

THE RAMBLER

The Ottawa Valley Mobile Radio
Club Incorporated

P.O.Box 5530

Station F

Ottawa Ontario

K2C 3M1

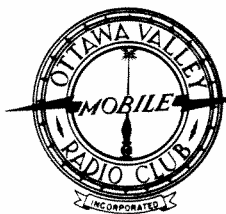
Feb 1989



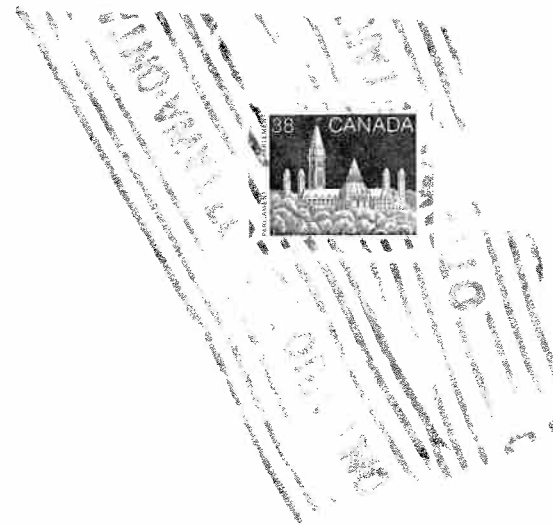
NEXT MEETING: THURSDAY, FEBRUARY 16, 1989

PLACE: THE MUSEUM OF SCIENCE AND TECHNOLOGY

TIME: 7:30 P.M.



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



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1988-1989**

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**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 2
February 1989

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The next meeting of The Ottawa Valley Mobile Radio Club is scheduled for Thursday February 16, 1989 at 7:30 p.m.

The speaker will be Bob Baillargeon, VE3MPG. He will demonstrate with the help of an Amiga 2000 computer, the methods used to produce an issue of The Rambler. Packet software will be shown in split windows, running concurrently with WordPerfect. These methods are used in the production of The Rambler.



Publishing Committee:
Fred VE3NJF, Eric VE3OTT, Don VE3PUZ

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RAMBLINGS

By Alan Boyce VE3LNH

Our club has been presented with an opportunity and a challenge. Additionally, I think that our bluff has been called.

The National Museum of Science and Technology has torn out VE3JW without, it appears, even notifying members of their own staff. So it is no surprise that they didn't notify the Ottawa Valley Mobile Radio Club.

In the week between the removal of the station and the January club meeting many of us were wondering what the museum had planned for us and if there would be a relationship between our organizations in the future. As the word spread, most of us felt some sense of indignation, and some of us discussed those feelings. Many of us said that the museum should have consulted us before making the plans.

Wonder no more; we have now been consulted.

At the January 19 meeting the Assistant Director of Public Programs, M. Jean-Pascal Souque told the OVMRC that "This museum is committed to our group". He stated that he wanted our club to tell him what we wanted in the station when it is rebuilt. He left a very clear impression that he was prepared to discuss location, structure, layout, equipment, antennas, and soundproofing for the new amateur radio station.

Now, nothing has been guaranteed, but I think that we have to take M. Souque at his word.

According to whatever schedule exists for the construc-

tion, the museum is to reopen in June. In order to allow for design, negotiation, redesign, approval, procurement, construction, installation, testing, and delays, we must start our designing without delay. I was pleased, therefore, when Bob Baillargeon volunteered to chair the committee, and several others volunteered to assist with their pet ideas. By the time this article sees print, the group will have met several times, and the design should be well on its way.

In my opinion, the best thing about this opportunity is that we can now redesign the station from the top down. We can start with defining the general roles for the station. For example we know that it must be both a good station to use and an informative and educational display for the museum visitors. But we may also wish to define new roles, such as being more accommodating to young amateurs, or that it should be equipped to operate in emergencies. We could not have a better time to decide these issues, and clarifying them early will make the design process more straightforward.

Next we can discuss the specific problems that must be avoided, and features that should be included. A wish list from Thursday's discussion includes: more complementary surroundings, more explanatory signs, more light, more switches, fewer cables to unscrew, less dust, less acoustic noise, less electrical noise, easier contact with

the public, operating positions easier to see by the public, planned seating for the operator and the interpreter or guide, racks with access from the back, a public address system for the visitors to hear the conversations, an external microphone for getting audience participation, a morse code key and reader for people to touch and try, a permanently rolling packet monitor, slow-scan television equipment that can be left set up continuously, two two-metre antennas (for packet and voice), two high-frequency antennas (for simultaneous operation). And if anyone can think of a feature that will make hams line up to operate the station, then that should be included too!

Then the list can be transformed into sketches and plans. (This is the part that we techies love!). All of the pet ideas will be combined and distilled into a station that fills the roles that we defined at the beginning. This will be followed by a few rounds of negotiation with the museum while we modify the plans to meet budgets and other constraints of reality. Finally the construction will have to be planned and executed, and the equipment installed and tested. With any luck we should have a new station by the summer.

To me, this is a tremendous opportunity to design the station that we always wanted. I wish Bob and his committee success. I hope that the club will support this group and show the Museum that we were not bluffing.

EDITORIAL

By Bob Baillargeon
VE3MPG

The well has gone dry.

This time it has. Your articles and letters have all been used in the past issues of the Rambler. This is a plea, for a continuance of the well written stuff that I've gotten used to in the last few months. Your material is what keeps these pages going. I know the talent is out there. Send it to me in the format of your choice.

The committee to plan the rebuilding of VE3JW has met twice in two weeks to hammer out objectives, ideas, and proposed design plans for the new station. I'm glad to say the committee members really put an all out effort into these think tank sessions. The results should be available for all to peruse at the next general meeting. Chuck King's submission for a proposed station design won overall support from the committee. It is a scaled down version of a similar ham station at the British Museum in London, England. The British station is sponsored by the RSGB.

Overall objectives for the new VE3JW are as follows: It must inform and involve the public; the station must be a joy to use; the station must be easy for new hams to use, and the new station should be provided with emergency power. The committee then did a breakdown of these points.

The completed document of ideas and plans will have been presented to Mr. Souque at the Museum by the time you read this. It will hopefully leave him with a clear impression of our commitment to VE3JW. Further meetings with museum staff will require many more meetings. If you are interested in participating on this committee let me know. Your input and interest is most

important for the above mentioned objectives to succeed. Especially important is discussion of new equipment and layout of such, for ease of use and maintenance.

Specifications for coax, rotators, new antennas, wiring, RF grounding, and safety will all need to be defined. Ideas for the display area and P.A. systems for the public need addressing too. You can see our work at this point is very preliminary. We can do it together. Let's try.

Next month's speaker is yours truly. The topic is desktop publishing on the Amiga. I'll give a demo of the multi-tasking capabilities of the machine, and how it relates to the production of the Rambler. Some impressive animation and graphic demos will be shown too. See you there at 7:30pm. ☺

MINUTES

By Arch McKenzie
VE3NJY

President Alan Boyce VE3LNH said that a donation had been made to the Civic Hospital Memorial Fund in the name of Dr. Maurice Haycock, VE3LC, Life Member, and now a Silent Key.

The Museum will be undergoing renovations, and will be closed from Feb.13 - June 6, and VE3JW has been temporarily dismantled and stored.

The Club's "Amateur Radio Day" originally planned for March 18, has been postponed.

The next meeting will be held in the Canterbury Community Centre, 2185 Arch Street. (Phone 564-1068). The easiest approach is to turn south from Pleasant Park Road. It's next to Arch Street Public School. Time: 7:30 pm.

Dan Holmes VE3EBI, re-

viewed the latest CARF Bulletin. Slight increases in prices were announced for certain publications. The CARF Repeater Directory, 1989, is available, as is the CARF Callsign and Address Book based on the October 1988 Communications Canada Call/Address Listings. Price to CARF members is \$13.95 + 8% sales tax (Ont.) + \$1.00 postage and handling. Chuck Baker VE3PAP, Assistant Ontario Director, will be take over some of Dan's duties while Dan is off for a couple of months for medical reasons.

Jean Pascal Souque Assistant Director of Public Programs, Museum of Science and Technology, outlined for the Club the reasons behind the museum renovations, and the plans for the future use of the space. He asked for input from the club concerning the design and use of the radio station VE3JW. Many suggestions were made. It was moved and seconded that our Club would form a Design Committee which would send their ideas to the Museum. CARRIED. A small committee was formed with Bob Baillargeon VE3MPG, as chairman, and will meet in the near future.

John Kent VE3ETW of Canadian Astronautics Limited gave a fascinating and detailed talk on a mobile data system which will allow the location of trucks (and ships) to be known (to the owners presumably) through the use of satellites and systems such as LORAN C, a long range navigation system. This 2-way system is under development at the present time.

Letters To The Editor

In response to George Dew's letter In January's Issue.

Amateur radio means different things to different people. It is a hobby and service broad enough to encompass wide-ranging interests, not excluding tone signalling. Those working with selcall are usually building and experimenting, activities that are distinctly on the wane, deserving some concern.

Human factors, being what they are, are that people cannot be receptive to all others, at all times, be they friend or stranger. Where selcall is used, the amateur is free to operate in the usual manner, engaging the decoder when necessary. Otherwise, once the operator tires of copying voice (and intermod, as many urbanites must contend with), the rig would be switched off. He or she is thereafter accessible on the AF band (telephone), or not at all. For this reason, nothing is being "missed".

Routine selcall on autopatch repeaters must be avoided because of mutual incompatibility. This tends to divert activity to simplex or repeaters like VE3TWO. The sound of touch-tones is bound to cause a few grumbles, but some tolerance could be exercised; tone calls are short and generally infrequent. I can think of less tolerable operating habits, especially on autopatch repeaters.

Selcall for emergency alerting offers more accessibility, not less. In fact, some are willing to pay for and maintain a separate dedicated receiver for this purpose; these systems can be active all day and night. Most people would be otherwise reluctant to monitor overnight, half expecting to be awakened by intermod or routine chit-chat in the wee hours, and leaving the rig on is guaranteed to prove unpopular with other family members.

One solution is a decoder activated by * or *911. I have built several different variations in the last decade and some are neither complex nor expensive. Some provide a second code for routine callup, an option of convenience that should be used to advantage. I will continue to make circuit details and ideas available to whoever is interested; alternatively, kits or assembled units are commercially available.

My receiver and "long 0" decoder, parked on VE2CRA (2m) for years, has yet to be triggered intentionally, even though its presence was announced from time to time. The apparent need in this area is minimal because we have three open autopatches. Other areas without this luxury could benefit from adopting a * or *911 convention if they desire. If a system is standardized, people will get to know it and use it.

The moderate inconvenience of installing an outboard tone decoder on the average FM rig has limited the number of selcall users. Regardless, I don't see hamdom in any danger of becoming de-personalized.

I could elaborate more on my ideas on tone standardization, monitor co-ordination, and related topics, but I'm already in danger of "timing out" the Rambler.

-Dave Harris, VE3KMW

**Mr. Alan Boyce - Pres
Ottawa Valley Mobile Radio Club
Ottawa, K2C 3M1**

Dear Mr. Boyce -

Yesterday I received an acknowledgement of a donation to the Ottawa Civic Hospital Foundation from the Ottawa Valley Mobile Radio Club in memory of my husband, Maurice, known, I believe, as "Doc VE3LC" to all you wonderful people.

Please accept my heartfelt thanks for your kind expression of sympathy, and a special thank you to Mr. Bill Wilson, VE3NR, for the deeply appreciated tribute he wrote for the January issue of The Rambler.

My gratitude and warm regards to you all.

Sincerely,

Kay Haycock

See elsewhere in this issue for a complete story on "Doc VE3LC".

-Editor

THE RIGHT STUFF

Maurice Haycock, BSc, MA, PhD, DCL

Maurice Hall Haycock was born at Wolfville, Nova Scotia in 1900, the only child of Professor Ernest and Priscilla Haycock. His mother died when he was three years old. Maurice served in the First World War for nearly two years before it was discovered that he was not yet seventeen. He was returned to Canada and honourably discharged. His father, a Harvard graduate and professor of geology at Acadia University, died a few months after Maurice returned from overseas. He followed his father's profession, continued his studies at Acadia and majored in geology. He graduated in 1926.

In July of 1926, he was northbound on the BEOTHIC to spend a year of geological and geographical exploration on Baffin Island. Fellow passengers on the return voyage in 1927 were A. Y. Jackson and Sir Frederick Banting. When the ship reached North Sydney, Haycock proceeded to Princeton University for post-graduate study and in 1931 he received a PhD degree in Economic Geology and Mineralogy. That fall he joined the staff of the Department of Mines in Ottawa, where he served until his retirement in 1965.

Dr. Haycock was married in 1941 to Katharine Blackadar of Weymouth, Nova Scotia, a graduate nurse of the Ottawa Civic Hospital. They have two daughters. Karole has degrees in Chemistry, Physiology, and Marine Biology, and Kathy is a graduate in Psychology.

In 1935, Dr. Haycock began to paint. Most of his early work was done in water colours and pastels. In 1944 he renewed his early friendship with A. Y. Jackson who encouraged him to paint in oils. There followed many years with Jackson as his painting companion an association terminated only by the latter's unfortunate illness in 1968. Their close friendship continued until Jackson's death in 1974.

Haycock's painting expeditions have taken him across Canada to every province, territory, Alaska, and to the North Pole. Much of his

painting during the past thirty-five years has been in the far north where he has travelled more than 350,000 miles in search of subjects. He has been especially interested in the history of Arctic Exploration and in painting the places visited by early explorers who left their marks on the land.

Haycock has also been active in the musical life of Ottawa. He had played in bands and orchestras in his youth when the French Horn was his principal instrument. He soon became involved with orchestras in Ottawa, and in 1960 collaborated with the late Captain H. E. Morris and Hans Lussenburg to form the very successful Ottawa Youth Orchestra. In 1965 he brought a group of musicians together to form the Ottawa Civic Symphony (now the Ottawa Symphony Orchestra) and became its founding president. In 1975, at a concert of the OSO in the National Arts Centre, he was made an Honorary Citizen of Ottawa and presented by then-mayor Lorry Greenburg with the Key to the City for his contributions in science, art, and music.

In 1980 he was awarded the Massey Medal by the Royal Canadian Geographical Society. He has also been honoured for having first described a naturally occurring copper-nickel-iron sulphide mineral, which has been named "HAYCOCKITE." In May of 1986 at its Spring Convocation and sixtieth reunion of his class, Acadia University awarded him the degree of Doctor of Civil Laws, honoris causis. In the fall of the same year the Art Gallery of Acadia university hosted a retrospective exhibition of more than eighty of his Arctic paintings.

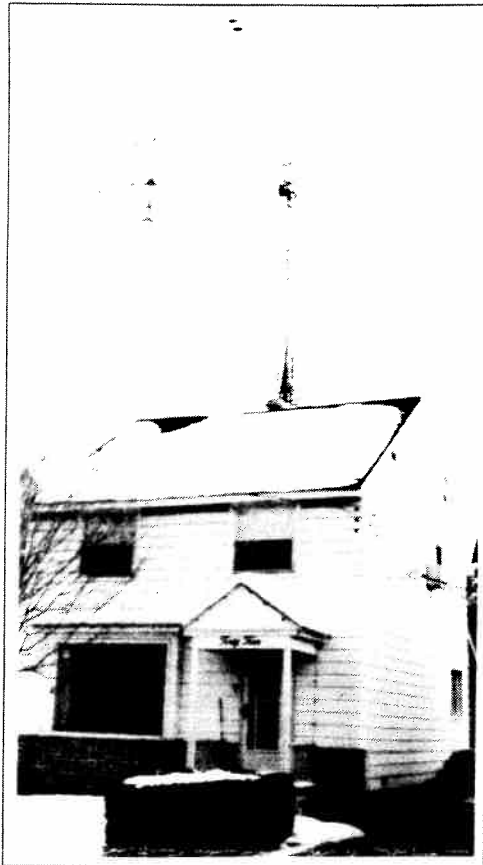
Dr Haycock returned each summer for at least a short visit to the Arctic. In October of 1987 he again briefly visited Pangnirtung on Baffin Island, the place of his early Arctic experiences.

Dr. and Mrs. Haycock lived Ottawa, where he continued to paint and write up until his death on December 23, 1988.

-Kay Haycock



SHACK OF THE MONTH



VE3LOW

SHACK OF THE MONTH

This shack belongs to Russ Lowe, VE3LOW. Ottawa East wouldn't be the same without this retired fresh air inspector. It wouldn't look the same either.

Check out the antenna farm! Speaking of farm's, Russ's other hobby is the care, feeding and parading of a pair of 2000lb. (each!) oxen. But that's another story.

Russ's station consists of an FT-101E and a Kenwood TS-140s and a Yaesu 2-meter rig. The antennas are a Hygain TH3 and an 11 element 2-meter beam. The antenna tower is an old farm windmill with some tower sections extending it to the 70 foot mark. If you look carefully on your way through Ottawa East you can't miss it!

OV MRC Annual (sort of) Club Banquet

SATURDAY, FEBRUARY 25 from 6:00pm

at THE SERGEANT'S PUMP

1568 MERIVALE ROAD

English pub atmosphere

Good food

Selection of imported beers

Bring the XYL - SHAKE THE FEBRUARY BLUES!

R.S.V.P. to George Dew, VE2OWW at 723-6500 770-3183

TEN METER BEACONS

*This is a revised list of *10* meter beacons as of February 89. KA1QFU helped with this update. If anyone who reads this list finds any beacons not listed or has info about beacons that are in-active, please let me know so I can keep the list updated!*

Freq	Call	Location/Equipment
* 28.0505	PY2GOB	SAN PAOLO, BRAZIL 15W, VERTICAL
* 28.1750	VE3TEN	OTTAWA, CANADA 10W, GROUND PLANE
* 28.1910	VE6YF	EDMONTON, CANADA
* 28.1950	IY4M	BALOGNA, ITALY 20W, 5/8 GROUND PLANE JN54qk
28.2000	GB3SX	CROWBOROUGH, ENGLAND 8W, DIPOLE
28.2000	KF4MS	ST. PETERSBURG, FLA 75W, GROUND PLANE
28.2010	LU8ED	ARGENTINA 5W
28.2025	ZS5VHF	NATAL, RSA 5W, GROUNDND PLANE, 1850 FEET ASL
28.2050	DLOIGI	WEST GERMANY 100W, VERTICAL DIPOLE
28.2075	W8FKL/4	VENICE, FLA 10W, VERTICAL
28.2080	WA1IOB	MARLBORO, MASS. 75W, VERTICAL
28.2100	3B8MS	MAURITIUS GROUND PLANE
28.2100	K4KMZ	ELIZABETHTOWN, KY 20W, VERTICAL
28.2120	EA6RCM	PALMA DE MALLORCA 4W, 5 ELEMENT, NNE JM19ho
28.2125	ZD9GI	GROGH ISLAND GROUND PLANE
28.2150	GB3RAL	SLOUGH, BERKSHIRE 20W, DIPOLE
28.2150	LU4XI	CAPE HORN
28.2175	WB9VMY	OKLAHOMA CITY, OK 4W, GROUND PLANE
28.2200	5B4CY	CYPRUS 26W, GROUND PLANE
28.2220	W9UXO	CHICAGO, ILL 10W, GROUND PLANE
28.2300	ZL2HMF	MT. CLIMIE, NZ. 50W, VERTICAL
28.2320	W7JPI	SONOITA, ARIZONA 5W, 3 ELEMENT YAGI NE
28.2325	KD4EC	JUPITER, FLA 7W, GROUND PLANE
28.2350	VP9BA	HAMILTON, BERMUDA 10W, GROUND PLANE
28.2375	LA5TEN	OSLO, NORWAY 10W, 5/8 WAVE GROUND PLANE
28.2400	OA4CK	LIMA, PERU 10W
28.2405	5Z4ERR	KENYA
28.2425	ZS1CTB	CAPETOWN, RSA 20W, 1/4 WAVE VERTICAL
28.2450	EA3JA	BARCELONA
28.2475	EA2HB	SPAIN 6W, GROUND PLANE
28.2480	K1ZB	BELFAST, MAINE 5W, VERTICAL DIPOLE
28.2490	WB9FVR	HOLLYWOOD, FLA 1W HORIZONTAL DIPOLE
28.2500	Z21ANB	BULAWAYO, ZIMBABWE 15W, GROUND PLANE
28.2500	4N3ZHK	YUGOSLAVIA JN76mc
28.2520	OH2TEN	
28.2520	WB4JHS	DURHAM, NORTH CAROLINA 7W, VERTICAL
28.2525	WJ7X	SEATTLE, WASHINGTON
28.2550	LU1UG	GRAL PICO, ARGENTINA 5W, GROUND PLANE
28.2575	DK0TEN	ARBEITSGEM, WEST GERMANY 40W, GROUND PLANE
28.2600	VK5WI	ADELAIDE, AUSTRALIA 10W, GROUND PLANE
28.2620	VK2RSY	SYDNEY, AUSTRALIA 25W, GROUND PLANE

10 METER BEACONS (cont'd)

Freq.	Call	Location
28.2640	VK6RWA	PERTH, AUSTRALIA
28.2660	VK6RTW	ALBANY, AUSTRALIA
28.2670	KB4UPI	ALABAMA
28.2685	W9KFO	EATON, INDIANA .75W, VERTICAL
28.2700	VK4RTL	TOWNVILLE, AUSTRALIA
28.2700	ZS6PW	PRETORIA, RSA 10W, 3 ELEMENT YAGI ON 'G' LAND
28.2750	AL7GQ	JACKSON, MISSISSIPPI .5/1 W, BROADSIDE LOOP
28.2775	DF0AAB	WEST GERMANY 10W, GROUND PLANE
28.2800	LU8EB	ARGENTINA 5W
28.2800	VE1MUF	FREDRICKTON, N.B. 500mW, DIPOLE
28.2820	VE2HOT	MONTREAL, 5/1.25/.312/.078 W, VERTICAL DIPOLE
28.2830	OK0EG	CZECHOSLOVAKIA 10 WATTS
28.2840	VP8ADE	ADALAIDE ISLAND 8W, VERTICAL BEAM TO 'G' LAND
28.2860	KA1YE	ROCHESTER, N.Y. 2W, VERTICAL DIPOLE
28.2870	W8OMV	ASHVILLE NORTH CAROLINA 5W, GROUND PLANE
28.2870	H44SI	SOLOMON ISLAND 15W
28.2880	W2NZH	MOORESTOWN, NEW JERSEY 3W, GROUND PLANE
28.2900	VS6TEN	HONG KONG 10W, VERTICAL
28.2910	LU2FFV	SAN GEORGE, ARGENTINA 5W, GROUND PLANE
28.2920	ZD8HF	
28.2950	WB8UPN	CINCINNATI, OHIO 10W, RINGO
28.2960	W3VD	LAURAL, MARYLAND 1.5W, VERTICAL DIPOLE
28.2970	WA4DJS	FORT LAUDERDALE, FLA 10W, 250 FOOT LONGWIRE
28.2990	PY2AMI	SAN PAULO, BRAZIL 10W, VERTICAL DIPOLE
28.3000	ZS1LA	STILLBAY, RSA 20W, 3 ELEMENT YAGI NW
* 28.3020	PI7ETE	NETHERLANDS
* 28.3255	DF0THD	WEST GERMANY
* 28.2880	W6IRT	CALIFORNIA 5W, GROUND PLANE - CODE PRACTICE
* 28.8900	WD9GOE	FREEBURG, ILL
* 28.9920	DLOANN	WEST GERMANY .02W, SINGLE ELEMENT DELTA LOG

* = NOT SANCTIONED BY I.A.R.U.

Edited by: VE2HOT@NA2B

ANOTHER POLAR SKI EXPEDITION!

Within a month, there will be another ski expedition in the northern part of the globe.

Dmitri Shparo, who led the Canadian/Soviet Polar Bridge expedition in the spring of 1988 will lead a team of six Soviets, six Americans, and six Inuits on the two thousand kilometer journey. The group will travel by ski and dog-sled along the coast from Anadyr in far eastern Siberia to Big Diomedede Island in the Bering Strait. They will cross the International Date Line and hit land again on the Alaskan island of Little Diomedede. From there the trekkers will travel overland to Kotzebue in Alaska.

The skiers will be within sight of land for most of the trip, so they will not rely on Amateur Radio for all communication. However, they are packing some ham gear. Alex Tenyakshev, who operated base stations in the Canadian and Soviet Arctic for the Polar Bridge trek, says that theirs will be the first DX-pedition to Big Diomedede Island.

Watch the pages of the Rambler for more information as it becomes available!

MOCOM 35 TRANSCEIVER

Some people may have heard about Motorola "MOCOM 35" radios lately; better, some have managed to acquire one.

The UHF MOCOM 35 is basically a 10-watt 2-channel commercial FM transceiver of early 1970's vintage. Unlike many old "anchors", this one is all solid state and fairly compact, about the size of a large textbook.

Source

From time to time, the Pioneer Amateur Radio Club has obtained a limited number of these rigs, less mike and power cord. They have been "resold" for \$10 each, under condition that the buyer sign a waiver (to preclude re-use in any commercial service). Bell Canada refers to this process as "disposal of worthless property"(!)

Amateur Use

Retuned to the 440 band, these radios are good for a couple of simplex/repeater channels, links, UHF packet, or a repeater.

Their limited frequency spread and channel capacity make them better for a specific use than for a general-purpose UHF rig.

Channel Capacity

Most versions I have seen have a 6-channel selector on the front, but only 2 channel capacity. The 4-channel expansion board was not supplied. In addition, each transmit and receive crystal requires in a "channel element" assembly, containing trimming and temperature compensation. New ones cost over \$20 each, and usually one set is provided. Otherwise, they must be built up.

Frequency Range

Like most commercial equipment, a single model covers only one segment of a band. In Canada, the UHF bands run from 408-430 and 450-470 MHz.

The MOCOM 35 uses a hybrid power amplifier module in its transmitter, similar to the MHW710 part (in 1982, these things cost me

\$64 each!). This is a disadvantage, should one obtain a 410-430 MHz version. Retuned to the top of the 440-450 band, where most repeater outputs are, power drop to around 2w has been reported. If given a choice, select the 450-470 version.

Maximum spread of transmit or receive frequencies without degradation is not specified, but probably a MHz or less.

Microphone

Motorola used a preamplified mike, which is hard to come by. Adapting a Radio Shack "preamp" CB mike has been tried, with limited success; its output level was still too low. A different approach is to build an op-amp circuit into the radio, and use a conventional mic.

Occasionally, a working mic can be scavenged from old equipment, or picked up from a flea market (e.g. Dayton).

Tune-up

Crystals can be ordered from Lesmith (about \$20/pair) or other sources; once obtained and installed, tune-up can proceed. Detailed instructions are given in the equipment manual.

I found the transmitter tuning to be straightforward, using a DVM, power meter, and dummy load.

My receiver has proven not so willing, partly because I didn't start with a calibrated signal source.

Activity

With the advent of dual-banders, many are realizing the advantages of UHF in urban intermod reduction, full-duplex phone patching, and wide-open space for tinkering.

The UHF VE3MPC repeater is tied into its 2m twin. The OARC machine, VE2CRA, sits at Camp Fortune, and has a small but active following. I understand that the Pioneers are busy building a UHF addition to VE3TEL. ♠

-Dave Harris, VE3KMV

Radio Astronomy

Radio astronomy can be done on any frequency you can find which is free of terrestrial radio signals. There are many types of celestial radio emitters which generate (generally wide band) noise. At the lower frequencies the emissions are dominated by non-thermal (i.e. synchrotron etc.) mechanisms. For example the planet Jupiter is a **very** strong emitter of synchrotron radiation in the 5-39MHz range. Indeed much of the background noise you hear on HF is quite often dominated by these signals.

At higher frequencies you get continuous emission from interactions between free electrons (free-free emission) again producing broad band noise. You also get spectral line emission from atomic recombination and molecular transitions. These emissions such as the neutral hydrogen line at 1420.406MHz appear at discrete frequencies instead of being broad band in nature. It is not generally reasonable to expect the casual amateur astronomer to be able to "see" these signals since they are comparatively weak and often localized.

If you have an OSCAR station and want to do a simple experiment try this: Point your 2m antenna straight south and up 30 or so degrees (in the northern hemisphere). Tune your 2m rig to an unused frequency in your area and set the mode to SSB (or CW). Turn on your GaAsFET preamp and write down the S-meter reading of the background noise every half hour or so for a day or as long as you want. You will notice the noise level going up and down from S-0 to S-6 or so with a 24hr period. CONGRATULATIONS - you have just made your first radio observation of the galactic center! You might also see another hump in your data at about local noon corresponding to the sun. The sun however is not nearly as strong as the galactic center at 144MHz.

Well thats enough for now! I pulled most of this out of the dark recesses of my brain while waiting for a Christmas party to start.

Maybe someday I will be inspired to post something more organized on the subject.

73's Ron, WA4SIR

REPORT ON THE WOODPECKER SIGNAL

by James T. Beckham FCC Field Operations Bureau

The Federal Communications Commission's high frequency network collected data concerning "Woodpecker" radio transmissions during a one week period beginning August 14, 1988. All thirteen FCC Monitoring Stations participated. Over 400 observations of the "Woodpecker" signal were recorded.

Our findings are: 1) The pulse rate remains at 11 to 11.5 pulses per second; 2) the pulse width remains at 4 milliseconds; 3) The lowest confirmed frequency was 7 MHz and the highest 19 MHz; 4) the lowest confirmed bandwidth was 20 kHz and the highest 800 kHz; 5) The most occupied bands appeared to be 10.5 to 11.0, 12.2 to 13.0 and 16.0 to 17.0 MHz; 6) the least occupied bands appeared to be 9.7 to 10.5, 11.0 to 12.2, and 13.0 to 15.0 MHz; 7) The bandwidth mean was 150 kHz, the median 75 kHz, and with a standard deviation of 207 kHz; 8) The air time of a signal was, as a minimum, 7.7 minutes for the mean, 3.0 minutes for median and with a standard deviation of 12.3 minutes; 9) All of the transmissions originated from a single location that we fixed at coordinates 51 degrees 24 minutes North by 137 degrees 42 minutes East near the city of Komsomolsk in the USSR.

These observations are essentially in agreement with the findings of monitoring we conducted February 23 through March 1, 1986. This appears to be the permanent pattern of operation of the "Woodpecker"...

Questions or comments should be directed to James Beckham at 202-632-6977.

Courtesy, ANARC BBS

Get those articles to the Editor. Articles describing antenna projects, computer tips or software evaluations, rig modifications or articles aimed at the novice, should be sent to the Editor by the 25th of each month. Send them in on disk (IBM, Atari, Amiga, C64) or handwritten or typed. If you enjoy the articles in THE RAMBLER, contribute to the effort.

-The Editor

NEW MEETING PLACE
THURSDAY FEBRUARY 16, 1989
7:30P.M.
AT
THE CANTERBURY COMMUNITY CENTER
2185 ARCH STREET
TELEPHONE: 564-1068

