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SORCERERS USERS' GROUP

(Toronto)

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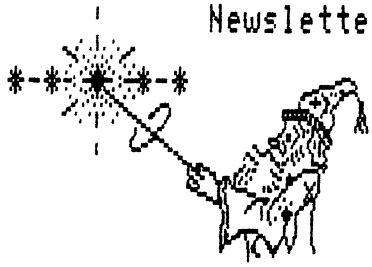
SORCERER

Newsletter



The Toronto Sorcerer Users' Group was founded in the Spring of 1979, a handful of willing and eager to learn members.

This newsletter shall at all times keep in mind the goal at its conception. To spread the seeds of knowledge.

Articles printed in this newsletter shall be free for all Sorcerer Users' groups to reprint or comment on as they see fit.

Articles submitted for this newsletter must be in no later than the beginning of the 1st of every month.

February 1981 ISSUE

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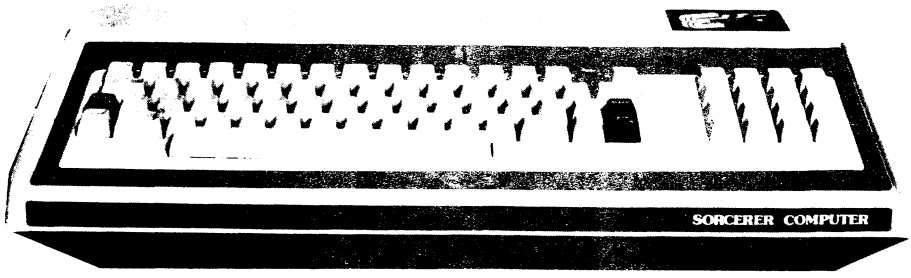

Now for a preview of some of the topics we shall cover under the Heading of CP/M. We will endeavour to keep you informed on some of the newer software that is available to you.

Keep posted on the following:

1. Spellbinder I & Spellbinder II (with 50K vocabulary)
2. EXASM (Exidy Z80 Assembler Disk ver)
3. EXBAS (Exidy Disk Extended Basic)
4. Wordstar (word processor)
5. Disk oriented Smart Terminal
6. MBasic & BASCOM Compiler
7. SID (Z80 DDT for CP/M)
8. CP/M users group library programs
9. Micropolis Basic
10. Exidy version CP/M
11. Exidy 19K Extended Basic
12. Vedit
13. Disilog
14. 'C' Language

Review: TRS colour computer.

At the last computer show held here in Toronto I happened to take a sideways glance at it. Don't worry -- you really didn't miss much. Resolution:- (let's just say) maybe Atari video games package for your colour T.V. would be a better idea, a little less expensive with more frills. I don't think that a person could sit down for any length of time and look at a colour screen without getting eye strain. Maybe I'm wrong about it. I certainly would.

LATEST RUMOURS

Exidy has rumoured that the SORCERER III is on its way. A full fledged disk system. Alas a 10K$ proposition though. Also via the grape vine reports that Hayden Publishing will possibly be sole outlet for ALL Exidy Software!!!??#$%&*.

via: Ralph La Flamme
Sect. Sorcerers Apprentice

EXCERPTS FROM LIFE

Does anyone want to know a neat way to blow up the Sorcerer? Does anyone have $1500 to spare? Well, listen up. This is a tale of one poor jerk that was hit by everything Murphy had to throw at him.

It all started sometime in the late Summer of 1980 when I finally got my whole system up and running together. The hardware consisted of one Sorcerer with Basic Rom Pac, an S-100 expansion unit, a dual Micropolis floppy disk drive, a cheap tape recorder, and a $100 B/W TV converted to be used as a video. The TV was the problem. See...it wasn't isolated. There was a small L.E.D. that was used to test for the proper polarity before I hooked it up to the computer.

When I tested the TV for proper polarity and hooked it all up, I noticed the display on the screen started to go haywire. I later determined that this was due to the effect of the S-100 box on the un-isolated TV, but at the time I thought it may have been the wrong polarity. So I switched polarity by reversing the direction of the TV power plug. I was wrong.

continued Pg 4

TIDBYTES

1 For those of you with Sorcerer Software manuals; there is an error on page 12 under 'cursor positioning' ITEM # 6. Change 1BE to read 18E.

2 Have you ever come up to a Sorcerer and wondered if a program is loaded into it? There is an easy way to find out. In the monitor mode type 'GO E6DE'. See what happens. This won't affect the program in any way.

3 Here is an easy way to clear the memory from top to bottom. Enter '0' @ 0000H, then type in the Monitor command 'MO yyyy xxxx 1 (cr)' where xxxx is the highest ram address UP TO WHICH you wish to clear. The 'yyyy' is the start address. Be careful, however, not to overwrite the monitor stack, which resides just below the top of ram.

4 For those of you who are newcomers to this computer. Basic warm starts are done by depressing the TWO RESET KEYS while you press 'Control C','Escape' or 'Run Stop'. Be sure, however to RELEASE the RESET keys FIRST-FIRST-FIRST-FIRST-FIRST. Just thought I would stress that point a little.

by: Dereck Gomes

5 Did anyone ever want reverse some or all of the graphic characters say at FC00 to FDFF. Here is a very small machine language program that can be located anywhere in memory and a USR(X) call to it will do the trick.

```
FD E5 F5 C5 D5 E5 11 00 FC 21 00 FC 1A 2F 12 13
23 3E FE BC 20 F6 E1 D1 C1 F1 FD E1 C9
```

This is called Bit Manipulation. See how fast this is.!

6 The next is being able to clear your video screen or just a part of it without damaging your graphic character set @ FC00.

```
          FROM                TO              TO
E5 F5 21 80 F0 36 20 23 3E F5 BC 20 F8 3E 80 BD
20 F3 F1 E1 C9
```

7 'LOG A BASIC PROGRAM' Should anyone desire to have a BASIC program written in Standard ROM PAC Basic come up running, then follow this procedure:

ENTER Line # 0` REM this must exist

Find the end address of your basic program (i.e.: at least past it). Now enter the Monitor and SE F=40 (CR) ,SE X=C858 (CR), Then SA name 1D5 xxxx where (xxxx) is the end of your basic program. In saving the program this way all you have to do is LOG when loading.

8 CLEAR A,B (A) Represents the amount of string space
(B) Represents TOP OF MEMORY POINTER

i.e.: CLEAR 100,6000 Sets string space to 100 and sets top of memory to 6000.

by: H.A. Lautenbach

CP/M SECTION

Exidy 19K EXTENDED BASIC REVIEW

Let's take a quick look at the NEW Extended BASIC package that is begining to look good. This is primarily the Microsoft version of disk extended basic 5.0, without any disk functions. We have not had time to explore all of the commands yet, but will cover them in following issues. Here is a summary of some of the commands that will be new to you.

CALL	DEFINT	FIX	HEX$	CDBL
DEFSNG	EQV	CSNG	DEFSTR	ERASE
IMP	CINT	CURSOR	DELETE	ERL
INKEY$	LINE	AUTO	ERR	BAUD
EDIT	ERROR	LLIST	DEFDBL	ELSE
LPOS	NULL	TROFF	TRON	LPRINT
SWAP	WEND	OCT$	RESUME	WHILE
USING	WIDTH	SPACE$	XOR	RANDOMIZE
VARPTR	RENUM	SERIAL	MOD	OPTION

These are the commands that are in addition to what you are accustomed to in the ROM PAC BASIC. There are just a few things I would like to mention. Your old programs are not 100% compatible with the new basic and further that conversion programs are necessary so that you may even attempt to run them. The main difference is in the manner which the program gets stored - in ASCII not tokens as was the previous case. There are also routines so that these programs can be saved on disk, later run using MBASIC or EXBAS.

This is certainly worth investing in because of it's compatibility with disk basic. Caution though some of the commands are not supported in MBASIC nor the Compiler BASCOM.

by: H.A. Lautenbach

Well it seems that the Sorcerer Clubs are getting bigger and bigger every year. Hopefully in our neck of the woods too. Maybe some of the local computer "merchants" will take the hint and start carrying it again. It seems that in the past there has not been too much response from Exidy in the way of the following.

(a) Faster delivery of equipment
(b) Support at the local Computer Show
(everybody and their grandmother
comes to it - Ohio Scientific -Texas Instuments
- Apple - Radio Shack

By the way Radio Shack did such a good job on Toronto that I'd hate to think that there are that many unfortunate people all around us. Did you know that their CP/M operating system is not just a standard system? It seems that even the information on disks cannot be transferred to let's say an 8" regular CP/M disk. If they keep going at their present rate it may be (us) who are running the non-standard format.

HEY EXIDY

Give us some more support.

Sorcerer Technical Tips

In the previous issue Cassette problems were discussed and hardware modifications. This time we shall finalize this with commenting on the recorders themselves. I have just recently treated a Sorcerer II for an ailment that is not uncommon to any of us. The procedure involved minor surgery and I might add, did indeed improve it's hearing ability. There were some further things that also had to be done. When previous tapes read produced errors, it became very evident that also the tape head alignment was slightly off.

Any persons contemplating getting any type of new recorder please keep in mind that it too could have alignment differences. The best solution is to buy one that has an adjustable head. This will insure that you should be able to read almost anybody's tape. With a little adjustment peak the audio output to its maximum. Don't forget to re-align it again back to what the previous setting was. This can be easily accomplished by inserting one of your old tapes that were written by you, and again peaking the audio to maximum. The adjustment screw is usually beside the tape head with a spring under it. Caution do not use a magnetic tip screwdriver that close to the magnetic read head.

EXCERPTS FROM LIFE Continued from Pg.1

It was now time to look around for a service centre for my damaged equipment. I took my Sorcerer and expansion unit to the Home Computer Centre on Yonge Street. About a week later their service technician told me that the Sorcerer board seemed to be damaged badly enough to warrant my considering the purchase of a brand new board. As he put it, at $35/hr.(his fee), it would probably cost more to go through it chip by chip and that maybe the Canadian distributors of Exidy in Calgary might be better equipped to do so than he was; so I got their number from The Computer Place on Queen Street and phoned them long distance. They told me that they had all the right equipment for the job and, sure, send them the computer. I did, and spent the next 3 months waiting to get it back.

What happened was that they did not even look at it but told me that it would be better to get a new board. So I phoned Exidy in California and they told me they could ship a new Sorcerer II board, minus the pluggable chips, for US$500. By this time I wanted the Sorcerer II board pretty badly so I told Calgary to go ahead and replace the board with the new Sorcerer II and to send me back the old one(they wouldn't give me a dime for it). I then spent the next 3 months on their backs (long distance) just trying to get them to hurry up, as I was suffering from acute withdrawal symptoms.

Every time I called them, it seemed that the bill was slowly mounting. I learned that the Sorcerer II board needed a power supply board and was told that it would cost an extra $150 or thereabouts. The final total turned out to be about $950. I asked them to put it together and ship it to me pronto (I was afraid that if they had it any longer I would have had to sell my car to pay for it).

Then I turned my attention to the Micropolis disk controller card which I sent to the Computer Place on Queen Street. I was impressed with their speed in fixing it. I was also impressed with their price, but in a different way.

They needed a ROM chip and it turned out that Micropolis couldn't ship it in less than a month, so I borrowed a master from the Computer Place and got it copied through Active Components in 2 days. The final bill for fixing this board was $343.65. This was mostly labour and the guy said it would have been little over $100 if I had just had them depopulate and repopulate the entire board. With a bit of crying I got them to knock off two hours of labour, so that I only paid $273.65. Still a lot, I thought (the parts only came to $60).

Now the Expansion box. This also needed a ROM chip and here I made the mistake of getting Spectra in Calgary to order it from Exidy. It took another two and a half weeks and a few more phone calls to finally get it. The total bill for the Expansion Box repair came to $277.70.

After the loud 'POP' was over; the smoke signal had dissipated; the flying I.C.s had landed; and the mad dash to unplug was completed, I sat there for about 5 minutes waiting for my heart and blood pressure to get their act together. Then came the time for the assessment of damage. It didn't look good. I had blown my Sorcerer board, my S-100 board, and my disk controller board. The TV was fine!! I spent $60 and got it isolated. (For those of you "I TOLD YOU SO"s who thought I should have had a proper video monitor in the first place, let me say that I don't like the display on those monitors.All the capital letters are square and look alike; especially the Hitachi job).

1980 was definately a bad year for me.

What did I learn from all this? (1) Never order a ROM chip from the manufacturer if you can help it. It's much cheaper and faster to have a PROM programmed up. (2) If the extent of damage to a board is uncertain, have the serviceman replace all the chips. Again, it's cheaper and faster. (3) Try not to deal with an out-of-town repair shop. You just can't visit them as you can a local company and the phone calls would kill you.

An interesting aside to this was that my Basic ROM PAC did not work with the new Sorcerer II board. I phoned Exidy and they said there were no changes in design between old and new ROM PACs and they suggested I contact my Canadian Distributor. Well I did and they exchanged it free of charge. Exidy, by the way, charges $50/hr. for service; an amount that I suspect is more punitive than anything else, if you ask me. They mean that you should not call them for service.

All in all a very expensive lesson. If I knew then what I know now I think that I could have cut the total bill by a full third. If Spectra Electronic Services of Calgary, our sole Canadian Distributors of Exidy computer products, wishes to do business with Toronto then they will have to set up a dealership here. Calgary is too far away to be worth the while to deal with and they drag their feet too much. What was worse was that I spent over $150 in long distance phone calls before I found out that they had a toll free number.

I am thinking of selling my old board. Anyone interested in a slightly used version of the Sorcerer I board? Proms will be provided in any one of four possible configurations: Burned in; Burnt out; Burnt up; or Burnt down! You can't get this deal in any store, so order now. The sucker...er..prospective buyer, can contact me through the good offices of the Sorcerer Users Group of Toronto.

As librarian, it is my duty to keep records; and I think I hold the dubious distinction of being the first sop to blow his entire system (with the exception of the $30 tape recorder). If anyone has had any similar problems with their system, let me know. Us victims of Murphy's Law have to stick together.

Will I do it again??? Stay tuned, folks!

by: Dereck Gomes

PIRANHA

If any of you Sorcerer friends have played Martian Invaders, then this PIRANHA game is a must for you! The following is a brief summary of the game listed on the following pages in Hex and Mnemonic form.

The screen formats to a large Rectangle with you, the swimmer, right in the center, and the PHASE level and SCORE at the base of the screen. Then from the bottom piranhas start to move vertically up to the top of the screen, some slowly, but others faster --- then one is right in line with you! If the piranha gets you, you're finished! But by using the numeric arrow keys you can avoid being devoured! Now with special attention to your movements you are able to avoid the piranhas coming up from the bottom of the screen. The intention of the game is to score as high as possible without being eaten. This is accomplished by moving from one side of the screen to the other side, as many times as possible, without running into a hungry piranha along the way.

When you accomplish this in Phase 0 you score 50 points for each pass. As the Phases increment by 1, this score rate for crossing the screen from border to border will increment accordingly. At Phase 2 your scoring is 100 per pass but the piranhas begin to increase in numbers from the bottom of the screen with an additional problem. Instead of just going up the screen some begin to move sideways toward you! It now becomes more and more difficult to find a free passage across the screen. At Phase 4 the problem becomes a little bit more hairy! -- because the piranhas have now decided to appear from the top of the screen moving downwards and occasionally begin to move sideways towards you and start hemming you in. Occasionally two piranhas will collide and fight it out. This obliterates them both from the screen. At Phase 5 scoring increases to 180 pts. per pass, but it becomes more and more difficult to cross from one side to the other. You manage to survive to reach Phase 6 and there are approximately 20 piranhas on the screen with very few openings available. At Phase 7 they are all moving towards you with great vigor!! More collisions appear between hungry piranhas and scoring is up to 250 pts. per pass.

With less and less chances of crossing the screen a break occurs. There are now only 6 piranhas on the screen. The score climbs to 28,000 and you are a bag of nerves! The screen soon fills up with more piranhas - it's just uncanny and impossible to watch all the piranhas at once to see in which direction they are all moving.

Phase 8 has now been attained. Ten minutes has gone by since you started. Just then a piranha came from the side right adjacent to your location. You were only inches from being eaten!!! Phase 9 finally has been reached. The score is now 42,000 Ooooooohhhhhh!!!!!!!!..... a piranha got me with a score of 42,044 High score to date has been achieved by Tony Lautenbach, the co-author of this newsletter, with a score of 94,000.

by: Tony Bagshaw

```
*********************************
*            PIRANHA            *
* Program originated for SOL/VDM *
*  from CP/M user library # 28   *
*    Game from INTERFACE AGE     *
* Modified and assembled to run  *
* on the Sorcerer computer @ 100 *
* Hex. Program can be modified   *
* for different graphics if one  *
* so desires.                    *
*                                *
*  Modified by H.A.Lautenbach    *
*        January/1981            *
*********************************

0100                    ORG     100H
0100 3E00       RESTART MVI     A,0
0102 D3C8               OUT     0C8H
0104 310008             LXI     SP,JUMPS
0107 CD3706             CALL    SETUP

010A 217B08     MAINLP  LXI     H,VTABL
010D 23                 INX     H
010E 7E                 MOV     A,M
010F FE4F               CPI     DEAD
0111 CA2001             JZ      MP1
0114 E5                 PUSH    H
0115 CD9801             CALL    ADDSCR
0118 3A0807             LDA     SCRFLG
011B B7                 ORA     A
011C F4CA03             CP      VMOVE
011F E1                 POP     H
0120 CD1D03     MP1     CALL    USER
0123 CD2802             CALL    BIGCTR
0126 CD3802             CALL    NEWFISH
0129 217B08             LXI     H,VTABL
012C 0620               MVI     B,MAXFISH+1
012E C5         FISHES  PUSH    B
012F E5                 PUSH    H
0130 CDA104             CALL    FISHY
0133 E1                 POP     H
0134 CDBC06             CALL    BUMP8
0137 C1                 POP     B
0138 05                 DCR     B
0139 C22E01             JNZ     FISHES
013C C30A01             JMP     MAINLP

013F 21C6F7     SETPHA  LXI     H,ETV-LENL+6
0142 4F                 MOV     C,A
0143 11FD08             LXI     D,PHAMSG
0146 060A               MVI     B,0AH
0148 1A         MOVPHA  LDAX    D
0149 F600               ORI     BIAS
014B 77                 MOV     M,A
014C 13                 INX     D
014D 23                 INX     H
014E 05                 DCR     B
014F C24801             JNZ     MOVPHA
0152 79                 MOV     A,C
0153 C630               ADI     ZERO
0155 32D0F7             STA     ETV-LENL+16
0158 D630               SUI     ZERO
015A 07                 RLC
015B 07                 RLC
015C 07                 RLC
015D 1600               MVI     D,0
015F 5F                 MOV     E,A
0160 2A1307             LHLD    CTLPTR
0163 19                 DAD     D
0164 110B07             LXI     D,LNEWF
0167 0608               MVI     B,8
0169 7E         TRPHA   MOV     A,M
016A 12                 STAX    D
016B 23                 INX     H
016C 13                 INX     D
016D 05                 DCR     B

016E C26901             JNZ     TRPHA
0171 3E00               MVI     A,0
0173 32E606             STA     BIGTWO
0176 C9                 RET

0177 3A0A07     BMTPHA  LDA     PHASE
017A FE09               CPI     9
017C C8                 RZ
017D 3C                 INR     A
017E 320A07             STA     PHASE
0181 CD3F01             CALL    SETPHA
0184 C9                 RET

0185 E1         STOP    POP     H
0186 CD6A03     GETPHA  CALL    INPUT
0189 FE30               CPI     '0'
018B D8                 RC
018C FE39               CPI     '9'
018E D0                 RNC
018F D630               SUI     '0'
0191 320A07             STA     PHASE
0194 CD3F01             CALL    SETPHA
0197 C9                 RET

0198 3A0A07     ADDSCR  LDA     PHASE
019B 3C                 INR     A
019C 47                 MOV     B,A
019D 21F4F7             LXI     H,STV-12
01A0 CDDD01     MORSCR  CALL    SCORIT
01A3 05                 DCR     B
01A4 C2A001             JNZ     MORSCR
01A7 217F08             LXI     H,VPOS
01AA 56                 MOV     D,M
01AB 23                 INX     H
01AC 5E                 MOV     E,M
01AD CDFB04             CALL    CONVERT
01B0 3A0907             LDA     GOODCAL
01B3 BA                 CMP     D
01B4 C2D401             JNZ     CHKBMP
01B7 FE01               CPI     ONE
01B9 C2C101             JNZ     LEFTCOL
01BC 3E3E               MVI     A,WIDTH-2
01BE C3C301             JMP     SETCOL
01C1 3E01       LEFTCOL MVI     A,ONE
01C3 320907     SETCOL  STA     GOODCAL
01C6 3A1207             LDA     LBONUS
01C9 47                 MOV     B,A
01CA 21F4F7     GIVBON  LXI     H,STV-12
01CD CDEC01             CALL    ASCBMP
01D0 05                 DCR     B
01D1 C2CA01             JNZ     GIVBON
01D4 3AE808     CHKBMP  LDA     BIGTWO
01D7 FE14               CPI     14H
01D9 C0                 RNZ
01DA C37701             JMP     BMTPHA

01DD 3A0302     SCORIT  LDA     SCRCTR
01E0 3C                 INR     A
01E1 320302             STA     SCRCTR
01E4 FE2D               CPI     2DH
01E6 C0                 RNZ
01E7 3E00               MVI     A,0
01E9 320302             STA     SCRCTR
01EC 7E         ASCBMP  MOV     A,M
01ED FE20               CPI     BLANK
01EF C2F501             JNZ     GOTDIG
01F2 3631               MVI     M,ZERO+1
01F4 C9                 RET
01F5 FE39       GOTDIG  CPI     ZERO+9
01F7 C20002             JNZ     NOT9
01FA 3630               MVI     M,ZERO
01FC 2B                 DCX     H
01FD C3EC01             JMP     ASCBMP
0200 3C         NOT9    INR     A
0201 77                 MOV     M,A

0202 C9                 RET

0203 03         SCRCTR  INX     B
0204 7E         ASCDEC  MOV     A,M
0205 FE20               CPI     BLANK
0207 CA2202             JZ      CNTDEC
020A FE30               CPI     ZERO
020C C21502             JNZ     NOTZERO
020F 3639               MVI     M,ZERO+9
0211 2B                 DCX     H
0212 C30402             JMP     ASCDEC
0215 3D         NOTZERO DCR     A
0216 77                 MOV     M,A
0217 FE30               CPI     ZERO
0219 C0                 RNZ
021A 2B                 DCX     H
021B 3E20               MVI     A,BLANK
021D BE                 CMP     M
021E C0                 RNZ
021F 23                 INX     H
0220 77                 MOV     M,A
0221 C9                 RET

0222 3EFF       CNTDEC  MVI     A,0FFH
0224 320807             STA     SCRFLG
0227 C9                 RET

0228 21E506     BIGCTR  LXI     H,BIGONE
022B 34                 INR     M
022C C0                 RNZ
022D 23                 INX     H
022E 34                 INR     M
022F C0                 RNZ
0230 23                 INX     H
0231 34                 INR     M
0232 C0                 RNZ
0233 23                 INX     H
0234 34                 INR     M
0235 C9                 RET
0236 3A0B07     NEWFISH LDA     LNEWF
0239 CDE202             CALL    RANDOM
023C FE01               CPI     ONE
023E C0                 RNZ
023F 3E04               MVI     A,FRATE
0241 CDE202             CALL    RANDOM
0244 FE00               CPI     0
0246 C0                 RNZ
0247 CD0008             CALL    ALIVE
024A 7C                 MOV     A,H
024B B7                 ORA     A
024C C25202             JNZ     GOTFISH
024F 7D                 MOV     A,L
0250 B7                 ORA     A
0251 C8                 RZ
0252 3601       GOTFISH MVI     M,ONE
0254 23                 INX     H
0255 3E84               MVI     A,84H
0257 CDE202             CALL    RANDOM
025A 47                 MOV     B,A
025B 3A1007             LDA     LTRACK
025E B8                 CMP     B
025F D26702             JNC     DOTRACK
0262 3641               MVI     M,NOTRK
0264 C36902             JMP     NOTRACK
0267 3648       DOTRACK MVI     M,FTRK
0269 23         NOTRACK INX     H
026A 3A0E07             LDA     LSRNG
026D CDE202             CALL    RANDOM
0270 47                 MOV     B,A
0271 3A0D07             LDA     LMINS
0274 80                 ADD     B
0275 77                 MOV     M,A
0276 2B                 DCX     H
0277 2B                 DCX     H
0278 7E                 MOV     A,M

0279 CDBF06             CALL    BUMP3
027C E5                 PUSH    H
027D 3A0C07             LDA     LSIDE
0280 CDE202             CALL    RANDOM
0283 FE03               CPI     3
0285 CAB902             JZ      BRNLFT
0288 FE02               CPI     2
028A CAAC02             JZ      BRNRHT
028D FE01               CPI     ONE
028F CA9F02             JZ      BRNTOP
0292 06C0               MVI     B,SUBL
0294 3E3E               MVI     A,WIDTH-2
0296 2140F7             LXI     H,ETV-3*LENL
0299 110100             LXI     D,1
029C C3C302             JMP     FBORN
029F 0640       BRNTOP  MVI     B,LENL
02A1 3E3E               MVI     A,WIDTH-2
02A3 21C0F0             LXI     H,DTV+LENL
02A6 110100             LXI     D,1
02A9 C3C302             JMP     FBORN
02AC 06FF       BRNRHT  MVI     B,0FFH
02AE 3E1B               MVI     A,NLINES-3
02B0 21BEF0             LXI     H,DTV+WIDTH-2
02B3 114000             LXI     D,LENL
02B6 C3C302             JMP     FBORN
02B9 0601       BRNLFT  MVI     B,ONE
02BB 3E1B               MVI     A,NLINES-3
02BD 2181F0             LXI     H,DTV+1
02C0 114000             LXI     D,LENL
02C3 CDE202     FBORN   CALL    RANDOM
02C6 3C                 INR     A
02C7 19         MOVEIT  DAD     D
02C8 3D                 DCR     A
02C9 C2C702             JNZ     MOVEIT
02CC EB                 XCHG
02CD E1                 POP     H
02CE 1A                 LDAX    D
02CF FE20               CPI     BLANK
02D1 CAD902             JZ      SETFISH
02D4 2B                 DCX     H
02D5 2B                 DCX     H
02D6 364F               MVI     M,DEAD
02D8 C9                 RET

02D9 70         SETFISH MOV     M,B
02DA 23                 INX     H
02DB 72                 MOV     M,D
02DC 23                 INX     H
02DD 73                 MOV     M,E
02DE 3E12               MVI     A,FISH
02E0 12                 STAX    D
02E1 C9                 RET

02E2 C5         RANDOM  PUSH    B
02E3 E5                 PUSH    H
02E4 47                 MOV     B,A
02E5 2AE308     RAND1   LHLD    RPTR
02E8 0E08               MVI     C,8
02EA 7C         RAND3   MOV     A,H
02EB 0F                 RRC
02EC AC                 XRA     H
02ED 0F                 RRC
02EE 0F                 RRC
02EF AC                 XRA     H
02F0 0F                 RRC
02F1 AD                 XRA     L
02F2 0F                 RRC
02F3 0F                 RRC
02F4 0F                 RRC
02F5 EE01               XRI     1
02F7 E601               ANI     1
02F9 29                 DAD     H
02FA 85                 ADD     L
02FB 6F                 MOV     L,A
02FC 0D                 DCR     C
02FD C2EA02             JNZ     RAND3
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0300 22E306    RAND    SHLD    RPTR
0303 7C                MOV     A,H
0304 85                ADD     L
0305 67                MOV     H,A
0306 78                MOV     A,B
0307 6F        RAND2   MOV     L,A
0308 80                ADD     B
0309 B8                CMP     B
030A D20703            JNC     RAND2
030D 7C                MOV     A,H
030E BD                CMP     L
030F D2E502            JNC     RAND1
0312 B8        TOPS    CMP     B
0313 DA1A03            JC      GOTNUM
0316 90                SUB     B
0317 C31203            JMP     TOPS
031A E1        GOTNUM  POP     H
031B C1                POP     B
031C C9                RET

031D CD15E0    USER    CALL    INSTAT
0320 E680              ANI     RDA
0322 C0                RNZ
0323 CD4A03            CALL    INPUT
0326 2B                DCX     H
0327 3601              MVI     M,1
0329 CDBF08            CALL    BUMP3
032C E5                PUSH    H
032D 211E08            LXI     H,CHARS
0330 061C              MVI     B,CHARL
0332 BE        COMP    CMP     M
0333 CA3D03            JZ      FOUND
0336 23                INX     H
0337 05                DCR     B
0338 C23203            JNZ     COMP
033B E1        RETURN  POP     H
033C C9                RET
033D 3E1C      FOUND   MVI     A,CHARL
033F 90                SUB     B
0340 E6FE              ANI     0FEH
0342 2608              MVI     H,JUMPS SHR 8
0344 6F                MOV     L,A
0345 5E                MOV     E,M
0346 23                INX     H
0347 50        MOV     D,M
0348 EB                XCHG
0349 E9                PCHL
034A CD15E0    INPUT   CALL    INSTAT
034D E680              ANI     RDA
034F C24A03            JNZ     INPUT
0352 CD09E0            CALL    INDAT
0355 E67F              ANI     7FH
0357 C9                RET
0358 3EC0      UP      MVI     A,SUBL
035A C37D03            JMP     MOVHIM
035D 3E01      RIGHT   MVI     A,ONE
035F C37D03            JMP     MOVHIM
0362 3E40      DOWN    MVI     A,LENL
0364 C37D03            JMP     MOVHIM
0367 3EFF      LEFT    MVI     A,0FFH
0369 C37D03            JMP     MOVHIM
036C 3EBF      UL      MVI     A,SUBL-1
036E C37D03            JMP     MOVHIM
0371 3EC1      UR      MVI     A,SUBL+1
0373 C37D03            JMP     MOVHIM
0376 3E41      LR      MVI     A,LENL+1
0378 C37D03            JMP     MOVHIM
037B 3E3F      LL      MVI     A,LENL-1
037D E1        MOVHIM  POP     H
037E BE                CMP     M
037F CA8703            JZ      SDIREC
0382 77                MOV     M,A
0383 2B                DCX     H
0384 3617              MVI     M,VMAXS
0386 C9                RET

0387 2B        SDIREC  DCX     H
0388 3607              MVI     M,VFAST
038A C9                RET

038B E1        HALT    POP     H
038C 3600              MVI     M,0
038E C9                RET

038F E1        AUTO    POP     H
0390 3A0807            LDA     SCRFLG
0393 2F                CMA
0394 320807            STA     SCRFLG
0397 C9                RET

0398 012208    ESC     LXI     B,CHARGO
039B 113B08            LXI     D,STRING
039E 2180F0            LXI     H,DTV
03A1 1A        ESC1    LDAX    D
03A2 13                INX     D
03A3 FEFF              CPI     0FFH
03A5 C20001            JNZ     RESTART
03A8 F600              ORI     BIAS
03AA 77                MOV     M,A
03AB 23                INX     H
03AC FE2D              CPI     '-'+BIAS
03AE C2A103            JNZ     ESC1
03B1 CDBA03            CALL    GET
03B4 3620              MVI     M,BLANK
03B6 23                INX     H
03B7 C3A103            JMP     ESC1
03BA CD4A03    GET     CALL    INPUT
03BD FE1B              CPI     1BH
03BF CA0001            JZ      RESTART
03C2 02                STAX    B
03C3 03                INX     B
03C4 03                INX     B
03C5 F600              ORI     BIAS
03C7 77                MOV     M,A
03C8 23                INX     H
03C9 C9                RET

03CA 217B08    VMOVE   LXI     H,VTABL
03CD 7E                MOV     A,M
03CE FE01              CPI     ONE
03D0 C0                RNZ
03D1 3AF1F7            LDA     STV-15
03D4 FE20              CPI     BLANK
03D6 C8                RZ
03D7 21F4F7            LXI     H,STV-12
03DA CD0402            CALL    ASCDEC
03DD 217F08            LXI     H,VPOS
03E0 46                MOV     B,M
03E1 23                INX     H
03E2 4E                MOV     C,M
03E3 CD4B04            CALL    NBR1
03E6 57                MOV     D,A
03E7 2B                DCX     H
03E8 2B                DCX     H
03E9 7E                MOV     A,M
03EA B7                ORA     A
03EB C2FB03            JNZ     MOVING
03EE 3A0907            LDA     GOODCAL
03F1 FE01              CPI     ONE
03F3 3EFF              MVI     A,0FFH
03F5 CAFA03            JZ      EQUAL1
03F8 3E01                MVI   A,ONE

03FA 77        EQUAL1  MOV     M,A
03FB CD8F04    MOVING  CALL    NBR3
03FE 5F                MOV     E,A
03FF 07                RLC
0400 83                ADD     E
0401 5F                MOV     E,A
0402 0F                RRC
0403 B3                ORA     E
0404 5F                MOV     E,A

0405 A2                ANA     D
0406 B7                ORA     A
0407 C8                RZ
0408 0607              MVI     B,7
040A 3A1304            LDA     ROTATE
040D EE08              XRI     8
040F 321304            STA     ROTATE
0412 7B        WAY3    MOV     A,E
0413 07        ROTATE  RLC
0414 5F                MOV     E,A
0415 A2                ANA     D
0416 B7                ORA     A
0417 CA3404            JZ      GOTWAY
041A 05                DCR     B
041B C21204            JNZ     WAY3
041E 7B                MOV     A,E
041F 07                RLC
0420 07                RLC
0421 A3                ANA     E
0422 5F                MOV     E,A
0423 0608              MVI     B,8
0425 7B        WAY1    MOV     A,E
0426 0F                RRC
0427 5F                MOV     E,A
0428 A2                ANA     D
0429 B7                ORA     A
042A CA3A04            JZ      FINDIREC
042D 05                DCR     B
042E C22504            JNZ     WAY1
0431 3600              MVI     M,0
0433 C9                RET
0434 7B        GOTWAY  MOV     A,E
0435 07                RLC
0436 5F                MOV     E,A
0437 0F                RRC
0438 0F                RRC
0439 A3                ANA     E
043A CD8804    FINDIREC        CALL    NBR2
043D 77                MOV     M,A
043E 0607              MVI     B,7
0440 21F3F7    SUBLOOP LXI     H,STV-13
0443 CD0402            CALL    ASCDEC
0446 05                DCR     B
0447 C24004            JNZ     SUBLOOP
044A C9                RET

044B E5        NBR1    PUSH    H
044C 21CA06            LXI     H,NBTB2
044F 3E00              MVI     A,0
0451 32E206            STA     COUNT
0454 3E08              MVI     A,8
0456 32E106    LOOP1   STA     LCTR
0459 7E                MOV     A,M
045A B7                ORA     A
045B 5F                MOV     E,A
045C 1600              MVI     D,0
045E F26304            JP      FWD
0461 16FF              MVI     D,0FFH
0463 EB        FWD     XCHG
0464 09                DAD     B
0465 7E                MOV     A,M
0466 EB                XCHG
0467 23                INX     H
0468 FE20              CPI     BLANK
046A CA7A04            JZ      NONBR
046D FEB1              CPI     BORDER
046F CA7A04            JZ      NONBR
0472 56                MOV     D,M
0473 3AE206            LDA     COUNT
0476 82                ADD     D
0477 32E206            STA     COUNT
047A 23        NONBR   INX     H
047B 23                INX     H
047C 3AE106            LDA     LCTR
047F 3D                DCR     A
0480 C25604            JNZ     LOOP1

0483 3AE206            LDA     COUNT
0486 E1                POP     H
0487 C9                RET

0488 E5        NBR2    PUSH    H
0489 21C906            LXI     H,NBTB1
048C C39304            JMP     NXTENT
048F E5        NBR3    PUSH    H
0490 21CA06            LXI     H,NBTB2
0493 BE        NXTENT  CMP     M
0494 CA9D04            JZ      FINDENT
0497 CDBF06            CALL    BUMP3
049A C39304            JMP     NXTENT
049D 23        FINDENT INX     H
049E 7E                MOV     A,M
049F E1                POP     H
04A0 C9                RET

04A1 35        FISHY   DCR     M
04A2 C0                RNZ
04A3 3E01              MVI     A,MRATE
04A5 CDE202            CALL    RANDOM
04A8 FE00              CPI     0
04AA C0                RNZ
04AB 23                INX     H
04AC 7E                MOV     A,M
04AD FE4F              CPI     DEAD
04AF C8                RZ
04B0 FE58              CPI     MARKED
04B2 CAC005            JZ      DIE
04B5 E5                PUSH    H
04B6 FE49              CPI     FTRK
04B8 CC1305            CZ      TRACK
04BB E1                POP     H
04BC 23                INX     H
04BD 7E                MOV     A,M
04BE 2B                DCX     H
04BF 2B                DCX     H
04C0 77                MOV     M,A
04C1 CDBF06            CALL    BUMP3
04C4 1600              MVI     D,0
04C6 5E                MOV     E,M
04C7 78                MOV     A,E
04C8 B7                ORA     A
04C9 C8                RZ
04CA B7                ORA     A
04CB F2D004            JP      FRWARD
04CE 16FF              MVI     D,0FFH
04D0 23        FRWARD  INX     H
04D1 46                MOV     B,M
04D2 23                INX     H
04D3 4E                MOV     C,M
04D4 0A                LDAX    B
04D5 FE20              CPI     BLANK
04D7 C2E004            JNZ     MOVER
04DA CDC408            CALL    DEC4
04DD 364F              MVI     M,DEAD
04DF C9                RET
04E0 E5        MOVER   PUSH    H
04E1 60                MOV     H,B
04E2 69                MOV     L,C
04E3 18                DAD     D
04E4 EB                XCHG
04E5 E1                POP     H
04E6 1A                LDAX    D
04E7 FEB1              CPI     BORDER
04E9 CA8305            JZ      HITBOR
04EC FE20              CPI     BLANK
04EE C29705            JNZ     BANG4
04F1 2B                DCX     H
04F2 72                MOV     M,D
04F3 23                INX     H
04F4 73                MOV     M,E
04F5 0A                LDAX    B
04F6 12                STAX    D
04F7 3E20              MVI     A,BLANK
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SORCERER USERS' GROUP (TORONTO)

Membership Application Form covering Jan. to Dec.1981

Membership to the group is not restricted to the TORONTO area. All persons willing to participate are invited to join.

As a member of the Sorcerer Users' Group (Toronto), I enclose the annual membership fee and agree to the following Terms.

1. That I will not, without the authorization of the board of directors, represent myself or take any action as agent, or representative or spokesperson of the group.

2. That I will not use any software obtained from the SUGT library for any commercial purpose or financial gain. The library shall be available to me should I wish to obtain programs donated by other members. These programs shall not be distributed without the owners consent and/or the consent of the board of directors.

3. That I have the right to vote for the officers and directors of the organization at the annual general meeting.

4. That any breach of the above conditions and any other restrictions that the board of directors may invoke in the future on my part may result in suspension or termination of my membership without refund.

Annual Membership Rates:

Canadian - $ 10.00 U.S. & Foreign $ 15.00 (Canadian Funds)

The SUGT program library is available to all members in the following manner.
(a) Supply a blank C60 casette at a meeting. It will be returned the next.
(b) Send in your blank cassette plus $ 1.50 for postage and it will be mailed back to you. Or you may send $3.50 and we shall supply the cassette.

All issues of PORT FE shall be mailed first class, in the case of non local issues, they are mailed via Air Mail. Program cassettes shall be returned via Air Mail.

NAME :.....
ADDRESS:.....
CITY:.....
POSTAL CODE:.....
TELEPHONE:.....

If you belong to any other Sorcerer Users' Group please list it below.

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