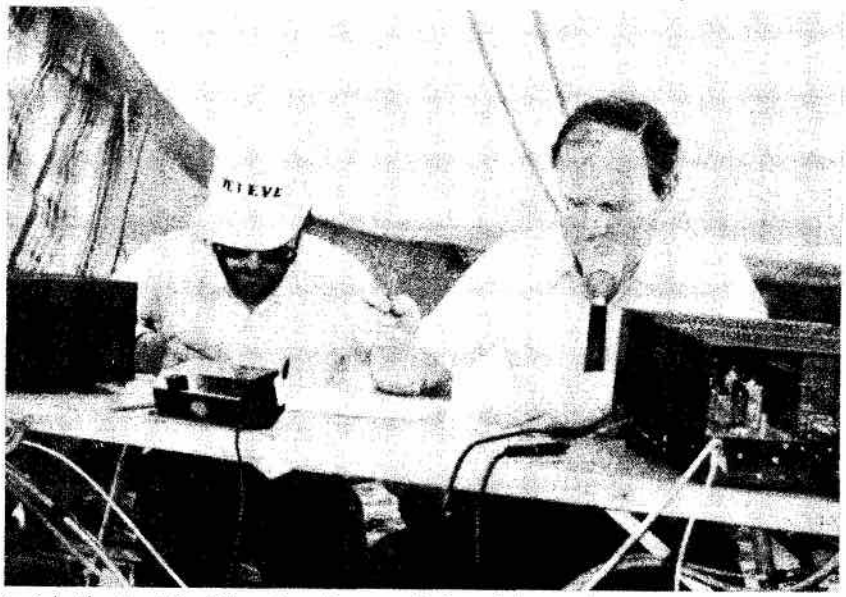
At about 2:00 a.m., Doug said he wanted to get some sleep so I told him to go ahead. The band was still in good shape and quite active as I proceeded to turn the V.F.O. on the Drake back to 14.150. I would follow up the band and then back down and try to work all the new stations heard. This went on till almost 5:00 a.m. at which time I just couldn't stay awake any longer. It was time to wake Bill, KU and ask him if he was ready to take a turn. At 7:00 a.m., after only 2 hours of sleep in the station wagon, I was awakened by my son.

By this time the clouds had moved in and it looked like rain — darn it! What a way to end field-day! Fortunately the precipitation only lasted for 1½ hours but then the winds came up. The rest of the day was very windy, but sunny, and the only problem remaining was the lowering of towers and antennas in the high winds.

The 15 CW station — who has never seen an old army 'bell' tent?

At 2:00 p.m. the generators were shut off and the dismal task of 'breaking-camp' was started. Luckily some of the quiet bands had packed up earlier and this made things a little easier. The first thing to do was to assemble everyone at each of the stations and lower their respective towers. Once this was done it was up to each band group to disassemble their antenna and tower. These were then carried to a storage area that Roy had made available to us. Tents were dropped, folded and packed away; generators were loaded onto a farm wagon and all personal gear was put into the appropriate vehicles.

What an eerie sight to see the



Inside the tent for 20 metre phone — left to right are Don (VE3EVE) and Doug (VE3EES).

fields now free of antennas, towers, guy ropes, etc. And something else was missing — the drone of the generators. Now only the sound of the wind through the trees could be heard!

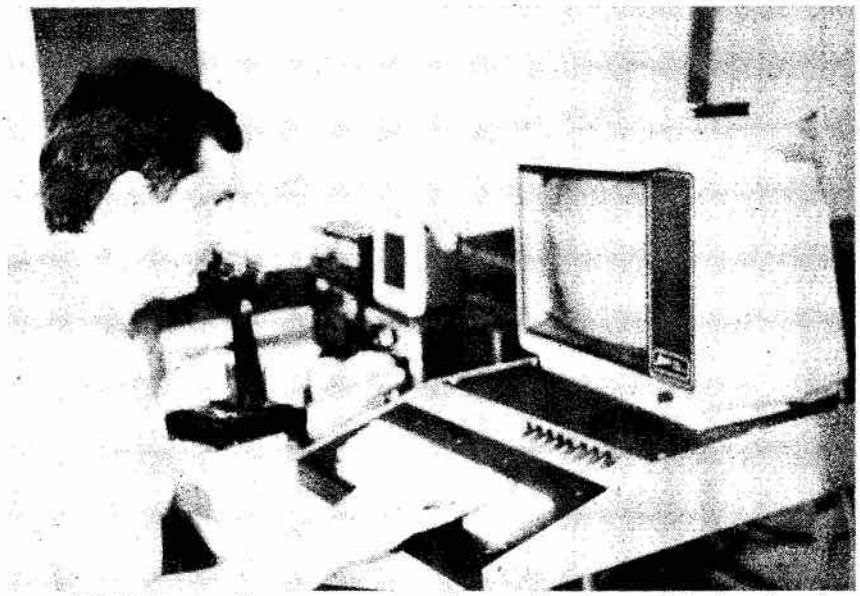
It was kind of sad as Chris and I climbed into our car, after saying good-bye to the others. Field day was over for another year. We at the Nortown A.R.C. are truly indebted to Roy and Marie Staples for putting up with us for another year. No one could ask for a better site for this event, and I am sure it has a lot to do with us winning the Canadian championship for the past number of years. A special thanks to everyone who participated!

73's

P.S. — See you all next year!

K. (Ken) Wren
VE3MCN
Corresponding Secretary
NARC
264 Parkview Ave.
Willowdale, Ont.
M2N 3Z1

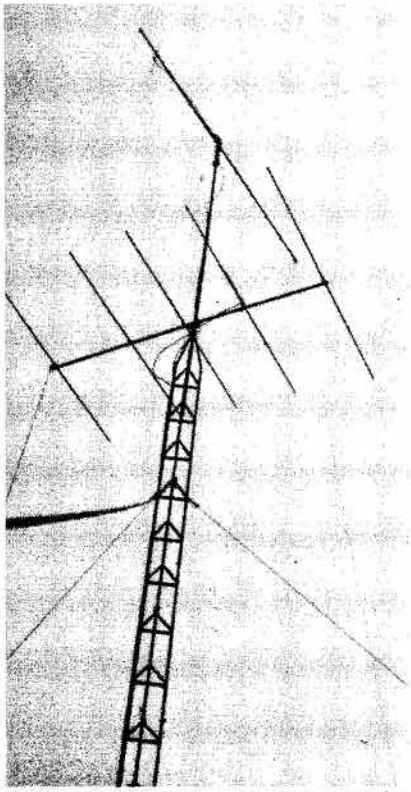
John (VE3FQJ) on 80 metre phone — what a way to rough-it?



Dan (VE3MCL) checking a contact on the monitor to see if he is a dupe?

Steve (VE3GBK), on 20 CW, is wondering what keyer or key he should use next?

Harrold (VE3JPX) and Lisa (VE3NOW) looking for more contacts on 2 metres, ho-hum!



Anyone for VHF — 2 metre and 6 metre Yagis.

Is this high enough? — that's Bob (VE3FIS) making some final adjustments with his toes to the 160 metre inverted Vee! (monobander for 10 CW & Phone on top).

The 'not-so-active' band (6 metres) has finally made a contact — left to right are Cyril (VE3OBK) and Art (VE3AIC).

A meeting before things get started.

In the 80 metre CW tent with Dave (VE3MQV) on the left and Bill (VE3KWX) on the right.

The C.B.C. national news? No, its only Dave (VE3MCL).

Pioneer Amateur Radio Club (Ottawa)
FIELD DAY 1983

The weekend of 25 and 26 June 1983 was the American Radio Relay League (ARRL) Field Day. This is the fifth consecutive year that the Pioneer Amateur Radio Club (PARC) of Ottawa has entered the Field Day contest. This year, operations were set up at the Recreation Association Grounds at Kars, Ontario.

We had two teams as follows:

Radio Telephony Team (phone)

Al Law	VE3LAW
Bill Cousins	VE3GPR
Lorne Hunt	VE3AHA
Al Betzner	VE3OL
Ruth Soucy	VE3DZH
Dick Jestin	VE3EYJ
Erik Christensen	VE3KIH

Radio Telegraphy Team (cw)

Howard Humphrey	VE3ASJ
Scott Hendry	VE3NPX
Daren Cousins	VE3GPR harmonic (future ham)
Marge Jestin	VE3CAM
Tom Agius	(future ham)
Cam Milne	VE3KIY harmonic (future ham)
Alex Milne Jr.	VE3KIY

For the first time, we had a **Natural Power Team:**

Barc Dowden	VE3TT
Ruth Soucy	VE3DZH

This team operated a 2 metre radio telephony station using power derived from a panel of solar cells. Following the rules of the ARRL, this team was on the air for a short period only while one of the other team stopped operating.

One again, our famous cooking team consisted of:

Cam Milne, Chief Cook, VE3KIY harmonic.

Alex Milne Sr., Assistant Cook, Father of VE3KIY.

Marge Jestin, Assistant-Assistant Cook, VE3CAM.

We had a number of visitors who came out to give moral support to family members and friends:

*Gerry Begley and daughters Mary and Nancy	
*Jim Humphrey	VE3ASJ harmonic
*Ron Guilbeault	VE3MSJ
Sue Guilbeault	VE3MSJ XYL
*Brian McCleery	
*Larry Renton	
*David Hackston	
*Loren Christensen	VE3KIH harmonic
*Stefan Christensen	VE3KIH harmonic
Mary Christensen	VE3KIH XYL
Joan Milne	VE3KIY XYL
Alexis Milne	VE3KIY harmonic
Elizabeth MacDonald	
Norma Betzner	VE3OL XYL
Don Maughan	VE3CHY

*Members of the Kars Experimental Radio Class run by Erik Christensen VE3KIH.

Two of the above helped us out for Field Day. Gerry supplied a pick-up truck for hauling picnic tables, a garbage can, generators, masts, etc., and provided some needed weight when erecting the masts. Alexis painted 4 signs which were used to direct people into the Field Day site.

The coordinators for this year's Field Day were Erik Christensen VE3KIH and Alex Milne Jr. VE3KIY.

The Radio Telephony Team (phone) were located in our club tent which was donated to us for such exercises. The transceiver used was a Heathkit HW-101 belonging to Erik Christensen VE3KIH. Lorne Hunt VE3AHA brought along his HW-101 as a back-up. They used two inverted "V" antennas cut for 20 metres and 80 metres. When we say cut, we mean cut; one of the antennas was cut at the feed point and it took the team quite a while to find out why the antenna would not load-up. The antennas were supported by a 48 foot telescoping mast. This team operated on 15 metres, 20 metres and 80 metres and used Bill Cousins' VE3GPR antenna tuner.

The Radio Telegraphy Team (cw) were set-up in the tent trailer of Dick and Marge Jestin VE3EYJ/VE3CAM. They used Howard Humphrey's VE3ASJ transceiver, a Kenwood TS 520, and antenna tuner. Scott Hendry VE3NPX brought along his transceiver, a Collins DWM2, just in case of problems. They used an inverted "V" antenna for 20 metres and a long wire antenna for 40 metres. The inverted "V" and one end of the long wire were supported by a 29 foot telescoping mast provided by Bill Cousins VE3GPR. The other end of the long wire was supported by a tall tree thanks to the climbing ability of Tom Agius.

The Natural Power Team operated a 2 metre transceiver, a Ken-

wood TR2400, powered by a panel of solar cells. The transceiver was modified so as to be powered by the solar cells rather than its battery pack. A "J" antenna was supported on top of a 41 foot telescoping mast.

Power, this year, was once again provided by two propane powered generators. These generators ran without fault this year thanks to the advance work put in by Dick Atkinson VE3JBO and Erik Christensen VE3KIH. Maintenance on the generators was done every few hours by Erik, Cam Milne or Tom Agius. Dick could not be with us this year as he was attending the wedding of his son.

Point wise, we ended up about the same as last year. At final count we had 293 cw contacts and 342 phone contacts for a point score of 2356 including bonuses.

As a comparison with other years:

Once again, the Milne team of Cam and his grandfather Alex Sr. provided the meal service. Marge Jestin VE3CAM helped out whenever her services were not required for operating a station. Hot dogs and hamburgers were the fare for Saturday and Sunday lunch. Saturday supper was pork chops, potatoes and green beans. Sunday breakfast consisted of bacon and eggs. Coffee, tea, hot chocolate and orange drink were available at all times. Mary Christensen brought over a chocolate cake which was much appreciated. Many thanks go out to Cam and his grandfather for organizing and preparing our meals. One of the participants, who will remain nameless, has peculiar tastes. He was found adding powdered potato to his coffee instead of powdered creamer. He claimed it tasted good but got a little thick at the bottom.

Have a good summer. You will be hearing from us again when the club notice goes out for the 13 September 83 meeting.

73 Alex VE3KIY

Year	Teams	CW Contacts	Phone Contacts	Points	Points per Team
1979	4	100	800	2496	624
1980	3	395	360	2700	900
1981	2	60	620	1780	890
1982	2	255	557	2434	1217
1983	2	293	342	2356	1178

Field Day by the Sea

by Doug Cormier VE1BCN

Soft sea breezes. Warm summer sunshine. A sky reflecting the blue of thousands of miles of whispering Atlantic waves. Over the hill behind us is the home of "Ann of Green Gables". Beyond the hill in front of us lies miles of golden, clean, ocean-washed sand. Our field-day site is huge, yet hardly noticeable in the massive network of trails and campsites carved skillfully into the forests of the Sunset Camp Ground at Cavendish, P.E.I. Our tents, towers, small mobile homes, and generators are spread as far apart as field day rules allow yet there is still room to park our twenty or so cars with unused space for hundreds of others. Band conditions, helped by a forty-foot tower with lots of radial ground wires, are good. There is even a scarcity of operators. Was this a ham's dream of Heaven? Was this a set up for millionaires? Neither! Just a routine field day on P.E.I.

The army donated generators and gas, the hams donated the use of their equipment, and Bob VE1BPY, manager of the Sunset Campground donated the acres and acres of space. It cost less to go than it would to stay home. Add the excitement of setting up antennas and equipment, the thrill of operating when every CQ brings in a half dozen responses, the pleasure of seeing hams again that you have known for years, and the total is what field day is all about.

Every field day needs a spark-plus. A ham full of vim and vigor who can be all places at once organizing, improvising, repairing, generating enthusiasm and bringing everything together. Our spark-plug was Ray VE1BKN. You know the type. A long lanky type that can't sit still, doesn't require sleep, and could eat you out of house and home. I'm sure that the success of field day would be all of the thanks that Ray would want, but he has the thanks of all that participated and especially that of we old retreads who had to be pushed, dragged, prodded and pulled to get us performing.

The hidden x-mitter for the hunt was located on the campground. The roads, paths and trails added up to many miles. The xmitter was finally located near the big swimming pool by yours truly (with a little help from Bob VE1BPY). It was located in a mobile home, where, at the conclusion of field day we were all treated to home-made ice cream made in an old fashioned crank type freezer. Our hosts were Kay, XYL of VE1EO, Gord Beaman and Gord himself, no less. The ice cream was delicious even though Kay was on a low salt or salt free diet.

The usual debate about using high or low power for field day was resolved. The main participants are Americans. Within a few hundred miles of their sites are hundreds of stations, many of which are using high power. Will they work us? Only if our signal is very strong and clear! When multipliers for distant and different contacts made it worthwhile to use operating skill all stations had an equal chance. The change in rules resulted in a horsepower race. More power, less skill. Surely this is not what the A.R.R.L. intends. We had no option but to pile on the kilowatts.

We usually have a hotly contested tower climbing event. This year we cancelled the event. Last year one contestant picked up so much speed climbing the tower that he climbed eight rungs higher than the top of the tower. The chances of an accident became too high so, sadly, we cancelled the event.

In lieu of the tower climb we had a tower erection and lowering contest. The contest took place at the conclusion of field day. Unfortunately we could only resurrect two teams of six for the contest as most hams were flaked out. It was frantic. It was hectic. But mostly it was fun. Six people with two hands each adds up in a hurry to sixty thumbs and no fingers.

Where were you on field day? If you want to capture or recapture the enthusiasm of field day why not drop down to P.E.I.? We could use your ten thumbs!

If you are near the island we have several good 2 metre repeaters. There are also well-attended breakfast meetings at the Kirkwood motel in Charlottetown on the first and third Saturday mornings at 10 a.m. There are also club meetings in Summerside and Charlottetown as well. Strange faces are always welcome. Why not add yours to the collection?

Battle joined in U.S.A. over no-code ticket

Canadian Amateurs are spectators only in a situation which would affect them directly if the FCC proposal for a no-code license goes through. According to the U.S. newsletters, "WESTLINK REPORT" and "W5YI REPORT", a militant group called the "American CB Trucking" is pressuring U.S. legislators for a far more "lenient" approach to the code-free ticket proposed by the FCC. The group wants all CB 11-metre operators "grandfathered" into a no-code Amateur category. According to monitoring of this group on the illegal 10½ metre band they want it as a codeless Amateur band with themselves populating it.

On the other side, the perennial U.S. Amateurs' legislative champion, Senator Barry Goldwater, other Congressmen and the U.S. Senate Armed Forces Committee are leaning hard on the FCC to kill the proposal. Let's hope these "good guys" win.

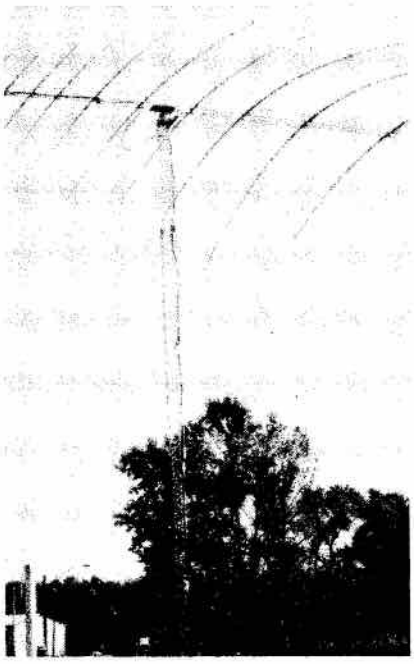
CARF News Service

Little Jimmy's 80th Birthday

Twenty-two hundred signallers, past and present, along with friends and spouses and including scores of Amateurs, converged on the historic Ontario town of Kingston last Labour Day to celebrate the 80th anniversary of the Royal Canadian Corps of Signals. Using the call VE3RCS, local operators furnished a talk-in facility and information station on two metres.

The three-day event took place in perfect weather, starting off with a Friday night social and buffet and numerous events on Saturday, with a banquet and dance to wind up the evening. Sunday featured military equipment displays and a march past, topped off with a magnificent barbecue. There were a number of demonstrations of current communications equipment and vehicles and training methods. A code contest was held for the fast fists in the crowd.

Forty years later VE3CDC found the jeep seats just as hard. (Who pinched the #19 set?)



Some beam! One of the many antennas at Vimy Barracks. It's a log periodic, 60-foot, 17 element beam, covering 4 to 30 megahertz. The longest element is 96 feet . . . no wonder it droops.

VE3CDC

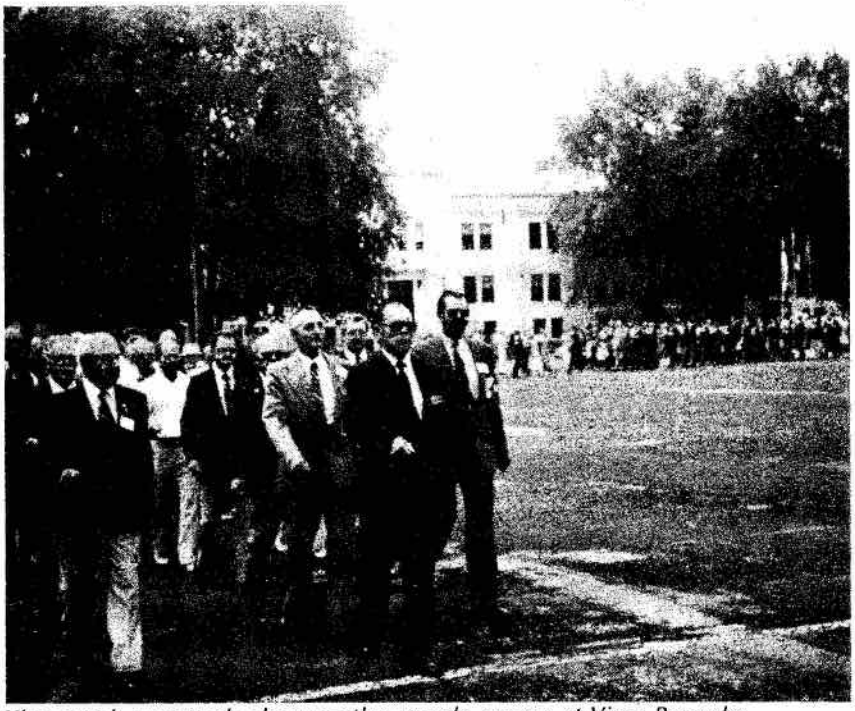
The display of modern equipment was an eye-opener to the World War II and Korean veterans. There was even an automated cable-splicer which was a most interesting device to those linemen who remember trying to splice the old 'D-8' field telephone cable whose six steel strands and one copper one invariably jabbed the fingers like needles.

To many of the veterans there it was a long step back four decades in time. The Vimy barracks area looked about the same as in the forties except for the many mature trees and the absence of many of the old wooden 'H' huts. Across the road in Barriefield, however, the new and modern-design 1st Signal Regiment building presents a striking contrast. Its huge football field-sized drill hall accommodated the indoor events, including the banquet and dance.

The changing times are emphasized by a sign on one of the old white-painted barracks

Retired Major-General Megill, who joined the Signals Corps away back when, took the salute of the more than 1,000 signallers in the Sunday march past.

VE3CDC



The march past took place on the parade square at Vimy Barracks.

. . . including 83-year-old "Shorty Mac" MacDonald, VE7AZ.
VE3ANL

blocks which states "Female Personnel Only". Another notable change is in the Officers' Mess which still looks the same from the outside but the survivors of the wartime's six-deep line-up of thirsty cadets and officers (who used to crowd around its only and totally inadequate seven foot bar of those days) will be pleased to know there there are now four bars of various sorts in the renovated mess.

Feeding hundreds of people at a time was accomplished efficiently by Armed Forces personnel who set up a half dozen 'chow' lines and dispensed food that would have done credit to the best restaurant in the country. A monster four by six-foot birthday cake, with the Signals crest in icing, was displayed and served up for dessert at the huge outdoor Sunday barbecue.

Although it was 44 years ago for many in the parade, signallers could still march brisky . . . and in step!

VE3CDC

Decorations featured the 'RCCS' shoulder patches worn by WW II army signallers and Mercury, wing-footed messenger of the gods of Roman mythology, better known affectionately as "Little Jimmy", who forms the central figure of both the old Sigs badge and the new combined forces communicators' badge.

The Toronto Signals Band, resplendent in scarlet uniforms, put on a fine show with a drill display and martial music and the

Fred McQuillan, who co-ordinated the committees and the year-long planning which went into the special anniversary reunion.

VE3CDC

Vimy Band gave a first-rate open-air concert of songs old and new.

For most the climax was on Sunday morning when nearly a thousand signallers formed up on the old Vimy parade square and to the rousing music of the Toronto band marched briskly past the saluting base, where retired Major-General Megill, who started out with 'Sigs' when flags and lamps were the thing, took the salute. The precision marching of the veterans demonstrated that even after four decades they could give a Guards regiment a run for its money for 'smartness' on parade. For those who marched and those who watched alike, it was a nostalgic and emotion-filled event, with the music and the sharp commands bringing memories of old comrades and of the stirring days of forty years ago.

On the lighter side, one veteran noted that it was a pleasant experience to stroll unconcernedly through the hallowed halls of the Administration Building. "The last time I was in here", he said, "I was more than somewhat concerned and worried as I was marched up before the commandant for being a bit overdue . . . like three days . . . on leave."

All who were there were lavish in their praise for the way the event went off. It reflected the year-long work of the various committees of the sponsoring Kingston Signallers Club and the assistance of the personnel of Canadian Forces Base Kingston and its commander, Col. Kevin Troughton and Col. David Florence, the Communications and Electronics School commandant and his staff.

Doug Burrill, VE3CDC

The Sunday barbeque.

Bill McCullough

There's always a clown in the act.

(the author)

Repeater at Yellowknife

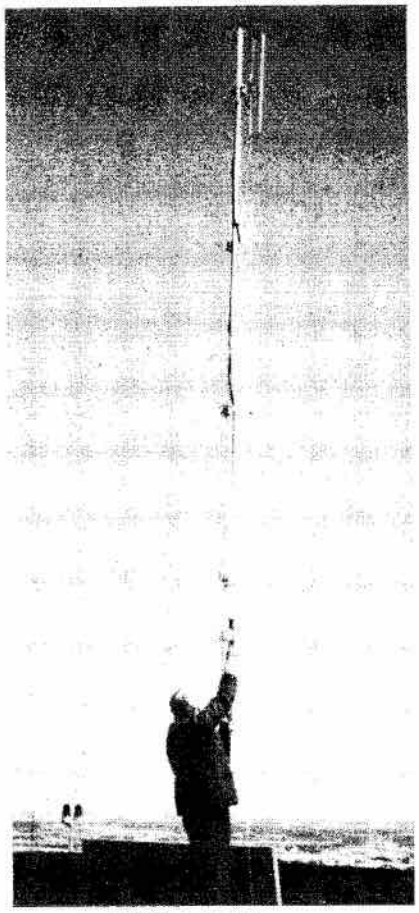
By Bruce Dinsmore

Amateurs in the major centres across Canada take for granted their ability to key-up a local repeater and to be able to communicate. Yet, the task of putting into operation such a machine takes hours of hard work, money and time. That's what a small group of Yellowknife Amateurs found when they put into operation the first Amateur repeater in the Northwest Territories.

Many Yellowknife hams have two-metre equipment, but no one was using it, until two of the Yellowknife hams sat down for lunch one day with a friend. He was Ray Flatt, the District Manager for the Department of Communications in Saskatoon. The two Amateurs were Terry Keim (VE8TF) and Peter Radcliffe (VE8BY). It was Monday, November 17, 1980. They were discussing why two metres wasn't being used in Yellowknife, when Ray casually mentioned he had an old Motorola tube-type repeater gathering dust in his basement. Bingo! With the able assistance of Bill Somers (VE5WB), the machine was crated and shipped air express to Yellowknife, N.W.T.

The real work was about to begin. Peter (VE8BY), our technical genius, dove right into assembling, tuning and building all the necessary pieces to make it work. Crystals for 146.34/146.94 MHz and an identifier were ordered. While Peter attended to the technical side, Terry scouted for a likely location.

The City of Yellowknife was founded almost 50 years ago as a gold mining town. Gold mines require huge hoists to haul men and ore up from the great depths underground. Cominco Mines in Yellowknife has such a hoist, it towers almost 300 feet above the city and overlooks Great Slave Lake. The hoist is housed in a



Peter Radcliffe VE8BY adjusting VE8YK's antenna

building called the Robertson Shaft, the highest building in the Northwest Territories. What a fantastic location, as it was well away from the RF congested city core and has clear sight lines to the horizon in all directions. In addition, an elevator could be taken to the top floor with only a short flight of stairs to the flat roof. In fact, they weren't any antennas on the roof! Fantastic! Disaster! The mine advised absolutely NO one is allowed to install or operate any radio equipment of any kind near the hoist controls on the top floor. It seems when a hand-held radio was used by a mine employee sometime previous to the Yellowknife Amateur Radio Society's (YARS) request, RF interference caused the hoist to run wild. Amateurs do not give in easily and after a few telephone calls to Cominco's Trail, B.C., office, Dave Homer and Hank Sanders came to Yellowknife to do some work and would investigate the RF problems. A few weeks and many phone calls later, a very special phone call came from the local Cominco office.

Mr. Ian Drinnan, Mine Superintendent of Maintenance called on behalf of Jim Greenhalgh, the Mine Manager, agreeing to a Sunday radio test. Under the watchful eyes of Cominco's management, the very nervous Amateurs installed a magnetic mount on the metal roof and ran RF power from one to 150 watts to the antenna. Nothing, absolutely no RF problems. The hoist operations remained stable.

The idea of a Yellowknife repeated spurred the interests of Paul Hokkinen (VE8FB), Peter (VE8BY), Doug McGill (VE8XO), Jim Polson (VE8JP) and Terry (VE8TF) and a club was formed. Each member of YARS donated $200 for a commercial grade Sinclair 224, 6db omni antenna and a Sinclair Q2330E duplexer. Motorola Yellowknife donated a cabinet and another commercial establishment donated 50 feet of 7/8 inch heliax and extra heavy pipe for an antenna stand. In less than one year from the historic luncheon, the first two-metre repeater in the N.W.T. was installed and operational.

The choice location gives a mobile (vehicle and boat) an average range of about 60 miles. The repeater is consistently being heard by Stu Montro (VE8CM) in Hay River some 120 miles across the Great Slave Lake. Stu is in the process of upgrading his antenna

system to access the Yellowknife repeater on a regular basis.

With VE8YK, the repeater, in full operation and with an additional couple of new club members, YARS started to become involved with public service work.

To date the largest challenge the YARS has faced is the annual Yellowknife dog trotters race, held each March. The Canadian Dog Derby Championship is one, if not the premier event in northern dog sled racing. It has been held annually since 1955. The three day event is a challenge of man and team against nature, with a 50 mile track blazed out of the snow and ice over Great Slave Lake. The teams depart from a downtown starting line, down blocked-off streets and then out onto the "Big" lake. Each team has to pass four check points on the race course daily. Radio communications are used used to provide on site emergency communications, inter-check point communications, intermediate race results and a host of other communications requirements. Initially no communications were used during the race, resulting in lost dog teams and numerous injuries. The General Radio Service (CB) operators attempted to provide assistance but the distances were too far and the reliability practically nil. Next the Department of National Defense assisted by relaying the messages along the 50 mile course. It wasn't until the Amateurs took over that the reliability became 100 percent, thanks to VE8YK.

Each Amateur at each checkpoint prefabricated his own equipment into a port-a-pack, including batteries and antenna to work through the VE8YK erpeater. The port-a-pack had to have sufficient power to work through the repeater during the seven hours of very cold and windy operating conditions. Temperatures as low as −30 degrees C are endured. Along with the Amateurs at each check point is a race judge/timer, an army cadet and a tent for protection against the cold, and protection from storms which occasionally require an overnight stay. At each of the check points, Amateurs communicate with the mobile control station in Yellowknife, which relays time checks, race team numbers, locates people, hauls gas and oil to aircraft and posts the running race results on a large blackboard at the festival's main activity centre, Fort Caribou. Fort Caribou is the centre of activity for the mid-winter Caribou Carnival, where the dog derby has become the premier attraction. Before Amateur radio took over the communications, public interest spanned only the race start and the finish. With Amateur radio, race results were posted up to the second as each team passed each check point. Everyone wants to know is ahead and how far.

In addition in 1983, the YARS set up a demonstration station as part of "Communications Year 83". The station was located at the Prince of Wales Museum. Race results were also posted on a blackboard there. The station operated on 80 through 10 metres, plus 2 metres. Interest soared to where the Amateurs provided receiving equipment for the CBC and the only private radio station in the N.W.T. CJCD, who broadcast the race results as they happened. The museum station was run by Paul VE8FB and was visited by over 1300 people on the week-end.

Club members have also been involved in supplying communications for many other community events, one being the Terry Fox Marathon of Hope, in the Northwest Territories.

The Yellowknife Amateur Radio Society now have a full membership of eight, plus six associate members from as far away as Edmonton, Fort Smith and Rae Lakes N.W.T. a monthly newsletter is published during the September to May winter months by the club's Secretary-Treasurer. Even the Government of the Northwest Territories Emergency Measures Officer has requested our help in cases of emergency.

What is our next project? The YARS is investigating ways and means to purchase (obtain one way or another) and install an autopatch. No small matter from such a small group of enthusiastic Amateurs.

Visiting Yellowknife? Bring your handheld, the YARS would love to rag chew with you on the N.W.T.'s only repeater, VE8YK.

The YARS would like to thank Cominco's Northern Group for their assistance and co-operation and also the Canadian Broadcasting Corporation for their valued donations, if it were not for these companies the first repeater in the N.W.T. would still only be but a dream.

L to R: Doug McGill VE8XO, Paul Hokkinen VE8FB, Peter Radcliffe VE8BY, Earle DePass VE6 BGQ, Terry Keim VE8TF

A ham family, a dream come true

Zareh Amadouny
VE2DWH

It's rare nowadays to have all the members of your family as ham operators, but I'm proud to say that ours is.

It all started back in the late forties when my uncle Edward (OD5AT) got interested in ham radio from his uncle Salim. The only thing that I remember from Uncle Edward's shack is his wall-to-wall radio equipment and his 3 element beam. Nobody realized back then that my two brothers and I one day would be ham operators. The interest in our family started when my middle brother Roger (DJ0TO) finished school and had to look for a job, Uncle Ed got him involved in electronics and ham radio at the same time. I still remember those long nights when Roger was practicing his cw and his dee's and dah's drove us up the wall. But in 1971 it all paid off when Roger got his ticket and a scholarship at the same time to go and study in West Germany.

My older brother Leon (VE2DTH) at the time was already in Canada and got involved in ham radio when Roger brought him over an old Galaxy 500 rig for some SWL in 1980. Soon afterwards Leon got his ticket and off he went in the contagious hobby. At the same time Roger tried to get me in ham radio too but I guess when you are 22 you tend to think of other things than this fabulous hobby. The perseverance of my brother never gave up and in February 1982 I received my call sign on the first try.

Look up these four call signs in the 83 DX Call Book (OD5AT, DJ0TO, VE2DTH, and VE2DWH) and you'll see what the family spirit is all about.

As for operating habits Uncle Ed is in his late seventies now and gradually losing his eyesight, so he's not as active as before. Leon and Roger are still very active and can be heard almost every weekend on 20 meters with another bunch of OD operators around 20:00 zulu.

Leon (left) and Roger during a family backgamon tournement.

As for me well thanks to VE2WY "Ross" who is on CQ's Magazine DXCC honor role with a fb 313 countries confirmed, I'm still trying to work as many new countries as possible and at last count I had 128 countries worked with exactly 100 confirmed so far.

So hope to hear you one day on the air with my brothers.

73's

From left to right, Roger (DJ0TO) Leon (VE2DTH) and myself in Leon's Shack.

An April Fool's look at operating a station.

CORRECTION

In our special November issue the telephone number for VE Amateur Radio Sales on page 14 was incorrect. The correct number is (416) 636-3636.

TECHNICAL SECTION

A 40-FOOT TOWER

I had been using a 30-foot TV tower for my two-element tri-band quad but every time the wind blew the tower twisted back and forth and, as I had a larger quad to put up, I needed a heavier tower.

I secured 40 feet of a heavy TV tower and went over this with a steel brush, then painted it with aluminum rustproof paint. The tower was assembled on the ground and a rotor plate and top bearing plate were made up from an old steel receiver panel. The rotor was set down about three feet from the top and a piece of 1½" galvanized steel pipe was used for the antenna mast.

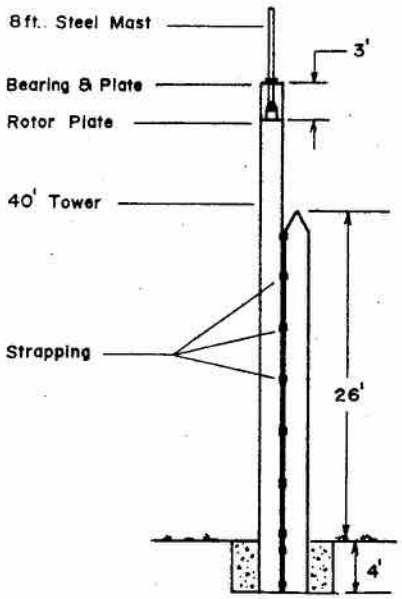
The existing 30-foot tower was dug out on the flat front side down to about 4 feet and a trench was dug slanting out and up from the bottom for about 6 feet. The 30-foot tower was already guyed and there was no need to add more guys. A piece of plywood was placed in the hole in front of the tower to prevent the legs of the new tower from getting tangled, this was removed before strapping the towers together.

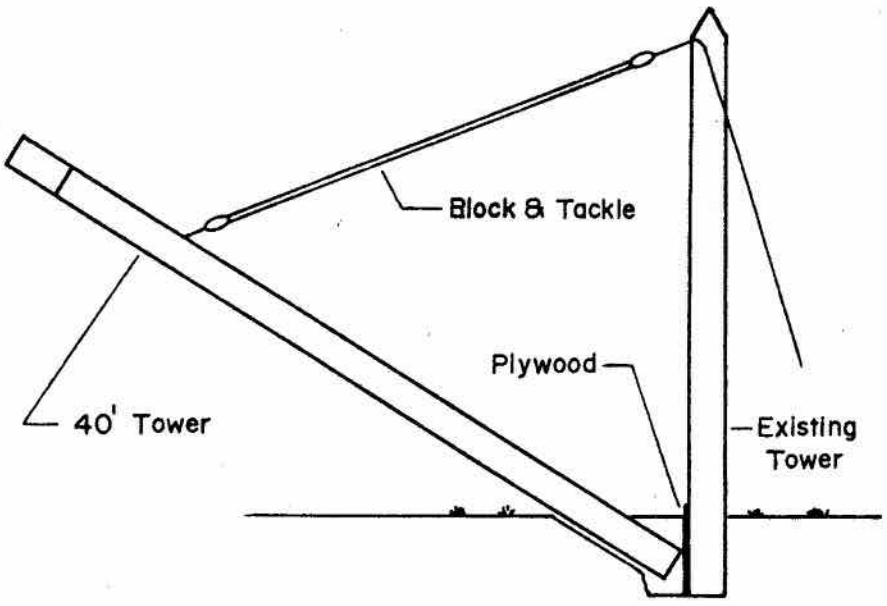
With the aid of a block and tackle, VE3VO and my son, the tower went up quite easily. Both towers were then strapped together and checked for plumb. Then the guy wires were tightened, the rest of the earth removed, and concrete mixed and poured.

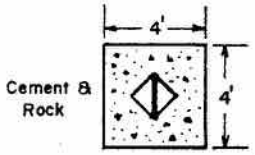
A few days later the guys were removed and my son climbed the tower. It proved to be solid as a rock. As we were leaving for W4-land in a week, no attempt was made to put up the new quad.

My thanks to Jack, VE3VO, Ed, VE3 INX and my son for their assistance.

Jack Spall
VE3 BTQ
101 Daphne Cres.
Barrie, Ont. L4M 2Y7

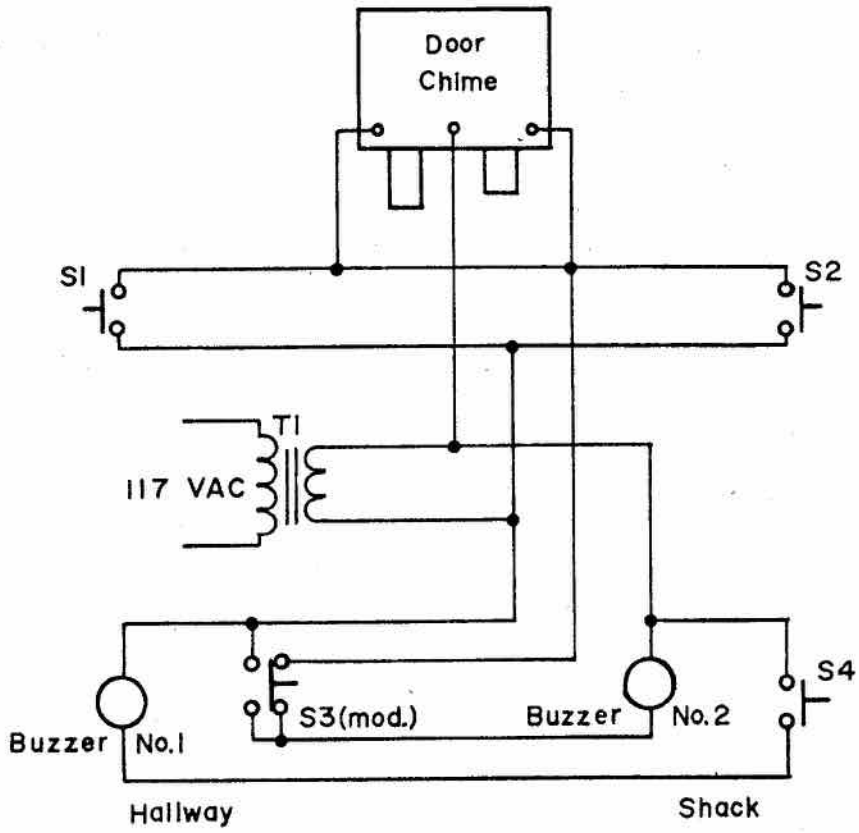






MORE USE OF THE EXISTING EQUIPMENT

To keep good relations with my XYL, I have devised a unique communications system between my radio shack and my XYL. Since my shack is located in the basement, and my ssb going "full blast" I had difficulty in knowing when my XYL needed some of my attention, such as "you have a visitor, take the gar-



bage out, answer the phone or dinner is ready". The last one I hated to miss. So, I have figured out how to wire up the existing door bell to two buzzers as follows. (See the accompanying schematics).

Either push button, switch S1 at the back door or switch S2 at the front door, operates the buzzer in the shack, and the door chime on the main floor. Switch S3 operates No. 2 buzzer only, in the shack. Switch S4 in the shack operates buzzer No. 1, in the hallway. Buzzer No. 1 and 2 provide communications between the shack and the main floor. By established code between buzzer No. 1 and buzzer No. 2 information is exchanged between radio operator in the radio shack and the XYL.

Michael Skomorowski
VE4 AET
Grandview, Man.
R0L 0Y0

IMPORTANT NOTICE TO WRITERS

The deadline for submitting articles for use in TCA is now five weeks from the printed date of issue. This means that material for the March issue should be in the hands of the Editor no less than thirty five days previous to the first of March. As it takes a full four weeks to produce TCA on time, this deadline is mandatory and will be adhered to. Avoid mail delays. Mail at least one week before the deadline. Swap Shop items should be mailed even earlier if possible.

The Reflected Pyramid Antenna

Peter Battista, VE3KYX
29 Barrington Drive
Welland, Ont. L3C 5Z7

Lately I have been experimenting with a new antenna which is useful on 2 meters, the same concept can also be applied to the lower bands. The antenna is my own design. I call it the "reflected pyramid" because the completed system resembles that configuration. It works on the same principle as the vertical dipole. It is a current-fed system employing four ¼-wave radials for the radiator and four ¼-wave radials for the ground system. It has an omnidirectional radiation pattern and a gain of about 5 db over a vertical dipole. On 2 meters the SWR is 1.1 at 144.5 MHz and 1.3 at 147.9 MHz.

The antenna is very easy to construct and also very easy on the pocketbook.

Parts List

1. 4 bronze rods ⅛" × 36" for elements
2. 1 ¾" CPVC plastic Tee for element retainer
3. length of ¾" CPVC pipe for mast
4. random length of RG58 co-ax for feeder
5. solder and CPVC cement

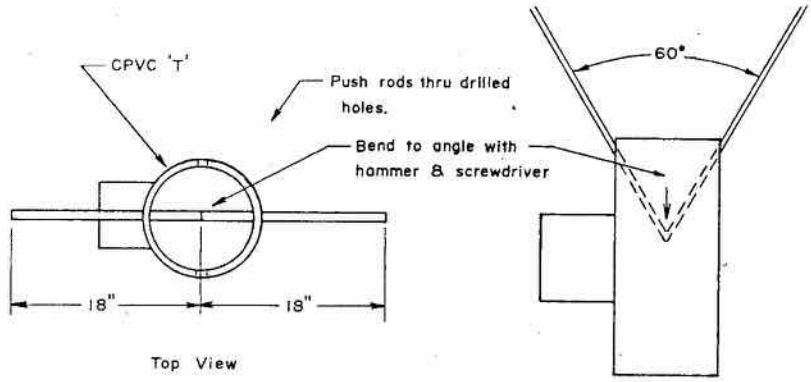
Construction

1. Take the four rods and mark the midpoint of each with a pencil.

2. Drill four holes 90 degrees apart about ⅜" from each end of the Tee, drill these holes at a 30 degree angle from the axis so the final angle between the elements will be 60°.

3. Insert a 36" rod through two opposite holes at one end of the Tee until you can see the midpoint mark centered in the end of the Tee.

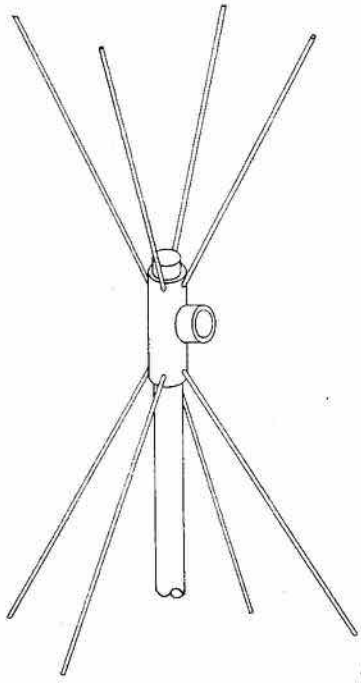
4. Take a flathead screwdriver and a hammer and by hammering downward you will bend the rod at the midpoint causing the two ends to come up to form a vee with a 60 degree angle.



5. Repeat with another rod in the two other holes, then repeat the whole operation at the other end.

6. When the above steps are finished, solder the junction of the vees of the two two rods at each end. You now have the "Reflected pyramid" element configuration.

7. Now add the co-ax feedline, with the centre conductor of the co-ax soldered to the top section of the antenna and the bruvf to the bottom section which is the ground plane.

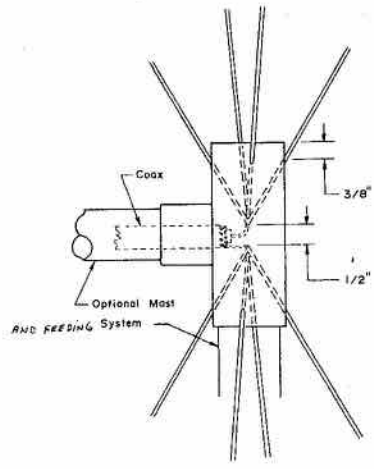


8. Finally, add the CPVC mast. This can be added either at the bottom or at the side.

Final Notes

I have tried the system with more than four elements and found that the gain decreased. I have also done some experiments on 20 meters with excellent results. If constructing the antenna for lower frequencies two wooden crosses can be used to support the elements and it can be raised with a rope. My 10-meter version has given very good results, being a low-angle radiator it is excellent for DX work.

I hope the reflected pyramid will work as well for you as it does for me. If any additional information is needed, don't hesitate to drop me a line.



CARF NEWS SERVICE

NSARA 1984 EXECUTIVE

Re-elected by acclamation as the Nova Scotia Amateur Radio Association's 1984 executive at the annual meeting in Halifax were: President Don Bower, VE1AMC; 1st Vice-President Sy Mills, VE2BLO; 2nd Vice-President Lauche McKeagan, VE100 and Secretary Brit Fader, VE1FQ.

Cecil Fardoe,
VE4AEE
Malcolm Timlick,
VE4MG

NEW TRC-24 AND TRC-25 NOW AVAILABLE

The two DOC publications, TRC-24 and TRC-25, which give respectively the new requirements for Amateur certificates and extracts from the Radio Regulations which apply to Amateur Radio, are now available from DOC local offices. The new TRC-25 reflects the various amendments made to date, such as the end to logging except for those Amateur class operators asking for phone privileges after six months. More changes will be promulgated soon in the Canada Gazette Part 2. They will include changes of which public notice was given in January 1982. They include letting foreign visitors from Region 1 who have reciprocal operating privileges use the whole of our two metre band, and the removal of power restrictions from 1.8 to 2.0 megahertz.

SONRA NET CHANGED

Newfoundland Amateurs are advised that the SONRA Sunday net has changed frequency as of October 30. It will now be on 7.085 megahertz at 1400 hours Zulu time.

DOC HQ APPOINTMENT OF INTEREST TO AMATEURS

The appointment of Robert A. Gordon to the position of Assistant Deputy Minister, Spectrum Management, in the Department of Communications, has been announced. Mr. Gordon will be responsible for regulating the use of radio in Canada, including the Amateur Radio Service. This responsibility was formerly assigned to Dr. John deMercado.

GRENADA 3RD PARTY TRAFFIC NOT LEGAL

In view of the current situation in Grenada, Canadian Amateurs are reminded that this country does *not* have a third party traffic agreement with Grenada. The situation there is politically volatile and the handling of any unauthorized traffic is not legal.

NEW ITU NO-NO LIST

A new banned countries list has been published by DOC in the Canada Gazette. The only ones left are: Burma, Iraq, Libya, Pakistan, Somalia and Zaire.

CHINA AGAIN ON AIR

Tom Wong, VE7BC, was on the air on sideband from BY1PK in Peking during the first week in October. Those lucky enough to contact him should QSL to his call book address; 220 North Grosvenor Avenue, Burnaby, B.C. V5B1J4.

U.S. NEWS

The FCC has finally issued its order setting up Amateur administration of the examinations. The program is complicated and looks like an administrative nightmare. There is difficulty in determining who picks up expense tabs as the FCC will not finance it. Lack of interest on the part of Canadian Amateurs has killed any further action on a similar idea in this country. Further news from the U.S. is that the military are into production on communication equipment using the 450 megahertz band. Amateur use there is secondary.

CORRECTIONS TO NOVEMBER ISSUE ADS.

IF YOU ARE ORDERING CALL BOOKS FROM OUR ADVERTISERS please note that there was an error in the PEN PUBLISHING CO. ad on page 61. It produces and sells the "CANADA CALL BOOK" **ONLY.** It does NOT sell "1984 Call Books. U.S.A. $23.00; Foreign $22.00; Both $42.00". These latter books are sold by Atlantic Ham Radio Ltd. and the above words should have appeared in its ad on pages 31 to 35.

IF YOU WANT TO PLACE A TELEPHONE ORDER WITH VE AMATEUR RADIO SALES, please note that the telephone number shown in the November issue is incorrect. **The correct number is (416) 636-3636.** We regret any inconvenience to our subscribers and advertisers.

It seems that we also had trouble with out translation department... the front page should have read **"La Revue des Radio Amateurs *Canadiens*". Nos regrets!**

"Radiation Leakage could be Dangerous to Cable Health"... CCTA

Recently there have been a number of articles in Amateur publications about the problem of interference to the Amateur and other radio services from radio frequency emissions from "leaky" cable TV systems and the potential threat this situation could pose to the Amateur Service. Because of the "leaky" cables and equipment, perfectly legal Amateur transmissions on some frequencies can get into the cable TV systems. Legal or not, this could stack up millions of irate cable subscribers (who have a vote) and the cable TV lobby against a mere 23,000 Amateurs . . . hence the potential threat to Amateur operations is obvious.

The picture may not be so black, however, if the cable TV companies heed the words recently printed in an information bulletin published by the Canadian Cable Television Association and its members.

Referring to its own words quoted in the headline of this article, the bulletin states that its object "is to illustrate a growing danger to this industry". It continues:

"At issue is our ability to introduce additional programs, expand into new services or even continue distributing existing signals and services.

"The danger is cable leakage.

"When a cable system delivers more than 12 channels of television, it makes use of frequencies which are not allocated to broadcasting. In principal, this should not cause any problem since cable systems by nature are closed-circuit operations as far as spectrum utilization is concerned. However, in the real world perfect systems do not exist and cable systems leak radio-frequency signals which can and do interfere with other spectrum users. The users include almost everybody from police, ambulance and taxi drivers to military personnel, pilots and Radio Amateurs.

"When we interfere with these users, we are depriving them of their rights as licensed radio operators. To ignore the leakage problem is not only dangerous, it is destructive to our industry. Consider the following:

— As a result of complaints from a Radio Amateur Club, a cable system has already been barred from using mid-band channel E;
— DOC is not approving any applications for augmented channel capacity unless a system can prove (with expensive comprehensive tests) that the system is leakage free;
— The possibility of eventually using channels A-1 and A-2 for cable delivery is now practically non-existent as a result of the publicity over this problem;
— Radio Amateur organizations have already intervened on a number of cable applications and are likely to continue to do so;
— The DOC has warned us to either find the means of coexistence with spectrum users or we would face the consequences."

"The message is clear. We either comply with the rules or we face the possibility of losing spectrum. The efforts we have made over the years to control leakage from our systems must show results. The following steps need to be taken:

1. Patrol your system. Radiation monitoring is a requirement which the Department expects you to carry out responsibly.
2. If you receive complaints from spectrum users, solve the problem. The Radio Act is on their side.
3. Document all cases of severe radiation problems, interference complains and steps taken to solve these.
4. Keep the CCTA informed."

Members of the CCTA were further advised:

"The warning comes from the Department of Communications (DOC) in the wake of a growing number of complaints from radio amateurs and other spectrum users that their services are being interfered with by cable signals.

"Both technically and financially, radiation, more properly termed signal leakage, has recently been called the most devastating problem besetting the cable industry. If we ignore the problem, we will certainly lose the use of channels. . . .

"At a recent meeting of CCTA's Technical Executive Committee, DOC officials warned that the use of mid and superband frequencies was conditional on meeting our commitments to control plant leakage. ***Cable licensees, we were told, continue to ignore radiation limits as well as radiation monitoring requirements. . . .***" (our emphasis Ed.).

A report on the CCTA Technical Committee executive meeting with the DOC in September noted that "various issues related to standards and operational requirements were discussed". The report stated:

"Of particular interest was the cable signal leakage issue and reports of interference to Radio Amateur services. DOC representatives stated that the use of supplementary channels by the cable industry was based on coexistence with spectrum users and was conditional upon the industry meeting its commitments. In this regard, it was pointed out that more has to be done by the

cable operators to ensure that they meet BP23 rules (leakage limits).

"In response to an earlier suggestion for a joint DOC/CCTA/CRRL (ARRL Canadian Division, Ed.) study of the problem, DOC suggested that nothing would really be gained by such a costly venture. It was felt that sufficient information was already available to determine the magnitude of the problem; it was up to the industry to solve it." (emphasis added, Ed.).

Sounds great.

Let's see what happens next.

Swap Shop

Single insertion is $1.00 (minimum charge) - 10 words and $1.00 for each additional 10 words. To renew, send copy and payment again. Deadline is first of month preceding publication (e.g. Jan 1 for Feb. issue). Put your membership number and call (not counted) at the end of your ad. Print or type your ad and include your address with postal code. If using a phone number, include the area code. TCA accepts no responsibility for content or matters arising from ads. This feature is for use of members wishing to trade, buy or sell personal radio gear. It is not open to commercial advertising. Send to: TCA Swap Shop, Box 356, Kingston, Ont. K7L 2W2

FOR SALE: Heathkit SB-303 receiver, includes cw filter plus matching SB-401 transmitter. Package deal $500.00. Eli Schneider, VE3DT, 7910 Cote St. Luc Rd., Apt. 707, Montreal, Quebec H4W 1R2.

LINEAR 21 × 11 × 8" cabinet, 500 VA 2500/3500 C.T.Tx., 150 pF 0.1" capacitor, 3 × 6" 36 turn former and H.D. 6 position switch, both porcelain, 6" Muffin fan, $75.00. 2 as new 813s and pair bases, $25.00. Lot $90.00 O.B.O. VE7CGM. 945 Ranch Park Way, Port Coquitlam, B.C. V3C 2H5, (604) 464-7074.

Packet Radio

Packet radio is a relatively new form of digital communications. It has some characteristics in common with older forms, such as ASCII and RTTY.

Packet radio promises to open new worlds of communications undreamed of just a few years ago, by making possible the rapid transfer of digital information over great distances — a virtual guarantee of integrity down to the last bit. This is tremendously attractive.

Traffic can be exchanged between hams equipped with data terminals and between a ham and a computer, or between two computers.

Information is coded in binary form, that is, as a series of 1s and 0s. The information is translated into an audio signal used to modulate an RF signal to produce an FSK or AFSK transmission.

Speed is slightly less than 120 bytes/second.

A packet consists of binary data (which may be ASCII, BAUDOT, or some other code, and the modulation techniques may be essentially the same as for conventional ASCII or RTTY.

The terminal node controller (TNC) is a complete microcomputer-based communication system with a good-sized memory. It does all the work involved in sending and receiving packets.

In a packet, the individual characters, or bytes are run together with no space at all between. This eliminates the need for both start and stop bits as well as the dead time between characters. The result is much more efficient information transfer.

The analogue of start and stop bits are sent only for the beginning and end of the packet, and the transmitter is keyed only while information is actually being sent.

The receiving station can determine automatically whether the packet was received without error.

The first large-scale packet network in North America was ARPANET, established in 1969.

Today there are many government and commercial computer networks, which allow users all over the country (U.S.) to access thousands of computers remotely.

Packet radio experiments began in the 1970s.

Packet switching networks generally use one of two methods for routing packets through intermediaries to the destination.

North American Amateurs first entered the picture in Canada, where in 1978 DOC encouraged the use of packet radio, and by giving exclusive use of 221 to 223 MHz and 433 to 434 MHz to packet and digital communications.

A group in Vancouver, B.C. designed the first well-known Amateur packet radio TNC, and soon TNCs became widely distributed.

Today, many experimenters using the VADCG TNC, the TAPR TNC and homebrew systems are hard at work developing this new mode of communications.

Bill Roork
VE3 MBF

Source: Ham Radio, July 1983, for more details.

THE BATHTUB AWARD
from the Nanaimo Amateur Radio Association

Nanaimo, Vancouver Island, British Columbia, Canada
"The Bathtub Racing Capital of the World"

Requirements for the Award

a. Work 5 different Nanaimo area Stations or members of the Nanaimo Amateur Radio Association, and send Certified Log Extract.

b. Contacts may be on any Amateur Band and in any Mode.

c. Station contacts must be after January 1, 1983.

d. The cost of the Award is $3.00 or 10 IRC's.

e. Send AWARD APPLICATIONS to: Award Manager, Ernie Harding, VE7FCK, P.O. Box 954, Nanaimo, B.C. Canada, V9R 5N2.

The Award itself is a distinctly designed certificate with an artist's rendition of one of Nanaimo's famous Racing Bathtubs in action.

Nanaimo is a city of 60,000 people located on the east coast of Vancouver Island, 30 miles across the Strait of Georgia from Vancouver, B.C. It is a fishing, lumbering and distribution centre for the Island as well as being a popular retirement destination. It has a very temperate climate ranging from 30°F on the coldest winter day to 85°F on the warmest summer day. Nanaimo Harbour, with its many facilities, attracts numerous yachtsmen from all over the Pacific Coast, from California to Alaska; having Newcastle Island Marine Park in the centre of the Harbour as a focal point. The Nanaimo Amateur Radio Association and the Nanaimo DX Association are both very active in all aspects of Amateur Radio, and have a membership of over 60 Hams. NARA is always active on Field Day under the Club call VE7NA, and have been the top club in their class in Canada for the past few years.

Nanaimo is probably best known for the zany antics of the World Championship Bathtub Races held each July between Nanaimo and Vancouver, B.C., when up to 200 of these motorized bathtubs brave the dangers of the often stormy Straight of Georgia at speeds up to 30 mph. The Bathtub Race originated in Nanaimo many years ago and now has grown to international status, with entries coming from all over the world to compete and the race is now also seen around the world on TV.

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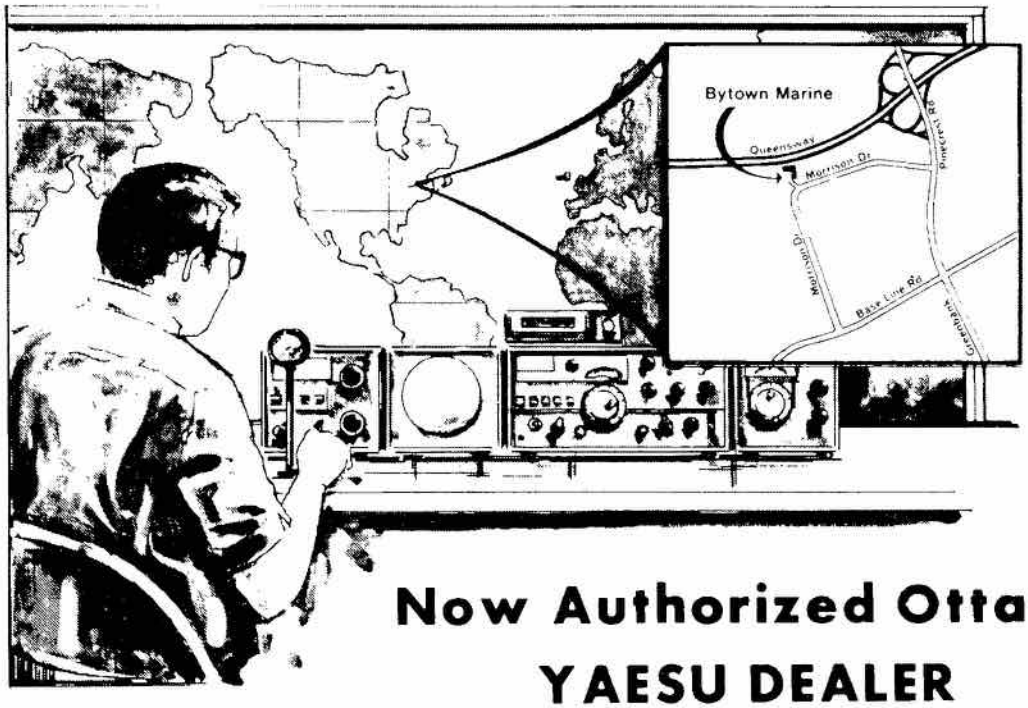

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