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TICOMM BBS
>>> 24-HRS <<<

SYSOPS

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Meeting: 8 Jan '88 Fri
Oregon #2 Fire Station
Time 7:00 Pm.

> TURNER - MILLS <
////////////////////////////////////

Meeting: 9 Jan '88 Sat
Unity Church Secor Road
New time: 12:30 Pm.

THE NEWSLETTER STAFF

Roger & Judy Feinauer

LOCAL CONTRIBUTIONS BY;

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Happy New Years 1988



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THE PRESIDENT'S PAGE

PRESIDENT'S COLUMN
OH-MI-TI
By Bob Peters

NEW HORIZON NEWS
By Don Turner

I am writing this because one reason or another Bob hasn't sent me his article for this section of the news letter.

This is too bad for you and is bad for the group. Well that's OH-MI-TI's business.

My business is to get this news letter out on time. Please don't think I am getting down on Bob because I'm not. It's just this without your user group there just isn't very many places to find out anything about your computer.

Oh ya don't forget to bring your \$15.00 to this January's meeting. And please do come and bring a friend

roger

EDITOR
Roger Feinauer

This month I haven't put my Geneve article in the news letter because I received an article from Bob Bobbitt of Asgard Software about Mdos 1.0 it is rather good so I will put mine in next month.

Also I am thinking of hooking up a 2400 bd. modem to my Geneve. I plan to hook this with the y-cable to my RS232. I hear this may cause some problems with wiring and would like to hear from anyone who could help me with this. I don't plan to buy the modem until the end of January first part of February so if anyone could help please let me know.

By Don Turner
New Horizons

Greetings to all the members of **NEW HORIZONS**. I would like to start the new year off with all of the members at this month's meeting. Be sure to attend or you could miss something that would benefit you. We will be meeting at **UNITY CHURCH** on Executive Pkwy at 12:30 on January 9th.

I would like to thank everyone who donated to the Christmas party. Your continuing support made the party a success! There were seven door prizes given away ranging from games to TI WRITER. Kent Sheets demo'd **CERTIFICATE 99** for us and from the interest during the demo it seems that this piece of software will be in great demand. I myself liked it rather well.

This month we will have a new club disk available. This new club disk is a **MONOPOLY** game in **Extended Basic**. It's rather good and best of all it's an American version. Everyone please attend so that you can catch the demo on this disk.

LASTLY BRING YOUR SELF AND
YOUR \$ 15.00 AND A FRIEND
TO ETHER CLUBS METTINGS.....
roger

Summary: M-DOS 1.0 is obviously not the last version of the operating system we are going to see - however it is reasonably complete. Watch for version 1.1.

Version: This is the 11/30/87 update of the original article that appeared last week. It has been modified to reflect new information kindly provided by Paul Charlton, the author of M-DOS.

Version 1.0 of the Myarc Disk Operating System has been released. However, a thorough examination soon proves that this latest version still isn't the one that is documented in the manual accompanying the machine. Many of the differences and some of the shortcomings are significant. This is not to say that the operating system is necessarily deficient. In many ways, it is superior to anything available for the TI-99/4A in scope and capability.

As is, version 1.0 is a reasonable operating system where productive work CAN be done - at least as productive as anything done on the 99/4A. Once some means is provided for converting assembly files from the TI format to one that can be executed directly from the M-DOS command line, M-DOS will be a complete operating system - with or without any additions.

This is not an apology for Myarc - instead it is encouragement for people to look at things as they are, instead of making sweeping pronouncements. Critics will be quick to jump on Myarc and claim that since the current version is less than the one advertised in the manual, then Myarc is again trying to pull a fast one. However, these critics are ignoring the purpose of an operating system - to provide user access to the resources of the computer, and to provide some means to use applications. In these things, M-DOS is complete. To put it a little clearer - EVEN IF MYARC WERE TO RELEASE NO FUTURE VERSIONS OF M-DOS, WE CURRENTLY HAVE ALL THAT IS NEEDED TO PRODUCTIVELY USE THE MYARC GENEVE COMPUTER. No one need apologize for M-DOS, especially not Myarc and it's authors.

The purpose of this article is to document the differences between M-DOS 1.0 and the version described in the user manual. Additionally, an effort was made to generate a rough index for the operating system manual (a glaring oversight in a otherwise decent manual). This is not to say this article is complete - I undoubtedly overlooked many inconsistencies between M-DOS 1.0 and the manual, and I didn't have the hardware to adequately test some parts of the operating system (specifically a hard disk drive).

The system I utilized for my tests consists of a Myarc Geneve 9640, a Myarc Floppy Disk Controller, 2 floppy disk drives, a TI RS232 card, an HP Thinkjet printer (Epson-compatible) and an Avatex 1200 baud modem. Additionally, the monitor was a small Zenith monochrome 80 column display.

Now to the tests.

M-DOS 1.0 reportedly functions fine with all disk controllers available for the TI-99/4A. As this was true with the preceeding version, it comes as no great surprise. I found in general that all my devices seemed to function pretty much like they do on the 99/4A (but the keyboard buffer is sometimes obnoxious - I wish there was a way to clear it). All in all, M-DOS works pretty much like that described in the manual. The following is a list of all the commands and notes as to how accurate the manual is for each:

ASSIGN: (pg 76) This command does not work as described in the manual. According to the operating system's author, it assigns "physical devices to logical devices". What this means is that it lets you assign a letter to a device name (like DSK1) so that M-DOS is easier to use (and more like MS-DOS). The ASSIGN Command has a number of uses: a primary one is the ability to use the ramdisk in M-DOS. To do this try ASSIGN D=DSK5: (note the colon is essential). You can also use this command to make all queries from one device go to another - for example if you try ASSIGN A=DSK2:, every time you type DIR A: you will get a

directory of the disk in drive #2. You can also use this command to assign a letter to a hard-disk subdirectory: for example ASSIGN C=WDS1.SUB1 assigns the subdirectory SUB1 of the first hard disk drive to device C. Hence, if you were to type DIR C:, you should get a list of the files in that subdirectory.

- ATTRIB: (pg 46) Before I reported that this doesn't work. After a protest from the author to the contrary, I spent a half-hour testing it again. It DOES seem to work, but every time I use it it locks up my Geneve before returning to the prompt. Maybe I have a bad copy of the operating system.
- CHDIR: (pg 53) See the notes below for MKDIR. Was unable to test this.
- CHKDSK: (pg 46) Works fine. However, does not report the amount of space used by files on the disk or that used by directories. However, by using wildcards, you can get info about all or some of the files on the disk (for example, CHKDSK * would tell you how much space is used by the files on the disk).
- CLS: (pg 32) Works as described.
- COPY: (pg 43, pg 69) Works as described but it occasionally startles you the way it works. For instance, if you specify the devices on a single-disk copy (IE COPY A:FILE A:FILE) it pauses for quite some time after prompting you to press any key before it seems to begin the actual copy. The first time this happens you are liable to press a bunch of keys and mess things up. It does this at odd times. The way around this is common sense - if you press a key it is very likely the Geneve caught it. If nothing happens after 30 seconds - press another (but never Y or N).
- DATE: (pg 32) Works as described.
- DIR: (pg 38) Works as described.
- DISKCOMP: (pg 41) Works as described.
- DISKCOPY: (pg 41) Works as described (and uses all the empty memory as a buffer so that you can usually copy a SS/SD disk to another with one drive in a single pass!). Occasionally, if you are making copies onto uninitialized disks it will try to copy without formatting the new disk (particularly if it isn't the highest quality disk). As a result, M-DCS reports a whole disk full of write errors. The way to stop this if it happens is to press CTRL-ALT-DEL simultaneously and wait a few seconds.
- ERASE: (pg 44) Works as described.
- FORMAT: (pg 40) Works as described. It would also be nice if you could set the interlace of the disk with this command too.
- GRAPHICS: (pg 70) Doesn't even begin to work.
- LABEL: (pg 48) Works as described.
- MKDIR: (pg 51) It seems to try to do something, but apparently floppies aren't allowed to have subdirectories (a shame too!) and no one plans on it. I didn't have a hard-drive on hand to test out this command, RMDIR and TREE.

MODE: (pg 45)

SCREEN: The Shift screen option doesn't work.
The Test Pattern isn't displayed.

PRINTER: Works as described (don't try to set
any other printer length but 30 and 132
though - it won't work).

SERIAL: Works as described.

PATH: (pg 55) Couldn't test without hard-disk drive.

PROMPT: (pg 75) Works as described (and is pretty neat!).

RENAME: (pg 45) Works as described.

RMDIR: (pg 54) Couldn't test it - but when I tried the command it
didn't seem to know it because it checked the disk as if I
asked it to load and execute a file.

SPEED: (pg 78) Didn't seem to have any effect in TI mode or
outside it.

TIME: (pg 32) Works as described.

TREE: (pg 56) Couldn't test without hard-disk drive.

TYPE: (pg 43) Works as described (and is a real time-saver).

VER: (pg 79) Works as described (and is pretty useless
considering M-DOS tells you which version it is when it
boots).

VCL: (pg 49) Works as described.

The following is a list of batch commands and whether they functioned or not. Batch files are simple to make, and can do quite a few powerful things which make a command line operating system almost livable. There is one bit of wrong information in the section about creating batch files - using My-Word use the ProgramEdit mode (PE from the command line) and print the file to disk when finished (for good measure).

ECHO: (pg 59) Works as described (but a bit confusing).

FOR: (pg 61) Works as described.

GOTO: (pg 60) Works as described.

IF: (pg 60) According to the author it works, but I had trouble
with the example in the manual.

PAUSE: (pg 59) Works as described.

REM: (pg 58) Works as described.

The last section deals with configuration files. What the manual doesn't make clear is that a CONFIGSYS file to be properly executed should be named AUTOEXEC and be placed on the disk containing the operating system. When M-DOS boots up, it will automatically be executed. Some of the options also drastically reduce the amount of system memory available (128K for the TIMODE option alone!). Do I see 1ML updates for the 9640 soon?

BUFFERS: (pg 74) Seems to work.

FILES: (pg 74) Works as described.

LASTDRIVE: (pg 75) Works as described (as I learned to my chagrin when I created an AUTOEXEC file with this value set to 1 and found I couldn't use my second drive until I edited the AUTOEXEC file and rebooted).

RAMDISK: (pg 72) It apparently doesn't effect the size of the GPL Interpreter's (or TI mode's) RAM disk, but you can create one for use in M-DOS. After setting it up in your AUTOEXEC file, use the ASSIGN command (detailed above) to make it usable.

SPOOL: (pg 73) Works VERY nicely. Unlike what I reported earlier, though, there is a way to kill the spool command in mid-spool. Type DEL (for DELETE) and the logical device name of the printer (PRN), or DEL PRN, to stop it. This doesn't work on any buffer built into your printer of course.

TIMODE: (pg 74) Assigns the memory alright but TI mode will load equally with or without this command.

A number of non-command things described in M-DOS are different. The CTRL PRT SC key (pg 33) works perfectly (and can be a nuisance). The Command Stack (pg 34) is actually there, but it is assigned to different keys. Use the up and down arrow keys to scroll through the commands you previously entered, and when you find one you like press ENTER to execute that command. Redirecting Output (pg 69) works just fine, and so does Copying from a Device to a File or Another Device (pg 68). Finally, the Screen Scroll (pg 35) doesn't work at all.

Additionally, NEVER use a \ in a filename - you can't rename, copy, or do anything to a file from M-DOS with that character in the filename. M-DOS interprets that as a subdirectory marker or somesuch. However, if you do, all isn't lost. If you put quotes around the name of the file you can make copies of the offending file, delete it, or do anything you would do to a normal file. Only the filename should be placed in quotes, not the device name of the drive containing the disk (IE B:"SYSTEM/SYS" and not "B:SYSTEM/SYS" is the correct procedure).

Finally, you can re-boot the Geneve (have it return to the swan) by pressing CTRL-LEFTSHIFT-RIGHTSHIFT. Or you can press CTRL-ALT-DEL to have it return to the M-DOS title screen and execute any AUTOEXEC files that may be on your disk.

The current version of M-DOS may be relatively complete and useful, but there are a few things I would like to see (other than the suggestions listed above). It would be nice to be able to return to M-DOS from the TI mode (or GPL program) without re-booting. And I can't wait until some of the Geneve specific software (like My-Word and Paul's Fast-Term) will be available in versions that execute directly from the command line so that I can ignore the TI mode altogether. However, word from the author is that there will be no future versions of Fast Term for the Geneve.

The most common complaint right now among Geneve owners is having to swap disks 3 or 4 times before getting to their application (though people with DS/DD drives don't really have this problem so much). Some programs seem to work better with M-DOS 1.0 than previous versions - Paul's GIF Translator for instance would occasionally do odd things under 0.99B but seems as stable as a rock under 1.0. Ah well, I guess we're starting to get there folks!

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MAY BE REPRODUCED IF UNALTERED

CALLING BASIC

By Don Turner
New Horizons

Probably one of the least used commands in TI Extended basic is the CALL subprogram. I am not speaking about linking to assembly programs, but creating your own Call routine. What is unique about this command is you not limited to the name of the call except by the length of the name and of course reserved words such as PRINT etal.

While you are reading this article you may want to clear the cobwebs and dust from you Extended basic manual and crack it open to the page that defines the call subprogram that is user defined. See pages 180-184 and page 55 in the manual.

Believe it or not but structured basic programming can be created by using this command. In general terms structured programming utilizes "modules" that handle only one routine such as initializing all of the pre-set values given in a program and open any files needed. The module has ONLY one entry point and one exit point. A module should be kept to a minimum of lines to insure its integrity. An added benefit is debugging because you could locate the problem rather quickly in a module.

Another added benefit to the call routine is never having to worry where it is at. Let me better explain. Most programmers use the GOSUB command. You must know what line number the routine is on in order execute it the way you want it to run. Lets say you decide to resequence the program. If you inserted any line numbers when writing the

program, then your gosub routine has been re numbered and your forced to list the program to find it again if you pain to use it again. BUT with the CALL subprogram that will never be the problem because you are calling a subprogram , not a line number !

Your saying, so what good is it? If you plan to use a CALL KEY statement to put a pause in the program then anywhere in your program you can at any time call your pausing subprogram with ease and use the proverbial "PRESS ANY KEY" routine with ease.

Below I listed a program with two user defined subprograms. I deleted some of the the bells and whistles in the program so that you could easier see how a user defined call is defined in your program.

```

100 CALL TITLE
120 DIM PHONE(20)
130 DR=20
140 CALL CLEAR
150 !*****
160 !* LOAD TABLE *
170 !*****
180 FOR I=0 TO 9
190 READ T1(I),T2(I)
200 NEXT I
210 !*****
220 !* ENTER PHONE NUMBER *
230 !*****
240 DISPLAY AT(08,2):"ENTER A
ZERO TO STOP"
250 DISPLAY AT(10,2):"PRESS
ENTER TO DIAL"
260 DISPLAY AT(12,2):"ENTER
PHONE NUMBER"
270 X=0 :: ACCEPT AT(14,2)
SIZE(13)BEEP VALIDATE(DIGIT,"-")$
280 IF SEG$(N$,1,1)="0" THEN
STOP
290 FOR I=1 TO LEN(N$)
300 IF SEG$(N$,I,1)="-" THEN 330
310 X=X+1
320 PHONE(X)=VAL(SEG$(N$,I,1))
330 NEXT I

```

```

340 !*****
350 !* MAKE TONES
360 !*****
370 FOR I=1 TO X
380 CALL DELAY
390 CALL SOUND(100,T1(PHONE(I)
),0,T2(PHONE(I)),0)
400 NEXT I
410 DISPLAY AT(20,2):"REDO TONES
Y/N"
420 ACCEPT AT(20,18):YN$
430 IF YN$="N" THEN 220
440 GOTO 370
450 DATA 941,1336
460 DATA 697,1209
470 DATA 697,1336
480 DATA 697,1447
490 DATA 770,1209
500 DATA 770,1336
510 DATA 770,1447
520 DATA 852,1209
530 DATA 852,1336
540 DATA 852,1447
550 END
551 !*****
552 !* title sub routine
553 !*****
560 SUB TITLE
570 CALL CLEAR
580 DISPLAY AT(5,1):"NORTHWEST
OHIO 99er SOFTWARE"
590 DISPLAY AT(7,14):"BY"
600 DISPLAY AT(10,10):"DON TUR
NER"
610 FOR I=10 TO 19
620 CALL SOUND(100,100*I,0,200
*I,5,300*I,0)
630 DISPLAY AT(11,I):"- "
640 NEXT I
650 DISPLAY AT(20,3):"PRESS ANY
KEY TO CONTINUE"
660 CALL KEY(3,K,S)
670 IF S=0 THEN 660
680 SUBEND
681 !*****
682 !* delay routine
683 !*****
690 SUB DELAY
700 FOR DELAY=1 TO 50 :: NEXT
DELAY
710 SUBEND

```

This program is quite runnable maybe not useful but it does work. If you enter a phone number the computer will sound the same tones created by your touch tone phone. If you put the mouth piece near the speaker of your monitor/TV some phones will actually be dialed. Try it on your local time and temp phone number. It will ignore hyphens in the phone number.

You can see how I encoded the title routine and the delay routine. Of course this example is really not a very good one, but if you wrote a lengthy program and had redundant routines then this would make the program easier and save memory as well.

I recommend that you read the TI extended basic manual

pertaining to this command and understand the parameters of this call before using it. If you make an error, it is truly unforgiving on a run, but the error messages are a bit more wordy and seem not to be so intimidating or cold.



UPDATED: 01/01/87

FAIRWARE PROGRAMS

This list does not represent a complete listing of all the material that is available. When requesting programs from the author don't forget to send a self-addressed prepaid mailer and the disks required.

MOST IMPORTANT OF ALL

If you keep the program and use it send the author what he asks, most times it is a small amount. Be fair with him.

NEAT LIST by:

Danny Michaels
Route 9, Box 460
Florence, Al. 35630

lists multi-statement lines to your printer OR disk and references your program variables to simplify reading.
SSSD (360) \$10

SCREEN DUMP by:

Danny Michaels
Route 9, Box 460
Florence, Al. 35630

Works with Epson type printers and will give you both verticle or horizontal printouts in double or single size.
SSSD (332) \$10

EASY SPRITE by:

Tom Freeman
515 Alma Real Drive
Pacific Palisades, CA. 90272

An extremely fast Extended Basic program. You can create sprites and have complete cursor control. You may insert them into other programs. SSSD (125) \$10

FAST FORTH by:

Tim Curran
4153 Four Pole Road
Huntington, WV. 25701

For those FORTH enthusiasts needing 40 column auto-repeat, editor locator, etc. SSSD (360)

SPRITE BUILDER by:

John Taylor
2170 Estaline Drive
Florence, AL. 35630

If you are in need of help to construct some fantastic sprites, this is for you.
SSSD (669)

MASS-COPY by:

Steve Lawless
2514 Maple Ave.
Wilmington, Del. 19828

This is a beautiful disk copier. You can use two drives at once, for rapidity.
SSSD (167)

DM10000 v3.8 by:

Ottawa TI-99/4A Users Group
P.O. Box 2144, Station D
Ottawa, Ont. K1P 5W3

This disk manager rivals CorComp's version, and will make your TI Disk Manager II worthless! SSSD (316), also the source code is available for \$15.00
SSSD (or equiv.) (1315)

HOMEPLAN by:

Bob Delpit
14634-B S. Budlong Ave.
Gardena, Ca. 90247

A SpreadSheet program. Can enter up to 20 rows and 13 columns of numerical data. Mathematically operates in 6 ways: Add, Subtract, Multiply, Divide, etc. SSSD (181)

TK WRITER by:

Tom Knight
7244 Dunion Drive
Jacksonville, Fl. 3222

This does everything the TI-Writer will do without need of the cartridge, except Show Directory. SSSS (175)

FAST-TERM v1.16 by:

Paul Charlton
1110 Pinehurst Court
Charlottesville, Va. 22901

Another excellent Terminal Emulator, some say "it's the best one available". DSSD (662) \$10

PILOT 99 by:

Thomas Weithofer
1200 Harbury Drive
Cincinnati, Oh. 45220

This is called the simplest programming language available for the TI-99/4A. Extended Basic manual included on disk. DSSD (669)

TURBO-PASC99

Tenex computer Express
Po Box 6578
South Bend, In.
46660-6578
1-219-259-7053

 \$59.95
windows 99 19.95
graphis&sound 19.95

ASSAULT THE CITY by:

John Behnke
5755 W. Grace
Chicago, Il. PF634

Requires the Tower of Doom module. Two games, Assault The City and Quest for the king and Party. SSSD (16)

THE DIRECTOR by:

Ron Rutledge
1020 3rd St.
Waukee, Ia. 50363

An Extended Basic program database that allows cataloging disk based programs. SSSD (131) \$10

PRINTOUT by:

Steve Mehr
633 Hollyburne Lane
Thousand Oaks, CA. 91362

An Extended Basic utility allowing a wide variety of options for outputting a "display Variable 99" file to an Epson or Gemini printer. SSSD (353) \$5

SUPERBUG II by:

Edgar L. Dohmann
Route 5, Box 84
Alvin, Tx. 77511

An excellent enhancement of TI's Superbug, and it includes a change-of-output device from your screen, color toggles, added commands, and much more. SSSD (360) \$10.00

PRBASE by:

William Warren
2373 Innton St.
Aurora, Co. 80012

An Assembly language database program with full screen editing and fast sorts. Design your own data screens. DSSD (628) \$10

DISPLAY AT by:

Barry A. Traver
835 Green Valley Dr.
Philadelphia, Pa. 19128

Build a "BLANK" TI-WRITER file to create screen of "Displat At" statements. SSSD (32)

ARCHIVER v3.2 by:

Barry A. Traver
835 Green Valley Dr.
Philadelphia, Pa. 19128

"Packs" a number of small files into one larger one. Will also "Unpack" them. also compress files.

HBM PRINT by:

Bob Lawson
16223 Mill Point Drive
Houston, Tx. 77059

A utility to print Household Budget Management Module files, excellent. SSSD (323) \$10

DISK CATALOG by:

Larry Duke & Scott Beeker
4704 Palo Duro NE
Albuquerque, NM. 87101

Disk Catalog X/B, add, delete, print, display, purge, disk info. SSSD (68)

TE-2 ENCODER by:

Ken Gilliland
543 Riverdale #15
Glendale, Ca. 91204

Made for Bulletin Board Operators that want to provide, Graphics, Speech and Color to their TE-2 cartridge. SSSD (178) \$5

CALENDAR PROGRAM by:

Richard Bailey
68A Church St. Gonic, NH
Gonic, NH. 03867

An excellent calender program. It will print a monthly appointment, yearly, big, small, smaller, tiny on an Epson type printer, plus screen. SSSD (164)

DISK MANAGER 99 by:

Mike Dodd
115 Richards Drive
Oliver Springs, TN. 37840

Another disk manager. Extended Basic, Console Basic with E/A or Mini-Memory. Protect or unprotect, rename files or disk, test and catalog a disk to screen or printer. SSSD (271)

FAS-TRAN by:

Bill Harms
4527 Hayes Court
Chino, Ca. 91710

A fast checkbook spreadsheet routine for 12 months. Also good for budgeting and income tax. A utility for many related jobs. SSSD (623) \$5

CHECKBOOK & BUDGET MANAGER by:

John Taylor
2170 Estaline Drive
Florence, AL 35630.

An efficient program for both checkbook and budget maintenance. SSSD (357)

DRAGON STORM by:

L. E. Benson
P. O. Box 283
Eden, NC. 27288

A game. SSSD (53)

LAWNMOWER by:

Gary Cox
For address see above.

A low key game for the youth. SSSD (47)

MASS TRANSFER v4.3 by:

Stuart Olson
6625 W. Coolidge St.
Phoenix, Az. 85033

An assembly language Terminal Emulator. Menu driven, x-modem transfers and is capable of multiple x-modem transfers all at once. SSSD (211) \$10.

GRAPH PAPER by:

Tom Wynne
16223 78th. PL W
Edmonds, Wa. 98020

Make professional graphs with your Epson-compatible printer. 1 to 32 partitioned squares. Very good. SSSD (23) \$2.

C99 COMPILER by:

Clint Pulley
38 Townsend Ave.
Burlington, Ont. L7T 1Y6 Canada

A excellent NEW language. The first tutorials on "C". DSSD (713) \$22.

TAX 1984 by:

Mike Conway
911 Dover Dr.
South Bend, In. 46614

Uses TI MULTIPLAN module. Can be updated to other years. Transfers info to the 1040 form. SSSD (187)

SUPERCART DISK by:

David Romer
213 Earl St.
Walbridge, Oh. 43465

2 programs, E/A loader & D/V 80 loader
A super cartridge module loader. Also called Homebrew Module Software.
SSSD (330) \$10.00

FUNLWRITER v3.0 by:

Funnelweb Farm
Tony & Will McGovern
215 Grinsell St.
Kotara, N.S.W. 2288
Australia

The most versatile program available for the 99/4A. TI-WRITER and E/A may be used without the modules. Auto loads from XB but also loads from TI-WRITER, E/A or M/M. Contains DM1000 v3.0, a sector editor, a forth loader & a C99 loader. Required is 32K, DOS, XB or E/A or M/M or TI-WRITER. SSSD (196)

TI WRITER HINTS by:

Dick Altman
1255 Shrader St.
San Francisco, Ca. 94117

Hints, instructions and common controls for using TI-WRITER. Very helpful. SSSD (133)

TI/SORT by:

David R. Romer
213 Earl St.
Walbridge, Oh. 43465

Manipulation of D/V 80 files. Single or bi-level ascending ASCII. Quicksort or Shellsort routines. SSSD (330) \$6.

FORTRAN IV.....\$ 49.95
Tenex Computer Express
1-219-259-7053