THE RAMBLER

MARCH 1989 ISSUE

The Ottawa Valley Mobile Radio Club Incorporated

P.O.Box 5530

Station F

Ottawa Ontario

K2C 3M1

NEXT MEETING: **THURSDAY, MARCH 16, 1989**
PLACE: **CJOH TELEVISION, 1500 MERIVALE ROAD**
TIME: **7:30 P.M.**

The Ottawa Valley Mobile Radio Club Inc.
P.O. Box 5530
Station F
Ottawa, Ontario
K2C 3M1

LARRY WILCOX
565 EASTVALE DR.
GLOUCESTER ONT.
K1J 6Z4

MARCH 1989 ISSUE

THE OTTAWA VALLEY MOBILE RADIO CLUB INCORPORATED

OVMRC SPONSORED ACTIVITIES

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

THE WISE OWL NET - OVMRC NET - Rag chew net every Friday evening at 2000 local time on the club repeater VE3TWO - 147.30/90 mHz.

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

AMATEUR RADIO ACTIVITIES IN THE NATIONAL CAPITAL:

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

CAPITAL CITY FM NET - Sponsored by the Ottawa Amateur Radio Club Inc. every Monday evening at 2000 hrs. local time. Conducted on VE2CRA repeater 146.94/146.34.

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

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

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

The **OVMRC** provides code practice 24 hours a day. Dial 825-0786.

The Rambler

Volume 32, Number 3
March 1989

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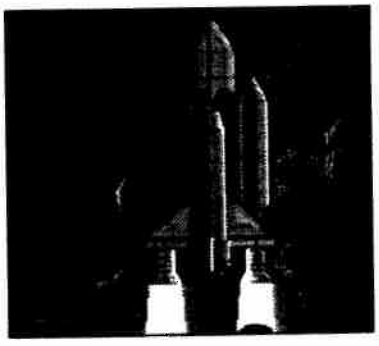
The next meeting of the Ottawa Valley Mobile Radio Club is Thursday, March 16, 1989.

The meeting will take place at CJOH TV, 1500 Merivale Road. The meeting begins at 7:30pm sharp.

A tour of the station facilities will be given, hosted by our membership chairman, Pat Brewer, VE3KJQ.

Several groups will be formed to tour the various production and post-production areas of this commercial television broadcast facility.

Be there on time!



Publishing Committee:
Fred VE3NJF, Eric VE3OTT, Don VE3PUZ

The Rambler is published monthly in Canada by The Ottawa Valley Mobile Radio Club Incorporated, P.O. Box 5530, Station F, Ottawa, Ontario K2C 3M1.

RAMBLINGS

By Alan Boyce VE3LNH

I am very encouraged by the support and energy that this club has put forth in the planning of the new museum station VE3JW. The call to arms at the sudden closing of the Science and Technology Museum resulted in the formation of a very able committee which has already met several times. Apparently each subsequent meeting brings out not fewer, but more committee members, and has produced results that should warm the heart of anyone despairing of amateur participation.

At the February club meeting, chairman Bob Baillargeon presented the first report of the committee, outlining the objectives for the new amateur radio station. This report has been delivered to Jean-Pascal Souque of the National Museum of Science and Technology, and the initial reaction has been very positive. It seems that we have convinced him of our commitment.

The group has determined very straightforward objectives for the station: "It must inform and involve the public; it must be a joy to use; it must be easy for new hams to use; it should be provided with emergency power."

These objectives combine the elements essential for the success of this station: something that will make hams want to use it, and something that will make the Museum want to support it.

These objectives will now guide decisions during the technical process of laying out the station, choosing equipment, and designing the displays.

The next step - preliminary work on the layout - has already begun. Based on sketches produced by Chuck King, Archie McKenzie produced a balsa-wood model to help with the visualization. A preliminary analysis of the equipment needs has also been started, and Norm Hull has brought the committee up to date on the state of Slow-Scan-TV art.

As the design work progresses through the coming phases, the committee will require many different skills. If you can volunteer even for a small task this is an opportunity to leave your mark on a project that will be seen by three-quarters of a million Canadians each year.

On the other hand, if you cannot afford the time to help out directly, then give the committee members a word of thanks for the job that they are doing. The professional quality and thoroughness of their work belies the amateur status of the members. Bob, Archie, Chuck, Leo Desjardins, Henry Greenway, Ed Leblanc, and Jeff Wilson deserve to be recognized and thanked for their services. Please give these fellows whatever support you can.

EDITORIAL

By Bob Baillargeon
VE3MPG

Planning for the new VE3JW continues. The second planning meeting occurred a few weeks ago. Equipment and specifications of the gear, to be included in the new station was discussed and recorded. Strategies for a completely revamped station, from the antenna system on down were hammered out. Color Slow Scan TV, and Fast Scan TV, were introduced as new high tech ideas, suitable for the high tech museum being unveiled in mid-summer. Bill, VE3EKA, and Norm, VE3JDJ, gave the committee a first rate demonstration of the capabilities of Amateur TV. Bill will propose a complete package that could be incorporated into the new station. Jeff Wilson, VE3RCI, is investigating an alternative power source. Solar panels and deep cycle RV type batteries will form the initial set-up. Jeff, a new ham as of February 9, is really getting his feet wet on the committee. It's great to see this amount of enthusiasm, considering since he's been licensed, he has worked all continents! Congratulations Jeff!

I plan to meet again with Mr. Souque of the Museum with our latest proposals. I believe that some firm justification will be needed for all of our plans. A lot depends on the committee. A lot depends on me, and my pitch to the museum. A lot depends on you.

The new station will be a public showpiece. To get our ideas on communications and amateur radio across to the public, our audience, the station must be active. Much more active than in the past. A membership of 152, makes us one of the more prominent clubs in the area. Let's use this opportunity to fulfill the privilege the Museum Corporation has granted us. Informing the public is one of our main goals. In the process we may gain new amateurs. Get involved.

In early February the National Capital Marathon involved many amateurs in the Ottawa and Montreal areas. Covering nearly 100 kilometers, the marathon is one of the longest international ski events in the world. Amateur radio is an important part of it. All communications relies on mobile, stationary, and amateurs on skis. Some of us spend the whole weekend providing communications, and those not able to spend to entire weekend, are assigned daily roles. All are important and vital to the success and safety of every skier on the trail.

For the past eight years I've provided my time and equipment to the marathon. In the last three years I filled the role as Safety 1. This is one of the busiest posts of the marathon communications. Co-ordination of all other safety vehicles, keeping track of all the checkpoints on opening and closing, tracking down equipment that hasn't shown up, providing rescue on the trails with our radio equipped amateur skiers, getting up at 3:30am and getting to bed sometime after midnight, driving all the back roads between Lachute and Gatineau, losing your cool once or twice, reminding people to use net control, reminding people that Safety 1 is the only one with the power to close checkpoints, getting to feed stations only to find that lunch was over an hour ago and the go-huts are overflowing, eating nothing but chocolate covered raisins, peanuts, and oatmeal cookies along with tepid soup cooked in galvanized garbage pails, are some of the reasons that keep me coming back year after year.

This year the Army reserves participated in the exercise. They were to provide some communications and transportation. Their primary frequency was somewhere near 43 mHz. The gear was vintage 1950. The range was pitiful. They could not communicate with other units a few kilometers away. One van had tube type equipment. It kept them warm. To top things off, on the Sunday morning of the marathon, a propane powered military vehicle informed us they were low on fuel. After a few phone calls the owner of the propane yard in Montebello was persuaded to open the yard for the military vehicle. When the vehicle was fueled the reserve officer proudly presented his Government of Canada credit card. The owner replied that was one card he didn't accept. An American Express card hastily appeared to cut through the red tape. Never leave home without it never seemed so apt where there's no life like it!

AMATEURS PROVIDE PUBLIC SERVICE?

Amateurs could be classed as professionals at keeping their light under a basket. There are frequent calls at club meetings for volunteers to provide communications assistance at this or that public function, with activities of athletic asociations, or with some human interest project such as the Santa Claus radio nets, not to mention those perpetual volunteers who manage and control amateur radio nets. We know that amateurs volunteer for these activities. We hear them on the nets and you may get a casual report from someone who has taken part in an event, but unless the media becomes involved that may all you hear of it. Are amateurs too modest for their own good?

When the press publicizes a "noteworthy" event, can we tell them that this is but one in an on-going series of public service activities carried out by local amateurs that amounted to so many hundreds or thousands hours of public service in the past year? It is more likely that the historical record of public service is only as long as the memory of the person being interviewed. Isn't it time we started recording amateur involvement in public service events in the Club newsletter?

Perhaps a short column in The Rambler, appropriately titled, might be developed to report to the membership the activities for the month, the people involved and the number of hours of service provided. It will not only be a permanent record, it will also recognize the individuals concerned and may even motivate some of the more complacent to get out and join the ranks of amateur public service providers.

Chuck VE3PDK

WANTED: RADIO NET HISTORIES -- REWARD!!

The Directory of Amateur Radio Club Members for the National Capital Region lists nine formal radio nets currently operating in the area, outlining the purpose of each net, its operating frequency and operating times. It could not be expected to include all the nets nor the historical details of their origins. Can you help to fill these gaps?

What other nets are or were operating in the Ottawa area? What are they called? How did their names originate? When did they start operations? What Club and/or persons sponsored these nets? What interesting anecdotes does anyone remember of the net's early operations?

Do you have any of these answers or do you know anyone who might have some or all of the net's history? If so, contact VE3PDK Chuck at 733-2079 who is trying to collect enough net histories to make an interesting Rambler article.

Reward: Major contributors will be acknowledged.

NOTICE -- EX-MILITARY

A "Statement of Service Certificate," listing your entire Service career and suitable for framing, is available to ex-military personnel on application to:

Director,
Personnel Records Centre,
Tunney's Pasture,
OTTAWA, Ont. K1A 0N3

Include Regimental Numbers and particulars of service when applying.

Chuck VE3PDK

MR. QRP, JACK HALLIDAY, W5PIZ

By Jeff Wilson, VE3RCI

It was with great pleasure that one of my last experiences as a ham band SWL (having joined the ranks as VE3RCI on February 9) was listening to a January SSB QSO between VE3MBL and W5PIZ on 10 meters. Jack, W5PIZ, in Albuquerque, NM was operating certified QRP 5 watts and was 56 on my dipole and 53 with 1 Watt! Jack, who is 72 years young, described his totally solar-powered station and some of his experiences during almost 54 years as a HAM, including QRP DXCC and winning the 1956 Field Day 1-A entry for New Mexico (as W5EEK/5). I listened for almost an hour, hearing only Jack's side of the QSO, fascinated by the possibilities of QRP and solar-powered field day operation. He mentioned an article that he wrote for QST (Solar Powering a Ham Station, August, 1980), which prompted me to write him a letter requesting more details. This was a great undertaking on my part as the last non-business letter I wrote was in 1986, I think. The following is his reply, which came in two instalments, along with my last SWL QSL card.

To my letter Jack replied " Writing letters is a chore, but very nice to receive. I feel that ham radio is a wonderful hobby. Sharing of ideas concerning ways of doing things better is ham radio. The 54 years of operating has taught this to me. Before I go any further, I am not much of a typist. My brains go faster than my fingers .... so I make mistakes. Also, I don't have the legs for being a typist! .... I remember back in 1935 we had to build everything. Some of the parts we had to build also. Money was hard to get, so we swapped a lot. Those were very romantic days in ham radio. The romance of today is different, and it's a nice change. .... I am glad you have an interest in QRP. It is a different world in ham radio. The challenge is great and when you have a combination of equipment and antenna that works well, it is a joy that is as great as receiving your first ticket! I still remember my first ticket and me being in outer-most space. It took me days to return to earth" ....I have some very special friends all over the world who know me as Mr. QRP and the Solar Power Man. Since the QST article I wrote, a lot of Field Day entries have been solar powered. I have written many letters to different people in the U.S.A. and foreign countries, working most of them with 1 watt on 20 meters SSB. In Australia they wrote a big article in their ARRL Magazine down under and sent me a copy."

Jack's article.....

SOLAR POWERING A QRP, FIXED AND FIELD DAY STATION

It's been over 13 years that Amateur Radio Station W5PIZ has been solar powered, independent from the main municipal power company, Public Service Company of New Mexico. It has been very successful with little maintenance through the years. In the beginning the solar powered project had a very humble start. The financial budget was limited and solar panels were very expensive. I was lucky to know a few engineers at Los Alamos National Laboratory who were knowledgeable about surplus solar panels made by Spectrolab. Spectrolab was a subsidiary of Howard Hughes Aircraft Company that went out of business. The company was in Texas with many warehouses of equipment and solar panels. They were selling the panels for $80 new and $40 used. The used panels worked as good as new, so I purchased 15 used panels, rated at 20 VDC @ 0.5 A each for a total of 20 VDC @ 7.5 A when used in parallel. This is of course when the sun is shinning overhead from 10 AM to 4 PM, with no cloud cover. The panels are still active during periods of cloud cover and near dusk and dawn, but don't have full output. Surprisingly, I found that during a snow storm my panels were active as well (ah, there's hope for Ottawa...VE3RCI). All of this activity places a charge into the battery bank, regardless. As shown in my QST article of August 1980, I started out with three Spectrolab solar panels that I used for one year of operation. They worked successfully on two heavy duty 12 VDC truck batteries. The panels provided 20 VDC @ 1.5 A and I never had a dead battery bank. These batteries lasted in the battery bank for 8 years before going dead. I replaced them with Marine Deep Cycle Heavy Duty batteries, which have more capacity for heavy use. I also have other batteries on line to keep charged up for portable work.

All the battery bank needs is a trickle charge to keep fully charged. Our system is similar to that of the telephone company in keeping up their battery bank. The charge rate used is below the boiling point of the electrolyte. Above the boiling point of the electrolyte, the battery bank charge rate requires regulation. Below this charge state the battery becomes its own regulator and not

much gassing occurs from the electrolyte. Different batteries have different capacities for charging rate, so experimentation is needed to find out the necessary current to use and then you will know how many solar panels are needed for your system (obviously, take the necessary safety precautions during these experiments - done outside and no sparks! .... VE3RCI).

My findings have been two 35 watt solar panels to keep up two Heavy Duty Marine Deep Cycle Batteries in parallel. These are batteries used in big boats. The varying sunlight over a period of time has proven this set-up to be practical. The panels used in the above statement were SOVONICS MA-30 SOLAR PANELS. The panel specifications are: Length 48.75 inches
Width 23.45 inches
Weight 6 lbs
Power Output 35 Watts
Open Circuit Voltage 21.5 Volts
Short Circuit Current 2.7 Amperes
Battery Charging Point 2.3 amps, 14 Volts
Cost $290 US each

(Two MA-30s will supply a 200 Watt P.E.P. station)SOVONICS (TM) Solar Systems available from:

Antennas West, PRovo, UT 84603-144 (801) 373-8425

Station W5PIZ consists of the following equipment:

Solar powered 12 VDC operation.

ICOM-740 Transceiver 160-10 meters, 200 W.
ICOM-27A Transceiver 2 meter FM, 25 W.
TEN TEC QRP Transceiver 80-10 m, 5 W.
12 VDC Light over table and bench area.
Converted 12 VDC Rotator for 3 el. Beam
Power outlets for 12 VDC Television and Stereo and to run emergency 12 VDC for low drain lights throughout house.

The battery bank is on a redwood material cart with heavy duty casters. The front of the cart has a metal panel with meters, switches, circuit breakers and outlets for distribution of 12 VDC. Redwood material is used to prevent rusting or acid spills from damaging the battery storage area.

Regular house 110 VAC outlets are used for distributing 12 VDC power. Why? Because they are easy to use and mount. Also, connections for positive and negative are made simple for polarity. The two flat prongs are joined together for the positive connection and the centre bottom pin (U-ground) for the negative side. No polarity mishaps can happen, protecting solid state equipment.

This same arrangement can be used for Field Day events or your fixed station at home. For QRP Field Day use one SOVONICS MA-30 panel and two 12 A Jell Cell batteries in parallel. Using a TEN TEC 505, 509, 515, HW-7, HW-8 or HW-9 transceiver and a good antenna up high and in the clear would be a good arrangement. It would be necessary to have a good antenna tuner, VSWR bridge and a Field Strength meter.

The Antenna for your QRP BIG SIGNAL! This is your linear for a 5 watt QRP signal. Stay away from traps and baluns, they take power. You're after gain of your 5 watts and a good sounding signal. First, get out into the country, no hidden valleys, and have some tall trees for antenna supports. Then use a thin nylon line with a rubber flipper (Sling-shot ?...VE3RCI) and tie a metal object (lead sinker) to the line. Send it over the top of your trees and draw up your antennas to a good height. No Problem!

TYPES OF ANTENNA

1. Rhombic: If you can, it is the KING of the antennas. This antenna works all bands and is very efficient.
2. V-Beam: This antenna works all bands and is easy to put up. It also has gain for QRP.
3. Multi-Band Delta Loop: This antenna works 40 to 10 meters. It's gain increases at the higher frequencies.
4. Long Wire: This antenna works all bands and very easy toput up. It also has gain at the higher frequencies.

Field Day Operation:

The use of two operators on and two off is a good system. One operator calls, the other keeps the log. Rotate your caller and logger every hour to keep your operators happy and alert. Then use the other pair of operators after 2 hours of operation. Repeat this schedule again. This gives fresh personnel all day and night. Duplications are hard on scores. If you have a computer, it should solve

your problem for fast information on duplications. If one is not available, use a Quality Control System as they use in an assembly line ina manufacturing plant. Take a sheet of paper and section it off for the districts, call signs and frequency. It will take several sheets of paper and a clip-board. The logger has to be fast to keep things straight. Oh, what fun you'll have! (Hear that OVMRC members! ... er, anyone got a lap-top?....VE3RCI).

Now the most important part! Have lots of good food and drink available and a nice place to rest and sleep. Make sure the operation position is comfortable. Oh yes, pick your personnel so thay can get along with each other. Good Luck to the Ottawa Valley Mobile Radio Club (OVMRC) from W5PIZ!

Well Gang, how can we miss topping last year's VE3JW score with all of these words of wisdom from Mr. QRP, the 1956 Field Day 1-A champ. Thanks to Jack Halliday, W5PIZ for taking the time to share his experience with all of us and if anybody would like a QSO with Jack, he's usually on around 2230 Z at around 28.4 MHz SSB QRP.

Humor

ANALOG -Horsd'oeuvre, usually made with cheese and covered with crushed nuts. Served at all staff parties.
APPLE -Typically, a device used to seduce men. Usually equipped with display screens and/or worms.
BAR CHART -A list of places to go when it's miller time.
BINARY -Possessing the ability to have friends of both sexes.
BIPOLAR -Refers to someone who has homes in Nome, Alaska and Buffalo, New York.
BIT -Similar to nibble. Commonly eight nibbles to a mouthful. See byte.
BPI -A 1960s term used to describe unmentionable parts of the anatomy, as in "you bet your bpi."
BUG -Small living things that small living boys throw on small living girls.
BYTE -A mouthful as in "How many bytes in a Big Mac."
CASSETTE -A very small petite cass (usually achieved through exercise).
CPU -A juvenile way of telling your dog he missed the paper.
CHARACTER DENSITY -The number of very weird people in the office.
CHIP -Any number of small crunchy objects often served with onion dip.
CLOSED LOOP -A method of execution no longer in vogue except in Iran.
CODE -Virus lasting about three to five days, accompanied by sore throat, runny nose and fever.
COMMAND -Statement presented by a human and accepted by a computer in such a manner as to make the human feel as if he is in control.
COMPILE -A heap of decomposing vegetable matter.
CONVERSATIONAL MODE -Describes the typical office the day after a major sporting event.
CRT -A movie about a little alien who forgets his telephone number and must write home.
CURSOR -An expert in four-letter words.
DEBUG -The act of placing shoe leather against a small creeping creature.
DOWNTIME -Coffee breaks, lunch, or Friday mentality in the office.
DUMP -The EPA's answer to health.
ERROR -Something only humans can commit.
FIFO -Common name for a dog.
GIGO -A movie industry acronym referring to the numerous "Gidget Goes..." movies i.e., GIGO Hawaii, GIGO surfing, etc.
HARDWARE -Typically, boots, leather and chains. Contrast with software.
INTERFACE -The opposite of "Getouttamy-face."
K -A term used in employment ads to disguise how much they are really willing to pay.
MEGAHERTZ -e very large car rental company.
NETWORK -The occupation of a fisherman.
ON LINE -A statement shouted a tennis judges in response to serves being called out.
OUTPUT -What people who talk backwards do to their cat.
PROGRAM -What commercials try to do to us.
RAM -A male sheep.
REAL TIME -Here and now, as opposed to fake time, which only occurs there and then.
ROM -A RAM after a delicate operation.
SEMI-CONDUCTOR -A person hired to lead an orchestra before he has graduated from director's school.
SOFTWARE -Typically silk nighties, nylons, garder belts. Contrast with hardware.
TERMINAL -What most people have to be before consenting to see a doctor.
TRANSISTOR -A sibling, opposite of transbrother.
VACUUM TUBE -A derogatory term. See "bubble memory."

Copied from Siemens's PG-685 Maintenance course.
Pat N0AZC

AMIGA NOTES

A very comprehensive SSTV and FAX hardware and software system called AVT (Amiga Video Transceiver) is available for around $100 U.S. from: Black Belt Systems, 398 Johnson Road, RR#1 Box 4272, Glasgow, Montana, 59230, phone:(406) 367-5509.

Ben Blish, N4EJI (formerly of SoftCircuits) has developed the project which sends and receives 27 modes of Slow Scan TV and 9 modes of FAX. All of the popular B&W and color modes at different resolutions are covered. The system also includes an oscilloscope screen display which can be used to help tune in signals. A small 5 1/2" by 3" demodulator circuit board converts audio tones into digital information which is fed into the Amiga via the parallel port. Tones containing picture information are Amiga generated, so all that is needed to transmit SSTV and FAX is a cable from an Amiga audio output jack to your transmitter mic jack.

You need at least 1 Megabyte of RAM to run AVT, 12VDC power for the demodulator, and you'll want a box to put the demodulator board in if you don't intend to install it in any existing equipment.

This is the most impressive Amateur Radio program that I've seen on the Amiga yet. I have heard several stations stating that they are buying Amiga 500's because of this program alone. Ben has released the program for distribution so that folks can get a look at the system before buying. You need to purchase the hardware demodulator board to receive SSTV and FAX, but by running the software, you can see what a major project this is.

Ben has been on the 20 meter AmigaNET, and is often on 14.230 Mhz to 14.235 Mhz or 28.680 Mhz voice and SSTV.

I ordered the system 5 weeks ago, received it 1 1/2 weeks later, and had it running the same day, so I can report that this system is for real, works very well, and is being shipped.

The Amiga computer is a natural for use on slow scan and FAX because of the many video accessories available such as digitizers, paint programs, and titler programs. I suggest any Amigan Amateurs interested is SSTV and FAX should get in touch with Ben for more details on this system.

Cathy Wehr, WB3KRN, Watsontown, PA.

MINUTES OF FEBRUARY 16 MEETING

The Vice-President, Doug Carswell, VE3ATY, welcomed about 46 members and friends in our temporary meeting place at Canterbury Community Centre 2185 Arch Street. He was happy to report that the graduates of his winter class were quite successful in writing their Communications Canada exams. Some are still working on their CW. New graduates Al Beveridge VE3RCS, Jeff Wilson VE3RCI, and Don Morris VE3RCD were welcomed. Doug was enthusiastic, and promised to teach again next year. Said before witnesses!! Also welcomed:- Visitor Stephen McNeill ZL4 HG/VE3.

The committee working on the plans for a new VE3JW is very busy and has had contact with Mr. Souque of the Museum. He wanted the Club to specify the type of equipment desired for the station. Suggestions from members are welcome. However, time is short, so get them in soon. Contact Bob VE3MPG.

CARF representative Chuck Baker VE3PAP said that Dan Holmes VE3EBI was out of intensive care in hospital. Later note: Dan is home, recuperating. Chuck read items from the CARF news bulletin, including an appeal from Claude Dupuis, VE3CPD, 24 Leo Street, AZILDA, Ont., POM 1B0, for keys and oscillators needed for his class of young students, some of whom are working for their Amateur ticket.

CRRL director Ray Perrin VE3FN said that "QST Canada" will be mailed from Canada, separate from QST from the U.S.A. He noted that the Ravenscroft defense fund is still short by approximately $1,000. Please send donations to : JRSD FUND, Box 8873, Ottawa, Ont. K1G 3J2. Ray invited Club members to join CRRL. Contact Ray if you are interested.

The event of the evening was an impressive display by Bob Baillargeon VE3MPG, who hooked up his Amiga computer to a couple of monitors and proceeded to dazzle the audience as he explained how he produced the "Rambler". It was a hard act to follow, as they say.

Next meeting: Come to TV station CJOH at 1500 Merivale Road for a conducted tour. Time 7:30 PM. Date: March 16.

Secretary, A.C. McKenzie, VE3NJY.

220-225 MHz AMATEUR BAND UNDER SCRUTINY BY COMMUNICATIONS CANADA

The struggle is not yet over for the Amateur Bands between 30 and 890 MHz. Here, briefly, is what has been said specifically about the 220-225 MHz Amateur band.

The Ontario Ministry of Government Services would like to see that band withdrawn from the Amateur Service and used "for government use including provincial governments and municipal safety service organizations".

Golden West Broadcasting, Manitoba, would like that band to be available for stereo and monaural point-to-point and for remote pickup of on-the-spot news.

Lapp-Hancock, Ottawa, think it should be used for personal/business radio.

The Electrical and Electronic Manufacturerds Association note the re-evaluation taken by the FCC some time ago of the 220-225 MHz band and suggest that "the Department should consider joint implementation of any new services in allocations which may result from this evaluation".

Radio Atlantic, CKCL, Truro, noted that the 220-225 MHz band was lightly loaded and would probably remain so for the forseeable future. Reducing the band by 2 MHz for a Personal Radio Service should not have a negative impact.

The Radio Advisory Board of Canada notes the causes of slow Amateur growth in this band but goes on to add, with regard to North American compatibility, the DOC should note the FCC's Notice of Proposed Rule Making (1987) regarding the 216-225 MHz band.

While these are the major organizations that have proposed other uses for the 220-225 MHz band, there is little doubt that the effect of other proposals will cause DOC to look very carefully at this band and, perhaps, to take into account the recent FCC decision to take 2 MHz for commercial land mobile services and reduce the Amateur allocation to 222-225 MHz.

Canadian Amateurs and Amateur organizations submitted 41 of the nearly 90 briefs and 2400 pages received by DOC. It will probably be the summer before DOC's spectrum utilization policy paper, which will deal with the Amateur bands between 30 and 890 MHz, will be available for public comment. Amateurs should prepare themselves to comment at that time.

Ottawa, January 27, 1989

PUBLIC COMMENT

The future release by DOC of Amateur call sign and address information for QSL and frequency coordination purposes is not yet a sure thing.

DOC has just invited public comment on a policy proposal to make public the names, addresses and technical information necessary for electromagnetic compatibility studies. Such information may include station location, frequencies, ERP, mode of emission, antenna gain, antenna height, manufacturer and model of transmitting and receiving equipment etc. Exceptions would be made for reasons of national security or public safety, such as for police and fire services.

When first prepared this notice was to cover just Amateur stations but, after consideration by departmental law officers, the proposed policy was enlarged to cover all licensed stations. Consequently, the availability of Amateur call sign and address information will depend largely on the reaction of the public at large to this proposal.

CARF strongly recommends that Amateurs and Amateur clubs write DOC and request that, as a matter of policy, this kind of information about Amateur stations be made available to Amateur organizations.

Write R.W. Jones, Director General, Radio Regulatory Branch, Dept. of Communications, 300 Slater Street, Ottawa, K1A 0C8. Refer to notice SMRR-001-89. The due date for comment is May 5, 1989.

Ottawa, February 9, 1989.

COMMUNICATIONS CANADA PROPOSES DEREGULATION OF THE AMATEUR BANDS

In a Canada Gazette Part I notice dated February 18th Com Can has proposed the deregulation of the Canadian Amateur Bands. Copies may be obtained from any District Office. Here is a summary of the more important amendments being proposed:

1. Eliminates the restrictions on the types of emissions that amateurs may use within the radio frequency bands allocated for the amateur radio service. In its place, the regulations would specify a maximum bandwidth, regardless of emission. In an attached schedule listing the existing amateur bands these would be 6kHz up to 29.7 MHz; 30 kHz 50-148 MHz; 100 kHz 220-225 MHz; 6MHz 430-1300 MHz and above 2300 MHz no bandwidth is specified.

2. Also in the attached schedule, Advanced Amateurs would be permitted to use any emission in any band. Amateurs would be permitted to use only aural or direct printing radio telegraphy in the amateur bands between 3.500 and 24.990 kHz and any emission in the remaining bands, that is 1.800-2.000

MHz and those above 28.0 MHz. Amateur Digital Operators would be permitted to use any emission only above 50.0 MHz. Of course, compliance with the above noted bandwidths would be required.

3. Eliminates the Amateur Radio Certificate endorsements at six months and one year for extra operating privileges and authority to use emissions that do not appear in the service schedules.

4. Amends the regulations to permit foreign amateurs who are permitted to operate using radio telephony and telegraphy below 28 MHz in their own country Advanced Amateur privleges. A foreign amateur who is permitted to operate with indirect aural telegraphy below 28 MHz (a novice) would be allowed an Amateur's privileges while a foreign amateur who is neither a novice or a general amateur would be allowed the same privileges as a Digital Amateur.

5. Requires amateurs to ensure that interference is not caused to the primary services in those bands where the amateur service is the secondary service, that is in the amateur bands between 430 MHz and 248 GHz.

6. Revokes some of the restrictions on amateur station identification but requires foreign amateurs operating in Canada to use their own call followed by the words "mobile" or "portable" or by an oblique stroke followed by the appropriate Canadian prefix when identifying by phone or radio telegraphy respectively.

7. Revokes the conditions for amateur radio operation on board aircraft.

Communications Canada is counting on "the Amateurs' enviable record for self-policing" to ensure the success of the proposed deregulation.

Thirty days is being allowed for comments which should be sent to Mr. John Fraser, Chief, Radio Regulations, Department of Communications, 300 Slater Street, Ottawa, K1A 0C8.

Ottawa, February 20, 1989.

ANTENNA FIX

Dipoles are wonderful aren't they? Cheap, easy, fast, taking up little room on a precious inner city lot, and they work fairly well. After seven years of using various configurations of wire antennae, up to and including a 250 foot monster 160 meter longwire (the Canadian Top Band Net started with this antenna!), I wanted the luxury of a beam.

A few facts are warranted at this point. I live on a 33' by 100' foot lot. All of my neighbours have the same sized lots. A tower and a beam stick out like a sore thumb. Wires are unobtrusive. With the amount of wire in my yard though, birds required flight clearance in the last few years.

Lo and behold a deal I just could not refuse came my way. A TH3MKIII was for sale on the swap net. The price was $125 dollars. I drove several miles to have a look at it. The long and short of it after a couple of weeks of haggling I got it for the price of $80. Still too much I thought. Next time I could do better.

The beam was in rough shape. It had been stored on the ground over a period of a few months. The plastic caps had deteriorated to the point of crumbling, and the stainless hardware on the elements was badly corroded. Most of the nuts and bolts were frozen with rust. All of the aluminum elements were sound but the beam had been on top of a tower for over ten years. A major refurbishing was about to begin.

WD40 is one of the best solutions a ham and his tower can have. I patiently sprayed every bolt and nut over a period of a few weeks and remove all of the corroded hardware. Spare plastic trap caps were ordered from Hy-Gain in the U.S. There are over forty plastic caps to replace. A new set costs $18 U.S. Next, some fine #300 grade sandpaper was used to go over all of the elements to remove the heavy oxide coating. Steel wool #0000 was used after this to get down to bare aluminum. Canadian Tire is an invaluable source of stuff to help the ham in need. In the automotive section near the car polishes you will find a Turtle Wax product called Chrome or metal polish with built in metal protector. This is great stuff! After the steel wool treatment rub some of this on and the aluminum looks like it just left the Hy-Gain factory.(after some heavy elbow grease too!)

After measuring and matching each and every element, I used an engraving tool to permanently mark the reflector, driven element and director. The last step was to purchase some real stainless steel hardware, mostly pipe clamps. They certainly cost a bit more, but your antenna will need much less maintenance.

The new antenna is sitting atop a 30 foot tower. After two winters the elements are still gleaming new. The metal protector in that polish is still effective, and the antenna works like a charm.

Total cost of refurbishing: $52.00. Cost of a new TH3MKIII: $600+.

Oh yes, my neighbour came over after the antenna raising and remarked how high the tower was. I replied, "Yes, isn't it a beaut, and it's only half way up!". He moved.

Bob Baillargeon, VE3MPG

PACKET BEGINNINGS

By Ed Leblanc, VE3VLF

Back in the late seventies considerable debate took place in the amateur community over a new class of license, the Amateur Digital, that was being formulated by the DOC. On the local two meter nets and at ham club meetings, the main point of debate was over the fact that this was to be a no code certificate. This point served to develop two camps out of the debate. Those that were in favour of the proposed digital class and those opposed or suspicious of a no code license.

It was in the mist of all this debate that I first began hearing about a new form of communications called packet radio. Evidently the Amateur Digital class was to introduce this new form of digital communications, something few of us in VE1 land had ever heard of before. Packet radio was only mentioned in passing during the debate over the digital class and I came across very few people who had any idea of what it was all about. Packet was a mystery.

As I headed off to university, packet remained a mystery as ham radio took a back seat to my studies. By letting my memberships to CARF and CRRL lapse and being on the air less often, I was becoming out of touch with the advances and changes being made in the ham world. The packet revolution was starting without me. All I knew about packet at the time was that it was catching on fast.

But what was it all about? I knew it had something to do with computer information. Packets of digital data were being transmitted over the air. But so what, I thought. It just sounded like some new version of RTTY. With that preconceived notion in mind, I didn't bother to pursue the matter all that energetically.

In coming to Ottawa a few years ago and buying a new two meter rig, I was able to listen below 146 mHz for the first time. I soon came across the now familiar Brrapp brrapp of packet. I had come face to face with this new mode. I also came across more hams who were engaged in this new mode than in my days out east. As a result, I became even more curious and purchased a book on the subject to find out what terms like TNC and digi meant. Rob VE3ZZR let me visit his packet station to see first hand how packet worked and what it had to offer. I discovered that this was more than RTTY.

My next major step in exploring this new world came when I actually had the chance to try it at home. Rob was going to be away for a few months and he kindly offered to lend me his TNC and terminal during his absence. Now I would really get a taste of this new mode which had escaped my understanding up until now.

After I was all set up and had everything properly connected I was ready to make my first packet contact. I had at first tried a couple of CQ's but with no success. Then I decided to connect with someone whom I'd heard previously. On seeing the connect message appear on the screen I proudly typed in the fact that this was my first packet contact. Then I waited for a reply and waited again. Nothing happened. I guessed that the operator had left his TNC running but was not in his station. No matter, I disconnected and tried again with another station. After the connect greeting I typed in the same message. This time I got a "not home, please leave a message" response.

At this point, my first impressions of packet operating were not all that warm. It all seemed a bit impersonal with no one around to talk to, except machines. At any rate, I tried the same thing again and was soon engaged in an enjoyable QSO. Packet with its famous bulletin boards and mailboxes seemed a little cold at first but I just had to get used to the fact that it was merely delayed communications. Much like letter writing and just as personal. Now I was beginning to enjoy packet but this was only the tip of the iceberg.

The step to the world of packet was far more than the transition I had made from CW to phone some years back. The many facets, features and aspects of the mode are enough to fill many textbooks. In fact the more I was learning about packet, the more I discovered how much I didn't know! Packet offers many areas of future exploration and expansion, all directed to the goal of world wide packet networks capable of handling keyboard data, speech and images at great speeds and efficiencies. This leaves plenty of room for experimentation and fun in both digital communications and computer software development for hams.

The potential for packet is great, far greater than what I had imagined. It certainly has proven to be interesting, educational and fun. I highly recommend taking the plunge into packet. The water may seem strange and odd at first, but once you get in you will never want to get out.