

SOUTH BAY TRS-80® USERS GROUP



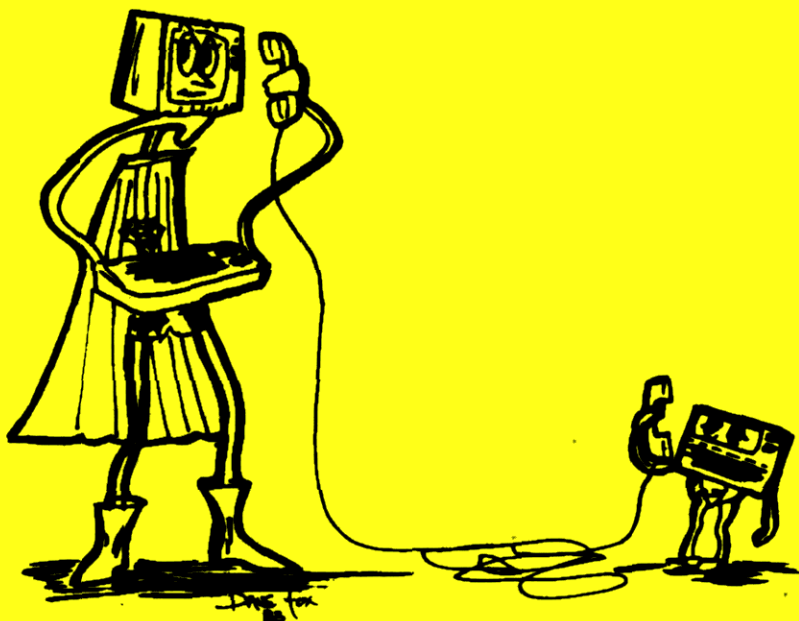
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DYNAMIC MEMORIES™

™ Tandy Corp./Radio Shack Inc.

SEPTEMBER 1983

The NEW PWORD
coming soon to
SBUG-80



Communications with the
Model 100...

SOUTH BAY TRS-80 USERS GROUP

Page - Contents

- 2. THE EDITOR'S TWO BITS**
- 3. SBUG'S CP/M SIG**
- 5. UNTOUCHED BY HUMAN HANDS**
- 7. F O U R P L A Y**
- 11. DISK COMMANDS ON A TAPE SYSTEM**
- 12. SBUG-80 MAIL CORNER**

SBUG meetings are held the 3rd Tuesday of each month in the north east corner of Dysan's building at:

Time - 7:15 to 10:30 PM 5201 Patrick Henry Drive
Santa Clara, Ca

September 20, October 18, November 15

Topic of the month:

Communications and the NEW SBUG-80 (bbs)

Eric Brewer will be the MC for this month's meeting. Eric plans to tell us about his new version of PWORD used on SBUG-80. Your sysop, Robert Byrd, will give an overview of SBUG-80 for beginners. Everyone come thou, Rob may have a trick or two for the more advanced user.

Don't forget the 1st Wednesday meeting on October 5th at 7:15 PM (bring your computer). This is an informal meeting and a good opportunity for a new member to chat with other SBUG members.

MEMBERSHIP

If you would like to be a member of SBUG and start receiving our newsletter "Dynamic Memories" then send \$18.00 (check) to the following address:

South Bay TRS-80 User Group
P.O. Box 60116
Sunnyvale, Ca 94088

Or, come to one of our meetings. If you also wish to communicate with our bulletin board system (SBUG-80) then include an additional \$25.00 for an account on the system. You must be a member of SBUG to have an account on SBUG-80. Please, include your address and phone number. Thanks . . .

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Dynamic Memories was prepared using
MAXPRINT from PEGGYTRONICS

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If the need arises, feel free to give one of us a call.

=====

THE EDITOR'S TWO BITS

Is there a member of SBUG communicating with SBUG-80 who would like to help me edit Dynamic Memories? I am very much over worked. Between my sysop functions on SBUG-80 and this newsletter I contribute approximately 24 hours of my time each month. Someone please, give me a hand! Is there a member of SBUG who feels comfortable with the English language who has a little spare time? Dynamic Memories is growing too fast for me to keep up. I need help!

Rob...

SBUG'S CP/M SIG

by Ron Carpenter
RON @ SBUG-80

The TRS-80 CP/M User Special Interest Group (SIG) of SBUG is dedicated to furthering interest in using CP/M on the TRS-80 Models I/III/IV, LNW-80, and the MAX-80. Activities include arranging group discounts on the adapter boards required to run full CP/M on the TRS-80 Models I and III, exchange of information on members' particular interests and experiences in using CP/M on the TRS-80's, and distribution of public domain programs from CPMUG, SIG/M, etc.

One significant reason for using CP/M on your TRS-80 is to share the knowledgeable of the operating system used on the many Z80 based computers such as Kaypro, Osborne, and Xerox. There is more readily available free software for CP/M than other systems. The CPMUG and SIG/M libraries contain 200 8" diskettes (50 megabytes) of software, most including source code which can be examined and modified. Also, although most categories of software applications are available to run under the TRSDOS operating system, there are some, such as DBASE II, which are available only under CP/M.

To run CP/M on a TRS-80 Model I or III, an adapter board is needed "under" the Z80 chip, intercepting and re-mapping address bus lines A14 and A15. Full CP/M requires the use of lowest memory addresses as RAM; the ROM must be mapped away from its location in the first quarter of the Z80's address space.

The first adapter board was the Mapper I from Omikron in Berkeley CA. which appeared about 1979 for the Model I. Thousands have been sold, providing CP/M version 2.2 in 48K on 5 1/4" 35-80 track or 8" single density drives. A double density upgrade was available for awhile, but was withdrawn because of serious bugs. The Mapper I was priced at \$239, MBASIC included; for awhile they offered "The Works", which added CBASIC and Wordstar for \$399 then \$299; I believe they will now sell the mapper I for \$139 (like 48K mapper III). Omikron started advertising a 64K mapper for the Models I and III about a year ago. The mapper III, 64K, was advertised at \$199, including CP/M and MBASIC; it only recently started shipping. Neither the Model I 64K board nor the upgrade for the Mapper I ever appeared! Thus, I think, Omikron's credibility has really gone down hill lately; although you can always cancel your order and have your bank reverse a charge-card charge, would you want Omikron to sit on your money for up to a year or more?

Another Omikron product called the Mapper II allows 8" drives to be used; it mounts in the expansion interface,

SEPTEMBER 83

under the 1771 FDC chip like a doubler, providing a 2Mhz clock to the FDC (NOT to be confused with a CPU speedup) and data separation. Newer doublers from LNW and Holmes allow both 8" and double density functionality. The mapper II costs \$100; LNDoubler 5/8 \$199; the Holmes is the best buy at \$129. A cable for two 5" and two 8" drives is available from Omikron for \$49; a jumper board which connects your fourth 5" drive's connector to the 50 pin cable (not included) from the 8" drive is available from LNW for \$29.

Around 1980 the Shuffleboard I and III appeared from Parasitic Engineering also in Berkeley. Apparently few Model I versions were sold, but the fairly popular and very reliable 64K Shuffleboard III is now available from Memory Merchant in San Leandro CA. for \$299. BUT, since Holmes Engineering in SLC, Utah has come out with their VID-80 which also gives you 80 column video (just like a Model 4) for \$279 (plus \$100 for CP/M license), the Shuffleboard III seems quite obsolete for the price. Both include a utility to read several other disk formats like Osborne, Kaypro, IBM.

Next, FEC from Woburn MA. produced a similar Model I 48K adapter board (for \$200+) and a 64K version with a clock/calendar for nearly \$500. The operating system was TB/OS, which was similar to CDOS and provided CP/M 1.4 functionality without the problem of royalties to Digital Research. A very nice utility to setup and read or write virtually any disk format was included and CP/M 2.2 was available at extra cost. Sales of these were turned over to Freedom Technology International in Philadelphia PA. a year or two ago, but now they are no longer sold.

Around late 1981 Hurricane Labs in Cupertino CA. produced a Compacter for the Model III. (They demonstrated it at one of SBUG's meetings.) It was marketed by MTI in Santa Ana CA. for around \$600, and was listed in a closeout ad in 80Micro this summer for \$299 plus \$100 for the CP/M software. The phone for Hurricane is disconnected, with no forwarding number; even the MTI clearance price is worse than Holmes' VID-80 and MTI is notorious for keeping customer's money if they return something!

In 1982, Martin Data Systems tried to produce a 64K adapter for the Model I, shipped a few, then disappeared. There is currently a product called Bigmem by Microhatch in Dewitt NY. which, with considerable trace cutting, allows 96K on the Model I for \$169 (\$30 for installation, guaranteed), plus \$100 for CP/M (from Freedom).

In summary, for the Model I, the Omikron (single density support only) 48K seems to be the best. (We may be able to get a closeout quantity of the 48K Freedom board at under \$99, which would be a great buy because it supports all disk formats including double density. (The Freedom

SOUTH BAY TRS-80 USERS GROUP

BIOS has no ROM as does Omikron, and is therefore modifiable.)

The best buy for the Model III is clearly the Holmes VID-80, because it upgrades the Model III to nearly a Model IV!

=====

UNTOUCHED BY HUMAN HANDS

by Bill Ramsey
BILLRAM @ SBUG-80

At the July meeting of SBUG, I inquired if anyone had successfully transferred sequential files (such as Special Delivery) to the very excellent Postman program. At the time no one had experienced this (or at least, they didn't share the information with me.) I subsequently attempted to write a program which would do this, but was unsuccessful and was beginning to run out of time. I tried "ROUTEing" the info to high memory, I tried making a BASIC program which would parallel the format of Postman, I tried APPENDING the data to the end of a postman file, etc. I had already spent far too many hours on this project and was experiencing great frustration--nothing new for me and computing!

The problem seems to lie in the fact that Postman uses some hashing technique to place its records in the file. The beauty of Postman is its rapid ability to sort (11,000 records in 24 seconds), its "wild card" extraction, and the fact that the file may span several disks and has been adapted for hard disk.

After consulting with many gifted and knowledgeable SBUGgers, I came to a grand halt in my quest to transfer my files. In desperation, I called the 800 number of Soft Sector Marketing (distributors of Postman) only to find that the number had been disconnected. I subsequently called the 313 number and got the same message. I also attempted, unsuccessfully, to locate the author of the program, Alger LaForest. Finally, I called Bruce Carso and was told that Soft Sector no longer existed--too many full page ads in 80 Micro?? I then determined that I would not use Postman at all. My primary use of the program would be to store information from my large data base of selected musical compositions for voices and instruments from 1600 to the present. What I required was a program which would allow me to enter the following information:

Source, Composer (Last Name & First Name), Title, Opus #, Types and numbers of instruments as follows: Flutes, Oboes, Clarinets, Bassoons, Horns, Trumpets, Trombones, Tubas, Violins, Violas, Celli, Basses, Percussion instruments, Keyboard instruments, Voice groupings (Mixed,

SEPTEMBER 83

Male, Female), Solo voices (Soprano, Alto, Tenor, Bass), Length, Occasion, Other instruments, and Optional instruments. Admittedly, this is a large order for the little Mod I!. In addition to this, I also wanted to use the Mod 100 to gather information for the ever expanding data base, and "dump" it directly to the Postman program.

I have been gathering information for the data base for the past 23 years and used this project as an excuse for the purchase of my first computer. (What excuse did you use?) I developed a functional BASIC program for gathering the information and storing it in efficient and usable form, but the Mod 100 was a great boon to eliminate the need of transferring the data from the library to paper (by hand) and then typing in the coded information to the Mod I. Once the information is entered into the data base, I then could interrogate the computer and request a composition of say 30 minute's length which used 2 violins, viola, cello, bass, 2 oboes, perhaps bassoons, 1 soprano solo, no tenor solo, 1 piccolo, timpani, harp, organ, for mixed voices, for Easter, by Burt Bacharach!--if, indeed, such a strange composition existed and was entered into the data base.

This all worked in my original BASIC program, and I adapted it for Xtra Special Delivery. When my disk filled, however, I had a problem in that I had several thousand records and could only have a file that was approximately one thousand records in length, thus necessitating multiple sorts, searches, and extractions! Multiple extractions, painful as they are in the Mod I, are still somewhat less excruciating than at the dentist! When Postman offered me so much more flexibility, and the 100 the luxury of portability, I was determined to make use of the latest in technological advancement. I am aware that I will have to use "real" mainframes for greatest efficiency, but I could, at least have some clumsy (yet far more efficient than me) tool (the Mod I) for accessing this information. For years choral conductors have longed for a data base which would do just what this one hopes to do. I could then share this data base with the community of musicians who generally have access to micros.

Shortly after the July meeting, I received a call from Frank Vanslager, another charter member of SBUG, who said, "have you tried to use a /JCL file for getting the information from the 100 to the I." I hadn't. With this clue, I had, in ten minutes time, called Frank and reported that he was a genius! The program (without modifications for my special musical needs) follows:

```
10 CLS: CLEAR 1000: DEF STRA-H, J-Z: DEFINITI
: OPEN "RAM: DATA. DO" FOR APPEND AS 1
11 PRINT #1, "POSTMAN"
12 PRINT #1,
13 PRINT #1, "1": PRINT #1,
```

SOUTH BAY TRS-80 USERS GROUP

```
14 PRINT#1,"I";
15 I=I+1
20 INPUT"Code";CD;INPUT"Last Name";LN;INPUT"First Name";FN
30 INPUT"Company";CP;INPUT"Address";AD;INPUT"City";TN
;INPUT"State";ST;INPUT"Zip";ZP;INPUT"Data1";D1
;INPUT"Data2";D2
40 PRINT#1,CD;PRINT#1,LN;PRINT#1,FN;PRINT#1,CP;PRINT#1,AD
;PRINT#1,TN;PRINT#1,ST;PRINT#1,ZP;PRINT#1,D1;PRINT#1,D2
;PRINT#1,"@";
50 INPUT"Another (Y/N)";A;CLS:IFA="Y"ORA="Y"THEN GOTO15
60 CLOSE:MENU
```

When the created file is "dumped" to the Mod I (more about that next month), I name the file POST/JCL. I then type DO POST, and all the information gathered is automatically transferred from the Mod 100 to Postman--untouched by human hands!

F O U R P L A Y

by Ian Webb
IANWEBB @ SBUG-80

Well, another month. Time sure passes quickly when you feel obligated to produce some copy for the newsletter!

At least this month one person has helped by providing some Model 4 information. Thanks to Chet Kemp who has provided the information about programs available at Strawflower and at Ebert Personal Computers.

SOFTWARE

Ebert Personal Computers of Aurora, CO (303) 693-8400 offers a video driver for the 80x24 and high speed mode of the Model 4 when used in the Model III mode. It does not work with just any program. Profile, Scripsit, Superscript, Visicalc, will not work with it. It will work with BASIC however and it does allow you to use 80 column display bulletin boards by loading it before Modem 80. They charge \$9.95 plus \$2.50 shipping. It is also available at B & C Computervision for less than that combined cost even when you pay the politicians their 6.5%.

Strawflower Electronics, the Radio Shack store at Half Moon Bay, carries the following software for the Model 4 operating in the Model 4 mode:

DOSPLUS 4.0 by Micro-Systems Software, \$195.95
CREATE PRO by MISOSYS (Editor/Assembler), \$159
PRODUCE by MISOSYS (Disassembler), \$69.95
MSP01 by MISOSYS (Four Utilities), \$69.95
6.0 Plus by Micro-Systems Software, \$49.95

5 DOS and 6 BASIC programs: Includes DISKZAP, DISKDUMP, DIRCHECK, MAP and RESTORE. For use in BASIC it has SORT (up to 30 arrays with keys on 10), SR (Global BASIC text editor), REF (cross references), RESOLVE (removes label addressing and inserts line numbers) and BE1 & BE2 which include editing shorthand and labels, abbreviated statements, faster loads and saves, extended error posting, etc.

I notice in the September 80 Micro, there are the following programs for the Model 4 advertised:

LS-FED II 6.x (File Editor) - disk zap with Disassembler, \$49.95

LS-FM 6.x (File Manager), \$49

LS-TBA 6.x (The BASIC Answer) - 5 Pass text processor, allows structured programming for TRSDOS6.x Basic. 14 character variables and local variables. Uses labels instead of line numbers and has built in cross reference system. \$79

LS-HELP 6.x (built in 5.x tutor), \$29

TECHNICAL REFERENCE MANUAL

The Model 4 Technical Reference Manual (\$24.95) arrived - finally - at the Saratoga Avenue Radio Shack, while I was in looking for disk drive connectors. (Still no sign of CP/M except it is in the new catalog for \$149.) The manual is a 385 loose leaf book in the padded cover. (Bart the manager says the padded cover means it'll be expensive - he's right!) It is divided in half with hardware and software covered. The last half is the TRSDOS 6.0 information with the supervisory calls to incorporate TRSDOSS 6.0 into Assembly Language programs.

Some interesting items in the first glance through the manual are that there is a 2K memory for the video...as would be expected when you multiply 80 times 24. But.. it is half used in the Model III 64 by 16 screen mode and can be switched to the other half. In other words, you have two screens that you can use in the Model III mode.

By the proper use of a byte sent to a port, it is possible to switch the memory banks and exchange various memory areas in 32K increments. This is possible from the Model III mode as well. So it would appear that you could have three different programs in three different 32K memory blocks and switch those blocks in and out of upper memory to try out a "poor man's" LISA like software scheme. I think we'll see some interesting software available if the creative writers don't abandon the TRS entirely for the 16 bit machines.

There are three different power supplies used in the Model 4. If you bought a completely expanded Model 4, you

SOUTH BAY TRS-80 USERS GROUP

get a single 65W power supply. It would either be one built by ASTEC for Tandy, or a "pure" Tandy one. If you have one that has been expanded, you have two 38W supplies built by ASTEC like the Model III.

I am particularly sensitive to the disk drives, because I spent most of the day today teaching myself to align Model III drives and managed to get to the place where I can do one in less than an hour now. I did 6 today and found that there are Tandon drives with Tandon boards, Tandon drives with Tandy boards and Texas Peripheral Drives with Tandy boards. There are track 0 switches that are mounted with 1/8" hex head bolts, with allen screws and with slot head screws, etc. The manual seems to indicate that the drives in the Model 4 are all Texas Peripheral drives with the Tandy electronics boards on them and the alignment instructions are for that configuration. However, there are two different disk controllers. The one used in the Model III and a redesign with LSI chips using a digital data separator, etc.

As a matter of interest, for those who do their own drive alignment, the Model 4 manual information on track 0 switch adjustment which is different from what is in the Model III Technical Reference Manual or the Model III Service Manuals which I have. They say the switch should be closed (low signal) at track 1 and open (high signal) at track 3. The original Model III information says this should happen between track 2 and 3. I notice that the manual still has a misprint in it in the Index Sector Adjustment information, so it hasn't been gone over very well since the Model III manual was written.

The RS232C board is the same as the Model III board. The video board seems to have two different possible configurations. There is an RCA version, which appears very similar to the Model III video and uses discrete transistors. There is a TCE video monitor board which uses 3 ICs and 4 transistors. The CRT is a 12VCLP4 with the RCA board and 12VCMP4 with the TCE board.

MODEL 4 HINTS AND KINKS

Jim Campbell reports that using the fast clock on the Model 4, he is able to use Modem 80 and communicate with a computer at work with no scrolling problems at high baud rates.

To read a Model 4 TRSDOS 6.0 diskette OR a Model 3 LDOS diskette directly from NEWDOS 80 V2, use this PDRIVE (Also reads DOSPLUS):

Single Density LDOS/DOSPLUS

TI=A,TD=A,TC=40,SPT=10,TSR=3,GLP=2,DDSL=20,DDGA=2

Double Density LDOS/DOSPLUS

SEPTEMBER 83

TI=A,TD=E,TC=40,SPT=10,TSR=3,BPL=2,DDSL=17,DDGA=2

The above is from Marin County TRS80 Users Group Newsletter.

I find that it is now easy to copy things back and forth to Model 4 TRSDOS diskettes using this. I have even loaded and run, from NEWDOS 80, programs on the TRSDOS 6.0 diskette, without copying them first onto the NEWDOS diskette.

From the Voice of the 80 Newsletter, June 1983. (Portland Area TRS 80 Users), the update passwords for LDOS 5.1 are:

System files (/SYS) = WOLVES, FILTER files (/FLT) = GBLTD
Driver filte (/DVR) = GBLTD, Utility files (/FLT) = RRW3
LBASIC and BASIC overlays (/OV\$) = BASIC
CONFIG/SYS = CCC. Master Password = RSOLTOFF

SUPERSCRIPT

From the Marin County TRS 80 Users Group Newsletter:

The following program can be used to recover from an "Attempt to Read Past EOF" error when using SuperScript.

```
10 LINEINPUT"Script filename";FS$
20 OPEN"E",1,FS$:PRINT#1,"END":CLOSE
30 PRINT:INPUT"Press (ENTER) to return to SuperScript"
40 CMD"I","SCRIPT"
```

CP/M - WHEN?

The Marin County Newsletter also mentions a talk given to a Dallas Users Group by the Product Manager for the Model 4. He apparently said that CP/M was targeted for August 15 with an additional 2 to 4 weeks for distribution. The SD disks will be Osborne/Kaypro type and there will also be DD. There will be NO programs from Radio Shack in support of CP/M.

He also said that there would be Scripsit, SuperScript, Visicalc (89K workspace), a MULTIPLAN type spreadsheet and NO upgrades for existing software. In the future there might be both Model III and 4 diskettes in packages but no upgrades from existing software.

RADIO SHACK PRODUCTS

The new radio shack catalog shows a new typewriter key 64K color computer and a keyboard upgrade for the older CoCos.

There is a \$799 Daisy Wheel printer at 18 cps and an ink jet printer at 40 cps for \$699. It has both parallel and serial 600/2400 baud interfaces and can take a three

SOUTH BAY TRS-80 USERS GROUP

color cartridge for multi-color graphics. It prints 2600 dots per second in the "color scan mode." The graphics resolution is 640 dots per line in the multi-color mode.

The graphics board for the Model 4 is \$250 and available in October according to the catalog. (Model 3 graphics board is \$370 still.) Speaking of that, I had to work on a machine with the graphics board in it and it consists of two boards that are attached to the CPU board between it and the back of the case with add-on shields over them. I did drive work so didn't disassemble that area, but it sure looked weird!

The catalog lists PASCAL at \$250 for Model I and III and TRSODS 6.0 diskettes for \$14.95. The softbound manual is \$16 or \$17 as I recall. That is a cheap operating system as prices go! Guess volume can do that for you! I am still not convinced that a good program or even operating system is more work to write or takes more talent than a good book and even a low volume top-notch technical textbook sells for much less than software...maybe \$30-\$40. Is someone ripping us off? Maybe that explains a lot of the software piracy problems?

Model 4 SuperScript is advertised at \$199, same price as Model III. Enhanced Model 4 VISICALC is advertised at \$250, Model III at \$200.

Anyone else notice the ad in a Sunday paper for Model IIIs being sold out by Radio Shack at \$1295?

=====

DISK COMMANDS ON A TAPE SYSTEM

by Bill Pottberg

As a tape user we have 15 "IMMEDIATE MODE" commands that can be used to access a system program stored in high memory. Run this small program.

```
10 CLS
20 FOR A = 16719 TO 16808 STEP 3
30 PRINT, A; PEEK(A); PEEK(A+1); PEEK(A+2)
40 NEXT
50 GOTO 50
```

What we see is the place where certain words, (for a DOS), are checked to see if such a system is installed. If not these addresses will have a JUMP (195) to address 012DH (45)(1) for a routine which displays --> L3 ERROR.

Instead of having the jump to 012DH we can change that address to the entry address of a program that we have installed in high memory. We can change these addresses

BECAUSE they are NOT in the ROM.

Here is a list of the 15 commands and the addresses of the JUMP command. We would change the NEXT two addresses.

| | | | | | |
|---------|-------|--------|-------|---------|-------|
| DEF---- | 16731 | CMD--- | 16755 | OPEN--- | 16761 |
| FIELD-- | 16764 | GET--- | 16767 | PUT---- | 16770 |
| CLOSE-- | 16773 | LOAD-- | 16776 | MERGE-- | 16779 |
| NAME--- | 16794 | SAVE-- | 16800 | LINE--- | 16803 |

Let's use an example. RENUM sits up in the top of 16K memory and has an entry point of 31820. We will select the word LINE to activate it.

ADDRESSES IN MEMORY ARE STORED WITH THE <LSB> FIRST FOLLOWED BY THE <MSB>.

The MSB = $\text{INT}(31820/256) = 124$. The LSB = $31820 - (256 \times 124) = 76$. Now POKE 16804,76 and POKE 16805,124.

Now type LINE and <ENTER> 3 more times, it will go through it's routine and return to BASIC. So any time that you want to renumber, just type LINE. This will remain this way until you reboot the system.

I have a MODEL III with 48K of memory. Every Model III owner should install the extra 32K of memory. It's easy to do and only costs about \$30 for the needed 16 chips. At the present I have 6 different programs, which reside in high memory, that I can get with the use of some of these commands. The access time is instantaneous, much faster than disk.

If you have DEBUG or some other type of monitor program, you should use it to write all your machine language programs in the high memory area. The programs I use are as follows: DEBUG, RENUM, MERGE, PRINT/LPRINT, KILL and EDIT (a full screen editor which has its own call out, /EDIT). If I have a RESET I lose the L3 modifications but merely go through the - SYSTEM, ?/(entry point) - routine to get it all back into operation again.

If anyone knows how to make the PRINT#-1 in BASIC work at the high baud rate on the Model III, I would appreciate the help. Maybe we could trade some of our findings.

=====

SBUG-80 MAIL CORNER

<Message from ANDERSON at SBUG-80 08/18/83 15:36:26>
RE: Transferring a TRS-80 basic program to IBM PC

Hi - Some things to look for when converting programs to other computers.

1. Even though the statements and the commands on the IBM MICROSOFT basic are almost alike there are some

SOUTH BAY TRS-80 USERS GROUP

differences in the way things work.

2. I have used conditional statements in FOR/NEXT loops to sort out things as the process continues or to shift processing to another program line by skipping a line within the loop. SHE DON'T WORK in IBM. All you get is FOR without NEXT.
3. CHR\$(8) does not erase.
4. You must set the disk I/O buffer size as you enter basic and you must set the buffer size when you open the file unless you want standard 128 byte buffers. On the other hand they can be very,very large if you need them.
5. Things go pretty well if no particular screen antics are required with little jumping around or erasing. The LOCATE function is as good as PRINT,.
6. When I write programs I pretty up the listing by using line feeds in the middle of the lines with some extra margin spaces. I also use the linefeed <down-arrow> to make menus in a single string statement. This is all ok with the IBM as long as you don't edit the line or try to save it as an ASCII file. As soon as you edit the line the whole thing comes unglued. The editor will only connect the line so it doesn't have to be retyped by placing a colon at the 80th column and sucking out the extra spaces with the DEL key.

Tom Anderson

<Message from IANWEBB at SBUG-80 08/18/83 18:51:04>
RE: MAGAZINE - T.A.S.

Does anyone know if the group, The Alternate Source, which publishes(d?) a magazine about every 3 months is belly up with our money? They don't answer their toll free number and they don't seem to be running ads lately. I haven't received a magazine from them for 6 months or so. Am I out the money for my three year subscription on which I have received only two issues?????

<Message from GCKEE at SBUG-80 08/20/83 22:52:50>
RE: FOR SALE

PRINTER for sale.....I B M selectric (Jacob-Anderson)
...excellent condition...ready to run
Call Rich Black (408) 245-5000.....

<Message from DICKALLE at SBUG-80 08/21/83 14:27:49>
RE: "C" COMPILER

HAS ANYBODY HAD ANY EXPERIENCE WITH A "C" COMPILER?

<Message from BREWER at SBUG-80 08/21/83 22:06:45>
RE: 'C' Compilers...

If anyone is having any problems or has any questions about the 'C' compiler for the TRS-80, or for that matter, for another machine, just ask. I can probably field most

SEPTEMBER 83

questions as I have been working with 5 or so 'C' compilers over the past year at work...

Happily hacking,
--Eric

<Message from IANWEBB at SBUG-80 08/25/83 18:06:35>
RE: MODEL 4 - TECHNICAL REFERENCE MANUAL

Bart, who comes to our meetings and sells items in the back, who manages the Radio Shack store at Saratoga Avenue and Quito Road/Lawrence Expressway, got a shipment of Model 4 Technical References Manuals this morning while I was in the store looking for connectors. He ordered 10 of them, had about 5 promised, including the one I got. He should have 5 additional ones. If you want one, I recommend you go buy soon. (\$24.95)

<Message from ROGERAND at SBUG-80 08/27/83 22:15:29>
RE: MX80 MODIFICATION

I WENT TO THE PC FAIR TODAY AND PICKED UP (BOUGHT) A MODIFICATION FOR MY MX80. THE MODIFICATION IS CALLED "FINGERPRINT" COST \$44.00.

FINGERPRINT ALLOWS YOU TO ADDRESS SOME MX80 FUNCTIONS USING THE BUTTONS ON TOP OF THE PRINTER.

FUNCTIONS CONTROLLED:

- | | |
|----------------------|-------------------------|
| 1 RESET | 2 COMPRESSED |
| 3 DOUBLE WIDE | 4 EMPHASIZED |
| 5 DOUBLE STRIKE | 6 PERFORATION SKIP OVER |
| 7 LEFT MARGIN INDENT | 8 BLINES/INCH |
| 9 ITALICS | 10 FINE PRINT |

ITALICS AND FINE PRINT ONLY WORK WITH GRAFTRACKS PLUS ITALICS DOES WORK ON MINE BUT FINE PRINT DOESN'T I DO NOT HAVE GRAFTRAXS PLUS JUST GRAFTRAX

INSTALLATION IS QUITE EASY.

<Message from DAVEFOX at SBUG-80 08/28/83 17:38:46>
RE: ATARI FOR SALE!

Are those boring BLACK and WHITE games for your TRS-80 getting old? Here is your chance to choose from a zillion different games IN COLOR. I am up-grading to Coleco-Vision and would like to sell my Atari for a Coleco adapter. The machine is in tip-top shape with little or no scratches. All components work fine including the two joysticks that come with it. The price is negotiable but keep in mind that there is nothing wrong with the unit and I am throwing in two cartridges with it. Unfortunately, I can only be reached early in the morning (till 8:30 am) and late at nite (after 10:30 pm). I can be reached at: 408 374-5358 at the times listed above. Oh, by the way my name is Dave Fox (I'm that looney Staff artist who does the covers for Dynamic Memories).

SOUTH BAY TRS-80 USERS GROUP

prices: \$50.00 or best offer
name: Dave Fox
phone: 408 374-5258
what: Atari 2600 VCS for sale

<Message from DAVEFOX at SBUG-80 08/28/83 18:13:03>
RE: HELLO AGAIN...

Speaking of ColecoVision!?? Has anybody heard of their new home computer that's supposed to revolutionize the home computer market? Scheduled for retail distribution in time for the Christmas season (of course), the system promises some really interesting breakthroughs. The computer is called "ADAM" and its biggest breakthrough that I can see is its price. But before I mention that let me fill you in on what's inside: for starters- 80k memory (RAM or ROM? I don't know) ROM resident word processor Smartwriter (isn't there already one called that?) Dedicated keys (special keys just for word process) No other info available yet high speed Stringy Floppy (NOT Exatron) Capable of storing over a megabyte of data loads at 19,200 baud! or maybe 9,600, can't remember Detachable Keyboard looks MUCH like the IBM PC! Selectric keyboard with special function keys DAISYWHEEL PRINTER Slow and noisy - but does the job (letter qual) 10 CPS - 10 pitch Applesoft syntax BASIC (why??!!) loaded via stringy floppy Plays ColecoVision Cartridges version of this computer that plugs into Coleco-Vision for \$200.00 less!! Can be expanded to 144k - CP/M adapter has 80 column & disk Color and high rez (of course)

And now the shocker! All the above for a price of: believe it or not = less than \$600.00 Including the stringy floppy drive AND Daisywheel Printer! Not bad folks...I know what my next computer purchase will be.

<Message from RON at SBUG-80 08/29/83 13:18:07>
RE: my model 100 !!!!

I finally have a 'useable' computer!!! That is, in one working piece, useable at home without getting out of my reclining chair, and at work as a terminal! Actually, I rather traded an IBM PC, which I discovered was useless to me, for it (long story). Now I can write for Dynamic Memories newsletter! (I resisted because my \$1000 investment will probably be worth \$50 in a year as the technology progresses, but I finally realized the only thing (except \$8000 GRID) that would "facilitate" the things I needed/wanted to do was the Model 100!

<Message from RON at SBUG-80 08/29/83 13:30:14>
RE: Mod 100 questions

OK, all you mod 100 experts, teach me.... Is there any way

SEPTEMBER 83

to upload msqs and/or text (newsletter) files from 100 to SBUG-80? Is the "schedule" mod 100 rom pgm. good for anything? (i.e. isn't it just a notepad?) Sometimes I get a slightly garbled modem connection, which I (almost) never got with modem I or Hayes. Is my mod 100 modem deficient?? How do I get it to talk out the RS232 to, say, a 1200 baud modem? (Explain in a way a retarded monkey could use!!) Can my Mod 1 be persuaded to read it 1500 baud tapes? Is there any hope of finding a way to jump out of on-line telcom to diddle in a text file & return without hanging up? More later... (It's great!!)

<Message from RON at SBUG-80 08/29/83 13:39:02>
RE: Mod 1 CP/M for \$99

For any mod 1 user NOT at Aug 16 meeting, we got a group buy on omikron mapper 1 for \$99. Leave me msg here if u want....

<Message from ROGERAND at SBUG-80 08/29/83 17:24:41>
RE: RON'S QUESTIONS

HI RON,
IN ANSWER TO YOUR QUESTIONS.

SABRI WROTE A PROGRAM CALLED "COM". I HAVE A COPY OR YOU CAN GET A COPY FROM SABRI. THIS PROGRAM GIVES MENU CONTROL OF MOST OF THE TELCOM FACILITIES.

TO ACCESS THE RS232 LOOK AT PAGE 197 OF YOUR MANUAL. THIS IS APPENDIX C.

I HAVE A MEMORY DUMP PROGRAM AND SOME GRAPHICS PROGRAMS
CALL ME AT (408)732-4307 IF YOU WANT ANY OF THESE PROGRAMS.

<Message from IANWEBB at SBUG-80 08/29/83 21:37:47>
RE: RON's Model 100

Since Ron is known for his hardware wondering, I wonder when he will be adding 8" drives, a hard disk, CPM 86, UNIX and flashing 10 foot high display to his Model 100?
Just kidding Ron!

<Message from RON at SBUG-80 08/30/83 17:44:47>
RE: WORKING 100 <> HWD HACKING

I promise to never open the Model 100, nor even read the tech ref. manual! (maybe) I wanted to be just the dumbest of users & have the pleasure of something working 100%, but lack of fancy global replace in text editing and modem80-like features in telcom (e.g. uploading msqs) may induce me to try to sit still long enough to program a bit (don't count on anything: I'm quite lazy). Glenn: quick,

SOUTH BAY TRS-80 USERS GROUP

convert your term pgm. to mod 100!!

<Message from GLENN at SBUG-80 08/30/83 20:56:28>
RE: TERM PROG FOR MODEL 100

Ron,

You hand 8" drives on it and I will convert the program.

(snicker)

Glenn

<Message from FORBES at SBUG-80 08/31/83 00:10:24>
RE: MX-80 goodies

Hi Everyone! I've been away from California for the past 2 months. Observing the comments on SBUG-80, I want to remind those of you with the MX-80 with either Grafrax-80 or Grafrax+. There is A V-E-R-Y E-A-S-Y way to have BOTH Grafrax-80 and Grafrax+ on your MX-80. The Mod is so simple, even I can do it with my mind still on Tahiti! It requires 3 new EPROMS that need to be programmed (easy to have done), and about 6 wires, one resistor and one switch. Those who didn't see this announcement a few months back, and may be interested, feel free to call me any evening in Los Altos, at (415) 948-5193.

See you at the meeting!

Ross <FORBES>

<Message from FORBES at SBUG-80 08/31/83 00:15:44>
RE: The Alternate Source

I saw Ian's question concerning the Alternate Source from earlier this month. It might have been answered at the meeting, but I called them on their Toll Free number, as I had the same question. It had been February since I heard from them. Unlike Ian, I was lucky enough to get through. The lady I spoke to (forgot her name), said The Alternate Source has closed down the magazine, and will just continue to sell software.

The Alternate Source sold, or passed off their subscribers to a "new" computer magazine, and she said that all T.A.S. subscribers would hear from this new magazine soon (maybe September).

Ross <FORBES>

<Message from RON at SBUG-80 08/31/83 10:36:34>
RE: MOD100 MAGAZINE "PCM"

It is still at the Computer Literacy Bookshop; the person who didn't find it must have not looked hard enough. I had hard time spotting it; didn't buy it: \$3 only few pages & nothing useful to me.

<Message from IANWEBB at SBUG-80 08/31/83 21:25:26>

SEPTEMBER 83

RE: 8" DRIVES - RADIO SHACK DISK CONTROLLER

Has anyone put hardware or software switching into the Model III R/S controller to handle 8" drives? Looks easy to do since the 2 MHz clock is already built in. I am thinking of doing it as an easy hardware exercise even though I don't own an 8" drive. Might be a nice capability to have when CP/M becomes available. By the way, the story I hear is that Mod 4 CP/M will read Kaypro - Osborne CP/M most likely.

<Message from ROGERAND at SBUG-80 09/01/83 16:34:01>
RE: OTHER SYSTEM FORMATS

MOST OF THE NEWER COMPUTERS KAYPRO, PCM, ETC. HAVE PROGRAMS TO READ OTHER USERS DISKS. HAS ANYONE EVER WRITTEN SOMETHING LIKE THAT FOR THE GOOD OLD TRS-80'S? THIS TYPE OF THING IS VERY USEFUL IF YOU VENTURE INTO THE WORLD OF CP/M.

ROGER ANDERSON

<Message from IANWEBB at SBUG-80 09/02/83 07:45:30>
RE: MODEL 4 CP/M

Strawflower Radio Shack (1/2 Moon Bay) is expecting CP/M 2.2 for the Model 4 any day. It will cost \$200!!! Will read numerous different formats AND is said to support the full 128 K. It will ALSO run in a 64K ONLY machine. Apparently CP/M from Tandy is going to require a 128K machine to run.

The San Mateo Computer Center seems to think it may be December (1983 that is) before CP/M from Tandy is available. Strawflower also has a package of TRSDOS 6.0 Enhancements which will allow running of Model III unspaced programs in the Model 4 mode and provides Model 4 BASIC with the editing features of the Model III BASIC.

<Message from ROGERAND at SBUG-80 09/02/83 14:26:31>
RE: MODEL 100 SERVICE MANUAL

I STOPPED BY BARTS RADIO SHACK STORE AND HE HAS A STOCK OF SERVICE MANUALS FOR THE MODEL 100. THE BOOK HAS PORT ADDRESSES AND OTHER GOODIES. THE BOOK IS \$18.00 BUT IT LOOKS LIKE IT WILL BE WORTH THE PRICE. I HOPE TO BE AT THE WEDNESDAY MEETING AND WILL HAVE MY COPY WITH ME.
ROGERAND

South Bay TRS-80 Users Group
P.O. Box 60116
Sunnyvale, Ca 94088

FIRST CLASS MAIL