

# 99'er Online

February 1986

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to:



**99'er ON LINE** is the news letter of the Edmonton 99'er Computer User's Society published ten times a year. Unless otherwise stated, all material contained in this news letter may be published in other news letters provided that source and author are identified. We welcome correspondence from all TI User Groups and we will credit authors quoted in **99'er ON LINE**.

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**OFFICERS:** PRESIDENT--PAUL HELWIG,  
VICE PRES--TOM HALL, TREASURER--SUSAN LIVINGSTON,  
SECRETARY--ROGER LOTEN

**DISCLAIMER:** All information published in this news letter is, for the most part, the fruits of the labors of amateurs; therefore, we cannot guarantee that the information presented is always correct.

**REGULAR MEETINGS:** Regular meetings of the Edmonton User's Group are held on the second Tuesday of each month on the 8<sup>th</sup> floor of the General Services building of the University of Alberta from 7:00 till 10:00 PM and are open to all members in good standing. Non-members may attend their first meeting free of charge. The Executive Committee meets monthly. Members may attend these meetings as observers or to address a particular issue. Arrange with one of the officers listed above if you wish to attend.

**ADVERTISING:** Commercial advertising space is available in this news letter at the following rates: FULL PAGE--\$20.00, HALF PAGE--\$15.00, 1/4 PAGE--\$10.00. Discuss your commercial needs with JIM MULLIGAN at 467-5021, at the next meeting or write to the P/O Box above. Members may advertise their personal computer related items for free but are asked to limit their ads to about 50 words. Mail your ads to the EDITOR'S ADDRESS or hand it to him at the general meeting; newsletter deadline 15<sup>th</sup> of the month.

**MEMBERSHIP FEES:** FAMILY---12 MONTHS, \$20.00, 6 MONTHS, \$15.00. STUDENTS---12MONTHS,\$15.00, 6 MONTHS, \$10.00.



JANUARY MEETING

The January meeting was attended by 32 members including three new members who signed up for membership. Two of these new members promptly donated programmes they authored to the library.

There were no minutes to be read from a December executive meeting as the meeting was cancelled in view of the busy Christmas season. However, Susan Livingston reported \$374.79 in the bank. It is evident that our economy measures, membership growth, and renewals is turning us back in the right direction.

The "Trading Post" is established. Some modules available include MunchMan, TI-Invaders, Adventure, and Home Budget. Bring in your retired software, hardware, modules, etc for sale or swap. Software must be on original media and include original documentation. All items will be prepriced at 50% of market value (list available) or less. The society will ask a 10% handling fee on all sold or traded items.

Ken Godbeer presented a list of software available in our library. See his article in this issue giving details. It is rather short; we could use some more donations! How about bring along a loaded disk to the next meeting? (PLEASE, no copyright stuff!) Our new members are certainly setting an example for some of us bench warmers.

Wally Barabash has information regarding a Hayes Smart Modem in kit form for \$120. Sounds like a good deal for the handy types.

Speaking of handyness, Jim Mulligan is working on a budget conversion of a TI acoustic modem to a direct connect model. It will be interesting to see how this works out.

About an hour was spent as free time and many members took advantage of the group system to do some swapping. This was greatly facilitated by the loan of Roger Loten's external drive and the use of our fast copy software.

The final hour was devoted to another in our series of assembly language programming workshops. This month's was presented by Michal Jaegermann who described the operation of a simple graphic display program.

TI-TRIVIA

by: Jim Mulligan and Bob Pass

Once again we have dredged up some weird and wonderful facts about our TI-99/4A's. You can find the answers further along in the newsletter. **SEE PAGE 4.**

1. True or False: There are five different foreground/background color combinations available and only those five are possible in the TI-WRITER text editor.
2. Using TI MULTIPLAN, the square root of decimal .09 is....?
3. Using cosole basic, you have opened a printer port using output buffer number 1 (ie, OPEN #1: etc). Later in your program you execute the following statement:

```
PRINT $N:PPT$("-".10)
```

what will happen if N equals zero?

USER GROUP NEWS

**PROGRAMMING CONTEST...** see article elsewhere in this issue for details.

**TRADING POST...** see "January Meeting" column for details but watch this space in future months to keep tabs on this new service.

**BOOKS...** do you have any books, manuals, magazines, etc related to computing that are surplus? How about donating them to our library; just leave them with Gord Bradlee at the next meeting.

**EXECUTIVE ASSISTANTS...** helping to keep the group running are non-elected volunteers who are in many ways the soul of this User's Group:

Newsletter Editor - Bob Pass  
 Advertizing & Editor's Assistant - Jim Mulligan  
 Newsletter Library-Ron Hohmann  
 Disk Library - Ken Godbeer  
 Book Library - Gord Bradlee  
 Bulletin Board Sysop - Tom Hall

If you see a job that needs doing that is not covered by the above departments, how about volunteering your services at the next meeting; you will find that it is worth the effort.

**BULLETIN BOARD...** a BBS service is operated for us by Tom Hall. To get on line, dial (403) 424-3258. In addition to news and the usual BBS offerings, there are programs available for downloading to your TI machine.

**WANTED...** any clippings from newspapers, magazines, or comic strips that you think may be of interest to other members of this User Group. Please forward to the editor, Bob Pass, to Jim Mulligan, or to the P/O box address on the fly leaf.

**ALSO WANTED...** your advertising. Don't forget that members can advertize their computer related merchandise or requests in this news letter for free! Give your ad to Bob Pass or Jim Mulligan by phone, mail, or at the next meeting. See the fine print on the newsletter fly leaf for further info.

**EDITOR THANKYOUS...** a tip of the hat to this month's contributors: Greg Healy, Ken Godbeer, and Bob Chapman. Your efforts make my job easier and this newsletter more interesting. Thanks guys.

NEXT MEETING

The next meeting, our sixth of the season, is scheduled for Tuesday, Feb 11'th at 7:30 pm in room 849 of the U of A's General Services building on 116 St north of the Jubilee Auditorium. Doors open at 7:00 pm.

As of this writing, there is nothing specifically scheduled for this meeting so it may be a good time for you to bring along some blank diskettes and peruse the disk library.

Edmonton User Group Disk LibraryFebruary 1986

By: Ken Godbeer, Disk Librarian

99'er --> This Freeware "C compiler" was written by Cliff Pulley of Burlington, Ontario. Documentation is contained right on the disk in files which can be printed with your TI-Writer or Editor/Assembler. Although the author readily admits that this version is less than optimal, he plans to continue development if enough interest is shown. Anyone who finds this program useful is encouraged to send a \$20.00 contribution to the author. This program loads from the Editor/Assembler with instructions which can be obtained by printing the files "99ER-1.2 and 3"

Daffy Pun --> Daffy Pun was written by Jim Mulligan of our own User Group. This program is reminiscent of many Television Game Shows and should provide many hours of entertainment for adults and children. Two teams compete to guess letters and spell out a "Daffy Pun". Instructions are included. This program runs in Basic or Extended Basic.

Disk Label and Directory --> This program was written by Jim Mulligan of our User Group and runs in Console Basic. This program won him first prize in our recent program contest.

Disk Library --> Disk Library was written by Roger Loten of our own User Group. It allows you to take control of your Disk Library by cataloguing and either displaying or printing all relevant data. The Program runs from Extended Basic and a copy of the Program Listing is included.

Disk Manager 1000 and Masscopy --> Disk Manager 1000 is a freeware program written by Bruce Caron of the Ottawa TI-99/4 users Group. It provides many features not included in the TI Disk Manager including the ability to recover files which have accidentally been erased from the Disk Directory. It runs in Extended Basic. Masscopy is a Freeware program written by Stephen Lawless of Wilmington Delaware. It allows you to copy a complete Disk in three or less passes. The program runs in Editor/Assembler and can be loaded by selecting Option 3 and entering the file name "I:1.MASSCOPY".

Games 1 --> This disk contains three excellent games contributed by members of our group. All run in Extended Basic. Invasion from Mars and Supercroak were written by Ian Denny and his brother and provide suer fast arcade action. TI-Dinghy was written by Ken Butler from Peace River. Try your sailing skills out with this one.

Greg's Spreadsheets --> This Spreadsheet program was written by Greg Sears of our own User Group. It may not be Microsoft Multiplan but if you are looking for a basic Spreadsheet it may be just what you are looking for. The program comes with documentation and examples and runs in Extended Basic.

Music for the TI --> This disk contains a collection of public domain music programs which demonstrate all of the musical capabilities of our computer. Most of them were written by Sam Moore Jr. and provided on a "TI-Cares" disk from Texas Instruments.

Pterm and Xmodemc --> These two terminal emulator

programs are a must for any of you who have a modem and call the User Group Bulletin Board. Pterm is freeware from C.R. Bryant. It runs from Editor/Assembler option 3 by loading and running "DSK1.L". Documentation is contained in a disk file called PDOC. Xmodemc is a public domain program by Paul Charlton. It runs from option 3 of Editor/Assembler by entering the file name "DSK1.XMODEMC" then when it has finished loading press enter and type "TE". Documentation is contained in a file called XMODEMC.

Saxsaan --> This Demo disk of the adventure program was sent to us by D D Publishing. It loads from Extended Basic.

Super Debugger --> Super Debugger by Navarone Software was sent to us on a "TI-Cares" disk. It will be very useful in working on assembly language programs with the Editor/Assembler cartridge. Instructions are contained in a file called HELP.

TI-Forth --> This is the original public domain version of TI-Forth sent to us by Texas Instruments in a "TI-Cares" package. You will need the manual so ask at the meeting and you should be able to find a copy to borrow for reproduction. The program runs from Editor/Assembler option 3 by entering file name "DSK1.FORTH".

TI-Forth Source Code --> If you are really into programming in a big way this flippie disk contains the source code for TI-Forth.

TI-Writer and TI-Multiplan Updates --> This disk contains some improvements to TI-Writer and TI-Multiplan sent to us as part of a "TI-Cares" package. All you have to do is copy the appropriate files onto your disk.

TI-Writer Reference Guide --> If anybody knows how to use TI-Writer it is Bob Pass, our Newsletter Editor. This disk will print out a handy reference guide he has compiled to make using TI-Writer just a little bit easier. Read the instructions in the file "Print/File" with your TI-Writer Text Editor to see how to use it.

TI-Public 1 --> This disk is one of the disks of programs we received from "TI-Cares". There are two utility programs; Basketball Statistics and Universal Graph and Message as well as three games; PI-Ring, TI-Rescue and Trucker's Domain. They all run in extended Basic.

TI-Public 2 --> On this "TI-Cares" disk you will find two utility and two music programs. They are - Stock Record Keeper, Read Fast, Farm (Rocky Robot singing Old Macdonald has a Farm) and Piano (some Beethoven music courtesy of Sam Moore Jr.). To hear Rock Robot you will need a TE II but the rest run in Extended Basic.

Universal Screen Dump --> This freeware Universal Screen Dump was written by our own Michal Jaegermann. It was written for a Gemini 10X printer. It works in Extended Basic or Editor/Assembler and instructions can be found at the beginning of the source code listing. If you like it you are encouraged to make a contribution to the User Group.



PROGRAMMING CONTEST

by: Bob Pass

Lots of you have printers tied to your TIs and some of you have word processing packages too. Wouldn't it be nice to be able to send out your correspondence on a nice letterhead of your own design?

Our user group needs a custom designed letterhead bearing the society logo and return mailing address as seen on the cover sheet of this newsletter. The rules are as follows:

1. Contest is open to all members and their immediate families.
2. The entry must print a logo and return address on the top of a standard 8.5 by 11 inch page. It must be from 1.5 to 3.0 inches in length. You may use the full width of the page.
3. You may use any programming language you wish but the entry must run on a TI-99/4A equipped with 32K Memory expansion, RS232 card, a dot matrix printer, and Disk Drives. XBasic and Editor Assembler are also supported.
4. Your entry must be submitted on disk or tape and be accompanied by documentation indicating how to load and run the program, where the printer "OFF" statements are and a brief explanation of each print statement that sends control data to the printer (we may need to change them for printer compatibility), and a general description of how the program works. A complete listing is optional.
5. All entries are to be submitted by April 15<sup>th</sup>, 1986 to Bob Pass. They may be given to him at any meeting, mailed to the P/O box, or to Bob's home (see newsletter cover sheet). Winner will be announced at the May meeting.
6. Winning entry will be added to the societies' disk library for use of other members and/or published in this newsletter.
7. There will be a prize for the winner.

This is not an impossible undertaking; I have seen it done using nothing more than TI console basic. So put on those thinking caps and lets see some originality in program design! The ideal entry would be easily adaptable to create other letterheads from the same core program making it usefull to all. By the way, there will not be an extension to the contest deadline.

POKEing AROUND

by: Greg Healy

Here are some handy addresses you can CALL LOAD (XBasic's POKE statement) that I have discovered:

CALL LOAD(-31568,N). Use integer values in the range 1 to 200 or so in a FOR-NEXT loop for some weird sound effects.

CALL LOAD(-31962,8787) then type NEW to boot your system directly into Console Basic from XBasic.

A BUG IN TI MULTIPLAN

by: Bob Chapman

I have been working on a project to get the old family Grandfather Clock back into operation and ran into a spot of bother with the pendulum length - it wasn't quite long enough to give a beat of one second (ie, a period of two seconds). How long should the effective length be?

Out came the high school physics book and a few minutes research revealed the formula:

$$T = 2\pi\sqrt{L/G}$$

where T is the period, L is the effective length, and G is gravitational acceleration (32.174 feet/second/second).

Then I moved over to my TI and loaded up MULTIPLAN and set up two columns, one for L (in inches), the other for T. The formula in MULTIPLANESE is:

```
2*(*)SQRT(RC[-1]/12/32.174)
```

where RC[-1] picks up the value for L. I varied L from 12 to 48 inches and took a look at the results.

Something was wrong; between 38 and 39 inches, the period jumped by a factor of ten! Now, I knew that the length should be about 40 inches, which is what MULTIPLAN was indicating. But for lengths under 38 inches, the results were obviously whacko. On analysis, I found that at this and shorter lengths MULTIPLAN must calculate the Square Root of numbers smaller than .01 but it gets them wrong - by a factor of ten. For example, it tells me the SQRT of .09 is 3 when it should be 0.3.

I tried changing the formula by using an exponential of 0.5 and got the same results. Next, I tried it in basic and got correct answers. On an IBM-PC, using LOTUS 123, I got correct answers.

Does anyone know why TI MULTIPLAN cannot find the correct roots of number smaller than 0.01? I don't know the answer but I would like to hear your theories or facts!

TI-TRIVIA ANSWERS

1. False. You can change the color combinations fairly easily. See Bob's article elsewhere in this news letter.
2. If you said the answer is decimal .03, you are wrong. MULTIPLAN says the answer is 3. Unfortunately that is also wrong. This bug was picked up by Bob Chapman; see his article in this news letter.
3. Trick question! If N equals zero, a print display of 10 hyphens should appear ON THE SCREEN because buffer zero is reserved for the keyboard and screen in the system I/O routines. However, in this case, you would get an error message because the RPT\$ function is only valid in XBasic.

DISK LIBRARY BY R.K. LOTEN  
JUNE 20, 1985

THIS IS MY VERSION OF A SELF  
LOADING DISK PROGRAM THAT  
CATALOGUES ALL YOUR FLOPPIES  
AND EITHER DISPLAYS OR  
PRINTS ALL RELEVANT DATA.

NOV. 11, 1985 REVISION

10 ! DISK FILE LIBRARY-  
SAVED AS PROGRAM FILE\*\*LOAD\*\*

20 ! DEFINE VARIABLES

30 OPTION BASE 1

40 DIM DS\$NAME\$(20),FILENAME\$(20,20),SECTORSFREE(20),FILESECTORS(20,20),FILETYPE(20,20),RECLEN(20,20)

50 WHERE\$="OUTSIDE"

60 ! MODIFY SCREEN COLOURS

70 CALL CLEAR :: FOR A=1 TO 9 :: CALL COLOR(A-1,16,2):: NEXT A :: R,S=0 :: START=1

80 CALL VCHAR(2,4,30,4):: CALL DELAY(400):: CALL HCHAR(2,4,30,26):: CALL DELAY(400):: CALL VCHAR(2,29,30,4):: CALL DELAY(400)

90 CALL HCHAR(6,4,30,26):: CALL DELAY(400)

100 MSG\$="DISK LIBRARY MENU"  
:: CALL SLOWPRINT(MSG\$,4,"")

110 IF WHERE\$="INSIDE" AND LEN(NDATE\$)<>0 THEN 160

120 ! BRING UP DATE OF LATEST ADDITION/REVISION

130 OPEN #1:"DEV:\DATEFILE",RELATIVE,INTENT:\_,FIXED 20

140 RESTORE #1 :: IF EOF(1)=1 THEN CLOSE #1 :: GOTO 180

150 INPUT #1,REC 0:DNDATE\$,DSKNUM :: CLOSE #1

160 CALL CALENDER(NDATE\$,SDATE\$):: MSG\$="DATE OF LAST REVISION:" :: CALL SLOWPRINT(MSG\$,8,"")

170 MSG\$=SDATE\$ :: CALL SLOWPRINT(MSG\$,10,"")

180 IF WHERE\$="INSIDE" THEN 350

190 MSG\$="SPEECH SYNTHESIS ON-LINE?" :: CALL SLOWPRINT

(MSG\$,13,"")

200 MSG\$="PRESS Y OR N" :: CALL SLOWPRINT(MSG\$,14,"")

210 CALL KEY(0,R,S):: IF S<>1 THEN 210

220 IF R<>89 AND R<>78 THEN 210 ELSE IF R=89 THEN SS\$="YES" ELSE SS\$="NO"

230 IF SS\$="NO" THEN 260

240 MSG\$="REMEMBER TO INCREASE THE" :: CALL SLOWPRINT(MSG\$,17,""):: MSG\$="MONITOR/T VOLUME FOR THE" :: CALL SLOWPRINT(MSG\$,18,"")

250 MSG\$="VERBAL COMMANDS TO BE HEARD" :: CALL SLOWPRINT(MSG\$,19,""):: CALL DELAY(1500):: FOR BB=17 TO 19 :: DISPLAY AT(BB,1):" " :: NEXT BB

260 MSG\$="SINGLE OR TWIN DISKETTES?" :: CALL SLOWPRINT(MSG\$,16,"")

270 MSG\$="PRESS 1 OR 2" :: CALL SLOWPRINT(MSG\$,17,"")

280 CALL KEY(0,R,S):: IF S<>1 THEN 280

290 IF R<>49 OR R>51 THEN 280

300 DRIVES\$=CHR\$(R)

310 MSG\$="PINTER ON-LINE?" :: CALL SLOWPRINT(MSG\$,19,""):: MSG\$="PRESS Y OR N" :: CALL SLOWPRINT(MSG\$,20,"")

320 CALL KEY(0,R,S):: IF S<>1 THEN 320

330 IF R<>89 AND R<>78 THEN 320 ELSE IF R=89 THEN PRINT R\$="YES" ELSE PRINTER\$="NO"

340 FOR A=13 TO 20 :: DISPLAY AT(A,1):" " :: NEXT A

350 MSG\$="PRESS" :: CALL SLOWPRINT(MSG\$,13,"")

360 MSG\$="1-DISPLAY LISTINGS" :: CALL SLOWPRINT(MSG\$,15,"")

370 MSG\$="2-EDIT/ENTER LISTINGS" :: CALL SLOWPRINT(MSG\$,16,"")

380 MSG\$="3-STOP EXECUTION" :: CALL SLOWPRINT(MSG\$,17,"")

390 ! LINE 360-430 ARE THE TIMING LOOP FOR PROMPTS.

400 Q=0 :: DISPLAY AT(22,2):

"IDLE FOR \*";TAB(18);\* SECONDS"

410 K=0 :: IF SS\$="NO" THEN 430 ELSE 420

420 FOR XX=1 TO 2 :: CALL SOUND(400,500,15):: CALL SOUND(400,300,15):: NEXT XX :: CALL SAY("PLEASE PRESS THE KEY OF YOUR CHOICE"):: GOTO 450

430 DISPLAY AT(19,1):" " :: DISPLAY AT(20,1):" " :: MSG\$="PLEASE PRESS THE KEY OF" :: CALL SLOWPRINT(MSG\$,19,"")

440 MSG\$="YOUR CHOICE" :: CALL SLOWPRINT(MSG\$,20,"")

450 CALL KEY(0,R,S):: IF S=1 THEN 470

460 K=K+1 :: Q=Q+1 :: IF K<500 THEN DISPLAY AT(22,12)SIZE(5):INT(Q/8):: GOTO 450 ELSE 410

470 IF R>48 AND R<52 THEN 480 ELSE 450

480 ON R-48 GOTO 1050,510,490

490 CALL CLEAR :: STOP

500 REM SEARCH ALL YOUR DISKS AND THE PROGRAM NAMES

510 DISPLAY AT(5,1)ERASE ALL:"INPUT TODAY'S DATE, USING THE FORMAT-YMMDD" :: ACCEPT AT(8,10)SIZE(6)VALIDATE(DIGIT)BEEP:DATE\$

520 CALL DATECHECK/DATE\$,OK\$):: IF OK\$="N" THEN 510 ELSE 530

530 DISPLAY AT(10,8):"PRESS" :: DISPLAY AT(12,2):"1 FOR COMPLETE REVISION" :: DISPLAY AT(13,2):"2 TO REVISE ONE DISK ONLY"

540 DISPLAY AT(14,2):"3 TO ADD ANOTHER DISK"

550 CALL KEY(0,R,S):: IF S<>1 THEN 550

560 IF R<>49 AND R>51 THEN 550

570 ON R-48 GOTO 620,580,600

580 IF SS\$="YES" THEN CALL SAY("WHAT IS DISKETTE NUMBER?")

590 DISPLAY AT(18,2):"INPUT DISK # " :: ACCEPT AT(18,16)SIZE(3)VALIDATE(DIGIT):START :: IF START<1 OR START>DEFNU

M THEN 590 ELSE 620

600 START=DSKNUM+1

610 REM OPEN CATALOG

620 OPEN #1:"DSK"&DRIVE\$&".&" ,INPUT ,RELATIVE,INTERNAL

630 FOR X=START TO 20

640 CALL SPGET(STR\$(X),X\$)

650 ON VAL(DRIVE\$)GOTO 660,680

660 IF SS\$="YES" THEN CALL SAY("TAKE OUT PROGRAM DISKETTE"):: CALL SAY("PUT IN DISKETTE",X\$)

670 DISPLAY AT(6,1)ERASE ALL:"REMOVE LIBRARY PROGRAM DISKET" :: DISPLAY AT(8,1):"INSET T DISK";TAB(15):" " :: DISPLAY AT(8,13)SIZE(2):X :: GOTO 700

680 IF SS\$="YES" THEN CALL SAY("PUT DISKETTE",X\$,"IN NUMBER 2 DEVICE"):: CALL DELAY(1000):: CALL SAY("THEN PRESS ANY KEY TO START")

690 DISPLAY AT(6,1)ERASE ALL:"INSERT DISK";TAB(15):" INTO THE 2ND" :: DISPLAY AT(7,1):"DISK DRIVE." :: DISPLAY AT(6,12)SIZE(3):X

700 DISPLAY AT(12,1):"PRESS ANY KEY TO START THE DISK LISTING PROCESS"

710 CALL KEY(0,R,S):: IF S<>1 THEN 710

720 INPUT #1,REC 0:DS\$NAME\$(X),DUMMY1,DUMMY2,SECTORSFREE(X)

730 REM RECORD PROGRAM FILE NAMES

740 DISPLAY AT(8,1)ERASE ALL:"CHECKING DISK #";X

750 FOR Y=1 TO 20

760 INPUT #1:FILENAME\$(X,Y),FILETYPE(X,Y),FILESECTORS(X,Y),RECLEN(X,Y)

770 IF LEN(FILENAME\$(X,Y))=0 THEN 790

780 NEXT Y

790 DISPLAY AT(12,1):"DISK #";X;" LISTING DONE" :: CALL DELAY(750)

```

800 IF R-48=2 THEN 860
810 DISPLAY AT(15,1):"SEARCH
  ANOTHER DISK OR STORE ALL DI
  SK NAMES & PROGRAM FILE NA
  MES FOUND SO FAR?"
-----
820 DISPLAY AT(19,1):"PRESS
  1 TO CONTINUE SEARCH" :: DIS
  PLAY AT(21,1):"PRESS 2 TO ST
  ORE LISTINGS"
-----
830 CALL KEY(0,R,S):: IF S<
  1 THEN 830
-----
840 IF R<49 AND R>50 THEN 83
  0 ELSE IF R=50 THEN 860
-----
850 NEXT X
-----
860 CLOSE #1
-----
870 IF VAL(DRIVE#)=2 THEN 90
  0
-----
880 DISPLAY AT(8,1)ERASE ALL
  : "INSERT LIBRARY PROGRAM DIS
  K" :: DISPLAY AT(10,1):"PRES
  S ANY KEY WHEN FINISHED"
-----
890 CALL KEY(0,R,S):: IF S<
  1 THEN 890
-----
900 DISPLAY AT(8,5)ERASE ALL
  : "PLEASE WAIT-IN PROCESS"
-----
910 OPEN #1:"DSK1.DATFILE",
  RELATIVE, INTERNAL, FIXED 20
-----
920 PRINT #1, REC 0: DATE#, X :
  : CLOSE #1
-----
930 FOR DSK=START TO X
-----
940 OPEN #1:"DSK1.DFNAME"&ST
  R$(DSK), RELATIVE, INTERNAL, FI
  XED 60
-----
950 PRINT #1, REC 0: DSKNAME$(
  DSK), SECTORSFREE(DSK)
-----
960 FOR FILE=1 TO 20
-----
970 IF FILENAME$(DSK, FILE)=""
  THEN 1000
-----
980 PRINT #1, REC FILE: FILENA
  ME$(DSK, FILE), FILESECTORS: DS
  K, FILE, FILETYPE(DSK, FILE), R
  ECLEN(DSK, FILE)
-----
990 NEXT FILE
-----
1000 CLOSE #1
-----
1010 IF START>1 THEN 1030
-----
1020 NEXT DSK
-----
1030 WHERE$="INSIDE" :: GOTO
  70 ! RETURN TO MENU
-----
1040 REM ACCESS AND DISPLAY
  DATA
-----
1050 DISPLAY AT(10,1)ERASE A
  LL:"DO YOU WANT TO REVIEW AL
  L OR JUST ONE OF THE LISTED D
  ISKS"
-----
1060 DISPLAY AT(13,2):"PRESS
  1 FOR ALL THE DISKS" :: 3:5
  PLAY AT(14,8):"2 FOR ONE SEL
  ECT DISK"
-----
1070 CALL KEY(0,R,S):: IF S<
  >1 THEN 1070
-----
1080 IF R<49 AND R>50 THEN 1
  070 ELSE IF R=49 THEN DNUM=1
  :: GOTO 1100
-----
1090 DISPLAY AT(17,2):"TYPE
  DISK #" :: ACCEPT AT(17,14)S
  IZE:2)VALIDATE(DIGIT):DNUM :
  : CHOICE$="ONE"
-----
1100 FOR DSK=DNUM TO 20
-----
1110 OPEN #1:"DSK1.DFNAME"&S
  TR$(DSK), RELATIVE, INTERNAL, F
  IXED 60
-----
1120 RESTORE #1 :: IF EOF(1)
  =1 THEN CLOSE #1 :: GOTO 171
  0
-----
1130 INPUT #1, REC 0: DSKNAME$(
  DSK), SECTORSFREE(DSK)
-----
1140 FOR Z=1 TO 20 :: FILENA
  ME$(DSK, Z)="" :: NEXT Z ! R
  ESET BUFFER
-----
1150 FOR NAME=1 TO 20
-----
1160 IF EOF(1)=1 THEN 1190
-----
1170 INPUT #1, REC NAME: FILEN
  A$(DSK, NAME), FILESECTORS: D
  SK, NAME, FILETYPE(DSK, NAME),
  RECLEN(DSK, NAME)
-----
1180 NEXT NAME
-----
1190 DISPLAY AT(2,6)ERASE AL
  L:"DISKNAME="; DSKNAME$(DSK)
-----
1200 DISPLAY AT(3,4):"DATE:
  ";SDATE$
-----
1210 DISPLAY AT(4,4):"AVAILA
  BLE=";TAB(19);"USED=" :: 3:5
  PLAY AT(4,14)SIZE(4):SECTORS
  FREE(DSK)
-----
1220 DISPLAY AT(4,24)SIZE(4)
  :35-SECTORSFREE(DSK)
-----
1230 DISPLAY AT(5,4):"FILENA
  ME";TAB(13);"SIZE";TAB(19);"
  TYPE" :: DISPLAY AT(6,4):RPT
  $("-","B");TAB(13);"-----";TAB(
  19);"-----"
-----
1240 B=1
-----
1250 FOR A=1 TO 20
-----
1260 IF LEN(FILENAME$(DSK,A)
  )<2 THEN 1400
-----
1270 IMAGE " #####
  #####"
-----
1280 RECSIZE$=STR$(RECLEN(DS
  K,A)):: IF RECLEN(DSK,A)=0 T
  HEN RECSIZE$=""
-----
1290 ON FILETYPE(DSK,A)GOTO
  1300,1310,1320,1330,1340
-----
1300 TYPE$="DIS/FIX" :: GOTO
  1350
-----
1310 TYPE$="DIS/VAR" :: GOTO
  1350
-----
1320 TYPE$="INT/FIX" :: GOTO
  1350
-----
1330 TYPE$="INT/VAR" :: GOTO
  1350
-----
1340 TYPE$="PROGRAM"
-----
1350 DISPLAY AT(8+7,1):USING
  1270:FILENAME$(DSK,A),FILES
  ECTORS(DSK,A),TYPE$,RECSIZE$
-----
1360 B=B+1 :: IF B>7<20 THEN
  1390 ELSE B=1
-----
1370 DISPLAY AT(21,1):"PRES
  S ANY KEY TO CONTINUE"
-----
1380 CALL KEY(0,R,S):: IF S<
  >1 THEN 1380
-----
1390 NEXT A
-----
1400 IF CHOICE$="ONE" THEN D
  ISPLAY AT(21,1):"PRESS ANY
  KEY FOR MENU" ELSE 1420
-----
1410 CALL KEY(0,R,S):: IF S<
  >1 THEN 1410 ELSE CLOSE #1 :
  : WHERE$="INSIDE" :: GOTO 70
-----
1420 FOR XX=(8+7)TO 20 :: DI
  SPLAY AT(XX,1):" " :: NEXT X
  X
-----
1430 DISPLAY AT(21,1):"PRESS
  ";TAB(B);"1 FOR REVIEW" :: D
  ISPLAY AT(22,8):"2 TO RUN PR
  OGRAM"
-----
1440 DISPLAY AT(23,8):"3 TO
  PRINT LISTING" :: DISPLAY AT
  (24,8):"4 RETURN TO MENU"
-----
1450 CALL KEY(0,R,S):: IF S<
  >1 THEN 1450
-----
1460 IF R<49 OR R>52 THEN 14
  50
-----
1470 ON R-48 GOTO 1650,1660,
  1490,1480
-----
1480 CLOSE #1 :: WHERE$="INS
  IDE" :: GOTO 70
-----
1490 IF PRINTER$="YES" THEN
  OPEN #5:"PIO" ELSE 1430
-----
1500 PRINT #5 :: PRINT #5 ::
  PPINT #5:TAB(16);"DISKNAME=
  ";DSKNAME$(DSK):: PRINT #5:T
  AB(14);"DATE:";SDATE$
-----
1510 PRINT #5:TAB(14):"AVAIL
  ABLE=";SECTORSFREE(DSK);TAB(
  34);"USED=";35-SECTORSFREE(
  DSK)
-----
1520 PRINT #5:TAB(14):"FILEN
  AME";TAB(26);"SIZE";TAB(34);
  "TYPE" :: PRINT #5:TAB(14);R
  PT$("-","B");TAB(26);"-----";TA
  B(34);"-----"
-----
1530 FOR A=1 TO 20
-----
1540 IF LEN(FILENAME$(DSK,A)
  )<2 THEN 1640
-----
1550 RECSIZE$=STR$(RECLEN(DS
  K,A)):: IF RECLEN(DSK,A)=0 T
  HEN RECSIZE$=""
-----
1560 ON FILETYPE(DSK,A)GOTO
  1570,1580,1590,1600,1610
-----
1570 TYPE$="DIS/FIX" :: GOTO
  1620
-----
1580 TYPE$="DIS/VAR" :: GOTO
  1620
-----
1590 TYPE$="INT/FIX" :: GOTO
  1620
-----
1600 TYPE$="INT/VAR" :: GOTO
  1620
-----
1610 TYPE$="PROGRAM"
-----
1620 PRINT #5:TAB(14);FILENA
  ME$(DSK,A);TAB(26);FILESECTO
  RS(DSK,A);TAB(34);TYPE$;TAB(
  41);RECSIZE$
-----
1630 NEXT A
-----
1640 PRINT #5:CHR$(12):: CLO
  SE #5 :: GOTO 1420
-----
1650 CLOSE #1 :: NEXT DSK
-----
1660 CLOSE #1 :: DISPLAY AT(
  10,1):"INSERT DISK *";DSKNA
  ME$(DSK);"***" :: DISPLAY AT(
  12,1):"PRESS ANY KEY TO CON
  TINUE"
-----
1670 CALL KEY(0,R,S):: IF S<
  >1 THEN 1670
-----
1680 DISPLAY AT(14,1):"RUN P
  ROGRAM BY TYPING THIS:"
-----
1690 DISPLAY AT(16,1):"RU
  N *DSK1.XXXXX"

```



```

1700 STOP
-----
1710 MSG$="NO DATA AVAILABLE
DUE TO : " :: CALL SLOWPRINT
(MSG$,20,">")
-----
1720 MSG$="1-NO MORE DISKS TO
REVIEW " :: CALL SLOWPRINT
(MSG$,21,">")
-----
1730 MSG$="OR" :: CALL SLOWP
RINT(MSG$,22,">")
-----
1740 MSG$="2-NO DISKS LISTED
YET " :: CALL SLOWPRINT:
(MSG$,23,">")
-----
1750 CALL DELAY(1500):: WHEN
E$="INSIDE" :: GOTO 70
-----
1760 SLS SLOWPRINT(MSG$,LINE
NUM,DI:RECTION$)
-----
1770 IF LEN(MSG$)=26 AND DI
RECTION$="<" THEN START=1 ::
X,B=1 :: GOTO 1810
-----
1780 IF LEN(MSG$)=26 AND DI
RECTION$="<" THEN START=LEN(
MSG$):: X=-1 :: B=LEN(MSG$):
: GOTO 1810
-----
1790 IF DIRECTION$=">" THEN
START=1+INT((28-LEN(MSG$))/2
):: X,B=1 :: GOTO 1810
-----
1800 IF DIRECTION$="<" THEN
START=INT((28+LEN(MSG$))/2):
: X=-1 :: B=LEN(MSG$)
-----
1810 FOR A=START TO (START+X
*LEN(MSG$))STEP X
-----
1820 IF A=0 OR B=0 THEN SUBE
XIT
-----
1830 DISPLAY AT(LINENUM,A)SI
ZE(1):SEG$(MSG$,B,1):: CALL
DELAY(1)
-----
1840 IF DIRECTION$=">" THEN
B=B+1 ELSE IF DIRECTION$="<"
THEN B=B-1
-----
1850 NEXT A
-----
1860 SUBEND
-----
1870 SUB DELAY(N)
-----
1880 FOR A=1 TO N :: NEXT A
-----
1890 SUBEND
-----
1900 SUB CALENDER(NDATE$,SDA
TE$)
-----
1910 DIM MONTH$(12)
-----
1920 DATA JANUARY,FEBRUARY,M
ARCH,APRIL,MAY,JUNE,JULY,AUG
UST,SEPTEMBER,OCTOBER,NOVEMB
ER,DECEMBER
-----
1930 RESTORE 1920 :: FOR A=1
TO 12 :: READ MONTH$(A):: N
EXT A
-----
1940 FOR B=1 TO 12
-----
1950 IF B=VAL(SEG$(NDATE$,3,
2))THEN 1970
-----
1960 NEXT B
-----
1970 @DATE$=MONTH$(B)&" "&SE
G$(NDATE$,5,2)&" "&"19"&SEG$
(NDATE$,1,2)
-----
1980 SUBEND
-----
1990 SUB DATECHECK(DATE$,OK$
)
-----
2000 DIM MTHLEN(12)
-----
2010 DATA 31,28,31,30,31,30,
31,31,30,31,30,31
-----
2020 OK$="Y" :: RESTORE 2010
:: FOR A=1 TO 12 :: READ MTH
LEN(A):: NEXT A
-----
2030 IF VAL(SEG$(DATE$,1,2))
/4=INT(VAL(SEG$(DATE$,1,2)))
THEN MTHLEN(2)=29
-----
2040 IF VAL(SEG$(DATE$,3,2))
=0 OR VAL(SEG$(DATE$,3,2))>1
2 THEN 2060
-----
2050 IF VAL(SEG$(DATE$,5,2))
=0 OR VAL(SEG$(DATE$,5,2))>M
THLEN(VAL(SEG$(DATE$,3,2)))T
HEN 2070 ELSE 2100
-----
2060 DISPLAY AT(10,1):"ERRO
R* DATE INPUT INCLUDED VALUE
OF ZERO OR 2-DIGIT # GREATER
12 FOR THE MONTH #.TRY A
GAIN." :: GOTO 2080
-----
2070 DISPLAY AT(10,1):"ERRO
R* DD VALUE IS GREATER THAN
THE NUMBER OF DAYS FOR THIS
MONTH.TRY AGAIN"
-----
2080 OK$="N" :: MSG$="PRESS
ANY KEY TO CONTINUE" :: CALL
SLOWPRINT(MSG$,18,">")
-----
2090 CALL KEY(O,R,S):: IF SK
>1 THEN 2090 ELSE 2100
-----
2100 SUBEND

```

**SMOKING**

by: Executive Request

Seen on a bulletin board recently:

"Cigarette smoke is the residue of your pleasure. It permeates the air and settles on my hair and clothing, not to mention by lungs and eyes. This takes place without my consent.

I have a pleasure too! I enjoy a can or two of Molson's beer now and then. The residue from my pleasure fills my bladder. Would you be annoyed if I stood on a chair and peed all over your hair and clothes without your consent?"

The executive reminds all members that the meeting room is out of bounds to smoking both out of courtesy to our nonsmoking members and as compliance to UofA rules. To those members who indulge in liquid refreshment, the washroom is just down the hall!

Thanks.



"The computer says it's in love with the stereo and they'd like a big church wedding."

**FOR SALE**

Members can place advertising free of charge in the newsletter. The following items are offered by members taking advantage of this service:

Acoustic modem - 300 baud, full/half duplex. \$50 or best offer. Call Jim Beck, 435-2065.

TI acoustic modem - 300 baud. \$50. Call Ken Godbeer, 462-8060.

2 Shuggart SSSD disk drives (note, 35 track but compatible with TI) mounted as a pair in a stand alone case with power supply. Ideal for drive 2 and 3 expansion. \$130 for both. Call Ken Godbeer, 462-8060.

1200 baud auto dial Hayes Smart Modem. \$240. Call Michal Jaegermann, 438-7012.

TI System: consol, expansion box, 32K memory card, RS232 box-car, disk drive and controller, TI-LOGO. misc software. \$750.00 OBO. Call Grant, 458-2392.

# NASA helped launch small software firm

Canadian Press

Getting its product into outer space was the perfect blast-off for a small Toronto software company.

Two years ago, the U.S. National Aeronautics and Space Administration bought a copy of UX Software Inc.'s new programming language to control scientific experiments aboard the space shuttle. That sale, UX Software's first, was worth only \$2,000 but it gave the company "fantastic publicity," said sales director Birgit Vogelzang.

Other big-name customers followed, such as communications

giant AT&T and IBM, as well as "lots of little ones."

In the crowded field of North American software houses, the company's debut was unusually auspicious. But the most surprising thing about all this is that UX Software's product is a version of BASIC, the computer language, all but dismissed by serious business users.

Hobbyists use it on their home computers. But NASA? IBM?

Vogelzang says her firm's dialect of the language, called UX-BASIC, is vastly more powerful than standard "toy BASIC" and is aimed at commercial and scientific applications.

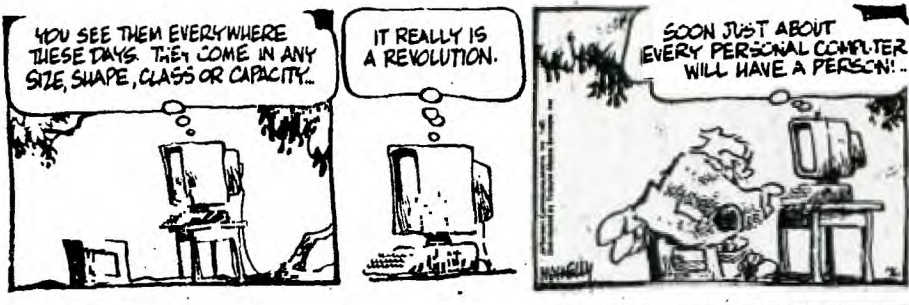
The company also gambled by designing its language to work with the then largely untried Unix operating system (an operating system is a master program that controls a computer's basic functions).

Three years ago, "we noticed there was a shortage of software applications operating under Unix," Vogelzang said. Applications are programs like word processing and electronic filing that help users do specific tasks.

One factor in the sale to NASA was the fact that at that time UX-BASIC was the only powerful BASIC operating under Unix. There is more competition now, with about five other BASICs available for the operating system.

UX Software made a profit — it won't say how much — on sales of \$1.5 million and in 1985 hired 12 more employees for a total of 10.

STORY



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STORY



## Software survey planned in Alta.

Alberta Economic Development is looking for participation by involved companies in a survey of the software industry in Alberta.

The survey will provide the department with up-to-date information on: companies working in the area; products; services and capabilities; investment areas; overall economic and employment impact of the industry.

Information on various companies will appear in a directory for domestic and international circulation.

For details, contact Jim Hoffmeyer, manager, computers and software industry development branch, Alberta Economic Development, 427-2005.

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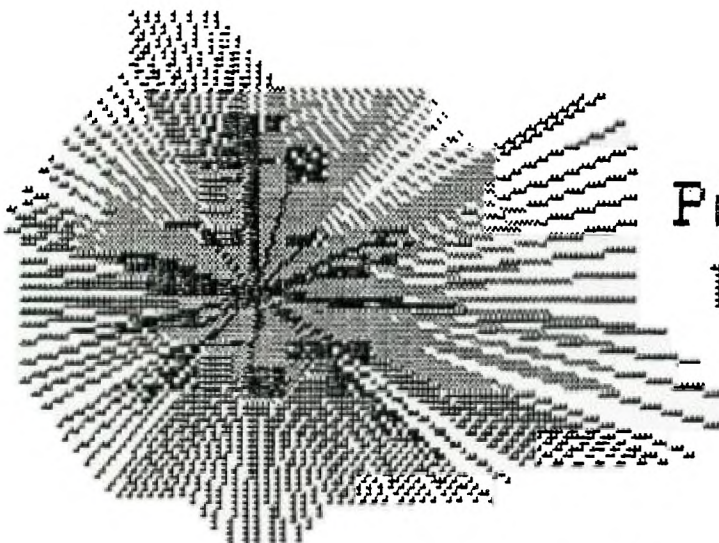
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