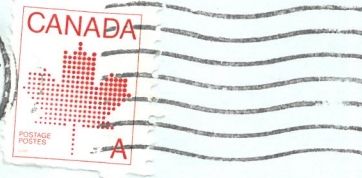


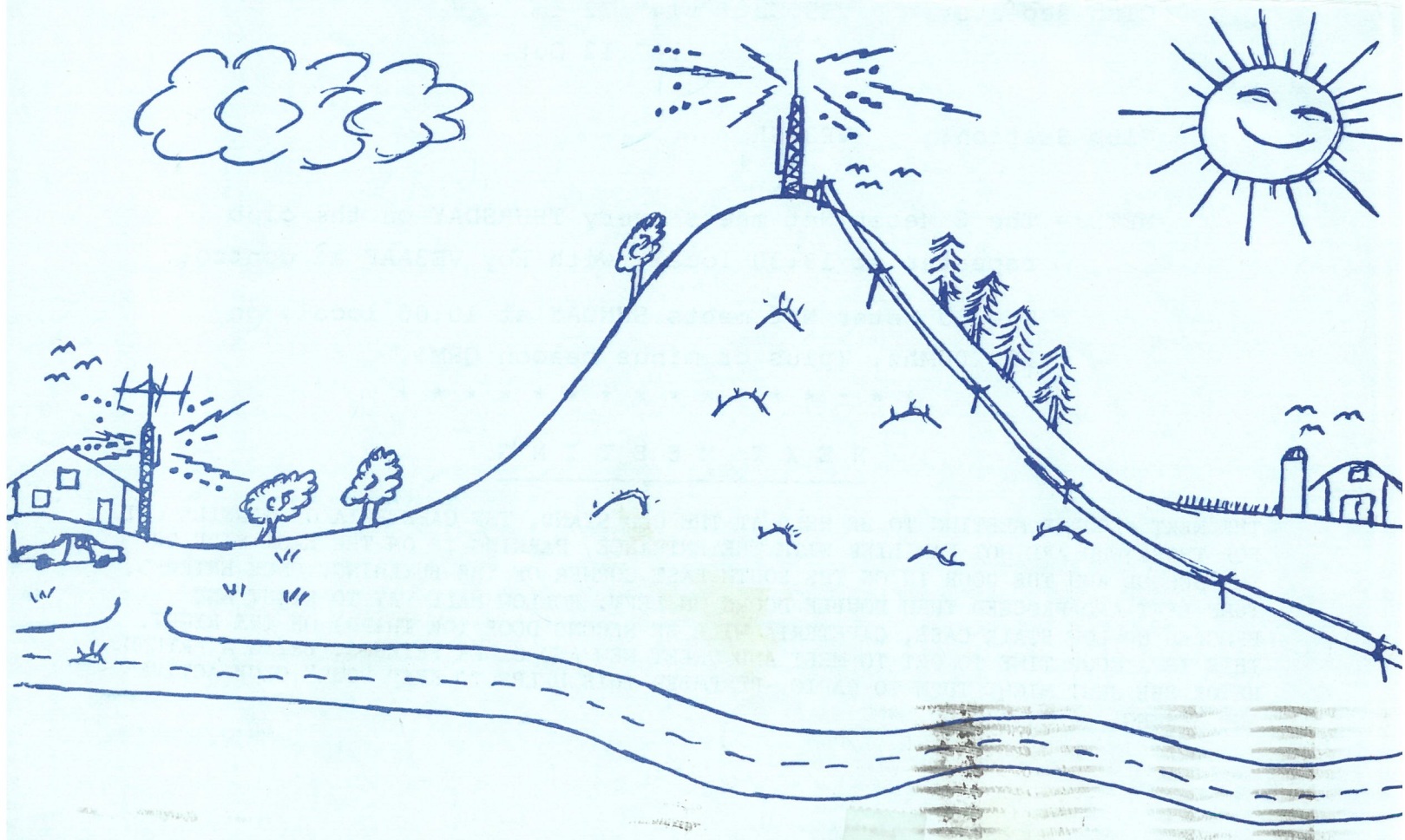
FROM: THE NORTH SHORE RADIO CLUB INC.,  
P.O. BOX 171, OSHAWA, L1H 7L1.



*March.*

TO:

VE3CRK  
DAY, Ralph  
454 Holcan Ave.  
OSHAWA, Ontario  
L1G 5X6



" S P A R K S "

THE NORTH SHORE AMATEUR RADIO CLUB INC.

MARCH 1982 EDITION

OFFICERS & EXECUTIVE

Directors	Colin Bell	VE3CEU	723-7842
	Bob Elston	VE3LLE	725-5124
	Bob Leet	VE3LLZ	725-1236
	Mac McFarlane	VE3IKG	723-8484
	Hank Verwoerd	VE3FHV	571-0863

President	Bob Elston	VE3LLE	725-5124
Vice-Pres.	Mac McFarlane	VE3IKG	723-8484
Treasurer	Hank Verwoerd	VE3FHV	571-0863
Secretary	Colin Bell	VE3CEU	723-7842
Registrar	John Pluister	VE3FGL	655-4269
Get-Well-Cards	Ted Brant	VE3ADD	668-3561
Editor	Doug Smith	VE3MKC	705-786-2086
Tech. Editor	Position Open		
" "	<i>PHIL LEITH</i>	<i>VE3LNE</i>	<i>728 8167</i>

+ + + + + + + + + + + + + + + +

Club Repeater: VE3OSH 147.72 In.  
147.12 Out.

Club Station: VE3NSR

NETS:- The 2 Meter Net meets every THURSDAY on the club repeater at 19:30 local, with Roy VE3AAF at control.

The 10 Meter Net meets SUNDAY at 10:00 local, on 28.200Mhz. (plus or minus beacon QRM).

\* \* \* \* \*

N E X T M E E T I N G

THE NEXT REGULAR MEETING TO BE HELD AT THE OLD STAND, THE CAFETERIA OF O'NEILL C.I. FOR THOSE WHO ARE NOT FAMILIER WITH THE ENTRANCE, PARKING IS ON THE EAST SIDE OF THE SCHOOL AND THE DOOR IN ON THE SOUTH EAST CORNER OF THE BUILDING. ONCE ENTERED, TURN LEFT AND PROCEED THRU DOUBLE DOORS ON LEFT. FOLLOW HALL WAY TO RIGHT AND PROCEED UP LOW STAIR CASE, CAFETERIA WILL BE SECOND DOOR (OR THIRD) ON THE RIGHT. THIS IS A GOOD TIME TO GET TO MEET AND GREET NEW AND OLDER FRIENDS. BRING A FRIEND, HE OR SHE JUST MIGHT TURN TO RADIO. REMEMBER THIS HELPS TO KEEP "OUR" CLUB ACTIVE AND STRONG.

ED.



"SPARKS"

NEWS & VIEWS

+++++

PLEASE TAKE NOTE !

MY HOW TIME FLY'S

WE MAY BE UP TO OUR "GROUND PLANES" IN SNOW BUT GUESS WHAT.....IT IS TIME TO THINK FIELD-DAY. LAST YEAR WE REALIZED THE MEANING OF "WHAT IS SO RARE AS A DAY IN JUNE" MAY WE BE AS BLESSED AGAIN THIS YEAR. THE FIRST OBJECTIVE AGAIN THIS YEAR IS ...HAVE FUN... .LAST YEARS TENT MANAGERS HAVE BEEN CONTACTED AND SOME REINFORCEMENTS ARE NEEDED\*-- ALSO OPERATORS, LOGGERS AND EQUIPMENT LENDERS. ALL HELP GRATEFULLY ACCEPTED. SWL'S THIS IS A GREAT OPERTUNITY TO LLGALY TALK TO THE WORLD.

COME ON VE3NSR LET'S GO !!! VESIND  
\*\*\*\*\*

THE BIG NEWS FROM EXECUTIVE HEAD QUARTERS IS THAT THE DUES WILL REMAIN THE SAME FOR 1982 BUT THE CLUB DOES REQUIRE \$6.00\$ FINANCIAL SUPPORT FOR THE "OSH" REPEATER. SO ALL WHO CAN PLEASE DO .

\*\*\*\*\*

IT HAS ALSO BEEN DECIDED TO MAKE HONERABLE MENTION TO THOSE WHO LEND SUPPORT TO THE OPERATIONS AND REPAIRS OF "VE3OSH" EITHER IN TIME OR FINANCIALLY AS A WAY OF SAYING THANKS.

\*\*\*\*\*

I ALSO HAVE SOME INFO HERE FROM VE3MDV (STAN HUGES IN FELLOW FALLS). IM SURE IF YOU OWN A AZDEN PCS 2000AND WHO HAS PURCHASED A SMALL CAR , THIS WILL TICKLE YOU PINK. EXTENSION CABLES ARE AVAILABLE FROM CONTEMPORARY ELECTRONIC PRODUCTS WHO IS NOW MANUFACTURING AND SELLING EXTENTION CABLES FOR SEPARATION OF THE HEAD AND MAIN UNIT PORTIONS OF THE AZDEN MODEL PCS 2000. AS YOU MAY HAVE ALREADY FOUND OUT, AZDEN QUIT MAKING THESE OVER A YEAR AGO,AND MANY PEOPLE HAVE BEEN TRYING TO GET THESE CABLES ONLY TO BE TOLD THAT THEY'EP NOT AVAILABLEIN THE U.S.A. THIS COMPANY CAN REACHED VIA. P.O. BOX 570549 MIAMI FLORIDA ZIP. 33157.

+++++

In order to receive the monthly bulletin without interruption the CLUB MEMBERSHIP must be renewed annually by January 31. Please make cheques payable to the NORTH SHORE AMATEUR RADIO CLUB INC. Full membership is \$10.00, associate membership is \$5.00, and second family members or student membership is \$3.00. Please mail to: John Pluister, R.R.#1, Brooklin, Ont. L0B 1C0. Use the handy application form below.

-----  
THE NORTH SHORE AMATEUR RADIO CLUB INC.

NAME.....  
CALL.....  
ADDRESS.....  
POSTAL CODE.....  
PHONE NUMBER.....  
-----



"SPARKS"

TAKE A GOOD LOOK HERE! ENTERTAINMENT AT THE MARCH MEETING WILL BE SUPER SO PLAN TO COME OUT. THE GUEST SPEAKER WILL BE DAVE CREICHTON VE3AWC. THE TOPIC WILL BE ABOUT RADIO CONTROLLED AIR CRAFT, COMPLETE WITH DISPLAY. DON'T MISS THIS CHANCE TO SEE THE INNER WORKINGS CLOSE UP. I'M SURE DAVE WILL BE ABLE TO TELL YOU EVERYTHING YOU ALWAYS WANTED TO KNOW --- BUT WERE AFRAID TO ASK.

=====

FOR THOSE THAT MISSED THE FEB. MEETING, DON (HYU) BROUGHT A FILM FROM THE A.R.R.L. THE TITLE BEING: "~~THE~~ WORLD OF AMATEUR RADIO" AND WAS PRESENTED BY W6RO. THE ONE THING THAT REALLY STICKS IN MY MIND IS THAT KING HUSSEIN OF JORDAN IS VERY ACTIVE IN HAM RADIO AND EVEN TEACHES THE SAME IN THE COUNTRY'S SCHOOLS. I THINK IT WAS ONE OF THE BEST FILMS I'VE WATCHED ON AMATEUR RADIO. THANKS DON, EXCELLENT CHOICE. ED.

=====

DURHAM REGION AMATEUR RADIO MARKET STILL HAS A FEW TABLES LEFT FOR THE SHOW BUT HURRY, AS THEY ARE GOING VERY FAST. CONTACT VE3IKG MAC 732-8484.

=====

JUNE 5TH THE GREAT NONQUON CANOE RACE WILL BE HELD AGAIN. DON (HYW) HAS SUGGESTED THAT THE CLUB SET UP A H.F. RADIO STATION AT THE FINISH AND WILL BE LOOKING FOR OPERATORS TO MAN THIS SETUP AND PROMOTE THE HOBBY. THE STATION WILL BE OPERATING UNDER THE CLUB CALL VE3NSR. LET'S HAVE LOTS OF VOLUNTEERS AND PROMOTION FOR OUR CLUB AND HOBBY -- EVEN SOME NEW MEMBERS, MAYBE.

=====

I HAVE BEEN ASKED BY SOME OF THE MEMBERS FOR MORE INFORMATION ABOUT THE 10-10 NET SO HERE YOU HAVE IT --

THE HISTORY OF 10-10 GOES BACK TO 1962, WHEN THE 10-10 NET OF SOUTHERN CALIFORNIA ORIGINATED AS A TRAFFIC NET, WHICH MET AT 10 O'CLOCK DAILY. INDEED THAT'S THE SOURCE OF THE NAME: 10 METERS AT 10 O'CLOCK. THE 10-10 INTERNATIONAL NET STILL MEETS AT 10 O'CLOCK DAILY, PACIFIC STANDARD TIME, OR 1800Z, AND THE FREQUENCY IS 28,800 KHZ. THE OBJECTIVE OF 10-10 HAS ALWAYS BEEN TO INCREASE 10 METER ACTIVITY, AND THUS PRESERVE THE BAND FOR AMATEUR USE.

A FEW YEARS LATER THE IDEA OF ISSUING AND EXCHANGING 10-10 NUMBERS WAS BORN. MEMBERSHIP INCREASED SLOWLY DURING THE LATE 60'S AND EARLY 70'S, BUT BETWEEN 1972 & 1975, MEMBERSHIP MORE THAN DOUBLED - FROM ABOUT 4000 TO MORE THAN 10,000: AND BETWEEN 1975 AND 1979 IT MORE THAN DOUBLED AGAIN, AND NOW APPROACHES 30,000. IN 1975, THE NAME OF THE ORGANIZATION WAS CHANGED TO REFLECT IT'S WORLD-WIDE SCOPE - THE WORD "INTERNATIONAL" WAS ADDED.

THE PURPOSE OF 10-10 HAS ALWAYS BEEN TO ACTIVATE THE 10 METER BAND. THIS WIDE SEGMENT OF THE AMATEUR RADIO SERVICE SUFFERS LONG PERIODS OF UNPREDICTABLE CONDITIONS, AND AN AMATEUR POPULATION WHICH TENDS TO VANISH DURING PERIODS OF POOR PROPAGATION. TO INDUCE AMATEURS TO REMAIN WITH THE BAND, THERE ARE A NUMBER OF 10-10 INCENTIVES.

THE EXCHANGE OF 10-10 NUMBERS KEEPS MANY MEMBERS FULLY OCCUPIED. WHEN HE OR SHE JOINS EACH MEMBER IS ISSUED FOR LIFE A UNIQUE 10-10 NUMBER. DURING QSO'S WITH OTHER MEMBERS, THESE NUMBERS ARE EXCHANGED. WHEN ONE HAS COMPLETED 100 SUCH EXCHANGES (INCLUDING HIS FIRST 10), HE MAY SUBMIT A LIST OF THEM TO THE AWARDS MANAGER, AND RECEIVE, IN RETURN, A "100 BAR" AND A FORM UPON WHICH IT, AND FUTURE BARS MAY BE MOUNTED. FOR EACH ADDITIONAL 100 DIFFERENT CONTACTS, ANOTHER BAR IS ISSUED UPON APPLICATION. PLAQUES ARE AWARDED TO THOSE WHO HAVE MADE 1000, 2500, 5000 AND 7500 SUCH CONTACTS. IN SUBMITTING YOUR APPLICATION, BE SURE TO FOLLOW ALL INSTRUCTIONS. COLLECTING NUMBERS IS A NEVER-ENDING, NO-TIME-LIMIT CONTEST, GREATLY ENJOYED BY MANY MEMBERS.

CONTACT HARRY A. SYRING, JR., 37 BRADFORD DRIVE, WINDSOR, CT. 06695, USA. WB1 PTO



\*\*\* TECHNICAL SECTION \*\*\*

Simple Regulated Supplies:

Everyone needs a source of regulated low voltage at one time or another, to operate that just built project, 2 metre rig etc. The 3 terminal regulator has made designing your own power supply a snap.

HERE'S HOW TO DO IT:

- (1) Pick the voltage regulator corresponding to the voltage and current you need. STANDARD voltages are 5, 9, 12, 15 and 24. Regulators with currents up to 5 amps are available.
- (2) Design the raw DC section consisting of transformer T, bridge rectifiers BR, capacitor C, fuse F and switch S. The transformer and rectifier must have current ratings equal to or greater than the regulator. The transformer AC RMS voltage should be about the same or slightly higher than the required DC output voltage. Don't go to high here or the regulator will overheat.

- (3) Select filter capacitor according to:

$$C \text{ (mf)} = 50,000 \times \frac{\text{Load current max}}{\text{RMS transformer voltage}}$$

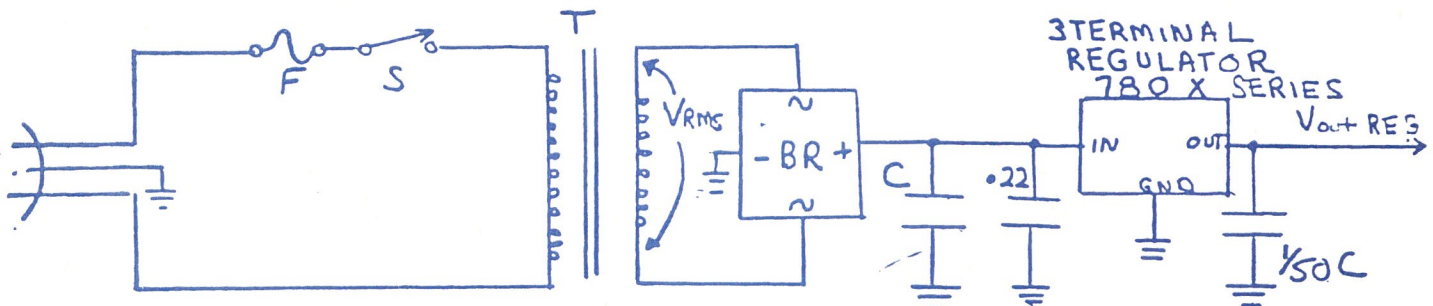
Use closest larger size.

- (4) Select fuse according to  $F \text{ amp} = \frac{3 \times \text{MAX LOAD CURRENT} \times \sqrt{V_{RMS}}}{\text{LINE VOLTAGE}}$

and use closest standard value above this. Generally use a slow blow for capacitor input supplies as the capacitor will require large initial turn on current.

Stick it all together as shown below then sit back and enjoy the juice. Enjoy the power supply too.

A couple of notes: Make sure you heatsink the regulator to a chassis. The regulator will shut off if it gets too hot or if too much current is drawn. These beauties are almost destruct proof. The .22 capacitor and 1/50 C capacitor improve the regulator's performance. Put the .22 capacitor right at the regulator.



\*\*\* SATELLITE TV PART 1 \*\*\*

This is the first in a series of articles on Satellite TV reception. It is probably well known that many individuals in both the USA and Canada have the capability to receive the myriad of programming available from the satellites. In this series, I will discuss the characteristics of satellite TV transmission, and the requirements of a home receiving station for those interested in exploring this state of the art technology.

WHAT'S AVAILABLE ON THE SATELLITES?

Many companies rent channels on the satellites to broadcast first run movies, sports, news and religious programming. These signals are primarily intended for cable companies, hotels, motels and business concerns who pay a fee to receive the programming. They then provide the programming to their customers. At present very little scrambling is in use therefore the programming is available to anyone with a home set-up. In the USA it is legal for individuals to receive this programming provided it is not sold or distributed. In Canada however, the Government's stand on home reception is still unclear. This is offered as a caution!

WHAT IS A SATELLITE?

A satellite is basically a multi channel repeater, not unlike OSH. The satellites we will be talking about receive their signals in the 5.925 to 6.425 GHz band and retransmit them in the 3.7 to 4.2 GHz band. The band is divided into 12 horizontally polarized channels and 12 vertically polarized channels, with each channel capable of carrying one TV signal. Some satellites are dual polarized (24 channel) while others are single polarized (12 channel).  
(SEE FIG. 1 FOR THE 3.7 to 4.2 GHz FREQUENCY PLAN)

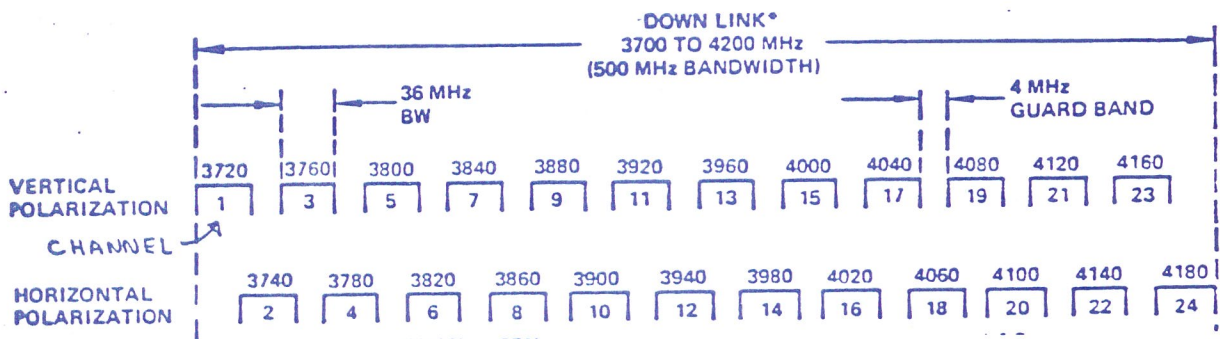


FIG. 1  
SATELLITE CHANNEL FREQUENCY PLAN



The satellites designed for TV transmission are called geostationary. They sit 22,300 miles above the equator and are spaced at about  $4^{\circ}$  intervals. Because of their location above the equator at 22,300 miles they rotate at the same speed as the earth and therefore appear stationary with respect to the earth. Thus the name geostationary.

(SEE FIG.2 FOR A PICTORIAL)

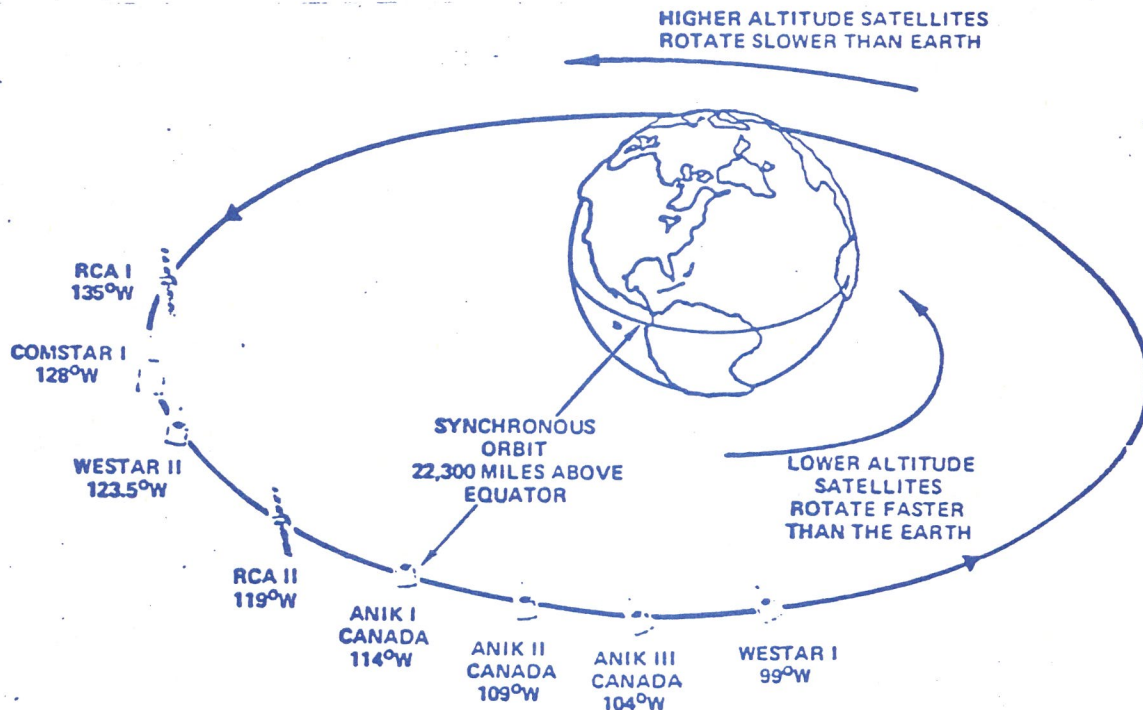


Figure 2 Geostationary Satellites.

Your home satellite antenna is pointed at the desired satellite once and no further tracking is necessary. Each TV channel is transmitted from the satellite with a carrier power of between 5 and 10 watts. The power for the satellite is obtained from batteries which are charged using solar cells. The transmit antennas have very broad patterns to cover the majority of the continental USA and Canada.

The Domestic satellites are owned by U.S. corporations such as RCA and Western Union and Telesat Canada, a unit of the Canadian Government.

It should be obvious that with 10 watts output and more than 22,000 miles to go, the TV signals received by an antenna on Earth (called an Earth Station) are very weak. The receiving equipment requires high gain antennas and low noise amplifiers.

TO BE CONTINUED  
NEXT ISSUE

SELL----SWAP----BUY

FOR SALE: Call-Books, 1979 U.S. \$5.00, and 1981 U.S.  
\$10.00. A Freq. counter Micronta 50Mhz.  
c/w pouch etc., \$50.00. Contact

Stan VE3MDV at 705-738-3336.  
(Fenelon Falls)

\*\*\*\*\*

WANTED: Sharp CW xtal filter, audio filter, or "Q"  
multiplier type, to be used with Heath Comanche.  
Contact Bernard Ferris 668-6177.

\*\*\*\*\*

FOR SALE: Tri-band transceiver. Eico 753. Excellent first  
rig. 100W out on 80/40/20M. This one does not  
drift. Make an offer to Jack at 725-9464.

\*\*\*\*\*

WANTED: External VFO, tuning 6 to 8Mhz.

Call Moe 705-277-2984.

\*\*\*\*\*

FOR SALE: Yaesu 207R, c/w DC and AC charger, batteries etc.,  
\$450.00. Also Motorola HT220s (2) \$250.00 ea.

Call Phil at 655-4069.

\*\*\*\*\*

WANTED: Teletype machines. Any type or model. Set your  
price and call Phil.

655-4069.

\*\*\*\*\*

FOR SALE: Dummy-Load. Quart size, up to 200W. Filled with  
special oil. \$18.00 or 2 for \$30.00. Still have  
some of the special oil for anyone who requires.

Call Mac at 723-8484.

\*\*\*\*\*

WANTED: 3 ELEMENT 10 or 11 METER BEAM IN PERSONAL REPAIR.  
CALL GARY VE3EPY hm.723 1210 bz.683 8200 ext.226

WANTED XTALS 32.0 AND 33.0 MHz  
ALSO HALLICRAFTERS HA-16 VOX CONTROL  
CALL DOUG VE3 MKC 705/786 2086 COLLECT  
EQ

f  
FOR SALE: MODEL No. 15 TELE TYPE COMPLETE WITH DEMODULATOR. ALSO  
GE 2 METER PROG. LINE C/W OSH, RPT, AND 52 XTALS.  
CALL PATTY, VE3LUR 416/576 4577



GET "SPRING" INTO YOUR AMATEUR RADIO

BARGAINS - DOOR PRIZES - EYEBALL QSO'S  
COMMERCIAL DISPLAYS

**SUPER** DRAW

# DURHAM REGION AMATEUR RADIO MARKET

ORGANIZED BY

SOUTH PICKERING AMATEUR RADIO CLUB INC. VE3SPC AND

NORTH SHORE AMATEUR RADIO CLUB INC. VE3NSR (OSHAWA)

**SATURDAY APRIL 3, 1982**

**8:00 AM to 2:00 PM**

**AJAX RECREATION CENTRE**

**AJAX, ONTARIO**

(MAP ON OTHER SIDE)

**ADMISSION ONLY \$ 1.50**

(12 YEARS & UNDER - FREE)

**VENDORS:** INSIDE ONLY FROM 6:00 am

3' x 8' TABLES \$2.50 ea. PLUS ADMISSION

PRE-REGISTRATION PAYABLE TO S.P.A.R.C. INC. BOX 53,  
PICKERING, ONT. L1V 2R2

TALK-IN ON 52 SIMPLEX, 07/67, 12/72

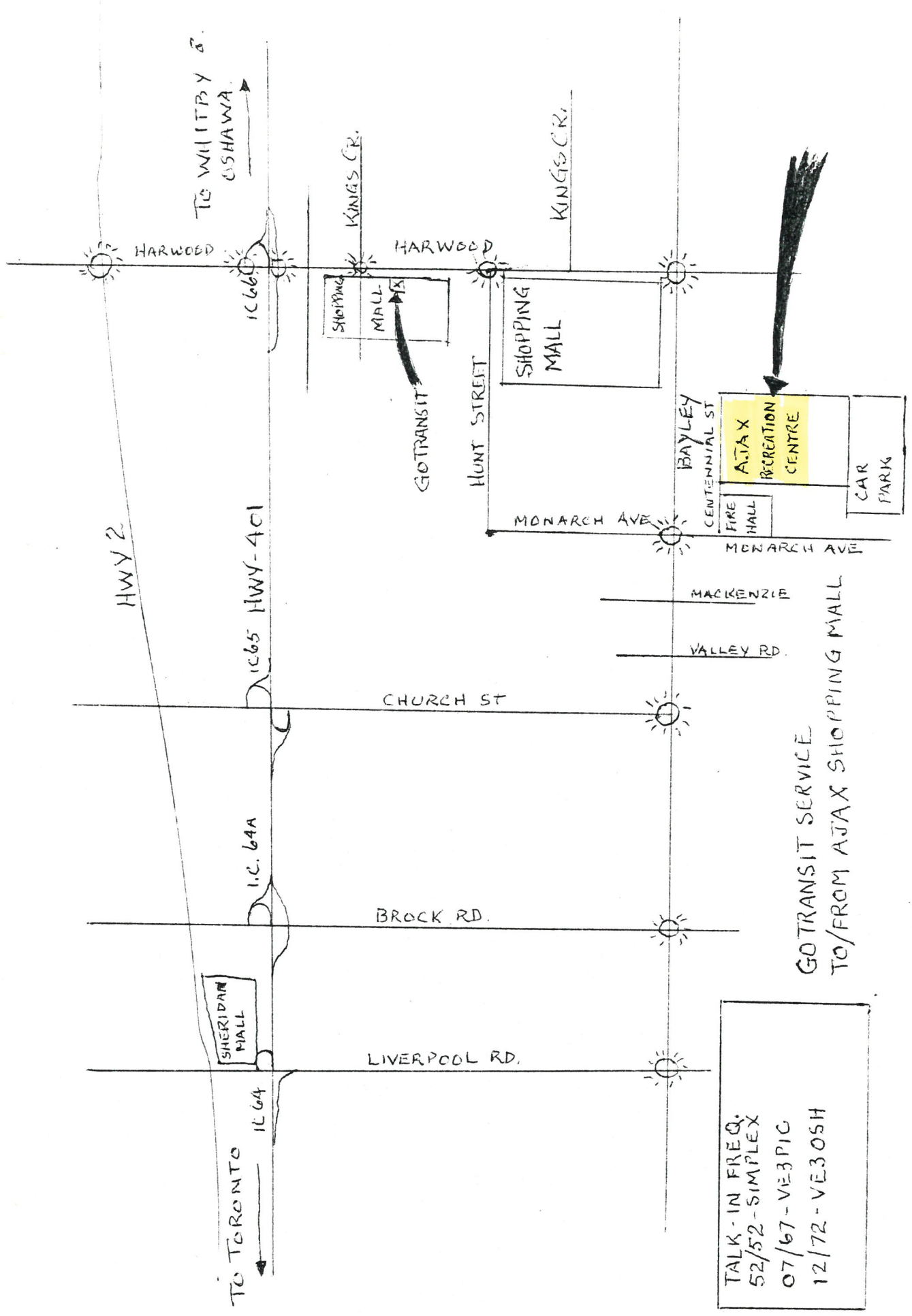
GO TRANSIT SERVICE TO / FROM AJAX SHOPPING MALL

FOR FURTHER INFORMATION CONTACT : PHIL WASHBURN VE3HAA

1-416-683-3368

# DURHAM REGION AMATEUR RADIO MARKET

APRIL 3/82  
5:30 AM ARRIVE



TALK-IN FREQ.  
52/52-SIMPLEX  
07/67-VE3PIC  
12/72-VE3OSH

GOTRANSIT SERVICE  
TO/FROM AJAX SHOPPING MALL