



SPARKS

SPARKS

SPARKS

NORTH SHORE RADIO CLUB

BOX 171

OSHAWA

ONTARIO

FEBRUARY 1971

DAY RALPH  
 454 HOLCAN AVENUE  
 OSHAWA

VE3CRK  
 L1G5X6

Next meeting...  
 The club is pleased to receive a net on 40 and is looking for vol-  
 untary net controllers. Suggested time of 7 p.m. on Wednesdays on approx-  
 imately 7000 kHz. Will be confirmed when arrangements are completed.

ON THE MESSAGE SIDE

The club reader inadvertently found the Q1 & X11 under the Q1's call  
 only and we hereby correct this oversight with apologies:

- VE3BDV - Gerry Walker
- VE3RUF - Doreen Eaton 788 Stinson Street OSHAWA 728-9752
- PORT FERRIS LOB 1K0 852-7017

THE LAWS OF MURPHY

- 2-7 An important instruction manual on operating a machine will have been  
 described by the receiving department.
- 2-8 Successions made by the voice analysts group will increase: coils and  
 reduce capabilities.
- 2-9 Original drawings will be named by the copying machine.

EXECUTIVE & OFFICERS 1977

PRESIDENT	Ralph Day	VE3CRK	576-8738
VICE-PRES.	Bob Miller	VE3HNH	723-0601
SECRETARY	Doreen Aston	VE3FUR	728-9759
TREASURER	Steve Wotton	VE3CFG	725-4197
REGISTRAR	John Pluister	VE3FGL	655-4269
GET WELL CARDS	Ted Brant	VE3ADD	668-3561
EDITOR	Bernie Sandbrook	VE3ATI	655-4156

FEBRUARY 1977

NETS

THURSDAYS	7.30 p.m.	VE3OSH	repeater	Net control	VE3AEX
SUNDAYS	10.00 a.m.	28,600		" "	VE3GOU
NIGHTLY	9.00 p.m.	14,160	Whiskey & Bagpipe net?????		

NEXT MEETING Tuesday 8.00 p.m. February 8 ROOM C243 Durham College

Bernie, 3ATI will try and hook an oscilloscope to a rig and attempt to show what a properly modulated SSB rig should look like on the scope. Gary, 3EPY is going to make up some circuit boards for the logic probe that Farny, 3BHQ spoke about at the last meeting. There will be a discussion on whether it is possible to retain the present rate for membership of \$5.00. The financial situation will be explored and if necessary, a motion for an increase will be entertained. Planned wxpenditures, including running costs of the bulletin will be presented by the Treasurer. There will be a draw for a pocket sized VOM at this meeting.

40 meter CW NET

The Club is planning to organize a net on 40 and is looking for volunteer net controllers. Suggested time of 7 p.m. on Wednesdays on approximately 7050 Khz. will be confirmed when arrangements are completed.

ON THE DISTAFF SIDE

The Club roster inadvertently grouped the OM & XYL under th OM's call only and we hereby correct this oversight with apologies:

VE3ADV	Gimmy Walker	RR #1	PORT PERRY	LOB 1N0	852-7017
VE3FUR	Doreen Aston	782 Grierson Street	OSHAWA	728-9759	

THE LAWS OF MURPHY

(General Engineering)

- 2-7 An important instruction manual or operating manual will have been discarded by the receiving department
- 2-8 Suggestions made by the value analysis group will increase costs and reduce capabilities.
- 2-9 Original drawings will be mangled by the copying machine.



NORTOWN AUCTION

MARCH 18

The Nortown ARC Auction takes place on Friday, March 18, 1977 at 8 p.m. at the Centennial Library, 578 Finch Ave. West, WILLOWDALE. Nortown takes the usual 10% of the sale price of anything sold at the auction and items must be labelled as to the owner and the reserve bid if there is one. There is plenty of parking in the Centennial Arena lot behind the library and there is no charge for parking. Visitors are welcome and there is no charge for attendance.

A.R.R.L CONVENTION

JUNE 3/5 1977 Sheraton Centre Toronto

A reminder that tickets will be hard to get for this one. It is ten years since the last ARRL convention in Montreal and judging by the attendance at the recent RSO Convention, the Centre will be bulging at the seams with the locals and those from the U.S.

The convention is sponsored by the Scarborough Amateur Radio Club and they are looking for help and especially any new ideas for this event. Nortown, Metro and other groups will be lending a hand and it should be one great convention. The thing that is important is to get tickets for all events and especially rooms if you plan to stay in Toronto. The latter should be done right away. Once the convention tickets are gone you may not even get to peek in. Hi!

For information write to:

1977 ARRL CONVENTION, P.O. BOX 1011 Stn "C"  
SCARBOROUGH, ONTARIO, CANADA, M1H 2Z4

DAYTON HAMFEST

APRIL 29/30, 1977

DAYTON OHIO

The Dayton Hamfest will be the largest gathering of Amateur Radio enthusiasts in the U.S. this year. Anyone interested in attending would be advised to register early -- and if willing to consider a return flight in comfort instead of a long tiresome drive, contact Gord Hogarth, VE3CNA. Temporary plans for a flight leaving Friday, April 29/77 at 7.30 a.m. arriving at Dayton about noon and returning Sunday 5 p.m. arriving Toronto about 9 p.m. Approximate cost of flight \$120.00 return. Last year the 25th anniversary, attendance was about 14,000 but this year it should be about average, 8 - 10,000 attending. (Ed. note; wonder if Gord has a 747?)

Thanks to S.A.R.C.

S.P.A.R.C.

The new Pickering area club is now in operation and publishing a club bulletin. The name is South Pickering Amateur Radio Club and presently has a membership of 22 but this will certainly grow. Officers of the club are:

President	Bruce McLellan	VE3FBI
Secretary	Bud Clarke	VE3BIC
Treasurer	Phil Washburn	VE3HAA

The next meeting on January 27 will feature a guest speaker, the President of the Ajax Barnstormers Flying Club who will speak on Remote Control Aircraft.



The following article appears in the current issue of the Emergency Planning Digest and is of interest to Amateur Radio Operators -- Steve CFG

### SATELLITES IN SEARCH AND RESCUE

The Communications Research Centre (CRC) of the federal Communications Department has successfully demonstrated the feasibility of a new satellite-aided search and rescue concept that could reduce the time, fuel dollar and other costs associated with conventional methods of finding downed aircraft. The demonstration project is funded by the Department of National Defence.

Recent proof-of-concept experiments employing the Radio Amateur Satellite Corporation (AMSAT) OSCAR-6 satellite and simulated distress signals have shown a relatively low-cost, low-altitude polar orbiting satellite could pinpoint crash sites in Canada and elsewhere in the world to accuracies occasionally as good as one mile, and generally within 5 miles, in as little as 15 to 20 minutes after the spacecraft first "hears" the signal.

It would operate with conventional Emergency ~~Locat~~ Locator Transmitters (ELTs) mandatory for aircraft in Canada and the U.S. Operating on an international distress frequency of 121.5 MHz, the ELT is designed to go off by itself on crash impact and provide a signal for at least 100 hours for search and rescue aircraft to "home in" on. At present, the "home in" range is within about 30 miles of the crash site, usually achieved by flying criss-cross patterns involving many planes and often dozens of costly and sometimes risky flying hours.

The concept CRC has now proven depends on two vital things; Highly precise orbit predictions for the satellite (exact knowledge of just where the spacecraft is at any given instant) and sophisticated computer processing of distress signals relayed to a central ground station. It works by measuring the Doppler shift in the frequency of the ELT signal as the satellite passes over the crash. (Doppler effect has been observed by anyone who has ever stood at a railway crossing while a high-speed train approaches, its whistle bellowing. While the sound frequency of the whistle doesn't change, its apparent frequency or pitch is higher while it approaches the listener and lower as it passes and pulls farther away.)

Since May 1975, when the demonstration project began, the locations of some 60 "crashes" simulated by transmitters at locations as far away as Winnipeg have been fixed by CRC computer processing of signals from Oscar-6 with accuracy. Researchers conceive of an operational system that might involve three satellites with a design lifetime of seven to 10 yrs., with total spacecraft and launch costs of around ~~\$200,000,000~~ \$30 million. (Over a 10 yr. period, the \$3 million annual cost would be only a small fraction of what Canada spends today on aerial search and rescue.) As soon as the nearest satellite to a crash location appeared over the horizon visible from that site, it would alert ground stations that it had received an alarm. About 15 min. later, at the conclusion of its pass an immediate initial "fix" to within about 70 miles accuracy would be obtained. An optimized position, fixing the crash site to within one to 5 miles, would be delivered in anywhere from 2 to 15 min. later, depending on computer accuracy. The satellites would fly at an orbital altitude of 700 miles--low enough to get fairly good signals from the low-powered ELTs, yet high enough to cover 2,000 miles. Such a system would cover the entire earth and would likely be international in nature. CRC scientists say Canadian industry would be in a good position to build the necessary ground stations for both domestic and export use.



OOPS

Seems as if we all get egg on our face at one time or another. The new editor of the OTS Bulletin (Ontario Traffic Safety) made a slight error in the September/October issue when he mentioned that CB operators would have the option of ordering special passenger vehicle licence plates that include their radio call number. Well, anyone can make a mistake, but we wonder how many GRS enthusiasts have contacted the Special Plates Office? Maybe they don't read that publication, but on the other hand, maybe they do. Anyhow, he corrected it in the November/December bulletin and will not make the same mistake again, you can bet on that. Got your new plates yet?

VE3OSH

and it's operation - - -

Our repeater has been functioning very well despite a few problems now and then, but Harry, 3QG has been treating any ailments it may develop as promptly as the weather may permit. We are shortly going to share the same frequency pair as VE3TBF (The Black Fly) repeater at Essonville, as has been reported before. It has not been installed to this date, although some other interference has led some to think that the signal emanated from this source. Terry, 3GTS and Paul, 3AQV have had difficulty getting up there due to other commitments. When it does come on, there could be some interference on some occasions and there will be a point somewhere between Oshawa and Bancroft where it may be possible to hit both repeaters but we will have to wait until TBF is operational before we can be sure. It may then be necessary to decide which one you are getting into. Hopefully, you will only access one of them and have a dead area in between.

With the severe weather conditions we have been experiencing this winter, the thought comes up as to the value of OSH. It has proven valuable a number of times when calls have had to be placed to the OPP or Durham Regional force. The one thing we have to be cautious of is that we don't tie OSH up to such an extent that it's value diminishes and it no longer is able to render the public service that it is capable of giving. Long ragchews with no break for the mobile - resetting the timer in order to continue ragchewing - carrying on with a conversation when a breaking station comes on, and having him wait it out are not good operating practices on a repeater. Occasionally, the breaker wants to report a vehicle in difficulty or even just locate another station. We all forget, but let's think about it and check our operating habits. Don't abandon the repeater though - we need help and the base station is the one with the phone. One other thing - we have promised the use of VE3OSH to the Metro AREC for emergency tests when needed, so if someone comes on and requests the use of the repeater for this purpose, remember what amateur radio is famous for - communications.

VE3FIV's phone number is 983-9584

VE3GDE should read VE3GDF and telephone should be 723-5758

VE3IKG's phone number is 723-8484 - - add to your membership list.

STOP THE PRESS The 40 m net will commence at 8.00 p.m. Wed. Feb. 16 and will continue each week. Bob, 3GND will start it with - NSR CN de VE3GND QNI BK - and will listen for BK's. Give ur call only and wait! Freq. is 7050 Khz. +/- 10 Khz. Net will be informal, also slow! When net is over he will send CN QRF. Come in and get your feet wet.



LICENCE PLATES

## CALLSIGN LICENCE PLATE FEE NOW ONE-TIME CHARGE

The Ministry of Transportation and Communications recently announced that physical renewal of license plates will be done only on an as-needed basis i.e., due to wear and tear. In other words, there will be no general issue each five years, as originally contemplated. This means that the \$25 "own choice" fee charged for callsign plates becomes a one-time-only charge. The plates will be transferred from vehicle to vehicle until they wear out, at which time a nominal charge of \$2 to \$5 will be made to obtain a new duplicate set. The actual fee charged will depend on the circumstances leading to the replacement.

There now is no reason to hold off ordering callsign plates, as there was when the life of the plate was only two years. Why not get yours now? The fee is a one-time charge that lasts a lifetime.

November 12, 1976  
W. W. Loucks, VE3AR

## TO HOLDERS OF OWN CHOICE PLATES

If you change cars and wish to retain your Own Choice plates, please follow one of the procedures below.

## OLD VEHICLE

Attend to your local Motor Vehicle License office and:

1. Complete form JL13 for replacement of registration plates;
2. Attach Own Choice vehicle permit to form JL13;
3. Pay the replacement plate set fee of \$2.00.

The License Office will issue a replacement permit and set of plates. These plates are to be placed on the old vehicle after the removal of your Own Choice plates. The new permit may then be transferred to the new owner of the vehicle. Please be sure to retain your Own Choice licence plates.

## NEW VEHICLE - NOT YET REGISTERED

1. Mount your Own Choice plates on the new vehicle.
2. Send, to the address noted below:

Special Plate Office,  
MacDonald Block,  
Queen's Park,  
Toronto M7A 2A2

- a) the application for registration of the vehicle (JL1);
- b) the Certificate of Sale (issued by the dealer);
- c) the registration fee as per the cylinder rating of the vehicle;
 

4 cylinders - \$23	6 cylinders - \$32
8 cylinders - \$40	(these fees are reduced by one-half if the vehicle is registered on or after September 1);
- d) the re-issuing service fee of \$3.00;
- e) a note giving the Own Choice plate number.

On receipt of the above items a new permit will be issued showing the Own Choice plate number and describing the new vehicle.

Courtesy THE ONTARIO AMATEUR (RSO)



REPORT ON EMERGENCY MEASURES ACTIVITY Jan. 28/77, SNOW STORM

From information obtained by listening on amateur FM repeater OSH and RPT reports of the weather conditions and effects on communities in Ohio and Michigan indicated that the storm, which was coming in our direction would create serious problems to us. The information on the situation in the Toronto area confirmed its arrival.

The time of day was noon hour and the decision at EMO Durham Region was to ensure the local school boards be made aware of anticipated weather and to have them take appropriate action.

The Durham Board of Education advised they had begun to inform schools to close.

Attempts were made to contact the Durham Separate School Board but only their answering service (tape) replied. Ten minutes later after 1 p.m. they were contacted and they had begun closing schools, but having difficulty getting lines out, EMO accepted a list of 4 schools and 1 bus line to be called and informed of school closing and early bus arrivals at the schools.

The Durham Board was again called to see if they were encountering phone problems and this was affirmed. Consequently 11 schools were called, on the Board's behalf to advise of the school closing and re-scheduled bus pick up, EMO had no great difficulty in getting lines out but every school was inundated with incoming calls and close to 10 calls had to be made to each school to eventually get a clear line.

Both Boards of Education were asked if there were any schools isolated and in need of outside assistance. Although some were reported to be prepared to have students remain overnight, there was no problem anticipated.

Further monitoring of OSH FM repeater continued and Earl AZT called Steve CFG advising he was monitoring the freq. of the Newcastleworks and a snow plow out of the Hampton yard was on the way to find a stranded bus of "Crippled" school children in the area of Enniskillen.

This generated many phone calls to Hampton Works Depot, Regional Works Dept. for radio contact as phones were out, the farm house where children were being held, the Northumberland Board of Education for decisions, local snowmobile club for stand-by if needed to transport food and blankets, bus despatcher, etc. The trick was to get a replacement bus into the area as the original bus broke down.

The Hampton Yard was kept informed so that the grader standing by would remain available to the incoming bus.

Subsequent calls from the Northumberland Board and the Bus operator confirmed the bus had arrived and transported the children.

Conclusions to be drawn from action:

Unless unlisted phones are installed in schools, their recourse in the event of such emergencies is to take the initiative to implement action, but as this would likely involve a bussing situation, communication is required



(7)

to adjust to changing situation as to timing of arrival and/or availability of same. This presumes that it is impossible to stop telephone jamming in emergencies.

The flexibility of the amateur radio service is well illustrated in this action. The local FM repeater OSH provided the Durham Region coverage with many mobiles reporting local conditions. Information of more distant situations were relayed by members working the higher frequencies to operators in Ohio and Michigan. Also, as with Earl AZT, local emergency service nets were being listened to and this information relayed to the EMO office if it appeared of value. A further use of this capability could have been to assist the EMO office to phone to the schools by use of any station operator resident nearby and on their local phone exchange. This, however, was not found necessary.

The value of reliable input information and immediate communication to back up the telephone is very apparent and affirms this office's belief that a proper cross-connection of the amateur VHF and HF nets and the EMO commercial frequencies will provide an excellent emergency net. This net also enables the concerned Provincial Ministries to remain Off-line but come on the emergency EMO frequencies when they are required to become involved.

Fortunately, we did not have the problems to the extent that occurred in the Niagara peninsula. It is evident that reliable communication can provide a means of identifying areas of concern and concentration effort and resources at the most needed areas and reducing the danger of over-reacting and misuse of resources.

Steve Wotton (CFG)  
Durham Region Emerg. Measures Div.

#### Re LOGIC PROBE CIRCUIT

We had hoped to have a drawing of the logic probe that Farny, 3BHQ showed at the last meeting but our facilities for producing it are not what was required. The stylus was too large for the templates and it was impossible to make in this bulletin. Sorry, but we will try and have a few photocopies of the article and diagram for this next meeting.