SPECTRAVIDEO

THIS IS THE OFFICIAL NEWSLETTER FOR THE SPECTRAVIDEO USERS GROUP OF TASMANIA

SV·318 / SV·328

News Letter

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MEMBERSHIP FEES
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SPECTRAVIDEO

COMPUTER USERS GROUP OF TASMANIA

COMMENTARY:

It cannot be over emphasised that the viability of the Newsletter is entirely dependant on member response. The aim is to keep the content specific to SPECTRAVIDEO and CP/M. The solution to problems you have encountered may appear, in retrospect, trivial but please write about them anyway. It is more than likely that others will benefit from your experience. Equally important is to air in the Newsletter questions or difficulties you have directly relating to the SPECTRAVIDEO. It is quite possible another User Group member will be able to offer useful advice. In this regard one topic of universal interest is the connection of peripheral devices to the JOY-STICK PORTS. Detailed descriptions of the connection of any peripheral devices to the PORTS are most earnestly solicited. E.G. Light Pen , Temperature Dependant Resistor, e.t.c.

As in the inaugural issue it is intended that the contributions by one person will dominate the Newsletter. Until significant newsletter input is recieved from User Group members this concept of a major contributor is the only way of ensuring worthwhile newsletter content. Anyone wishing to volunteer for the position of main contributor is most welcome.

THE TEAM:

It has been asked by many User Group Members and now will be answered.

"Who is running the SPECTRAVIDEO USERS GROUP OF TAS?"

Mark Tyeson: The electronics expert, He can build it, fix it, and if it does not exist he can design it.

John Van Staveran: He is the software magician, If it wont work he will make it work, If it is impossible to write he will write it.

Greg Hastings: Assistant Editor: Watch out in future issues for some neat programs from this man.

Peter Deckert: Thats Me. Im the editor, and paper worker. I've been programing for 15 years and hope to also be able to

put a few neat programs into the newsletter. (I wrote the last issue so blame me for it).

THE DIFFERENCE BETWEEN VPOKE AND CHR$:

If you have not already noticed there is a difference between the character set that is displayed when you use VPOKE and CHR$. Try this program and you will see what I mean. Much thanks to G. Hastings for bringing this to my notice.

```
10 FOR I=1 TO 255
20 VPOKE I,I
30 NEXT I
40 ?:?:?:?:?:?:? :REM SEPERATE THE TWO OUTPUTS
50 FOR I=13 TO 255 :REM 12 CLEARS THE SCREEN SO WE MISS IT OUT
60 PRINT CHR$(I);
70 NEXT I
```

P.S.   Who is J. SUZUKI ??????????

STRIG ON

Can anyone help? Why does the statments
STRIG ON
STRIG OFF
or
STRIG STOP

give an error. What is the correct syntax.

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COMPUTER USERS GROUP OF TASMANIA

LETTER TO THE EDITOR

        Dear Sir,

            I wish to join the SV 318/328 Users Group and have
enclosed the $15 membership fee.

            I purchased my SV 318 in early August and have self-
taught myself many aspects of the machine. Some of my experiences
with the machine may be of interest to other users and therefore
I am writing to contribute to the newsletter if requested.

            A Victorian based Spectravideo Users Group would be possible
as there are many machines around. This group,which I am interested
in starting, could be totally affiliated with your group. I am
interested in your opinion on this. A User Group is essential as the
litrature supplied is useless and the Victorian distributors know
more about C.B. radios than Computers. (These distributors are supposed
to be dropping all distribution of Spectravideo Equiptment after 1983!!).

            One of the most essential things your group could supply to
users is a Memory-Map similar to that given in the VIC-20 Users'
Guide. I have found this to be a great aid in programming effectively.

            I hope for a lot of correspondance between myself and other
Spectravideo Users.

                                        MARK C DODD.
                                        5 Phyllis Ave.
                                        Boronia VIC. 3155.

        Mr. P.W. Deckert,

            After our telephone conversation this morning I
enclose a cheque for $15 being membership of the Spectravideo
Computer Users Group.

            I hope shortly to start a Victorian group and it will
obviously be useful for the various state groups to co-operate
and exchange information and views as much as possible.

            I look forward to hearing from you and to a long and
fruitful association.

                                        STEVE LANE
                                        South Caulfield
                                        VIC 3162

      I included these two letters I recieved in the newsletter as I
agree that each State needs to conduct group meetings of their
own. I hope the two Members above will get together on the idea
of starting the group for Vic. Other states I want volunteers too.

                                                        ED.

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COMMENTS ON THE DISK DRIVE.

So after a long wait I finally received my disk drive
and controller card. I pluged it all into my expander, double
checked and switched on. It fired up O.K. and signed on with the
CP/M header. Good so I will now FORMAT some disks and make backups
of my MASTER DISK. However this is were my joy ended the disk
drive refused to format over track 30.(There are 39 tracks on the disk)
I tried 10 blank disks but no joy I always ended up with a fatal read
error around track 30-31. So I packed up my drive and sent it back
to the shop. They promptly replaced it with a new Drive and I started
over again. Same thing Fatal read Error. Well to cut a long story
short after 2 disk controllers 2 expanders 2 S-V 328s and 5 disk drives
I decided there must be something else doing it. To confuse matters
more a friend brought his drive and controller over and we had no
trouble at all the disks formated without a hitch. Well after two
weeks I was getting desperate until one night I was again trying
to format the disks and still getting errors. For some reason I
moved my Disk Drive and Hey Presto It worked, no errors all the
disks formatted. So I moved the Drive back and again the disks
gave read errors at track 30. Well the reason I finally found out is
because I am Left Handed(dont laugh I will explain). Because I am Left
Handed I had my Disk Drive on the Left side of my Video Monitor
and That is the side the The monitor has its VHT (Very hot transformer)
that supplies power to the tube. Apparently this was causing interferance
and making the Disk Drive   give Faulty Reading. Why only over track
30? Well maybe because the density of the data stored on the disk is
closer on the inner tracks than on the outer track. Now I have
my drive on the Right Hand side of my Video Monitor and have had
no more problems with FORMATTING.

So why did my friends Disk Drive work when we tried it
on my computer? He was Right Handed Was'nt he.

TIC TAC TOE

       Well I'm stuck with the program of the Month again so I
give you one that although may not be the most exiting program will
at least keep you and your kids happy trying to beat the computer.

```
10 DEFINT A-Z
20 DIM B(9),X(9),Y(9)
30 FOR I=1 TO 9 : READ Y(I),X(I) : NEXT I
40 COLOR 15,4
50 SCREEN 0,0
60 PRINT TAB(10) "TIC TAC TOE
70 PRINT TAB(10) "————————————
80 PRINT:PRINT:PRINT
90 PRINT "
100 PRINT "      7 | 8 | 9
110 PRINT "     ——————————
120 PRINT "
130 PRINT "      4 | 5 | 6
140 PRINT "
150 PRINT "     ——————————
160 PRINT "      1 | 2 | 3
170 PRINT "
180 PRINT : PRINT
190 PRINT "YOU WON";U;"GAMES."
200 PRINT "  I WON";H;"GAMES."
210 PRINT " WE HAD";D;"DRAWS."
220 PRINT : PRINT
230 PRINT "DO YOU WANT 'X' OR 'O'"
240 PRINT "PLAYER 'X' STARTS FIRST"
250 A$=INKEY$
260 IF A$="" GOTO 250
270 IF A$="X" OR A$="x" THEN S1=3 : S2=4 : A$="x" : A1$="o" ELSE S1=4 : S2=3 : A
$="o" : A1$="x"
280 FOR I=1 TO 9 : B(I)=0 : NEXT I
290 COLOR 8,1,1 : SCREEN 2
300 PRINT "     |   |
310 PRINT " ————+———+————
320 PRINT "     |   |
330 PRINT " ————+———+————
340 PRINT "     |   |
350 COLOR 7
360 IF A$<>"X" AND A$<>"x" THEN 450
370 GOSUB 950
380 BEEP : COLOR 3
390 M=VAL(INKEY$)
400 IF M<1 OR M>9 THEN 390
410 IF B(M) THEN BEEP : BEEP : GOTO 370
420 B(M)=S1
430 LOCATE Y(M),X(M) : PRINTA$
440 COLOR 7
450 E=S1+S1+S1 : GOSUB 890
```

```
460 IF E=0 GOTO 530
470 LOCATE 0,164
480 COLOR 12
490 PLAY "T255S3M050903ABABADDD"
500 U=U+1
510 PRINT " YOU WIN"
520 GOTO 1030
530 E=S2+S2 : GOSUB 890
540 IF E=0 GOTO 660
550 IF B(E1)=0 THEN E=E1 : GOTO 570
560 IF B(E2)=0 THEN E=E2 ELSE E=E3
570 B(E)=S2
580 LOCATE Y(E),X(E)
590 PRINT A1$
600 LOCATE 0,164
610 COLOR 13
620 PLAY "T255S9M990105AABBAADD"
630 H=H+1
640 PRINT " I WIN"
650 GOTO 1030
660 E=S1+S1 : GOSUB 890
670 IF E=0 GOTO 740
680 IF B(E1)=0 THEN E=E1 : GOTO 700
690 IF B(E2)=0 THEN E=E2 ELSE E=E3
700 B(E)=S2
710 LOCATE Y(E),X(E)
720 PRINT A1$
730 GOTO 370
740 E=S2 : GOSUB 890
750 IF E=0 GOTO 810
760 IF B(E1)=0 THEN E=E1 ELSE E=E2
770 B(E)=S2
780 LOCATE Y(E),X(E)
790 PRINT A1$
800 GOTO 370
810 REM :: TO MAKE COMPUTER UNBEATABLE ADD LOGIC HERE.
820 GOSUB 950
830 E=RND(-TIME)*9+1
840 IF B(E)>0 GOTO 810
850 B(E)=S2
860 LOCATE Y(E),X(E)
870 PRINT A1$
880 GOTO 370
890 RESTORE 1080
900 FOR I=1 TO 8
910 READ E1,E2,E3
920 IF B(E1)+B(E2)+B(E3)=E THEN RETURN
930 NEXT I
940 E=0 : RETURN
950 FOR I=1 TO 9
960 IF B(I)=0 THEN RETURN
970 NEXT I
980 LOCATE 0,164
990 COLOR 11
1000 PLAY "T10007S11M9919AD03AD
1010 D=D+1
1020 PRINT " A DRAW"
1030 FOR I=1 TO 5000 : NEXT I
1040 GOTO 40
1050 DATA 45,125,115,125,180,125
1060 DATA 45,70,115,70,180,70
1070 DATA 45,10,115,10,180,10
1080 DATA 7,8,9,4,5,6,1,2,3,7,4,1
1090 DATA 8,5,2,9,6,3,7,5,3,9,5,1
```

3D PLOTS ON YOUR SCREEN
Submitted by G HASTINGS, George Town, TAS.

Here is an interesting little program for you to try out in an idle hour (or two... I did say it was interesting...).

If you have an SV-318 then just type in listing 1 as I don't know how to use the tape to save and load screens. (to slow on tape ED.) However if you are rich enough to own a disk drive add the lines in listing 2 to listing 1 and you should be able to save and load screens to and from the disk.

This program is, unfortunately, slow to complete a screen so don't expect instant graphics magic.

To vary the shape that is plotted, change the equation in line 50:

> e.g.   G(X)=SIN(X+3)
>
> G(X)= (1-X)*SIN(X*12)
>
> G(X)=EXP(COS(12*X)

You can also adjust the values of 'ST' and 'VS' in line 170. The value of 'ST' governs the number of horizontal points plotted so for a 'quick and dirty' plot you could increase 'ST' to give fewer points to plot. The value of 'VS' likewise governs the number of lines plotted across the circle.

I would welcome any articles on improvements to the program from members.

G.W. HASTINGS.

Listing 1

```
50   DEF FNG(X)=(X-1)*SIN(X*12)
100  DEFSNG A-Z : REM Speeds it up a bit
160  SCREEN 1
170  H=256 : V=192 : ST=1 : VS=H/10
180  X1=H/2 : X2=X1*X1 : Y1=V/2 : Y2=V/4
190  FOR X=O TO X1 STEP ST
200  X4=X*X : M=-Y
210  A=SQR(X2-X4)
220  FOR I=-A TO A STEP VS
230  R=SQR(X4+I*I)/X1
240  F=FNG(R)
250  Y=I/5+F*Y2
```

```
260 IF Y<=M GOTO 290
270 M=Y : Y=Y1-Y
280 PSET (X1-X,Y) : PSET (X1+x,Y)
290 NEXT I,X
310 BEEP
320 IF INKEY$="" GOTO 320
330 END
```

Listing 2

```
110 INPUT "Do you want to save this Screen :";SF$
120 IF LEFT$(SF$,1)="y" THEN SF=-1 : GOSUB 1000    ELSE SF=Ø
140 IF SF=0 THEN INPUT "Do you want to load a screen :";LF$
150 IF LEFT$(LF$,1)="y" GOTO 500

300 IF SF THEN SAVE "1:"+FN$+",S"

500 GOSUB 1000
510 LOAD "1:"+FN$
520 GOTO 310

1000 INPUT "FILENAME :";FN$
1010 RETURN
```
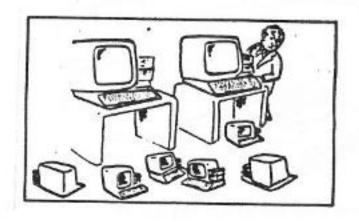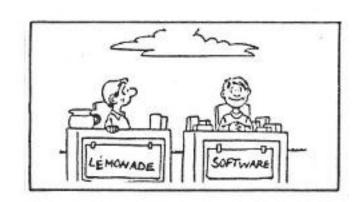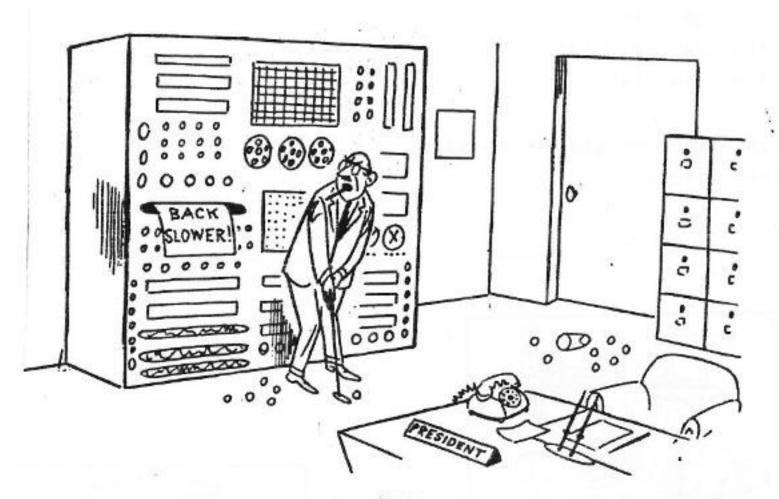
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ESC Y FOLLOWED BY X & Y ADDRESS

      While I was installing all my old CP/M Software
to my new SPECTRAVIDEO Terminal I came across a problem.
As you no doubt know if you have a disk drive the SPECTRAVIDEO
emulates a VT-52 terminal, and in the hand book you recieve with
the disk controller it gives you the Escape Sequences for the
VT-52 terminal. It said to position the cursor anywere on the
screen you use the following   ESC Y x y. This means your
installed software (eg. Supercalc,DbaseII,WordStar e.t.c.) must
send 1BH 59H ?? ?? were ?? is the line and column numbers. But it
will not work you <u>must</u> add an offset of 20H to these numbers.
E.G. if you want the Cursor at line 7 column 10 you would send
1B 59 27 2A (Note all numbers are in HEX.)

"IF I want your advice I'll ask for it!"

BOOK REVIEW (BASIC AND THE PERSONAL COMPUTER)
by Thomas A. Dwyer & Margot Critchfield

This book is to my mind the BEST book available for anyone wanting
to learn the BASIC language. It is extremely well written with plenty
of examples throughout. The book is divided into 10 Chapters.
1.THE WORLD OF PERSONAL COMPUTING - an introduction to computers
containing some handy introductory programs.
2.THE EIGHT HOUR WONDER - this section covers the following commands,
PRINT,LET,GOTO,INPUT,FOR..NEXT,IF..THEN,PRINT TAB,READ,DATA,RESTORE,
RND,INT,ON..GOTO,GOSUB,ON..GOSUB,RETURN,DEFFN,REM,ABS,SQR,STOP & END.
It describes the use of variables, arithmetic operations, conditional
branches, loops, nested loops and counters within a program. Programs
include addition, multiplication practice, craps simulation, quizzes,
number guessing, interest calculation, Russian roulette & others.
3.COMPUTER GRAPHICS & SUBSCRIPTED VARIABLES - tells how to use
the sine and cosine functions for creating graphs, a method for
automatic scaling of graphs to fit on your screen or printer, explains
subscripted variables,(two dimensional arrays, double subscripts)
and includes a handy program to convert decimals to fractions.
4.WORD PROCESSING - this section covers string arrays and string
variables, string relations, operators and functions. The string
functions covered are: ASC,CHR$,LEFT$,MID$,RIGHT$,STR$,LEN & VAL.
Programs include: permutation demo, computer poems, letter writer
and a word guessing game.
5.SPORTS & RECREATION; SORTING ALGORITHMS - which covers MAT state-
ments, sorting routines including the BUBBLE sort, STRING BUBBLE sort,
SHELL sort and QUICKSORT. Programs include: football scouting
(American football), record sorting and the above-mentioned sorts.
6.COMPUTER GAMES - needs no introduction, does it? Games include
MORRA (odds & evens), SPIES ON A GRID,POKER,CRAZY EIGHTS, HORSEPLAY
ARROW TRAJECTORY & PLANET-X LANDER.
7.COMPUTER ART - this section is meant for the aspiring (perspiring?)
computer artist, and includes: ASCII CHARACTER PATTERNS, RETEAT-A-
DESIGN,RANDOMIZED PATTERNS,LISSAJOUS TREE, DOUBLE GRAPHS,SUPER PLOT
AND ULTRA PLOT.
8.DATA BASES FOR FUN & PROFIT - includes use of sequential and random
access files and business applications. Programs include: DIET
programs for calculating CALORIES, CARBO-HYDRATES, PROTEINS etc.
contained in various foods, and a business CHARGE ACCOUNT program.

9.COMPUTER SIMULATIONS - covers data structures for queuing simulatio
modular arithmetic, a different random number generator, simulation
games such as SPACE COLONY.

10.EXTENDING MICROCOMPUTERS - this last section covers additions to
your computer (via S100 bus) including: colour graphics, analog I/O
(using Joysticks),X-Y plotter, light pens, computer music and
speech synthesis, as well as Binary, Hexadecimal and Octal modes.

As can be seen, this book covers a wide section of applications,
and includes a SELF-TEST and PROJECT IDEAS at the end of each chapter.
If you carry out these SELF-TESTS and PROJECT IDEAS rigidly you
should be a very proficient programmer in BASIC once you have
finished the entire book.

SCALING FUNCTION DEMO
by Tim J Colverd, VIC.

      I have enclosed a small program that demonstrates the scaling
function as the reference manuals only briefly mention this useful
function.
      This program demonstrates the scaling function by drawing a
crude space shuttle and scaling it down until it disappears.

```
10 SCREEN 1
20 A$="BL8R16D1L16U1BR6U4R2U4D4R2D4"
30 FOR S=40 to 1 STEP -1
40 B$="S"+STR$(S)
50 DRAW "BM128,136;C15;XB$;XA$;"
60 CLS
70 NEXT S
80 GOTO 80
90 END
```

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SOFTWARE AVAILABLE ON CASSETTE AND DISK FROM THE LIBRARY:

CASSETTE SOFTWARE:	DESCRIPTION	COST
PAC:MAN	NEED WE SAY MORE	$10
ELIZA	ARTIFICIAL INTELLIGENCE	$ 7
SPRITE EDITOR	CREATE AND EDIT SPRITES BEFORE USE IN PROGRAMS	$10
W.W. III	WORLD WAR THREE RUSSIA AGAINST AMERICA, YOU AGAINST THE COMPUTER	$10

COMMING SOON ON CASSETTE:

CASTLE	ADVENTURE PROGRAM	$10
VALLEY	ADVENTURE PROGRAM WITH GRAPHICS	$10
PLANET PATROL	SHOOT THEM DOWN IN REAL TIME.	$10
DOG FIGHT	TWO PLAYER GAME WW I STYLE DOG FIGHTS	$10

DISK SOFTWARE AVAILABLE NOW:

MFT.COM	ALLOWS MASS FILE TRANSFER DISKS ON A SINGLE DISK SYSTEM	$1.50 (PD)
XDIR.COM	SORTED DIRECTORY WITH THE SIZE OF FILES DISPLAYED AND SPACE REMAINING ON DISK DISPLAYED	$1.50 (PD)
ZCPR.ASM	A BETTER CCP FOR YOUR CP/M WRITE UP NEXT ISSUE.	$1.50 (PD)
ADVENTURE.COM	THE ORIGINAL ADVENTURE OVER 128K LONG.	$1.50 (PD)
UNERA.COM	THIS PROGRAM WILL RECOVER PROGRAMS THAT HAVE BEEN ACCIDENTLY ERRASED FROM A DISK	$10.00
DISK.COM	ALLOWS YOU TO ALTER FILES BY DIRECTLY ACCESSING THE DIRECTORY TRACKS OF A DISK	$10.00

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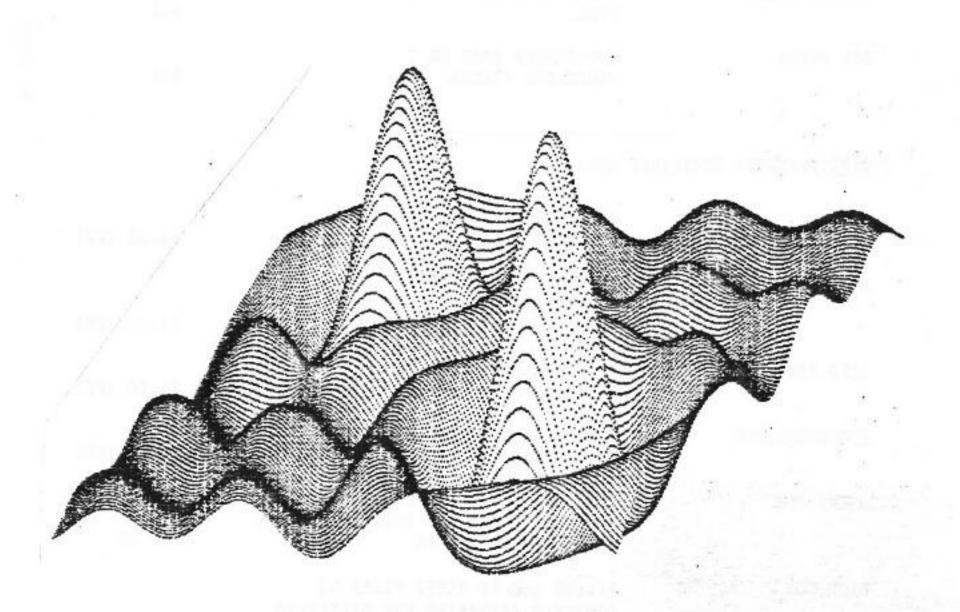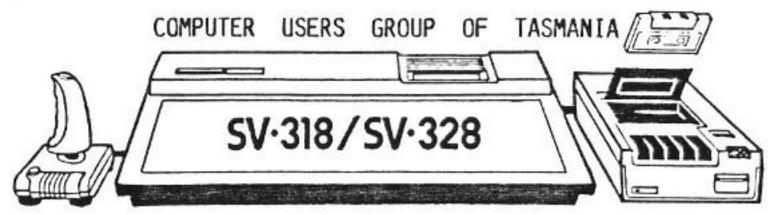COMPUTER USERS GROUP OF TASMANIA

NOTE:

All software marked (PD) is public domain and this means No royalties are charged only a small amount to cover copying costs.
ALSO For all Cassette Software remember to add $3.00 for the cost of the cassette if none is sent with order. The same applies to Disks, Add $9.00 to program cost if no disk is sent with order.

Any additional programs placed on same cassette or disk will incure only the cost listed, that is the price on the previous page.

We hope that members will soon swell our Library with software of their own. Please find an application form to have your software included in the Library on the following page.

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SV·318/SV·328

GUIDING NOTES FOR SUBMITTING PROGRAMS
TO THE SOFTWARE LIBRARY

POST TAPES TO S-V U.G.T.. . THESE WILL BE FORWARDED TO REFEREES FOR ASSESSMENT. TAPES WILL BE RETURNED TO CONTRIBUTORS FOR CORRECTION OF 'BUGS' OR ERRORS AND INCLUSION OF ANY NEEDED INSTRUCTIONS.

NAME OF PERSON SUBMITTING TAPE _____

TAPE DATA:

  (A) TITLE _____

  (B) BRIEF DESCRIPTION OF _____
  PROGRAM _____
  _____
  _____

  (C) BASIC OR MACHINE CODE
  OR CP/M _____

  (D) MEMORY REQUIRED _____
  WILL IT RUN ON 318

  (E) SOURCE OF LISTING _____
  (eg BYTE, SELF) _____
  Has Listing Been Substantially Modified? YES/NO

  (F) PAYMENT BEING SOUGHT _____
  (NOT INCLUDING CASSETTE
  SUPPLY AND DUPLICATING
  COST)

SIGNATURE: _____

DATE: _____