

APRIL 1982

TRS-80TM NEWSLETTER

SOUTH BAY - USERS GROUP

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SBUG-80, IT'S UP AND
RUNNING...

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

Time - 7:15 to 10:30 PM 5401 Patrick Henry Drive
Santa Clara, Ca

April 20, May 18, June 15

- Features: 1) Eric Brewer (BREWER) & Robert Byrd (EDITOR) will review the B.B.S.. That's right, SBUG-80 is now on line...
- 2) Discussion on libraries
 - 3) Open rap session.

Treasure's report:

As of 15 April 82 SBUG has 185 active members.

STATEMENT OF ACCOUNT

A S S E T S

Bal as of 15 DEC 81	- - - -	\$97.06
Deposits	- - - -	<u>\$1935.00</u>
T O T A L	- - - -	\$2032.06

D E B I T S

JAN Newsletter & Mailing	- - - -	\$202.20
JAN Bad Debts Not Collected	- - - -	\$30.00
JAN Misc.	- - - -	\$16.00
FEB Newsletter & Mailing	- - - -	\$97.51
FEB Tape Library Supplies	- - - -	\$30.00
FEB Misc.	- - - -	\$3.00
MAR Newsletter & Mailing	- - - -	\$102.98
MAR Disk Library Supplies	- - - -	\$105.13
MAR Misc.	- - - -	<u>\$8.74</u>
T O T A L	- - - -	\$595.56

S B U G E Q U I T Y As of 15 Apr 82 - - - - - \$1436.50

**** Your Steering Committee follows ****

Discussion Leaders:	SBUG-80 Username	Phone
Phill Coffman	(CAP)	(408) 997-0247
Mike McHenry	(MCHENRY)	(408) 245-4704
Gerry McKee	(GMCKEE)	(408) 926-4063
Sabri Kawash	(SABRI)	(408) 732-5484
Bill Richerson	(OFTOBILL)	(408) 257-8267
Treasurer:		
Larry Gunderson	(TREAS)	(408) 259-5349
Newsletter Editor:		
Robert Byrd	(EDITOR)	(408) 732-6775
Librarians:		
(disc) Pete Huntsinger	(PETE)	(408) 227-7125
(tape) Bob Brown	(SAMBROWN)	(408) 379-2774
(doc) Ron Carpenter	(RON)	(415) 726-3487

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

SOFTWARE LIBRARIES

Effective immediately the operation of the software libraries will be suspended temporarily while we assess the legality of having a club software library which includes copyrighted software. The members of the steering committee have come to this decision based on the following considerations:

- * It is impossible for the club to prevent pirating of copyrighted programs that are checked out of the libraries. Copying of this software and documentation is a violation of federal copyright laws.

- * Piracy of software has been receiving increased media coverage. For example, the following quote is from the March 22 issue of InfoWorld (page 36)---"A member of a Northern California TRS-80 users' group says that piracy is common in users' groups. He says that his club's library includes many copyrighted programs that members can take home. 'In theory he only runs it, but in reality he makes a copy,' says the member."

- * Even members that do not participate in the library could be involved in legal prosecution or civil suit based on their association with the club if the library is not completely legal. Several long time members have expressed concern about this and some have even dropped out of the club to avoid being associated with potential illegal activity.

- * The intent of the software libraries is to allow the members to evaluate programs prior to purchase. This intent can be accomplished by other means than the libraries. One suggestion is to compile a list of members that have purchased or are knowledgeable about various software products and are willing to demonstrate and discuss them. A member considering the purchase of a program could contact the members on this list for more information. The newsletter and the bulletin board (when it gets going) can also be forums to review software.

- * We are evaluating the legality of including copyrighted software in the library only if the library contains the original tape or disk and documentation.

- * The elimination of copyrighted software from the club library would probably not stop trading of programs among individual members since the club has no control of members activities outside of the meetings. The person who wants to get a pirated copy will at least be forced to interact with the other club members and perhaps buy a few programs with which to trade.

- * The libraries will be reopened as soon as it has been verified that they contain only public domain and original copies of copyrighted software. Club members are encouraged to submit original programs and public domain software to the libraries. We must also remember that the bulletin board (SBUG-88) will only contain non-copyrighted software.

- * These issues will be discussed at the next club meeting.

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-- Mike McHenry
MCHENRY @ SBUG-88

Editor's note:

Can you believe it?? It's finally here... SBUG-80 is humming strong. It doesn't have direct file transferring capabilities but, it is now being worked on and will soon be available. For now, ASCII files can be downloaded and uploaded through BASIC and there is a mail program that will allow messages to be passed privately among its' users. For those of you who can not make the next club meeting but would like to have access to SBUG-80 give me a call at (408) 732-6775. I will be happy to create you an account. Cost?? It was decided by your steering committee that the first two months access will be free to SBUG members, the system can be used by members ONLY. It is believed, by your committee, that a public system would crowd a 300 baud modem quickly making the utility of such a system impractical to its' members. Let us call this a trial period, all hardware for SBUG-80 is on loan by supporting members. If the membership likes the idea the committee is considering the purchase of a Model III to do the task. How the financing will be arranged has not yet been determined. Lets' first see what the next two months bring. See you at SBUG-80...

-- Robert Byrd
EDITOR @ SBUG-80

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TO DOUBLE OR NOT TO DOUBLE, THAT IS THE QUESTION

A late report from the double density front! I sent letters to the double density adapter suppliers for the Model I and received the following information:

DAD Sales - sells Percom Doubler for \$135 and offers no discount.
Aerocomp - sells their own doubler for \$149.95 + \$2 shipping and will sell for \$120 +\$2 each shipping for a single order of 10 or more. AM Electronics - sells a "multiplier" for \$99.95. Possible \$20 discount--see below.

I have ordered and received an Aerocomp unit. It took about 7-10 days for delivery. It is a nicely made, solder masked double sided PC board of apparently good quality workmanship. It is the same size as my Percom data separator and plugs right in like the Percom unit. Carries a 14 day return privilege and a 120 day warranty ... you pay shipping if repair needed.

I have tried it and it works great. Bob Byrd brought over some disks made on the Model III using NEWDOS 80 V.2, they read fine on the Model I. Using the double density capability, I made some disks on the Model I and Bob reports that they read fine on the Model III belonging to his father-in-law.

Now, the story on the AM Electronics unit. They hadn't answered my letter and I had long ago ordered the Aerocomp unit. When I saw their booth at the Computer Fair, I asked them about the multiplier. They were very defensive, asked what I wanted to know about it, and said they would guarantee that it would work as good as the Percom unit, however they wouldn't give a trial period as does Aerocomp. If it doesn't work as well as Percom's they said

they'd fix it. When I asked about a discount, I got a look as if I were crazy and they said it is already cheap. I pointed out that they obviously had some margin, or they wouldn't be selling it. After some shuffling of feet they said they guessed perhaps a \$20 discount for 10 or more units. Nothing in writing still. A week later, I got a letter back from them with price information on a Model III disk controller. Either they can't read as well as Aerocomp and DAD Sales which received the identical letter (Scripsit to the rescue) or they just plain don't have their act together. I have my doubts about this deal if we were to deal with them.

Whether or not we buy an Aerocomp as a group, I think I will keep mine. I'm tired of buying disks.

If you are interested in the Aerocomp unit at \$120 each, I will be glad to coordinate. If I were to collect payment in advance, I would telephone an order and charge it to my VISA card. I am, however, unwilling to assume people are really interested and buy it myself without money up front. It's not that I don't trust people, I just know how people change their minds. Maybe someone knows a better way to handle this, perhaps someone can suggest it.

If you are interested in a group buy and are willing to act reasonably fast so the order can go in, let Bob Byrd (732-6775) or me (867-9533) know and be prepared to come up with the money (tax refunds anyone?) if we get enough people for a group buy we'll put this one together

-- Ian Webb

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OBSERVATIONS AT THE FAIR

I went to the Computer Fair Friday morning. Arriving about 9:30, we found the garage full and no parking public or private for blocks. Finally parked near a city park in a shady part of town and walked 10 or 12 blocks. (Yes, the tires and wheels were still on the car when we returned.)

I expected a reasonably light crowd on Friday morning, but the front exit was mobbed. I remembered the basement exit through the parking garage and found no one in line there and got right in after purchasing a \$15 ticket! Wish I had been early to the last meeting for the \$7.50 tickets!

One thing I saw that impressed me was new Epson MX-80 printers WITH Grafrax for \$395. They seemed to be a bait and switch item for the new NEC printer which really looks good at \$495 and perhaps worth the extra \$100. The fellow making the units that allow you to control the MX-80 from the push buttons on it had his ROMs there for demonstration. I think they're \$39.95 for the set. They plug in in place of Epson's ROM. He will be coming out with a Grafrax compatible ROM adapter in the future he said. I put my name on his list for future information. By pushing the buttons when the printer is off line, you count the beeps of the built in horn and the number of beeps you produce determines what function you are

keying in. This way, you can put it into compressed print, for example, without having to turn everything off and getting into BASIC for a LPRINT command. (One of these days, I'll write up my machine language routine which lets you do this easily from BASIC with a LINE command or from DOS using a /CMD file.)

The Japanese (from Japan) Computer Club had an impressive array of computers, some of which are not available in this country, and a collection of magazines which make ours for computers look like comic books. Their computer interests seem to be paralleling their amateur radio interests and it seems as though they could run away with the hardware market very easily as they have done with the ham gear. Wish I could read Japanese, since their magazines seem to have so much in them!

Saw some hardware at low prices. Some disk supplies for about \$25 that were not the typical home made variety, but good commercial supplies. Also Z80A for \$3.95! Wonder what the price will be on them in another year or two. Exatron (Sunnyvale company) had their Stringy Floppies and were offering a free kit of memory expansion board and IC's if you bought the starter package for \$350. Their newboard goes in the KEYBOARD unit NOT THE EXPANSION INTERFACE and will give you 64K ... yes that is right 64K ... with no new power supply. The unit plugs in and replaces your existing memory chips with 64K chips. It will retail ready made for about \$200, but should be available as a kit for less. It may also give you a built in speed up if I understand it correctly.

With the 64K unit, you can software switch in and out the existing ROM. The procedure would be like this. Boot up normally and you would appear to have a regular 48K system. Load the bottom 16K of your memory to high memory RAM using a machine language LDIR routine. Switch out the ROM and in the RAM for the bottom 16K and then move the ROM code back to low memory with another LDIR routine. Now you can modify the ROM code and tailor the system however you wish. Even fix keybounce delays, and patch up Radio Shack peculiarities which you don't like.

Although the phantom ROM isn't yet available, it should be possible to run CP/M with this system also. I guess you could even do it through a system which would put the operating system in memory with a regular TRS-80 disk and then switch in the bottom 16K RAM.

Those who haven't been to an Exatron Stringy Floppy Owner's Association (ESFOA) meeting might find it interesting. Lots of nice people and TRS-80 information. Mostly based on the Stringy Floppy, but lots of good information also. It meets every Saturday morning from 9-12 at Exatron on Commercial St. in Sunnyvale. It is the short part of Commercial between Central Expressway and Kifer just to the West of National Semiconductor. Look for the building with the blue upper part. They also run a free BASIC programming seminar at 1 O'Clock on Saturdays. I recommend it highly.

-- Ian Webb

SOUTH BAY TRS-80 USER'S GROUP ROSTER AS OF 04/12/82

ALLEN, RICHARD	172 COLLEGE AVE.	LOS GATOS, CA	95030	354-8190
AMES, EDWARD E.	6390 WINDSOR LANE	SAN JOSE, CA	95129	253-2035
ANDERSON, ROBERT	514 LATONA CT.	SAN JOSE, CA	95111	281-8980
ANDERSON, ROGER	1279 CRESCENT TERRACE	SUNNYVALE, CA	94087	732-4307
ANDERSON, TOM	91 ANGELA DRIVE	LOS ALTOS, CA	94022	941-1543
ANDERSON, WES	763 LA PARA AVE.	PALO ALTO, CA	94306	493-3330
ANDRES, DAVID	1198 AWALT DR.	MT. VIEW, CA	94040	961-5225
ANTHONY, DICK	132 POTOMAC DR.	LOS GATOS, CA	95030	358-3002
ANTICOUNI, STAN	7174 SANTA TERESA BLVD., A1	SAN JOSE, CA	95139	578-8550
ASHEY, JOE	1999 HEATHERDALE AVE.	SAN JOSE, CA	95126	
BARDEN, GERALD L.	8302 CHIANTI CT.	SAN JOSE, CA	95135	238-2258
BARNES, KEN	106 ARBUJALO WAY	LOS ALTOS, CA	94022	948-1613
BARRETT, BARRY	3859 ASHRIDGE LANE	SAN JOSE, CA	95121	274-1427
BARRETT, DOUGLAS	611 EL TORO WAY	GILROY, CA	95020	847-4146
BASIE, STEVE	450 N. MATHILDA APT S-103	SUNNYVALE, CA	94086	735-9117
BEIN SR., GERALD	4653 EASTUS DR.	SAN JOSE, CA	95129	253-7546
BENNETT, WILLIAM	3270 MELENDY DR.	SAN CARLOS, CA	94070	595-2537
BERG, LAUREN	5145 HARVEST ESTATES	SAN JOSE, CAL	95135	274-6869
BIEBER, DENNIS	1630 OTTAWA CT., APT. C	SUNNYVALE, CA	94087	730-5068
BLAINE, DICK	22284 DE ANZA CIRCLE	CUPERTINO, CA	95014	257-6410
BOBBITT, KENNETH	20 SEA CREST CT.	HALF MOON BAY, CA	94019	728-5039
BODNAR, ELMER	5162 CORDOY LANE	SAN JOSE, CA	95124	266-1304
BRIESE, SUNNY	P O BOX 632	PALO ALTO, CA	94301	446-5592
BROWN, ROBERT	780 MANX AVE.	CAMPBELL, CA	95008	379-2774
BROWN, SAM	780 MANX AVE.	CAMPBELL, CA	95008	379-2774
BROWN, SAM	783 BORREGAS	SUNNYVALE, CA	94086	734-0898
BRYAN, LARRY	285 S. 12TH ST.	SAN JOSE, CA	95112	289-1519
BYRD, ROBERT J.	450 N. MATHILDA, NO. 1-208	SUNNYVALE, CA	94086	732-6775
CARPENTIER, BILL	1079 THE DALLAS	SUNNYVALE, CA	94087	739-8916
CARPENTIER, RONALD	NO. 7 LIGHTHOUSE ROAD	HALFMOON BAY, CA	94019	726-3487
CARR, JIM	16485 OAK GLEN AVE	MORGAN HILL, CA	95037	
CARRE, DON	21100 SUMMIT	LOS GATOS, CA	95030	354-2767
CERVANTES, BEN	854 34TH AVE.	SAN FRANCISCO, CA	94121	964-6635
CHABRAYA, KENNETH	2630 PAGANINI AVE.	SAN JOSE, CA	95122	238-3104
CHAMBERLAIN, CONRAD	1469 VILCARTIER DR.	SUNNYVALE, CA	94087	736-2208
CHOW, KAM	1031 CLYDE AVE., NO. 1504	SANTA CLARA, CA	95050	988-5022
COFFMAN, PHILLIP A.	1016 AKIO WAY	SAN JOSE, CA	95120	997-0247
DAY, J. P.	1340 SPOONBILL WAY	SUNNYVALE, CA	94087	241-6014
DEGRASSE, ROBERT	26755 ROBLEDA CT.	LOS ALTOS HILLS, CA	94022	941-5942
DELLINGER, STEPHEN	P.O. BOX 521	REDWOOD CITY, CA	94064	368-9355
DELONG, RICHARD	4878 KINGRIDGE DR.	SAN JOSE, CA	95124	356-3780
DEVENDORF, BRYAN	P.O. BOX 6302	STANFORD, CA	94305	494-8500
DINKEY, JAMES	3380 CORK OAK WAY	PALO ALTO, CA	94303	493-9307
DYKSTRA, JIM	102 ELMA WAY	LOS GATOS, CA		395-9118
EARLEY, MARTIN	1950 EATON AVE	SAN CARLOS, CA	94070	592-1950
EDSON, CHARLES	13784 VIA ALTO CT.	SARATOGA, CA	95070	
FEHRENBACH, PAUL	1798 COMMODORE DR.	SAN JOSE, CA	95133	251-3743
FIBUSH, DAVID K.	3877 HANCOCK DR.	SANTA CLARA, CA	95051	248-7585
FORBES, ROSS	P.O. BOX 1	LOS ALTOS, CA	94022	948-5193
FRENZEL, JOHN	629 LISA WAY	CAMPBELL, CA	95088	244-6427
GARDEI, DANIEL	1195 CLAYBORN LN.	SAN JOSE, CAL	95121	225-5859
GARMAN JR., LEROY	1581 CALIFORNIA AVE	PALO ALTO, CA	94304	855-3420
GARMAN, ROY	1676 KENNARD WAY	SUNNYVALE, CA	94087	736-1084
GEER, JOHN	617 VETERANS BLVD., NO. 212	REDWOOD CITY, CA	94063	361-0800
GEIBEL, JOHN	411 BURGESS	MENLO PARK, CAL	94025	

GEORGE, BRIAN	3501 MURDOCH DR.	PALO ALTO, CA	94386	494-0561
GIBSON, JIM	471 CHINOOK LN.	SAN JOSE, CA	95123	578-0261
GILL, RICH	46937 LUNDY TERR.	FREMONT, CA	94538	657-6611
GLESSER, ALLEN	2348-C WALSH AVE.	SANTA CLARA, CA	95051	727-3830
GOES, HARLEY	1358 JOYNER CT.	SAN JOSE, CA	95131	926-1254
GOLDBERG, ARTHUR	2602 MERIDIAN AVE	SAN JOSE, CA	95124	265-6419
GONCALVES, RONALD	1722 WICKHAM	SAN JOSE, CAL	95132	251-2993
GONCALVES, MARK	5199 CARTER AVE	SAN JOSE, CAL	95118	266-6539
GORMLEY, PATRICK	109 WARWICK ST.	REDWOOD CITY, CA	94062	
GRAY, CHARLES	7576 NEWCASTLE DR.	CUPERTINO, CA	95014	253-0606
GRAY, JOANN	450 N. MATHILDA, NO. C306	SUNNYVALE, CA	94086	733-3057
GREENE, RONALD	316 QUINAHILL AVE.	LOS ALTOS, CA	94022	941-5149
GUNDERSON, LARRY C.	1299 SIERRA CT.	SAN JOSE, CA	95132	259-5349
HAGER, HANS PAUL	1251 ALMENDEN AVE.	SAN JOSE, CAL.	95110	297-0265
HALL, ED	3545 EL CAMINO REAL	PALO ALTO, CA	94306	856-7467
HANSELMAN, ROBERT	3403 LODGE DR.	BELMONT, CAL	94002	591-1193
HANZ, PAUL	555 MIDDLEFIELD APT. P105	MOUNTAIN VIEW, CAL	94043	969-4290
HARMON, LARRY	3155 SYLVAN DR.	SAN JOSE, CA	95148	238-0194
HARSHBERGER, BOB	4238 HAINES AVE.	SAN JOSE, CA	95136	265-7432
HARTLEY, WILEY D.	6093 MONTGOMERY CT.	SAN JOSE, CA	95135	238-2576
HAYES, RICHARD J.	10119 RIDGEWAY DR.	CUPERTINO, CA	95014	734-3456
HEATHER, JOHN T.	1058 CELILO DR.	SUNNYVALE, CA	94087	732-3276
HERNIG, THOMAS	1023 BURLWOOD DR.	SAN JOSE, CAL	95120	997-0129
HILLBRATH, H.S.	P.O. BOX 4741	SANTA CLARA, CA	95054	578-3696
HIPPLE, MARION	3817 PHOENIX CT.	SAN JOSE, CA	95130	249-7835
HOBART, TERRY	697 HEBRIDES WAY	SUNNYVALE, CA	94087	730-4402
HOCKER, ALLEN	1685 LOBELIA LANE	SAN JOSE, CA	95124	265-8297
HOOVER, EDWARD F.	505 CYPRESS PT. DR. #171	MOUNTAINVIEW, CAL	94043	961-8396
HOOVER, EDWARD	1025 HIGHLANDS CR.	LOS ALTOS, CAL	94022	961-3410
HOPPER, JAMES	358 LASSEN PARK CIRCLE	SAN JOSE, CA	95136	629-7411
HUGHES, JERRY	2116 BEL AIR AVE	SAN JOSE, CA	95128	248-5367
HULL, JACQUES	1335 COMPER ST.	PALO ALTO, CA	94301	321-0337
HUNTLEY, WRIGHT	2483 S. PARK LN.	SANTA CLARA, CA	95051	248-5905
HUNTSINGER, PETE	603 GALEN DR.	SAN JOSE, CA	95123	227-7125
HUTCHESON, DAN	4830 CAROLINE WAY	SAN JOSE, CA	95124	247-7760
IRVING, DONALD	5450 MAYME AVE., NO. 15	SAN JOSE, CA	95129	255-3270
JARVIS, JOHN R.	3101 HUMBOLDT AVE.	SANTA CLARA, CA	95051	247-6328
JENSEN, DALE	852 ROSS COURT	PALO ALTO, CA	94303	494-6553
JIBBY, WILLIAM	6105 SILBERMAN DR.	SAN JOSE, CA	95120	260-0181
JOHNSON, ANTON	P. O. BOX 1671	FREMONT, CA	94538	
JOHNSON, SAM	310 CHATHAM WAY	MT. VIEW, CA	94040	969-0228
KAMAS, PETER	1186 SO. MARY	SUNNYVALE, CAL	94087	736-9264
KAWASH, SABRI	1016 HAVRE CRT.	SUNNYVALE, CA	94087	732-5484
KEPPEL, ROBERT	4644 WINDING WAY	SAN JOSE, CAL	95129	253-5928
KERRIGAN, VINCENT	452 LOS ENCINOS ST	SAN JOSE, CA	95134	262-4687
KINCHELOE, BOB	26830 ELENA RD.	LOS ALTOS, CA	94022	940-0682
KING, FRED	15159 MONTALVO RD.	SARATOGA, CA	95070	
KORS, RICHARD	119-A FLYNN AVE.	MT. VIEW, CA	94043	964-9045
KREHBIEL, COURTNEY	1034 HEATHERSTONE WY	SUNNYVALE, CAL	94087	737-2253
KROMMENHOCK, JACOB	948 HORCAJO CIRCLE	MILPITAS, CA	95035	262-4239
LAFPEY, GLOEY ANNE	353 SUBUR DR.	SAN JOSE, CAL	95123	227-2657
LAMB, EMMET	817 TOLMAN DR.	STANFORD, CA	94305	493-1138
LASMAN, JEFF	P.O. BOX 3157	SIMI VALLEY, CA	93063	522-4857
LEE, GIL S.	929 JUNGFRAU CT.	MILPITAS, CA	95035	263-9294
LESTER, TED	139 G ST. #150	DAVIS, CAL	95616	758-7961
LYNCH, JOHN & DONNA	984 ROCKDALE DR.	SAN JOSE, CA	95129	252-4491
MARCELLI, MR	134 MAPLE ST.	REDWOOD CITY, CAL	94063	365-0360
MARRAZZO, JOE	2888 STANHOPE DR.	SAN JOSE, CA	95121	230-5189
MARSHALL, BOB	5068 HOWES LANE	SAN JOSE, CA	95118	266-1482

MARTIN, JERRY	10139 S. BLANEY AVE., NO. F	CUPERTINO, CA	95014	996-8619
MAUCH, PAUL	1815 WALNUT DR.	MT. VIEW, CA	94040	968-1268
MAYFIELD, R. B.	12616 LARCHMONT AVE.	SARATOGA, CA	95070	257-3760
McNAUGHT, JEFF	2230 HOMESTEAD CT.	LOS ALTOS, CAL	94022	749-8332
MEHR, AL	3008 OAKBRIDGE DR	SAN JOSE, CA	95121	274-8112
MEURER, CHET	1671 MILROY PL.	SAN JOSE, CA	95124	264-8884
MEYER, ALEX	3153 TRISTIAN AVE	SAN JOSE, CAL	95100	258-1128
MICHAELS, WAYNE J.	1423 KEW GARDENS CT.	SAN JOSE, CA	95120	268-8170
MILLER, BILL	6675 CLIFFORD DR.	CUPERTINO, CA	95014	253-3175
MORREY, ROBERT	3404 MERRIMAC DR	SAN JOSE, CA	95117	379-5944
MUTSCHLER, LEWIS	3348 GARDEN DALE DR.	SAN JOSE, CAL	95118	264-2986
McCLAIN, BOB	1085 TASMUN DR. #610	SUNNYVALE, CA	94086	
McHENRY, MICHAEL	1030 RANGPUR COURT	SUNNYVALE, CA	94087	245-4704
McKEE, GERALD F.	926 CAPE BUFFALO DR.	SAN JOSE, CA	95133	926-4063
McLAUGHLIN, DAVE	12985 TEN OAK WAY	SARATOGA, CA	95070	867-5285
McVEIGH, WALTER	450 N. MATILDA, NO. B101	SUNNYVALE, CA	94086	736-8228
NELSON, ART	645 ALMANOR	SUNNYVALE, CA	94086	732-2710
NEUHAUS, HERMANN	12246 WOODSIDE DR.	SARATOGA, CA	95070	996-0304
NEWMAN, DAVID E.	6658 MT. HOLLY	SAN JOSE, CAL	95120	268-6610
NG, SAMUEL	6031 BOLLINGER DR.	CUPERTINO, CA	95014	257-6506
OBERDING, FRED	120 LINCOLN DR.	SAUSALITO, CA	94965	332-0625
OGLE, JOHN	1472 PASHOTE CT.	MILPITAS, CA	95035	263-3798
OLAFSSON, OLAFUR	95 GREEN VALLEY RD.	SANTA CRUZ, CAL	95066	335-3224
OLSON, CHUCK	20832 GREENLEAF	CUPERTINO, CA	95014	446-3450
OLSON, MICHAEL	4238 MONET CIRCLE	SAN JOSE, CA	95136	578-0740
PARKER, CASEY	38833 OVERACKER AVE	FREMONT, CA	94536	793-2715
PATRICK, RICHARD	1334 NANCARROW CT.	SAN JOSE, CA	95120	997-7876
PERKINS, DAVID	1066 MARIGOLD CT.	SUNNYVALE, CA	94086	984-6686
PERKINS, JEFF	3088 ADAMS WAY	SANTA CLARA, CA	95051	244-0876
PERRY, LARRY	284 CARLYN AVE.	CAMPBELL, CA	95008	378-2003
PERRY, RANDOLPH	35879 ADOBE DR.	FREMONT, CAL	94536	792-0969
PETERSON, KEN	441 PIN OAK DR.	SUNNYVALE, CA	94086	733-1464
PHELPS, SANDY	585 OAK ST.	MTN. VIEW, CA	94041	964-1642
PICARD, WAYNE	520 WALKER DR. #61	MOUNTAINVIEW, CAL	94043	965-3781
POTTERBERG, BILL	1621 WESTMOOR RD.	BURLINGAME, CA	94010	697-2375
PRINCEAU, RICHARD	66 GUAVA BLOSSOM CT.	SAN JOSE, CA	95123	227-6254
REDDY, VEN	10756 LINDA VISTA DR.	CUPERTINO, CA	95014	446-2984
RICHARDS, FRANK	1544 LYLE DR.	SAN JOSE, CA	95129	252-4543
RICHESON, BILL & BRIAN	1047 FOREST KNOLL	SAN JOSE, CA	95129	257-8267
ROBERTSON, DAVID	12077 COVINA COURT	SARATOGA, CA	95070	257-6383
ROCHE, CURT	3890 LOUIS RD.	PALO ALTO, CA	94303	494-2643
ROE, WAYNE	1034 BELLINGHAM DR	SAN JOSE, CA	95121	972-2494
RUDDLE, HENRY	413 TAYLOR DR.	MILPITAS, CA	95035	263-5343
SCHNELL, EDWARD	1508 SANTA INEZ DR.	SAN JOSE, CA	95125	264-2792
SCHWARTZ, ALLAN	919 CAPE GEORGE PL.	SAN JOSE, CA	95133	926-5307
SCHWARTZ, DAVID	919 CAPE GEORGE PL.	SAN JOSE, CA	95133	926-5307
SHAPIRO, AL	992 BLUEBONNET DR.	SUNNYVALE, CA	94086	738-3687
SHINKEVICH, PETER	6419 BERWICKSHIRE WAY	SAN JOSE, CA	95120	997-6382
SILLS, MARK	P.O. BOX 100	HOLLISTER, CA	95023	637-4434
SILVA, BILL	2643 CUNNINGHAM AVE.	SAN JOSE, CA	95148	926-5157
SMITH, LELAND	3732 LAGUNA AVE.	PALO ALTO, CA	94306	493-9386
SMITH, PATRICK A.	124 BELHAVEN DR.	LOS GATOS, CA	95030	356-6885
SMITH, VIGO	19768 SOLANA DR.	SARATOGA, CA	95070	996-7896
SOLEY, CLYNE	5541 CRIBARI CIR.	SAN JOSE, CA	95135	274-2017
SPRIGGS, LUCIAN	1063 CAPE HATTERAS WAY	SAN JOSE, CA	95133	926-3523
STEELE, KEN	953-70 HENDERSON AVE.	SUNNYVALE, CA	94086	
STOJANOVICH, JOHN	16880 KENNEDY RD	LOS GATOS, CA	95030	356-6452
STONE, BOB	19645 NORTHAMPTON	SARATOGA, CA	95070	255-6804
STORMBERG, BOB	4691 CASTLEWOOD	SAN JOSE, CA	95129	255-6770

TESSMER, MICHAEL	135 HEATH ST.	MILPITAS, CA	95035	946-5192
THOMPSON, BERNARD	20738 WOODWARD CT.	SARATOGA, CA	95070	867-7455
THOMPSON, JIM	13824 ESPADA CT.	SARATOGA, CA	95070	
THURBER, GENE	648 NAVAJO CT.	SAN JOSE, CA	95123	227-4406
TRAINER, RICHARD	744 SAN ANTONIO RD.	PALO ALTO, CA	94303	494-3565
VANCURA, ZEB	332 LOWELL DRIVE	SANTA CLARA, CA	95051	244-7625
WALKER, JOHN	5616 SILVERLEAF RD	SAN JOSE, CA	95138	225-1888
WATKINS, KENNETH E.	6349 MALORY DR.	SAN JOSE, CA	95123	226-6229
WEBB, IAN	20621 CANYON VIEW DR.	SARATOGA, CA	95070	867-9533
WEST, E. J.	1029 JOHNSON AVE.	SAN JOSE, CA	95129	257-8752
WILEY, MARVIN D.	20198 KNOLLWOOD DR.	SARATOGA, CA	95070	255-1438
WILSER, WALT	10136 CAROL LEE DR.	CUPERTINO, CA	95014	996-1450
WILSON, CURTIS	20251 MERRICK DR.	SARATOGA, CA	95070	867-6976
WITTEKIND, BART	1820 SARATOGA AVE.	SAN JOSE, CA	95129	379-5826
WRIGHT, FRED	10112 MELODY PARK DR.	GARDEN GROVE, CA	92640	638-7889
WYBRANT, SYLVIA	1700 COTTAGE GROVE AVE	SAN MATEO, CAL	94401	342-1169
YUNG, BENJAMIN	1923 LUBY DR.	SAN JOSE, CA	95133	272-7714

SCRIPSIT ZAP LOCATIONS

Something I picked up at the Fair that should be of interest to some people is from a Marin County TRS-80 Users Group Newsletter for March 1982. This information is attributed to Dick Victor and came from the LDOS board on Micronet. These are the default addresses for Model I Scribes. You can zap these locations to change the defaults.

An example of the use of this. I put my Epson MX-80 in the 7/72 inch mode with my machine code routine. This gives me about 113 lines per 11" page. You can't specify a page length greater than 90 with Scribes, so I zapped in 113 in hex for page length and a bottom margin at 106 or so and printed out pages with this closer spacing.

Rel Addr	Parameter	Default Value
40,C6	Page Length	PL=42H
40,BB	Right Margin	RM=48H
40,C4	Bottom Margin	BM=3CH
40,BC	Para. Line Spacing	PF=01H
40,BA	Left Margin	LM=0CH
40,C3	Top Margin	TM=06H
40,C2	Line Spacing	LS=01H
00,B1	Paragraph Indent	I= 05H
00,A6	Video Line Width	W= 3CH
40,BF	Flush Right	(N) FR=4EH
40,BD	Justify	(Y) J =59H
40,C5	Vertical Centering	(N) VC=4EH
40,BE	Horizontal Centering	(N) C= 4EH
00,DD	Cursor Character	8FH
25,A1	Bottom screen line character	8CH
40,08	End of line character	8CH
06,20-42	Title appearing at first load	

-- Ian Webb

A HARDWARE PROBLEM SOLVED - WITH A LITTLE LUCK!

Recently I had a persistent problem with my Model III. Perhaps someone has had this problem or a similar one and might be interested in my experience. It was a very frustrating experience but the outcome was happy.

The Symptoms:

The first symptom of trouble was intermittent failure to accept the DEF FN statement in DISK BASIC. The system would frequently re-boot when this statement came up. Later it became more and more difficult to get into BASIC at all. Error 35 (memory fault during load) appeared frequently. It was also more and more difficult to get into Model III BASIC using the <BREAK> key and RESET. Finally, I could get into BASIC about as often as I might hit the

Jackpot on a nickel slot machine at Harrah's. The MEMTEST program provided on my TRSDOS disk indicated no problems with memory - but I did not believe that.

While all this trouble was going on with BASIC, everything else worked fine. I could run the Editor-Assembler, DEBUG and Assembly Language programs without errors or problems.

The Solution:

My first suspicion was that the ROM was the culprit and that it was probably a dirty contact. So I opened up the computer, removed the ROM's (very carefully) and carefully cleaned all the pins. At the same time I cleaned all the cable connector contacts. All this work was for naught - the problem was still there.

After conversations with some SBUG members (notably Ken Watkins), I decided that the problem was in the low part of RAM, where DISK BASIC loads. Fortunately, I received 32K of spare RAM for Christmas, which made it possible to replace RAM IC's one at a time, starting at the bottom. The sixth RAM IC (U12) was the culprit! Everything has been working perfectly since U12 was replaced.

The Moral of the Story:

With a little persistence, a few talks with knowledgeable people at SBUG and a lot of good luck you can avoid an expensive service call.

-- Vigo Smith
VIGO @ SBUG-80

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SKILLS INVENTORY PROJECT

Many members would be willing to help others with things with which they are familiar. But who can help with what, and how much can they help?? A skills inventory, otherwise known as experience and interest list, if fully implemented, will turn this wasteland into utopia!!

For the April meeting, bring or send in (to me or Bob Byrd, the newsletter editor) a list of TRS-80 things with which you would be willing to help others. You might have from just two to two-hundred things on your list.

Use just a few words to describe each item. After this comes two numbers: the amount of experience / expertise you have with it on a scale of 1 to 9, a comma, then the amount of time you would want to spend helping / working with it. For example, a couple of my items would be:

8" drives	3,9
NEWDOS80	6,2

This means I only know a little (3) about 8" disk drives, but would

be happy to spend lots of time (9) trying to work on them. I know NEWDOS80 (6), but am not very interested (2) in working with it per se. Obviously, if both ratings were below 3, you wouldn't bother to list that item.

The following is some ideas to remind you of topics:

Basic (type of application, feature, technique specifically)
Assembly and other languages
Hardware (specific type or area)
DOS's (any special area of expertise); Device drivers
RS232 software, modems, source, micronet
Specific applications-business, math, engineering
Specific software packages you could help others with
Helping beginners
Games
Other hobbies in which your computer is used
*** I think this has GREAT potential. Thanks for cooperating!! ***

-- Ron Carpenter
RON @ SBUG-80

**** ASSEMBLY LANGUAGE CORNER ****

Well, here we sit with the second assembly language column. This month, as I mentioned last month, will be spent discussing some of the basics of using the ROM math routines for making assembly language math a lot easier!

First of all, what is the difference between integer, single and double precision arithmetic? Well, basically it is the amount of space it takes to store the numbers. Also, to a lesser extent, it is the amount of time it requires to various functions on these numbers (ie. +, -, *, /). But, this is usually negated due to the fact that we are doing the math in machine language. You will notice a great difference in time if you do a lot of number crunching (ugh!). This can be easily shown by running some FOR-NEXT loops in BASIC using INTEGER, SINGLE, and DOUBLE precision variable as the counter. Try it, you'll be amazed!

Anyways, what I am going to go over is how to use the ROMs for math functions. I am not going to get into the way the numbers are actually converted and such. (It is fairly long and involved.) But, what I will cover is enough to get you on the road to using the ROMs for converting ASCII to binary (the way the numbers are represented and stored in memory), binary to ASCII, +, -, *, /, and data type conversions. Unfortunately, due to space, I will only be covering the basic routines this month and actual examples will be in next months' newsletter as well as the ASCII-binary routines.

The first type of math is integer. It is very easy to implement since it uses the HL and DE registers as argument 1 and 2. It is also the fastest of all the different types. But, we are limited to numbers between -32768 and +32767. These numbers take up 2 bytes when being stored or used. Thus, the register pairs HL, DE, and BC can be used for the storage of these numbers. The following table shows the various math calls to ROM.

```

HL + DE = IAREAL : 0BD2H
HL - DE = IAREAL : 0BC7H
HL * DE = IAREAL : 0BF2H
DE / HL = IAREAL : 2490H

```

```

IAREAL =: 4121H - LSB INTEGER RESULT
          4122H - MSB INTEGER RESULT

```

The second type of numbers is single precision. These take up 4 bytes in memory. They are also stored in "Floating Point" format so that they take up less room in memory. Because of this, they are also less accurate. The advantage, though, is being able to have numbers of the range of $9.9E-38$ to $9.9E+38$! They are less accurate than double precision, but, that is offset by the speed of single precision routines. The following table shows the single precision call locations.

```

BC/DE + SAREAL = SAREAL : 0716H
SAREAL - BC/DE = SAREAL : 0713H
SAREAL * BC/DE = SAREAL : 0847H
BC/DE / SAREAL = SAREAL : 2490H

```

```

SAREAL =: 4121H - LSB OF SINGLE PREC.
          4122H - MIDDLE
          4123H - MSB OF SINGLE PREC.
          4124H - EXPONENT

```

```

BC/DE =: SAME FORMAT AS ABOVE

```

Finally, double precision numbers are the slowest of all. They also take up 8 bytes in memory. The only difference between double precision and single precision numbers is that single precision numbers have 3 bytes allocated for their "mantissa", Whereas, the double precision numbers have 7 bytes allocated for their "mantissa." The speed for this type of "number crunching" is by far the slowest, but, one more time.... They are accurate.... (Yes, redundancy!) The following table is for the double precision routines.

```

DAREAL + DAREA2 = DAREAL : 0C77H
DAREAL - DAREA2 = DAREAL : 0C70H
DAREAL * DAREA2 = DAREAL : 0DA1H
DAREAL / DAREA2 = DAREAL : 0DE5H

```

```

DAREAL =: 411DH - LSB OF DOUBLE PREC
          411EH - MIDDLE
          411FH - MIDDLE
          4120H - MIDDLE
          4121H - MIDDLE
          4122H - MIDDLE
          4123H - MSB OF DOUBLE PREC
          4124H - EXPONENT FOR DOUBLE PREC

```

Well, next month I will publish the listings to demonstrate these calls to ROMs as well as calls to do the ASCII to binary conversions. Also, the versa-vica of the latter. If you have any comments or problems, you can leave a message on the BBS to the username BREWER or give me a call. Happy ROaMing around... or is that pROgramming ?!?!?!

-- Eric Brewer

BREWER @ SBUG-80

SBUG BANNER CONTEST

Your Sbug Steering Committee is sponsoring a super colossal Banner Contest commencing April 20 and running thru May 18, 1982

So what's a banner you say? Well, you've probably all marvelled at those neat lead-in graphics displays like those used in "GALAXY INVASION" or some of the Big Five Software games! Those are banners! And now is your chance to write a snazzy banner and possibly win a prize.

The rules are simple: one entry per contestant, Disk or Level II Basic, and 50 lines of code maximum! Entries will be judged on originality and skill; however, to assure everyone has a chance to win, computer and software professionals will be judged in a separate category.

Sign-ups will commence during the next meeting and all entries must be submitted on May 18, 1982. Entries will be judged and winners will be announced during the June 15th SBUG meeting. Winning programs will be shown at that time and the winners will be awarded a prize!

So start planning your entry now and sign up at the next meeting!

-- Phill Coffman
CAP @ SBUG-80

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Send Newsletter articles to:

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

dlne for the May newsletter 5 May 82.

If at all possible send articles via modem or saved on disc/tap. I will see that your disc or tape is returned to you. Thanks . . .

South Bay TRS-80 Users Group
P.O. Box 60116
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