

PRESIDENT	RICHARD BUTTON	VE3RJB	725-7150
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PROGRAM DIRECTOR	PETER JOHNS	VE3HWZ	
VICE PRESIDENT	MARGARET JEFFERY	VE3RNN	725-1238
REGISTRAR	KEITH WYARD-SCOTT	VE3GDF	723-5758
SPECIAL EVENTS COORD.	RALPH DAY	VE3CRK	576-8738
GET WELL CARDS	COLIN BELL	VE3CEU	723-7842
2-METER NET CONTROL	ROY MILLER	VE3AAF	852-5447
LIST AND LABELS	PAUL DALE	VE3LHZ	434-6741
INSTRUCTION COORD.	RICK GIBSON	VE3ASH	434-2886
AUDITOR	HARRY WESTWOOD	VE3JG	683-5104
EDITOR	EDWIN H. TAYLOR	VE3FRM	985-3790

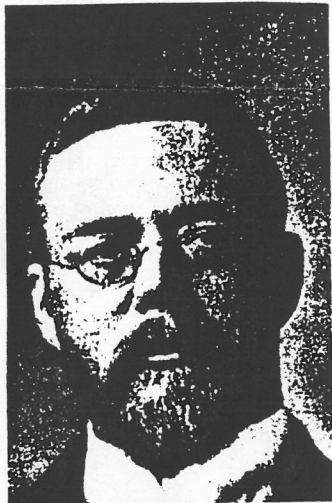
CLUB STATION..... VE3NSR
 CLUB REPEATER..... VE3OSH .. 147.72mc IN ... 147.12mc OUT
 HARRY'S REPEATER..... VE3NAA .. 448mc IN ... 443mc OUT

2-meter NET CONVENES EVERY THURSDAY AT 7:30 pm ON THE CLUB REPEATER, VE3OSH. AS PART OF THE NET, CODE PRACTICE IS PROVIDED BY BERNIE VEJATI BEGINNING AT 8:30pm.

10-meter NET - A GROUP OF LOCAL HAMS MEET SUNDAY ON 28.200 mc USING CW FROM 9:00am TO 10:00am, THEN SWITCH TO SSB PHONE UNTIL EXHAUSTED OR HUNGRY.

CO-ORDINATORS

NONQUAN CANOE RACES	GLEN GOSLIN, VE3LIZ	725-1545
RIDE FOR THE HANDICAPPED	RAY ZAMBONELLI, VE3JUB	723-2467
	RALPH DAY, VE3CRK	576-8738
	RALPH DAY, VE3CRK	576-8738
SANTA CLAUSE PARADE	GORD McCUAIG, VE3NZS	683-4054
FLEA MARKET	DOUG BARNES, VE3WJR	(705) 357-2342
CLUB INVENTORY	GREG SCHATZMANN, VE3GJS	576-4655
VE3CNE & FIELD DAY		



Reginald Fessenden, 1905

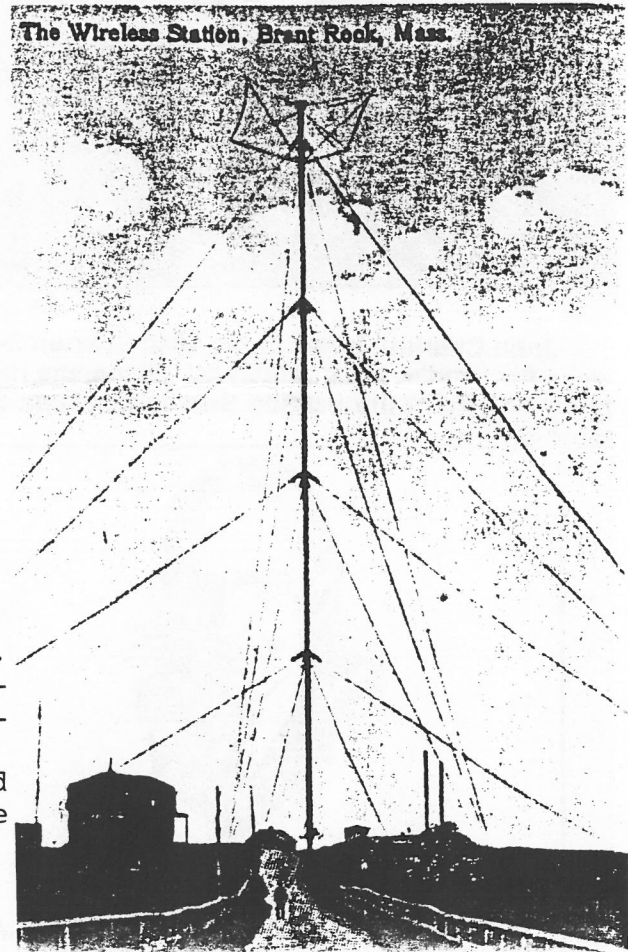
NEXT MEET-

APRIL 8TH.

SPECIAL GUEST SPEAKER!!!

REGINALD AUBREY FESSENDEN

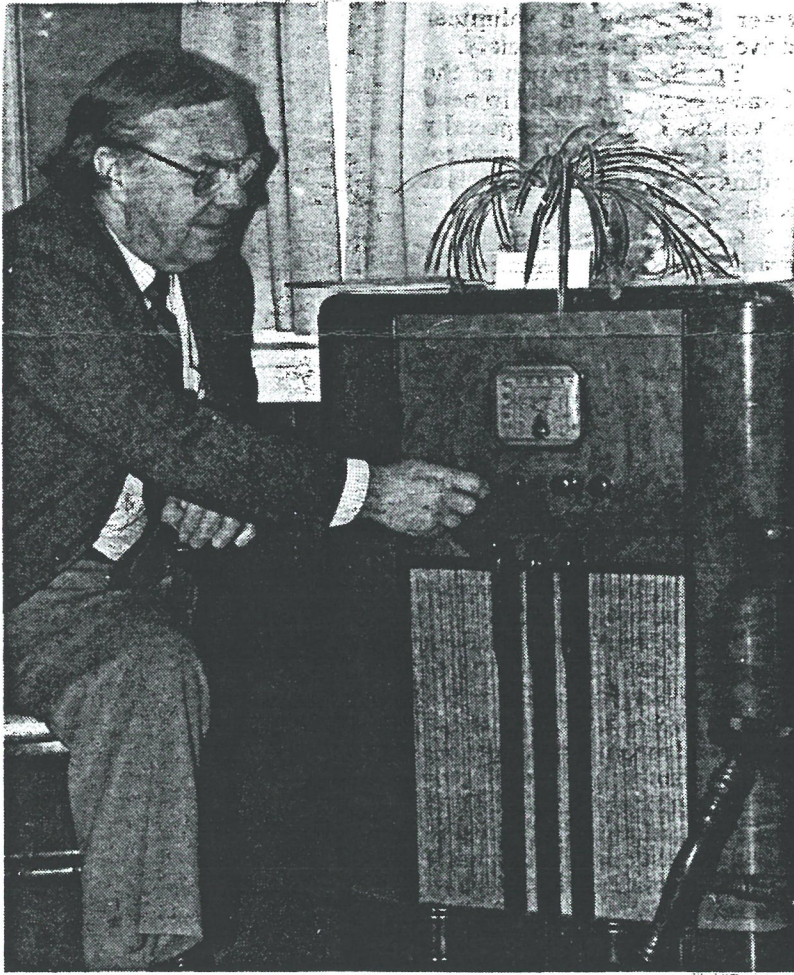
Oshawa's John Charlton has kindly agreed to give a talk at the April 8th meeting. The subject matter will be the life and accomplishments of Aubrey Fessenden. Fessenden, a Canadian, was the first to successfully interpose the human voice on a radio signal. Over shadowed by the charisma and showmanship that Marconi played out for the scientific and business community of that era, Fessenden's struggle to fame was much like that of David and Goliath. We all know what happened to Goliath. An unknown Canadian amid the giants, Fessenden's mathematical mind and unswerving loyalty to his convictions pioneered the first transmission of the human voice without the use of wires. Today Fessenden is still unknown to most Canadians. In 1970 a Toronto writer, Ormond Raby produced a book "Radios First Voice", the story of Reginald Fessenden. Now out of print, I received my copy from 3CMM who thoughtfully bought up the Coles Book Store entire stock when they were about to dump them. Still, Fessenden remains a stranger to most Canadians.



The Wireless Station, Brant Rock, Mass.

John Charlton has put together an excellent and absorbing talk on Reginald Fessenden. An article on John appeared in the Port Perry Star, and is reprinted below. He has accumulated a wealth of information on his subject and presents it eloquently. Don't miss this meeting!!!

radios on display at museum



John Charlton tunes in his 1940 Spartan 5-tube a.m. all wave floor radio. Mr. Charlton has 20 vintage radios currently on display at the Scugog Shores Museum. See story for more details.

The second display at the museum is a collection of radios, which are owned by John Charlton of Oshawa.

Mr. Charlton's exhibit includes 20 radios ranging from a 1923 "Workrite" 5 tube battery-powered neutrodyne a.m. table radio, and a 1923 "Splitdorf" Horn loudspeaker, to a 1960 "Zenith" transistor radio.

Mr. Charlton has been collecting radios for 15-20 years, and has been displaying them for four years.

He was an electronics teacher at high school when people began giving him old radios to repair and keep for himself.

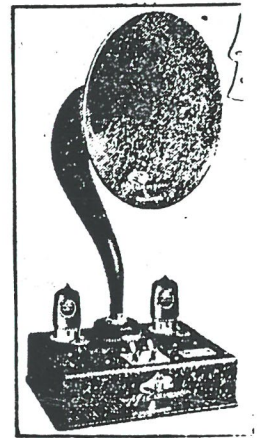
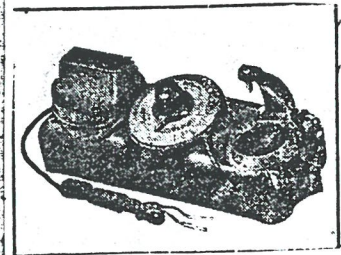
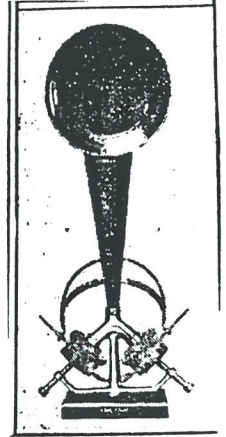
All of the radios on display are in working order.

His exhibit has also been on display at Bowmanville, Oshawa, and Clark Township Museums.

In August of 1990, Mr. Charlton was interviewed on CBC radio.

He spoke in his interview about Reginald Aubrey Fessenden who had his dream come true on December 23, 1900 when he was able to carry a message across a long distance without wires; to have a message carried out on radio wave.

Scugog Shores Museum is open all year round for tours.

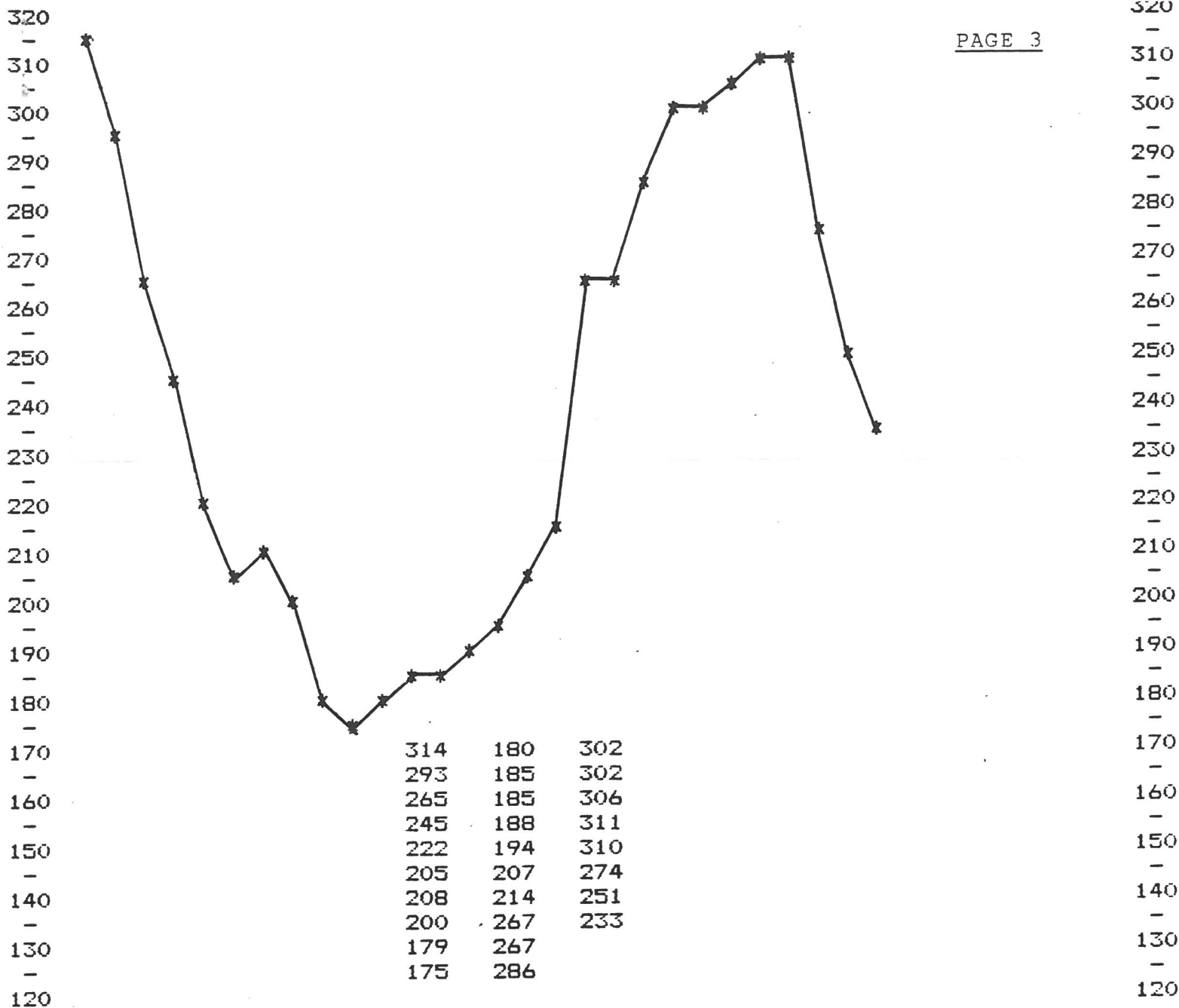


NIKOLA TESLA

Nikola Tesla, often called the father of wireless, was born in Smiljan, Serbia, July 10, 1857 and is credited with over 1000 inventions during his active life. He was one of

the first to work out the principle of electric tuning and resonance, and to employ an elevated aerial or capacitance, means that were later put into effect by Marconi. He discovered the rotating magnetic field, and as a result invented the a-c induction motor, his most famous piece of work. It was through his creative work that activity in the alternating current field was extended from the low-frequency to the high and ultra-high frequency ranges. His most spectacular invention was the now well-known Tesla coil, and as far back as 1890 he pioneered in reproducing artificial lightning. He also discovered the Tesla "cold light", which really was the forerunner of our present neon lights. Many of Tesla's ideas were in advance of his time, and many will be appreciated only in decades to come. He died in New York in 1943, at the age of 86.

Picture Courtesy Radiocraft



AVERAGE SOLAR FLUX NUMBER FOR THE MONTH OF FEB. IS 241.7

Not too much to report on the doppler system except that Bill VE3DJO says the components should be ready to be picked up by this weekend (Mar. 23) so if that's the case I should be able to start distributing them very soon so we can get some interesting transmitter hunts underway, so that is how the situation stands at the moment. By the way if anyone has not been notified the main board in the doppler system has been made upside down so a replacement board will be coming with the components so make sure you mark the one that is wrong so it will not get mixed up.

The above was submitted by VE3LNX. Solar fluctuations compared day to day, month to month tells a story about the many phenomenon that we witness daily affecting the aether. It is interesting to study the charts and compare a certain activity with logged results during that period. If you find these charts of interest, mention it to Vic or myself. We would like to know.

THE EARLY DAYS OF BROADCASTING

Radio broadcasting was actually started when an enterprising radio amateur by the name of Frank Conrad, a Westinghouse engineer in Pittsburg, Pennsylvania, commenced transmitting over his experimental station 8XK, programs of recorded music in early 1920. The license for 8XK was issued on August 1, 1916 and was reissued immediately after World War I. This enabled him to carry on with various experiments in radio broadcasting. The call letter of KDKA was assigned to this station and regular scheduled programs commenced.

It was Westinghouse which led the way in recognizing regular broadcasting in the U.S. Dr. Frank Conrad's broadcasting station in Pittsburg, KDKA, the first successor of an experimental station, was registered in the monthly bulletin of the Department of Commerce in August 1916 and was the first broadcasting station in the world. Its experimental transmissions were so popular that a local store began selling receiving sets to people who wished to listen. The result was a great extension of programs. KDKA broadcast election results in November 1920 and by the end of the year had put on the air not only gramophone-record programs but also its own station band; in June 1921 it broadcast its first church service and an after-dinner speech by Herbert Hoover. In August 1921, it broadcast a sports commentary on a baseball match; the Davis Cup competition; and a prize fight--thus having made the first sports broadcast.

Other early radio stations were WWJ and WBL in Detroit. They both succeeded amateur radio stations 8MK and 8CS who carried on experimental broadcasting earlier.

The success of radio broadcasting station KDKA in Pittsburg naturally suggested to the Westinghouse officials the idea of opening other stations. In the summer of 1921, plans were formalized for stations in New York City and at Springfield, Mass. Records of the Department of Commerce disclosed that Station WJZ in Newark, New Jersey was listed as a new station June 1, 1921, whereas WBZ in Springfield, Mass. was first listed October 1, 1921. WBZ went on the air in September 1921 some days in advance of Station WJZ.

The Radio Corporation of America did not open its first broadcasting station WDY until December of that year--it lasted for only a year. But in the meantime, several other stations had been started. Nine went on the air in September 1921, twelve in October, nine in November and nine in December. In the first few months of 1922, the numbers increased dramatically--26 in January, 14 in February, 26 in March and 88 in April. By the first of May, there were 219 registered radio stations in the U.S., broadcasting news bulletins, weather and market reports, concerts, lectures and commentaries on outside events. In the month of March itself, 99 new stations were started.

The rate of increase in the number of people who spent a part of their evenings listening-in was almost incomprehensible. The first "commercial" went on the air on August 28, 1922--ten minutes of N.Y. Station WEAJ's radio time sold to a real estate developer.

By the end of 1924, there were 530 American radio stations. The manufacturers of radio transmitters, receivers and accessories were in much the same position that munition manufacturers were when war broke out. Before the dealers knew what had happened,

4-4

their shelves were empty. Then as always experimenters started to work. In different cities, all kinds and types of transmitters were created by radio shops, department stores, newspapers, furniture stores and similar companies. Anything that would speak was called a broadcast station. The number of retail radio dealers had risen to 15,000 by the end of 1922. From 1921 to 1923, the rate of increase in the radio manufacturing industry growth exceeded that of the flourishing automobile industries.

The total number of new stations established and licensed up to August 1924 was 1105 but the total of discontinuances during the same period was 572. In other words, a little more than half the stations dropped out. The first network broadcasts were in 1923 and WEAF linked up with stations as far away as Boston, Pittsburg and Chicago.

In Canada, some stations also started broadcasting in the early 1920's. XWF experimental owned by Canadian Marconi Company in Montreal, later having the call number of CFCE was the first recognised Canadian radio station. Commencing soon afterwards were CFCA in Toronto, CKOC in Hamilton, CFPL in London, etc.

With such interest in the radio business created in the early 1920's the actual start of Hammond Manufacturing Company under Len Hammond took place and Hammond commenced making radio receiving equipment, battery chargers, power supplies and then into the transformer manufacturing business as it still is.

The collection of early pieces of radio receiving and transmitting apparatus was started by Fred Hammond many years ago and he now has hundreds of pieces of equipment — some dating back over seventy years. The purpose of such a museum is to preserve as many of the older pieces of equipment as possible for future generations to see the tremendous advances made in this industry.

CABLE LOSSES AT 100' USING ANDREWS LDF

	<u>3/8" LDF</u>	<u>1/2" LDF</u>	<u>7/8" LDF</u>	<u>1 5/8" LDF</u>
<u>3.5MHZ</u>	<u>.22 db</u>	<u>.15 db</u>	<u>.07 db</u>	<u>.04 db</u>
<u>30MHZ</u>	<u>.65 db</u>	<u>.45 db</u>	<u>.23 db</u>	<u>.15 db</u>
<u>50MHZ</u>	<u>.80 db</u>	<u>.58 db</u>	<u>.30 db</u>	<u>.20 db</u>
<u>150MHZ</u>	<u>1.40 db</u>	<u>.90 db</u>	<u>.45 db</u>	<u>.30 db</u>
<u>200MHZ</u>	<u>1.70 db</u>	<u>1.00 db</u>	<u>.55 db</u>	<u>.35 db</u>
<u>500MHZ</u>	<u>2.50 db</u>	<u>1.80 db</u>	<u>.95 db</u>	<u>.60 db</u>
<u>1 GHZ</u>	<u>3.70 db</u>	<u>2.50 db</u>	<u>1.50 db</u>	<u>.80 db</u>
<u>2 GHZ</u>	<u>5.50 db</u>	<u>3.80 db</u>	<u>2.20 db</u>	<u>1.50 db</u>

submitted by Vic, VE3LNX

ANNOUNCING

THE BIGGEST AMATEUR RADIO FLEA MARKET IN
CANADA. THE 10TH ANNUAL

**DURHAM REGION
AMATEUR RADIO
AND COMPUTER
FLEA MARKET**

Organized by: South Pickering A.R.C., VE3SPC
North Shore A.R.C., VE3NSR

Date: Saturday, April 13, 1991
9:00 a.m. to 2:00 pm
Location: Pickering High School,
Church Street, Pickering Village, Ajax
Admission: \$5.00 (Includes Superprize Ticket!)

VENDORS

Doors open 7:30 a.m. (Vendors Only)
Tables \$10.00 (per 6 Ft) + Admission
Reservations are payable to:
South Pickering Amateur Radio Club
P.O. Box #53
Pickering Ontario
L1V 2R2

Door Prizes!

Commercial Displays!

Refreshments Available

INFORMATION AVAILABLE FROM:

Ken Grant VE3FIT
(416) 283-6271
Mike Sherba VE3DKW
(416) 723-7674

TABLE RESERVATIONS:

Ron Brown VE3WZ
(416) 839-3711

TALK IN FREQUENCY

VE3SPA Input 147.975 Output 147.375
VE30SH Input 147.720 Output 147.120

