

OVER C RAMBLER

Volume 41, Number 3, November, 1996

Home Brew Antenna Night

The next OVMRC General Meeting, Thursday, November 21st, should be a real fun night as it will be Home Brew Antenna Night. Members are encouraged to bring and demonstrate antennas they have made at home to the meeting. The Executive has advised the Rambler that a valuable "surprise" prize will be awarded to the "best" antenna. Anyone intending to bring an antenna to the meeting is asked to contact Steve, VE3RUU, at 731-6749 so sufficient time can be allocated.

Price Going Up

The Club has been loosing money providing refreshments after each meeting. As a result, it has been decided to increase the price of coffee and cookies from fifty cents to one dollar. The price increase takes effect immediately.

Door Prizes Wanted

While the Club has a budget with which to buy door prizes for regular meetings, the budget is small. As a result, Program and Publicity Chairman Steve, VE3RUU, is looking for some assistance in acquiring suitable door prizes. Each year several members donate various items which are used as door prizes. Other members who have "connections" in commercial establishments solicit prizes for the Club. Your help would be appreciated.

Report on VE3JW Activities

During the past four weeks there has been reasonable participation of Club members at museum during week days occasional week-end operation. There are over 40 registered volunteers for the station, but only 10 or 12 go on a regular basis. Some Volunteers have reported experiencing problems getting the Security people to open the station; it is appreciated this can be very frustrating. The situation is being reviewed and it is anticipated that a better arrangement for station access will be introduced soon. It is proposed to have a key for station access available which the Volunteers can sign it out from Security. This method was used in the past and it worked quite well.

The annual "Talk To Santa" program at the museum will take place on either December 15th or 22nd. The date will be firmed up following consultation with the museum officials. Club members are encouraged to participate in fun event involving young visitors to the museum. Interested members are asked to contact Jerry, VE3CDS, at 828-3839.

Radio Course Well Underway

The OVMRC's Amateur Radio Course is well underway with 19 participants. While no Course Director has been named, the instructors are the same as last year - Bob Shaw, John Moffat, Jim Wright, Bob Kavanagh, Brice Wightman and Kevin Jones

The Ottawa Valley Mobile Radio Club

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The 1995-1996 OVMRC Executive

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Dan Reardon, VE3GUU, 836-2633

Vice-President:

Vacant

Treasurer:

Ernie Jury, VE3EJJ, 728-3666

Secretary:

Earl Andrews, VE3AB

Standing Committee Chairs

Amateur Radio Exhibit; Jerry Wells, VE3CDS, 828-3839 Amateur Radio Training:

Field Day: Flea Market: Historical:

Jake Guertin, VA3TQX, 744-2717 Ken Barry, VE3KJB, 746-4823 Larry Wilcox, VE3WEH, 747-5565

Membership: Newsletter:

Gordon Beatty, VA3GRB, 722-4675 Dan Doctor, VE3XDD, 745-9214

Publicity & Programs Steve Middleton, VE3RUU,

731-6749

RadioOperations:JacquesChoquette,VE3TSC,748-6597 & Maurice-Andre Vigneault, VE3VIG, 749-9010

Technical:

Bob Shaw, VE3SUY, 737-9443

Novice:

Joe Donnelly, VA3JJD, 488-3299

OVMRC Life Members

Ralph Cameron. Doug Carswell,

VE3BBM VE3ATY

Gerry King,

VE3GK

Fred Noble,

VE3BAJ

Jerry Wells. Bill Wilson.

VE3CDS VE3NR

Joining or Renewing RAC Membership

When joining or renewing your membership in RAC, remember to quote "OTT-101" on your application. This will reimburse the OVMRC \$3 of your RAC membership dues which will be passed back to you in the form of a credit on your next year's OVMRC dues.

OVMRC CODE PHONE - 737-0197

http://www.worldlink.ca/ovmrc

producing the Rambler.

SEE THE OVMRC WEB PAGE:

The OVMRC gratefully acknowledge the support of the Corel Corporation in

Mark Your Calendar! Next general meeting:

Thursday. November 21st at 1930 hours in the main auditorium of the Museum of Science and Technology. It's HOME BREW ANTENNA NIGHT! You are invited to bring antennas you have built to this meeting to explain their construction and operation. It's a fun night, so plan now to attend.

Deadline for next Rambler:

Thursday, November 28th, 1996.

OVMRC's Repeater: VE3TWO, 147.300MHz (+) 444.200MHz (+)

Affiliated Clubs

The OVMRC exchanges newsletters with the following organizations:

Algoma ARC, Sault Ste Marie, ON

Augusta Amateur Radio Assoc.Augusta,ME

Border City Radio Club, Windsor, ON

Chatham-Kent ARC Inc. Chatham, ON

Calgary Amateur Radio Assoc. Calgary AB

Comox Valley ARC, Comox, B.C.

Halifax ARC, Halifax, N.S.

Heritage ARC, Cobourg, ON

Kingston ARC, Kingston, ON

Lambton County ARC, Sarnia, ON

London ARC, London, ON

Metroplex ACA, New York Ottawa ARC, Ottawa, ON

Pioneer ARC, Nepean, ON

RAC, Kingston, ON

Rideau Lakes ARC, Smiths Falls, ON

Scarborough ARC Inc. Scarborough, ON

Seaway Valley ARC, Cornwall, ON

Sudbury ARC, Sudbury, ON

Surey ARC, Surrey, B.C.

Saskatoon ARC, Saskatoon, SK

Thousand Island ARC, Brockville, ON

West Island ARC, Dorval, PQ

Winnipeg ARC, Winnipeg. MAN

Sponsors

The OVMRC provides newsletters to the following organizations for their past support of our activities:

Bytown Marine, Ottawa, ON Kenwood Electronics Canada Inc. Mississauga. ON Corel Corporation, Ottawa, ON

WorldLink Internet Services Inc. Ottawa, ON

Ramblings Wise w

Wise words from our President,

Dan Reardon, VE3GUU

I would like to take this opportunity to thank our Membership Chairman, Gordon Beatty, VE3GRB, for the excellent job he has done for the Club. Due to his commitment to college and work, Gordon is not able to carry on his Club duties. Good luck Gord and many thanks!

I understand some members have received their copy of the Rambler while others have not. I apologize to those who have paid their dues but are among those who did not receive their Rambler. Corrective action is being taken!

While on the subject of dues, there are still a number of amateurs who have not renewed their Club membership. We need your support if we are going to maintain our level of quality in our Club. I have expressed it before, " you are only going to get out of the Club what you put into it!"

There seems to be many amateurs who simply sit back and let everyone else do the work. At our last meeting I outlined our commitment to the museum. We have to ensure that VE3JW is operated for at least 500 hours a year if we wish to have the privilege of using the museum for our meetings and radio course. I understand there are over 40 amateurs cleared to work at the museum. I understand, further, that only 6 to 8 amateurs are fulfilling their obligation and showing up to operate VE3JW. QUESTION: What are the other 32 amateur doing? Are you one of the missing 32?

Your executive can only do so much; we need the participation of the rest of the Club.

Please, make an effort, step forward and volunteer your help

The Club still needs a Vice President and a Secretary - so if any one is interested in helping out, please contact me. My phone number is listed on page 2.

As expressed at our last regular meeting, the majority voted to go ahead in acquiring a crest for the Club. I hope to have them for our November 21st meeting. We will have on sale, for \$5 each, and you may purchase them as you come into the meeting. Again, let's support the Club - buy at least one crest. I have expressed concern about field day as we do not have tents or a generator. Monies raised from the sale of crests will go towards the purchase of equipment for field day.

I have received an interesting and infirmative letter from Bob Campbell, VE3KLK, which provides the background about the "Key to the Executive Washroom" .I have asked that this letter be reproduced in next months Rambler so that we may all share in this bit of OVMRC history. I am sure you will enjoy reading about the fabled "Key to the Executive Washroom". Many thanks Bob for your letter!

The OVMRC has a great past and an excellent future if we all pull together and contribute our time and expertise to the Club.

I look forward to seeing you at our November 21st meeting. Remember, our meeting is "Antenna Night" so bring in any homemade antenna and share your expertise with your fellow amateurs.

Minutes

OVMRC Regular Meeting, October 17th, 1996.

The meeting was called to order by President Dan, VE3GUU, at 1940 hours.

The membership welcomed two visitors, VA3TIS and VE3JDI.

Seeking assistance, Ken Barry, VE3KJB, was looking for a specific vacuum tube. Carl, VE3CGM, has a large stock of tubes and will assist Ken.

President Dan read a thank you letter from the Women's Heart and Stroke Association for the Club's assistance in providing communications for their Chevrolet Mother and Daughter Walkathon recently held at Vincent Massey Park.

It was announced that there was an error in the October Rambler announcement that the OVMRC Flea Market will be held on April 27th ,1997. The correct date is Saturday, April 26th, 1997.

Treasurer Emie, VE3EJJ, reviewed the highlights of the Audit Report which appeared in the October Rambler. Emie explained that the line item of \$5700 misc. course expenses included refunds of security deposits made by students for the loan of HF monitors and a \$4500 investment in a term deposit. Emie pointed out that interest from the term deposit goes to the Club's treasury. It was moved by Jacques, VE3TSC, seconded by Steve, VE3RUU and unanimously approved that the Audit Report be accepted.

The 50 - 50 draw was held at this point and was won by Winston, VE3WTH, who won \$25.

Rick, VE3IHI, reminded the membership of the OARC's Flea Market to be held Sunday, October 27th at the Cumberland Community Centre starting at 11am. Rick also advised that AMSAT has a membership of some 16,000. However, some 18,000 amateurs use this satellite. In their recent field day, in the 1A category, the West Carleton Radio Club ranked within the top ten in North America and second in Canada. The OVMRC membership extends congratulations to the West Carleton Club on this major achievement.

Steve, VE3RUU, introduced our guest

speaker for the evening, Fred Archibald, VE2SEI, of the West Island Amateur Radio Club. Fred spoke about their recent DXpedition to Glace Bay and Seal Island. The Glace Bay DXpedition was based in the Marconi Museum and was basically a 2 metre attempt to make contacts in Ireland, Scotland and Spain. No contacts were made. Fred showed coloured slides of the equipment used and the innovative 100 foot ladder antenna made of two strands of rope and welding rods. Seal Island, located 15 miles off the southern tip of Nova Scotia. was a mix of radio equipment. DX contacts however were confined to HF with 80% of the contact made on 20 metres. Following Fred's presentation the membership's interest in this subject highlighted the question and answer period by a number of rather interesting and technical questions. Fred was accompanied to our meeting by fellow DXpeditioners Andrew, VE2WHO, Helen, VE2YAK, aand Jeff, VE2TBH.

Larry, VE3WEH, thanked Fred for coming to Ottawa from Montreal and making such an extremely interesting presentation. Larry had a 20 minute video of the Glace Bay DXpedition and invited those interested to stay after the meeting to view it.

President Dan led a discussion about the Club getting lapel pins and crests with the Club's logo. It was the memberships view that we proceed with acquiring crests and waiting the development of lapel pins.

The Club is still looking for a Vice President. Anyone interested is asked to contact President Dan.

The OVMRC has entered into a "agreement" with the Museum of Science and Technology regarding the Club's use of the facility. In leu of our use of the auditorium, class room, etc. we must provide a minimum of 500 volunteer hours to operate VE3JW. Volunteers are reminded to sign in and out in the volunteer book at the front desk of the museum so that credit will be given to time spent there.

The meeting was adjourned at 2140 for a social hour.

Our Two Meter Repeater

Written By Bob Shaw, VE3SUY, Technical Committee Chairman

Recently, we've experienced problems on our repeater VE3TWO. Some of you have reported that it is cycling on and off continually. This short article will outline some of the potential reasons and solutions to this problem.

The two meter receiver is receiving some signal strong enough to overcome the squelch, and is causing the transmitter to key. Because we are hearing the courtesy beep, we know that the problem lies ahead of the repeater controller. Because there is a cavity resonator in the input circuit of the receiver, it is most unlikely that out-of-band or off-channel signals are triggering the squelch. It is more probable that there is a signal on the repeater's input frequency of This signal could be 147.900 MHz. transmitted at this frequency, combination of other frequency signals may be mixing and creating this frequency either within the antenna/co-ax system (i.e. ahead of the cavity resonator), or is being mixed by some artifact in the area - a rusty pipe, etc., and is being radiated from that artifact. We do know that there is increasing usage in the immediate area of transmitters for paging systems etc. any of which could be causing this problem. Also, because the repeater is housed in an elevator room where heavy currents are being switched during operation of the elevators, it is possible that a strong sparking relay, or fast triggering SCR on the elevator circuits is causing some RF interference which is being picked up by the repeater system.

One possible solution is to turn up the squelch level, hoping that the offending signal is quite weak. It appears that the signal is not particularly weak, as the repeater is driven into full quieting during this cycling.

A couple of other solutions are possible. One is moving the repeater to a less active RF environment. This is generally not desirable and could not be accomplished quickly. A

second, more satisfactory solution is to implement a CTCSS sub-audible tone circuit to trigger the transmitter's equivalent of the "push to talk" switch, or gate the audio from the repeater's receiver to the audio squelch circuit. This would mean that everyone using the repeater would have to have the capability of transmitting the sub-audible tone. While this tone capability is built into many modern handheld and mobile transceivers, it is not universally present. In many of these systems, auxiliary boards are available to enable CTCSS sub-audible tones. In ancient equipment, there is no solution to adding CTCSS tones short of building or modifying a circuit.

There are a couple of other solutions that have been suggested. One is to use a DTMF tone pair to "unlock" the squelch for say 5 or 10 minutes to allow a QSO to proceed without using CTCSS tones. This could provide some relief to repeater users without CTCSS capability, but would require DTMF capability on their equipment or that of a co-operating operator to unlock the CTCSS tone system.

Since the problem is only present on the two meter portion of the repeater system, the CTCSS squelch could be applied to only the two meter receiver, or could be applied to both the two meter and seventy centimeter receivers.

There would undoubtedly be some opposition amongst OVMRC members to installing the CTCSS sub-audible tone squelch system. However, there may not be any other viable solution to the problem of increasing RF energy in the area of the repeater.

If you have any further thoughts, suggestions or comments on this matter, please feel free to contact me at 737-9443, or e-mail me at lycott@fox.nstn.ca.

I am currently exploring possible sources of the RF energy triggering our repeater. So if I'm caught lurking around Booth St., you'll know what I am doing!

A Chinese Spy?

From Short Waves-Short Bytes

In the late 60s, a well-known amateur CW operator in Sydney, Australia grew increasingly annoyed at an intruder on the 20 metre CW amateur band. One day, as he observed the intruder's activity more carefully than usual, he noticed that a net control station was logging in other stations. After being acknowledged, each station sent a series of five-letter groups. Then the net control logged them out again.

Our ham wanted to give back a little grief to those illegally occupying the spectrum. He proceeded to follow the log-in procedure, using a callsign in a logical sequence with those he had heard. To his delight, the net control acknowledged him. He sent a few random five-letter groups, just like the others.

A few weeks later, he got a knock at his door. It was a chap from the Attorney General's Department - well known as cover for the Australian Security and Intelligence Organization. It seems our playful ham had logged into a Chinese spy net. And an Australian DF station had identified the geographical area of his transmission. The ham's obvious antennas had done the rest. The authorities took no action against him, but they did ask that he inform the authorities before doing it again. They didn't want to again waste all the man-hours they had consumed trying to decrypt his random five-letter groups!

Morse Fishing

Wayne, VA3LOG, makes sharpening his morse code a family affair. Using a computer and a code program, the family plays a variation of the game, Go Fish. When it's a player's turn, instead of asking out loud for a card, he or she presses the appropriate key on the keyboard - K for King, Q for Queen, and the number keys for numbered cards. The computer then "sends" the selected morse character. The children enjoy pressing the keys and hearing the sound of the code and in the process they quickly learn morse code.

CW Beacon In Alaska

Have you been wondering whether there's 80 metre propagation to Alaska? Just listen for the South Central Radio Club of Anchorage beacon on 3.575 MHz CW. The beacon, whose callsign is KL7CC, runs 100 watts, but the club plans to QRO soon to 400 watts. The beacon transmits daily at 0100, 0400, 0700, 1600 and 1900 UTC. And please send your signal reports to Jim Wiley, KL7CC, 8023 East 11th Court, Anchorage, AK 99504.

DX Advantage

From West Park Radiops

The late Orrie Baumgardner, W8BF, used to tell the story about his six-element twenty-metre beam antenna.

It seems one of Orrie's DX competitors wanted to know why DX stations in Asia always seemed to give Orrie a better signal report, despite Orrie's poorer DX location. When he paid Orrie a surprise visit one summer evening, he found freshly spread manure in the back yard. And he noticed that the beam, pointed towards Asia, also pointed right over that part of the yard.

With a straight face, Orrie told his friend he had been experimenting with ways to improve ground conductivity, and that the manure had improved his signal reports from Asia.

This explanation apparently impressed the visitor. Although his lawn was in excellent condition, he called a landscaper the next morning to order a load of horse manure!

A man in his 80s was approached by a lady of the evening. She said, "i'll do anything for \$50." He invited her into his car and began to drive. When she asked him where it was he was planning to take her, he quickly replied, "I'm taking you home to paint my garage!"

RAC Report

Written by Patrick Doherty, VA3GD RAC Director - Ontario North

I was appointed the Director for Ontario North on June 30th, 1996, after Bob Bishop, VE3JAB, decided to retire from the position. Elections were due shortly after, with nominations to be in by September 1, 1996. Nomination papers were filed by one other amateur. The other person decided to withdraw his nomination, which resulted in my election by acclamation. My term of office is for two years, ending December 31, 1998.

Radio Amateurs of Canada is going through some significant changes. Industry Canada has approached RAC to take over the licensing and matters related to Canadian amateur licensing. A new company has been formed to handle licensing called "Amateur Radio Administration Services - Services Administratif Radio Amateur" (ARAS-SARA). Consultations between ARAS-SARA are on going, with ARAS-SARA coming into operation by January 1, 1997. There will be a period of time needed for training and transferring of data from Industry Canada. It is anticipated the change-over should be completed in July, 1997.

The October issue of TCA (the Canadian Amateur magazine) has a RAC report to the IARU (International Amateur Radio Union) for WRC 99 on the future of amateur radio. One of the most significant recommendations is the elimination of CW as a licensing requirement. CW would remain as an operating mode. The majority of

Canadian amateurs endorse this recommendation. National administrations around the world are reviewing the CW requirement. There are other excellent proposals in the report that make it required reading for all amateurs.

There are increasing pressures on the amateur radio spectrum. A recent attempt by commercial interests to grab the 2 metre and 70 centimetre bands for LEO's (Low Earth Orbiting Satellites) was, we hope, diverted. Our frequencies are extremely valuable to commercial interests. National organizations such as RAC, in Canada, ARRL, in the United States. and others in various countries around the world are the ones protecting your interests. Without these organizations. "amateur radio" would disappear, and commercial radio would reign supreme. Are you one of those amateurs that keep saying I better join RAC - but never seem to get around to doing it. You had better start thinking about it, because only through your support can RAC continue to enhance and protect amateur radio.

If you have any questions, comments or suggestions please let me know. My mailing, fax and e-mail addresses are as follows:

Patrick G. Dohertry, VA3GD R.R. #1-10035 John Street Road Murillo, ON., POT 2G0 Fax 807-935-2134 e mail pdoherty@tbaytel.net

If I'm Here, Who Can I Talk To?

Written By Bob Shaw, VE3SUY

Here is a suggestion for a club project. Make a map of the greater National Capital Region showing the approximate coverage patterns for the areas various repeaters.

I am proposing that we assemble 6 to 12 volunteers with mobile two meter and seventy centimeter radios, to participate in an all-day experiment wherein several teams fan out from Ottawa on the major routes in all directions, and check into each repeater approximately every quarter hour informing the monitoring team members in Ottawa of

the signal strength of each repeater, and their geographic location. All of this information would then be collected to produce a map showing the useful range of each repeater along each route.

I am proposing that this exercise could be done in late November or early December. If you have an interest or comment on this exercise, or wish to volunteer to help organize and analyze this exercise, please get in touch with me at 737-9443, or by e-mail at lycott@fox.nstn.ca.

DUAL BAND "J-POLE" ANTENNA

The "J" requires no radials, yet yields about 3 dB gain over a 1/4 wave ground plane antenna. This dual band "J" has an extra ½ wave radiating element above the original element with a ½ wave transformer linking the elements in phase. This increases gain another 3 dB for an overall gain of 6 dBd. SWR for this project is extremely low on 2M and never exceeds 1.5 on UHF.

Materials:

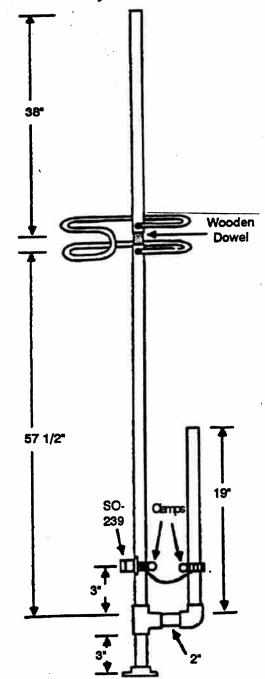
- 1. 10' length of ½" copper pipe;
- 2. one tee, one elbow and 2 pipe caps for ½" pipe:
- 3. 2 copper wall hanger clamps designed for 3/4" pipe
- 4. SO-239 coax connector
- 5. 42" of 3/16" or 1/4" O.D. soft copper tubing
- 6. 10" wood dowel to fit snugly in pipe. Soak the dowel in some weatherproofing fluid.

Construction:

- Cut 5 lengths of copper pipe: 571/2", 19",
 3" and 38".
- 2. Clean the pipe with sandpaper or steel wool.
- 3. Align as shown in the diagram.
- 4. Solder, let cool then remove the solder flux.
- 5. Fold the wall hangers around the pipe. This forms a neat clamp for attaching the SO-239 and making the sliding tap for the feedline center conductor.
- 6. Use the waterproofed dowel to join the 38" top section to the 57 ½ element. Leave a 1" gap between tubing ends.
- 7. Find the exact center of the 42" soft copper tubing and bend into a hairpin spaced 2".
- 8. Drill holes through the 2 elements just large enough for the copper pipe to fit through (above and below the dowel).
- 9. Pass the ends of the newly made transformer through the drilled holes and solder quickly to avoid burning wood. You can leave the transformer extending out at 90 degrees from the antenna of form a circle 12" in diameter centered on the antenna element.
- 10. Adjust the clamps for minimum SWR. Slide both clamps up and down, keeping

them even, while reading the SWR at 146 MHz until you get the best match.

11. Solder the clamps in place. For a sturdier connection you could solder the SO-239 to a small copper piece which in turn is soldered to the long tube. From there a small diameter copper wire goes from the center to the smaller tube. Before doing this make sure you note where your SWR was lowest.



OVINRC

VARIETY

SHOW

On the evening of the December OVMRC General Meeting

DEC. 19th, 1996 1930 Hours

In the Auditorium of the Museum of Science and Technology St. Laurent Blvd.
Ottawa, Ontario.

W E L C O M E Amateurs, Families, and Friends Free coffee and cookies A sampling of news and comments from newsletters and newspapers from across the country - written by Jacques Choquette, VE3TSC



Sudbury - A new 10M beacon VE3SSB (Sturgeon Bay Beacon) now broadcasts on 28.241. Output power is 5W from a HTX-100 using an A99 antenna mounted 30' in the air. Sturgeon Bay is SW of Thunder Bay. If you monitor this beacon, Fred VE3FAL would appreciate a QSL card detailing your reception.

Satellite Times - US made solar panels will be supplying electrical power to the Russian MIR space station. The 6 KW array (42 square meters) will help MIR which was running on limited energy due to recently losing the use of one of its solar cell arrays. QST Oct/96 - Roger ZL1RA of New Zealand turned 100 on June 14/96. Still active after 70 years, does this qualify him as the world's oldest ham?

W5YI - Wayne Green Inc owned by the editor (same name) of 73 Amateur Radio magazine has filed for bankruptcy. No one knows how this affect the continued publication of 73 which is owned by his wife. QST quoted Wayne Green, "This filing will not affect 73 nor any active businesses". Those that are affected are Almost Free CD's, Uncle Wayne's Books, Creative Music and Green with Envy. RAC - On Jan 1/98 Newfoundland and Labrador will become a new Canadian section. Earlier this year, it was announced that this change was made in an effort to address "the unique and special needs and aspirations" of that area.

AMSAT - Seems that the Phase 3D amateur satellite could blast off in spring 1997. The delay had been caused by the loss this year of the Ariane 501 rocket. Data from an investigation will be applied to future liftoffs to prevent similar damage.

Satellite Times - It seems when the cold spell is over no one is out walking or going to the bar at the US Antarctic McMurdo station. The Armed Forces and Television Services (

AFRTS) is using the Intelsat satellite to send live broadcasts of news/sports to US military bases. (Now Baywatch can be seen ALL over the world! VE3TSC)

Ottawa - A new business is starting in Churchill, Manitoba which will be launching commercial satellites using Russian launch rockets.

Ham Radio Online - There has been several reports of 10M openings from areas in North and South America. With propagation conditions at the bottom of the solar cycle it would be wise to listen carefully, call CQ on the calling frequencies (ie - 28.375) and see if the band opens for you. Also check propagation reports and real time E-skip announcements.

Rockwell - Rockwell, USR, Motorola and other modem manufacturers have announced they will be releasing 56 kps modems in 1997. These will provide very fast Internet access over ordinary phone lines. (Goodbye HF? VE3TSC).

Ottawa - Industry Canada has published proposed new radio regulations in the Canada Gazette. Interested parties have several months in which to comment on the proposals. The RAC executive are taking a long, hard look at this document on behalf of all amateur radio operators in Canada. Copies of the new regs are available from Industry Canada.

Ottawa - An Industry Canada August, 1996 release has announced that it's records show there are 48,305 Canadian Amateur radio callsigns issued. The release points out that the total does not represent individual license holders as several of them hold multiple licenses and there are numerous clubs with call signs as do repeaters.