



SOUTH BAY TRS-80[®] USERS GROUP

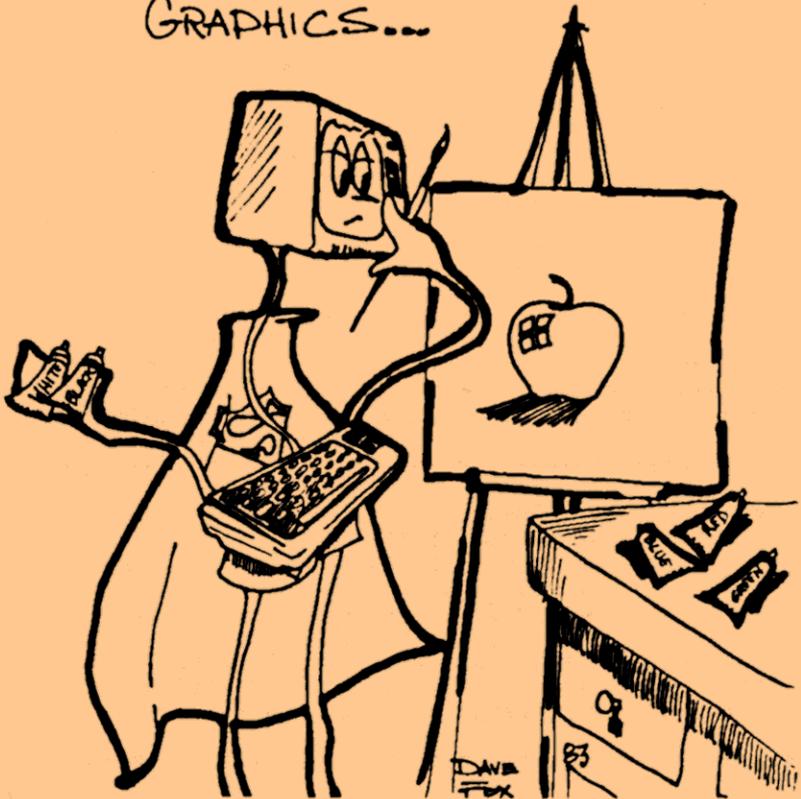
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DYNAMIC MEMORIES

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APRIL 1983

GRAPHICS...



South Bay TRS-80 Users Group

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ALSO!! SBUG ROSTER CENTERFOLD

SBUG meetings are held the third Tuesday of each month in the north east corner of Dyan's building at:

Time - 7:15 to 10:30 PM	5401 Patrick Henry Drive Santa Clara, Ca
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April 19, May 17, June 21

Topic of the month:

Graphics and the TRS-80

Features:

- The meeting will be chaired by Mike McHenry.
- 1) Bob Louden will tell us about a super TRS-80 business graphics package that his company has developed for Radio Shack. Bob will demonstrate the package on a Model III with high resolution graphics.
- 2) Mike McHenry will review the graphics software available for MX-80 printers with graphtrax.
- 3) Random access of questions and answers.

The topic for the May meeting will be computer recording media chaired by Sabri Kawash. June will feature hardware modifications chaired by Eric Brewer. Don't forget the first Wednesday meeting on May 4th to discuss programming techniques, problems and answers. Bring your computer.

Send Newsletter articles to:

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

Deadline for the May newsletter is; 25 April 83. Please, send articles via modem, or saved on disc/tape. I will see that your media is returned to you. Thanks . . .

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**** Your Steering Committee ****

Member	SBUG-80 Username	Phone
Discussion Leaders:		
Mike McHenry	(MCHENRY)	(408) 245-4704
Eric Brewer	(BREWER)	(408) 252-9332
Sabri Kawash	(SABRI)	(408) 732-5484
Treasurer:		
Larry Gunderson	(TREAS)	(408) 259-5349
Newsletter Editor:		
Robert Byrd	(EDITOR)	(408) 732-6775
Librarians:		
(disc) Gerry McKee	(GMCKEE)	(408) 926-4063
(tape) Gary Dixon	(GDIXON)	(408) 262-6937
(doc.) Bill Richerson		(408) 257-8267

**** Other key individuals ****

Assistant Editor:		
Dave Fox	(DAVEFOX)	(408) 255-3270
Public Relations:		
Ron Carpenter	(RON)	(415) 726-3487
Host Computer:		
SBUG-80	(EVERYONE)	(408) 737-SBUG
SBUG-80 Sysops:		
Robert Byrd	(EDITOR)	(408) 732-6775
Eric Brewer	(BREWER)	(408) 252-9332

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

**A NOTE OF THANKS TO
HOLMES ENGINEERING, INC.**

3555 South 3200 West
Salt Lake City, Utah 84119 Ph. (801) 967-2324

It is my pleasure to announce that Holmes Engineering has contributed one of their Sprinter speedup kits to our host computer (SBUG-80). This has made double density possible on the eight inch disc drives.

I have written a review of my experiences installing this fine piece of hardware (see table of contents for page number). I highly recommend the Holmes Sprinter as one the most economical ways to add life to your TRS-80 Model I/III. SBUG-80 feels like a different computer with 5.36 Mhz made possible by Holmes Engineering.

The support of their product speaks for itself with their contribution.

I feel that I can comfortably speak for all the members of SBUG and say. "THANK YOU HOLMES ENGINEERING, WE ENJOY AND APPRECIATE YOUR CONTRIBUTION!!"

Robert Byrd
EDITOR @ SBUG-80

SKIMPY NEWSLETTER

I am sorry for the lack of material in this months newsletter. This is NOT caused by lack of contributions, because there were many! The main problem is the one ounce limit in mailing per newsletter. I felt, SBUG members would prefer to have a membership list (CENTERFOLD ROSTER) to help improve communications among members. And of course, this took eight pages of of text away from this months publication.

Robert Byrd
EDITOR @ SBUG-80

RESULTS OF THE MEMBERSHIP SURVEY

About 51 percent of the current membership has returned the survey questionnaire that was distributed in the December newsletter. The results show that the average SBUG member has a Radio Shack Model I computer (69%), with 5" disk drives (88%), a Epson MX-80 printer (52%) with a Hayes Smartmodem (21%). The most popular uses of the computers are word processing (43%), business (29%), computer literacy education (21%), and games (19%). The average member has belonged to SBUG for 2 years and about one-third are willing to contribute to club activities by writing articles, giving talks, teaching and group buys.

In general, the members of SBUG have quite a large investment in hardware (\$2,500-\$3000) and use their computers for serious work and education. Surprisingly, only 5% of the members use cassette for program storage. Only one disk user reported using TRSDOS as the primary disk operating system. In contrast, NEWDOS80 is used by 72% of the members. CP/M use is on the rise with about 10% of the members using it now. The last survey was done two years ago. A comparison of results that survey with the current one is given below.

	March 1981	April 1983
Number of members	100	174
Number responding	81	86
Model I	90%	69%
Model II	4%	2%
Model III	6%	34%
Disk	82%	94%
Tape	16%	4%
Stringy	1%	3%
Modems	32%	70%

The number of tape users has dropped from 16% to only 4 percent now. We often hear that tape users are being neglected by the club. Apparently they have either left

the club, got disks, or just don't like to fill out surveys. The number of members with modems has increased from 32% to 70% currently, probably due to our excellent bulletin board.

The tables below summarize the survey results in more detail.

YEARS IN SBUG

years	number	percent
4 or more	10	12%
3	19	22%
2	25	29%
1	18	21%
New	14	16%

INTERESTS

Word Processing	37	43%
Business	25	29%
Personal Finance	21	24%
Computer Literacy	18	21%
Hobby	18	21%
Games	16	19%
Database	15	17%
Software Development	13	15%
Telecommunications	13	15%
Taxes	8	9%
Education	8	9%
Engineering	7	8%

COMPUTERS

Model I	59	69%
Model III	29	34%
LNW 80	4	5%
Color Computer	3	3%
Model II	2	2%
Pocket PC 1	2	2%
Max 80	1	1%

DISK AND TAPE STORAGE

5" Disk	76	88%
8" Disk	6	7%
Cassette	4	5%
Hard Disk	4	5%
Stringy Floppy	3	3%

PRINTERS

Epson MX-80	45	52%
Radio Shack LP xx	10	12%
DTC 300-382	5	6%
Microline 80-82	4	5%

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Others	34	40%
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MODEMS

Hayes Smartmodem	18	21%
Radio Shack I	9	10%
Radio Shack II	8	9%
Racal Vadic	3	3%
Signalman	3	3%
Others	15	17%

OTHER HARDWARE

Omikron 1	7	8%
Percom Doubler	6	7%
LNW Expansion	6	7%
LNW 5/8	4	5%
Omikron 2	3	3%
Alpha Joystick	3	3%

DISK OPERATING SYSTEMS

NEWDOS80	62	72%
DOSPLUS	14	16%
LDOS	11	13%
CP/M	8	9%
MULTIDOS	4	5%

WORD PROCESSING

Scriptsit	56	65%
Electric Pencil	16	17%
Superscripts	7	8%
Lazywriter	6	7%
Wordstar	6	7%
Newsript	3	3%

LANGUAGES

Basic	86	100%
Assembly	25	29%
Fortran	7	8%
Forth	5	6%
Lisp	2	2%
APL	1	1%
Pilot	1	1%

TELECOMMUNICATIONS

Modem80	32	37%
ST80III	8	9%
Omniterm	6	7%
Sterm	3	3%

UTILITIES

TRS-80 MEMBERSHIP LIST AS OF 5 APR 83

ABRAHAMSON, ALAN	10 RICHLEE RD.	NORWALK	CT	06851		83/81 FCUG
ALAVI, BEHAD	P.O. BOX 1955	SAN JOSE	CA	95109	292-6669	83/83
ALLEN, RICHARD C	172 COLLEGE AVE.	LOS GATOS	CA	95030	354-8190	83/ DICKALLE
ANDERSON, ROBERT B	514 LATONA CT.	SAN JOSE	CA	95111	281-8980	83/82 BOBANDER
ANDERSON, ROBER	1279 CRESCENT TERRACE	SUNNYVALE	CA	94087	732-4307	83/81 ROGERAND
ANDERSON, TOM J.	91 ANGELA DRIVE	LOS ALTOS	CA	94022	941-1543	83/79 ANDERSON
ANDERSON, WES	763 LA PARA AVE.	PALO ALTO	CA	94306	493-3330	83/82
ANDRES, DAVID	1198 AMALT DR.	MTN. VIEW	CA	94040	961-5225	83/83
ANTICOUNT, STAN	7174 SANTA TERESA BLVD#A1	SAN JOSE	CA	95139	578-8550	83/80 STAN
ARIA, RICHARD	1032 WHITEBICK DR.	SAN JOSE	CA	95129		83/
BABCOCK, DEAN F.	400 CERVANTES RD.	PORTOLA VALLEY	CA	94025	851-8195	83/83 BABCOCK
BARRETT, BARRY	3859 ASHRIDGE LANE	SAN JOSE	CA	95121	274-1427	83/80 BARRETT
BARTO, ROBERT	2019 DUVAL LN	HAYWARD	CA	94545	782-5081	83/83 RBARTO
BENNETT, WILLIAM C.	3270 HELENDY DR.	SAN CARLOS	CA	94070	595-2537	83/81 BENNETT
BERG, LAUREN V.	5145 HARVEST ESTATES	SAN JOSE	CA	95135	274-6869	83/82
BERSHADER, ILSE	937 WING PL.	STANFORD	CA	94305	493-1407	83/83
BIEBER, DENNIS L.	1630 OTTAWA CT. APT C	SUNNYVALE	CA	94087	730-5068	83/81
BLACK, RICHARD	1208 DANIEL CT.	MILPITAS	CA	95035	946-5906	83/82
BLAINE, DICK A.	22284 DE ANZA CIRCLE	CUPERTINO	CA	95014	257-6410	83/ BLAINE
BODNAR, ELMER R.	5162 CORDOY LANE	SAN JOSE	CA	95124	266-1304	83/80
BREWER, ERIC	18994 PALO OAKS CT.	SARATOGA	CA	95070	252-9332	83/ BRENER
BREWSTER, CHARLES	149 PICCADILLY PL. #E	SAN BRUNO	CA	94066	871-9379	83/83
BROWN, ROBERT W.	780 MANX AVE.	CAMPBELL	CA	95008	379-2774	83/79 SAMBROWN
BRYAN, LARRY	285 S. 12TH ST.	SAN JOSE	CA	95112	289-1519	83/82
BRYSON, JIM	10857 N. WOLF RD.	CUPERTINO	CA	95014	257-4390	83/82
BURKE, KEVIN	27060 OLD TRACE RD.	LOS ALTOS	CA	94022		83/82 CHEVYMAN
BYRD, ROBERT J.	555 FRANCIS ST.	SUNNYVALE	CA	94086	732-6775	83/80 EDITOR

FULTON, ROBERT	1510 ELKA AVE	SAN JOSE	CA	95129	998-2549	83/83
GEER, JOHN M.	617 VETERANS BLVD. NO 212	REDWOOD CITY	CA	94063	361-8000	83/81
GEORGE, BRIAN F.	3501 MURDOCH DR.	PALO ALTO	CA	94306	494-0561	83/81
GIBSON, JIM	471 CHINOOK LN.	SAN JOSE	CA	95123	578-0261	83/
GLATHE, WILLIAM B.	6477 OAKCREST DR.	SAN JOSE	CA	95120	268-7251	83/82 FLYPAA
GUNDERSON, LARRY C.	1299 SIERRA CT.	SAN JOSE	CA	95132	259-5349	83/80 TREAS
GUTIERREZ, FRANK	771 COLLEEN DR.	SAN JOSE	CA	95123	281-8596	83/82
HALL, ED H.	683 TOWLE WAY	PALO ALTO	CA	94306	856-7467	83/81 EDHALL
HAMMACK, FRED	1571 EL CAMINO #10	MTN. VIEW	CA	94040	968-7261	83/
HEATHER, JOHN T.	1058 CELILO DR.	SUNNYVALE	CA	94087	732-3276	83/
HERBACH, MICHAEL J.	5392 GREAT OAKS DR.	SAN JOSE	CA	95111	629-6949	83/83
HERING, THOMAS G.	1023 BURLWOOD DR.	SAN JOSE	CA	95120	997-0129	83/ TOMHER
HOBART, TERRY	245 CERVANTES RD.	PORTOLA VALLEY	CA	94025	851-3213	83/ HOBART
HOFMANN, RICHARD O.	1178 CARRIE LEE WAY	SAN JOSE	CA	95118	264-2027	83/83
HOLEMAN, NORVEL	P O BOX 2346	HUTCHINSON	KS	67501	FEB 3166638043	83/83 NORVEL
HOOKER, ALLEN	1685 LOBELIA LANE	SAN JOSE	CA	95124	265-8154	83/
HOOVER, EDWARD F.	1025 HIGHLANDS CR.	LDS ALTOS	CA	94022	961-3410	83/79 HOOVER
HOYTE, JOHN M.	3594 HAVEN AVE.	REDWOOD CITY	CA	94063	365-6567	83/83
HUGHES, JERRY H.	2116 BEL AIR AVE	SAN JOSE	CA	95128	248-5367	83/ HUGHES
HULL, JACQUES L.	2463 ELKA AVE.	MTN. VIEW	CA	94043	963-8792	83/
HUNTLEY, WRIGHT	2483 S. PARK LN.	SANTA CLARA	CA	95051	248-5905	83/81 HUNTLEY
IRWIN, DAVID	2450 OCTAVIA #3A	SAN FRANCISCO	CA	94109	673-7003	83/82 PINGO
JANOWSKI, BERNARD	355 ANGEL AVE. #2	SUNNYVALE	CA	94086	245-4160	83/82 JANOWSKI
JIBBY, WILLIAM	6105 SILBERMAN DR.	SAN JOSE	CA	95120	268-0181	83/81 JIBBYTRM
JOEL, ROBERT L.	1585 MARBURG WAY #4	SAN JOSE	CA	95133	MAR 926-3999	83/83
JOHNSON, SAM W.	310 CHATHAM WAY	MTN. VIEW	CA	94040	969-0228	83/80
JONES, WESLEY	806 BERRYESSA ST.	MILPITAS	CA	95035	946-2273	83/82 WES

MCGILL, ARTHUR	1085 IBERIS CT.	SUNNYVALE	CA	94086	243-8987	83/83
MCHENRY, MICHEL	1030 RANGPUR COURT	SUNNYVALE	CA	94087	245-4704	83/79 MCHENRY
MCKEE, GERALD F.	926 CAPE BUFFALO DR.	SAN JOSE	CA	95133	926-4063	83/80 MCKEE
MCLAUGHLIN, DAVE J.	12985 TEN OAK WAY	SARATOGA	CA	95070	867-5285	83/
NEUHAUS, HERMANN	12246 WOODSIDE DR.	SARATOGA	CA	95070	996-0304	83/
NEWMAN, DAVID E.	6658 MT. HOLLY DR.	SAN JOSE	CA	95120	268-6610	83/ PHONES
NEWMAN, JOHN	2355 CAMP BARKER RD.	MEDFORD	OR	97501	NR	83/83
NMOSU, CHUKUMA	2310 BLUEBELL AVE.	SAN JOSE	CA	95122	281-1772	83/82
OBERDING, FRED	120 LINCOLN DR.	SAUSALITO	CA	94965	332-0625	83/82
OGLE, JOHN S.	1472 PASHOTE CT.	MILPITAS	CA	95035	263-3798	83/
OLAFSSON, OLAFUR	95 GREEN VALLEY RD.	SANTA CRUZ	CA	95066	335-3224	83/82
OLSON, CHARLES R.	20832 GREENLEAF DR.	CUPERTINO	CA	95014	446-3450	83/83
OMAN, CHRIS K.	P.O. BOX 159	MMS MOFFETT FIELD	CA	94040	966-5461	83/82 OKMAN
PARKER, CASEY	38833 OVERACKER AVE	FREMONT	CA	94536	793-2715	83/81
PATRICK, RICHARD	1334 NANCARROW CT.	SAN JOSE	CA	95120	997-7876	83/ PATRICK
PENKINS, JEFF K.	388 VIEWPARK CIR.	SAN JOSE	CA	95136		83/
PERRY, LARRY	284 CARLYN AVE.	CAMPBELL	CA	95008	378-2003	83/
PERRY, RANDOLPH	35879 ADOBE DR.	FREEMONT	CA	94536	792-0969	83/ PERRY
PHELPS, SANDY L.	585 OAK ST.	MTN. VIEW	CA	94041	964-1642	83/81 PHELPS
PITRE, THOMAS J.	764 CLINTON PL.	SAN JOSE	CA	95126	APR 294-2256	83/83
POTTBERG, BILL	1621 WESTMOOR RD.	BURLINGAME	CA	94010	697-2375	83/81
RANSEY, BILL H.	MUSIC DEPT. KNOLL 311	STANFORD	CA	94305	255-2854	83/79 BILLRAM
RICHERSON, BILL	1047 FOREST KNOLL	SAN JOSE	CA	95129	257-8267	83/80
ROCHE, CURT	3890 LOUIS RD.	PALO ALTO	CA	94303	494-2643	83/81 CURT
RUSSO, MIKE J.	1428 GAUCHO CT.	SAN JOSE	CA	95118	266-3988	83/83
SAVRE, NICK	2001 ALAMEDA #175	SAN MATEO	CA	94403	574-8096	83/82 TINSAYRE
SCHNELL, EDWARD R.	1508 SANTA INEZ DR.	SAN JOSE	CA	95125	264-2792	83/80 SCHNELL

WARNER, DANIAL	1687 FLICKINGER AVE.	SAN JOSE	CA	95132	259-8889	83/83
WEBB, IAN A.	20621 CANYON VIEW DR.	SARATOGA	CA	95070	867-9533	83/81 IANWEBB
WEST, E. J.	1029 JOHNSON AVE.	SAN JOSE	CA	95129	257-8752	83/81
WEXLER, JONATHAN D.	986 STARFLOWER CT.	SUNNYVALE	CA	94086	736-0504	83/83
WHITELEY, STEPHEN	358 AVENIDA ARBOLES	SAN JOSE	CA	95123	227-4337	83/83 WHITELEY
WILEY, MARVIN D.	20198 KNOLLWOOD DR.	SARATOGA	CA	95070	255-1438	83/79 MARV
WILSON, CURTIS	20251 MERRICK DR.	SARATOGA	CA	95070	867-6976	83/82
WITTEKIND, BART	1820 SARATOGA AVE.	SAN JOSE	CA	95129	379-5826	83/
WONG, FRED J.	229 SO. ASHTON AVE.	MILLBRAE	CA	94030		83/82 FJM
WRIGHT, FRED	10112 MELODY PARK DR.	GARDEN GROVE	CA	92640	638-7889	83/82
YUNG, BENJAMIN	1923 LUBY DR.	SAN JOSE	CA	95133	272-7714	83/80 BENYUNG
ZIEGLER, ALEX	P O BOX 1358	SANTA CRUZ	CA	95060	662-0774	83/83

TOTAL MEMBERSHIP = 180

SCHULZE, HENRY	3927 ALAPULCO DR.	CAMPBELL	CA	95008	866-5731	83/83	HANK
SCHWARTZ, ALLAN	919 CAPE GEORGE PL.	SAN JOSE	CA	95133	926-5307	83/	
SHINEVICH, PETER	1456 CAMINO ROBLES CT.	SAN JOSE	CA	95120	269-1194	83/80	
SILLS, MARK L.	P.O. BOX 100	HOLLISTER	CA	95023	637-4434	83/80	MSILLS
SMITH, LELAND C.	3732 LABUNA AVE.	PALO ALTO	CA	94306	493-9386	83/80	LSMITH
SMITH, VIBO N.	19768 SOLANA DR.	SARATOGA	CA	95070	996-7896	83/81	VIBO
SOLEY, CLYNE	5541 CRIBARI CIR.	SAN JOSE	CA	95135	274-2017	83/81	
STAFFORD, RODNEY	5155 SHADOW ESTATES	SAN JOSE	CA	95135	238-4671	83/82	()
STARK, STEVEN A.	21579 EDWARD WAY	CUPERTINO	CA	95014	255-4610	83/83	
STEPHENS, DON	18762 CASA BLANCA LN.	SARATOGA	CA	95070	867-1443	83/82	
STODANOVICH, JOHN R.	16880 KENNEDY RD	LOS GATOS	CA	95030	356-6452	83/	
STONE, BOB	19645 NORTHAMPTON DR.	SARATOGA	CA	95070	255-6804	83/80	
STORBERG, BOB	4691 CASTLEWOOD	SAN JOSE	CA	95129	255-6770	83/80	STORBY
STROUD, GEORGEANNA	1259 PARKINGTON AVE.	SUNNYVALE	CA	94087	732-4192	83/82	
TASHJIAN, DAVID R.	177 HEMLOCK CT.	PALO ALTO	CA	94306	493-9494	83/82	
TERRAZAS, CARLOS C.	689 TARRYTOWN CT.	SAN JOSE	CA	95136	224-3695	83/83	
THOMAS, ROSS D.	95 CHURCH ST. # 2202	LOS GATOS	CA	95030	354-5816	83/83	
THOMPSON, BERNARD	20738 WOODWARD CT.	SARATOGA	CA	95070	867-7455	83/	BERNIE
THOMPSON, JIM	13824 ESPADA CT.	SARATOGA	CA	95070	378-1723	83/	SIXSIV
THOMPSON, RONAL R.	238 ERIE WAY	CAMPBELL	CA	95008	269-6439	83/83	RONAL
THOMSON, RICHARD D.	4420 CALLE DE FARRAR	SAN JOSE	CA	95118	629-2289	83/82	
THURBER, GENE	648 NAVAJO CT.	SAN JOSE	CA	95123	494-3565	83/	
TRAINER, RICHARD	744 SAN ANTONIO RD.	PALO ALTO	CA	94303	255-4504	83/82	
TRAN, BICH	5138 FOREST GLEN	SAN JOSE	CA	95129	656-4277	83/83	
TURLEY, CHARLES W.	224 MANITOBA TERR.	FREMONT	CA	94538	95035	83/	TURLEYC
VAUGHN, GLENN	224 SMITHWOOD ST.	HILPITAS	CA	94086	248-7612	83/83	MIKEVP
VANPELT, JAMES M.	763 SAN JUSTO CT. APT 7	SUNNYVALE	CA	95051	245-7888	83/82	
WAHLER, JOHN	3285 CATALINA AVE.	SANTA CLARA	CA	95051		83/82	
WARD, CHARLES	873 TRENTON	SUNNYVALE	CA	94087		83/83	

KARBS, PETER	1186 BU. HWY	SUNNYVALE	CA	94087	736-7204	83/82 PEITER
KAWASH, SABRI	1016 HAVRE CT.	SUNNYVALE	CA	94087	732-5484	83/ SABRI
KELLY, WILHEAM D.	282 BLUEFIELD DR.	SAN JOSE	CA	95136	629-4829	83/83
KEPPEL, ROBERT D.	4644 WINDING WAY	SAN JOSE	CA	95129	253-5928	83/82
KERRIGAN, VINCENT	452 LOS ENCINOS ST	SAN JOSE	CA	95134	262-4687	83/
KINCHELOE, BOB	26830 ELENA RD.	LOS ALTOS	CA	94022	948-0682	83/
KING, FRED C.	15159 MONTALVO RD.	SARATOGA	CA	95070	734-8995	83/ FCK
KREHBIEL, COURTNEY	1942 SEA VILLAGE DR.	CARDIFF BY THE SEA	CA	92007		83/
KROMENHOCK, JACOB A.	948 HORCAJO CIRCLE	MILPITAS	CA	95035	262-4239	83/ JAKE
LAMB, EMMET	817 TOLMAN DR.	STANFORD	CA	94305	493-1138	83/80
LAMBERT, DAVID L.	2040 FELL ST.	SAN FRANCISCO	CA	94114	668-5043	83/83 ()
LARSON, MILO D.	115 BIRBY DR.	MILPITAS	CA	95035	263-1623	83/83
LEE, DONALD V.	663 EHRHORN #2	MTN. VIEW	CA	94041	494-7171	83/83
LEE, GIL S.	929 JUNGFRAU CT.	MILPITAS	CA	95035	263-9294	83/
LEE, JOEL R.	1585 MARBURG WAY #4	SAN JOSE	CA	95133	MAR 926-3999	83/83
LESTER, TED	P.O. BOX 8140	SANTA CRUZ	CA	95061	684-1617	83/ TED
LOUDEN, ROBERT	21110 SULLIVAN WAY	SARATOGA	CA	95070	867-1904	83/ LOUDEN
LYNCH, JOHN & DONNA	984 ROCKDALE DR.	SAN JOSE	CA	95129	252-4491	83/82 JLYNCH
MACK, BERT	4775 PLAIN FELD DR.	SAN JOSE	CA	95111	629-6225	83/83
MARRAZZO, JOE	2888 STANHOPE DR.	SAN JOSE	CA	95121	238-5189	83/ MARRAZZO
MARSHALL, BOB W.	5068 HOMES LANE	SAN JOSE	CA	95118	266-1482	83/
MARTIN, JEREMY	10139 S. BLANEY AVE # F	CUPERTINO	CA	95014		83/83
MASON, BOB	1829 WALSH AVE.	SANTA CLARA	CA	95050	727-0555	83/82
MAUCH, PAUL	1815 WALNUT DR.	MTN. VIEW	CA	94040	968-1268	83/
MEURER, CHET G.	1671 MILROY PL.	SAN JOSE	CA	95124	264-8884	83/81 CHET
MIROSHNICHENKO, ALEX	1566 MURRE LN.	SUNNYVALE	CA	94087	735-1126	83/
MORREY, ROBERT	3404 MERRIMAC DR.	SAN JOSE	CA	95117	379-5944	83/80
MCCALL, WALTER A.	2160 S. WINCHESTER BLVD.	CAMPBELL	CA	95008	MAR 378-5190	83/83 WALTMC
MCCARLEY, JOHN T.	427 ALLAN LN.	SAN JOSE	CA	95076	MAR 724-2659	83/83 ()

CARPENTER, RONALD	15 LIGHTHOUSE ROAD	HALFMOON BAY	CA	94019	726-3487	83/79 RON
CARRE, DON	21100 SUMMIT	LOS GATOS	CA	95030	354-2767	83/79 CARRE
CARSD, BRUCE	3798 HANCOCK DR.	SANTA CLARA	CA	95051	554-0666	83/83 CARP/VSN
CHABRAYA, KENNETH	2630 PABANINI AVE.	SAN JOSE	CA	95122		83/82 THMCO
CHAMBERLAIN, CONRAD	1469 VALCARTIER DR.	SUNNYVALE	CA	94087	756-2208	83/80 CHAMBERLN
CHAMBERLIN, DICK R.	12384 PRISCILLA LN.	LOS ALTOS HILLS	CA	94022	948-7799	83/82
CHETLEY, RICHARD	100 N. WINCHESTER BLD 200	SAN JOSE	CA	95128	248-8770	83/82 PHANTOM
CHITWOOD, ANN	1971 SANTA ROSA CT.	SANTA CLARA	CA	95051	243-2166	83/83
CHOW, KAM W.	1031 CLYDE AVE. NO 150	SANTA CLARA	CA	95050	988-5022	83/80 CHOW
CLAYTON, JIM	P.O. BOX 02500	PORTLAND	OR	97202	(800) 452-2444	83/82
COFFMAN, PHILLIP A.	1016 AKIO WAY	SAN JOSE	CA	95120	997-0247	83/ CAR
COPE, JERRY	4313 MARLOW DR	SAN JOSE	CA	95124	266-2492	83/82 JERCO
CRANE, JOHN W.	5886 TEXAS CT.	SAN JOSE	CA	95120	MAR 268-7317	83/83 ()
CROVELLA, DENNIS E.	5676 BUTAND PARK DR	FREMONT	CA	94538	651-4373	83/83
DAVIS, RALPH	3670 HA16 ST. #3	SANTA CLARA	CA	95050	727-3310	83/82
DEVENDORF, BRIAN	P.O. BOX 6302	STANFORD	CA	94305	494-8500	83/79
DINKEY, JAMES	3380 CORK OAK WAY	PALO ALTO	CA	94303	493-9307	83/80 JHMDINK
DIXON, GARY	1933 GRAND TETON	MILPITAS	CA	95035	262-6937	83/ GDIXON
EARLEY, MARTIN	1950 EATON AVE	SAN CARLOS	CA	94070	592-1950	83/ MARTY
EICHEL, RICHARD	1207 PALAMOS AVE	SUNNYVALE	CA	94086	738-3472	83/82
FEBRENBACH, PAUL	1798 COMMODORE DR.	SAN JOSE	CA	95133	251-3743	83/
FIBUSH, DAVID K.	3877 HANCOCK DR.	SANTA CLARA	CA	95051	248-7585	83/81 DAVIDF
FLORES, EDWARD	15121 JOANNE AVE	SAN JOSE	CA	95127	258-4313	83/83
FORBES, ROSS W.	P.O. BOX 1	LOS ALTOS	CA	94022	948-5193	83/81 FORBES
FORRESTER, FORBES B.	2035 SHELLBACK PL.	SAN JOSE	CA	95133	926-3779	83/83
FOX, DAVID	5450 MAYNE AVE. # 15	SAN JOSE	CA	95129	255-3270	83/81 DAVEFOX
FRANK, BARRY	15195 ALMA JO CT.	MONTI SERENO	CA	95030	395-7211	83/83 BARRY
FRENZEL, JOHN	629 LISA WAY	CAMPBELL	CA	95008	244-6427	83/

April 1983

Superutility	14	15%
Trakcess	3	3%
Tasmon	3	3%

SPREAD SHEET

Visicalc	47	55%
Supercalc	2	2%

CONTRIBUTE TO CLUB ACTIVITIES

Newsletter Article	29	35%
Reviews	24	28%
Talk	18	19%
Teach Class	14	15%
Group Buy	10	11%

Thanks to those who filled out the survey. A detailed listing of the data takes about 27 pages, but perhaps we can publish portions of it, say the hardware, in the newsletter. I am working on a program to have the interactive database online on SBUG-80 so we can keep it current. Send me your completed survey, if you haven't done it yet, and I will add it to the database. Thanks also to those that have offered to contribute to the club. We will be in touch with you.

Mike McHenry
MCHENRY @ SBUG-80

SOUPING UP YOUR TRS-80 MODEL I

INTRODUCTION

Are you tired of the 1.77 MHz clock in your TRS-80 Model I? Have you ever wished you could speed up your graphic programs? Wouldn't it be great to have double density on your 8 inch disc drives. There is a solution, and you can have all the features mentioned above. All you have to do is speedup your TRS-80 to 3.55 MHz, or faster, and all this is yours!

There are several speedup boards on the market, and they all work well when installed properly. The main difference in the modifications is ease of installation. The most popular of the speedup kits are the Archbold and the Holmes; therefore, I will limit my discussion to these two boards. Perhaps someone else in the club has had experience with other speedup modifications and would like to write us another review.

THE ARCHBOLD

South Bay TRS-80 Users Group

Augh, what a mess! The Archbold kit requires much modification to your system. The kit requires traces to be cut and an experienced steady hand with a soldering iron. I don't recommend this kit to those who have had little experience with hardware.

There is, however, a handy feature that might encourage many to opt for the Archbold board, a multi-colored LED that replaces the conventional red LED now existent on your Model I keyboard. The LED changes colors depending on the speed of the system. This indicator could be handy when running software that is speed dependent such as games. I would think that FROGGER at 3.55 MHz might be exciting, but tough for sure!

THE HOLMES

Relief at last! This kit cures all the agony of the Archbold. There are only five wires to connect and one trace to cut in the keyboard. The wires connect using solderless clips, so there is no need to bring out the soldering iron!

Most E/Is (Expansion Interfaces) have a data delay line caused by 237. For an additional \$10 Holmes will include a replacement for this chip, so the E/I can handle the additional speed.

If you have an older E/I, which has the buffer cable, the speedup modification may be a little more complicated. If you have any questions or problems make a quick call to Holmes Engineering. They will be happy to share with you their experiences. The phone number for Holmes Engineering is included with the documentation.

The Holmes speedup kit includes some resistors, which they recommend, for soldering across your RAM chips if they are the slower 400-450 ns type. Don't do it!!! RAM is very cheap these days. I recommend that you buy new 200 ns chips, and replace your older slower RAM. Remember, check the RAM in your E/I also.

INTERFACE WITH DISC OPERATING SYSTEM

A final modification to consider is whether to have a switch for setting high or low speed during disc I/O (input/output). I chose not to have the switch, because NEWDOS/80 is my primary operating system. NEWDOS/80 has the SYSTEM option "BJ=2" (use "BJ=3" when running at 5.36 MHz), which allows the disc I/O to speedup also. Instead of the switch, I installed the 4.7k resistor across U-10 as suggested by Holmes. Why would I mess with TRS-DOS when I have a beautiful modification like the Holmes!?

EIGHT INCH DISC OPERATION IN DOUBLE DENSITY

April 1983

With the 3.55 MHz available to your machine, you should be able to have double density on your 8 inch drives. Again, with NEWDOS/80 this is easy. Set the PDRIVES as follows:

Single Sided Double Density (8 inch disc)

TD=F TC=77 SPT=26 TSR=1 GPL=3

CAUTION!! Many 8 inch disc drives will work with "TSR=0", but once you go to double speed the track stepping pulse is also reduced. Therefore, you must make the "TSR=1" to give you the 5 ms stepping rate.

CONCLUSION

The Holmes speedup board is great! If you wish to increase the capabilities of you Model I/III look into installing this fine piece of hardware. Follow the instructions carefully, and you should have little if no problems.

Robert Byrd
EDITOR @ SBUG-80

ECLECTIC PLAGIARISM

Try running that title through your spelling checker program! Seriously, I am going to present a few items that have been gleaned out of reading some of the newsletters that our club gets from other users groups in exchange for our newsletter. The ground rules seem to be that other users groups are free to use items if they are properly credited.

On a regular basis, I will try to pick out a few items of possible interest. At the same time, I will try to get the sending and receiving of newsletters organized and properly catalog the newsletters into the documentation library so others can read them.

This month things are somewhat hurried, as I didn't get the newsletters. So in an attempt to help with some newsletter material I have picked a few BASIC programs that might be interesting.

If you want a copy of the programs, better than typing them, they will be available on the bulletin board. Have a friend download them for you if you don't have bulletin board capabilities.

TICTOC/BAS

This is from the User's Group of Delaware County, Prospect Park, PA; TUG - DC is the name of their

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newsletter. January 1983 newsletter is the source.

They represent this as a major breakthrough! A \$4.95 digital clock that only uses \$2000 worth of computer hardware.

Lines 10-60 do housekeeping and graphic set-ups for the digital numbers. 70-120 pick up hours, minutes and seconds from TIME\$ of DOS. Line 130 prints the clock in the form HH MM SS. 140 routes back to the next update of TIME\$.

I have run it fine on Model III NEWDOS80 V2 and the author says it should run on other DOS which support the TIME\$ function.

```
5 'PROGRAM FROM TUG-DC, DELAWARE COUNTY USER'S GROUP (PA)
6 'NEWSLETTER, JANUARY 1983, PG. 6
10 CLEAR300:DEFSTRA-Z:DEFINTJ,K
20 CLS
30 M=CHR$(26)+STRING$(4,24)
40 X=CHR$(128):Y=CHR$(131):Z=CHR$(191)
50 A=X+Y+X+X:B=X+X+X+Y:C=X+Z+X+X:D=X+X+X+Z:E=Y+Y+Y+Z:
F=Z+Y+Y+Z:G=Z+X+X+Z:H=Z+Y+Y+Y:I=Y+Y+Y+Y
60 N(0)=F+M+G+M+I:N(1)=C+M+C+M+A:N(2)=E+M+H+M+I:
N(3)=E+M+E+M+I:N(4)=G+M+E+M+B:N(5)=H+M+E+M+I:N(6)=H+M+F+M+I:
N(7)=E+M+D+M+B:N(8)=F+M+F+M+I:N(9)=F+M+E+M+I
70 J1=VAL(MID$(TIME$,10,1))
80 J2=VAL(MID$(TIME$,11,1))
90 J3=VAL(MID$(TIME$,13,1))
100 J4=VAL(MID$(TIME$,14,1))
110 J5=VAL(MID$(TIME$,16,1))
120 J6=VAL(MID$(TIME$,17,1))
130 PRINT@328,N(J1);:PRINT@336,N(J2);:PRINT@348,N(J3);:
PRINT@356,N(J4);:PRINT@368,N(J5);:PRINT@376,N(J6)
140 GOTO70
```

The following two items are from the Voice of the '80 Newsletter, January 1983, Vol3, No. 8, Page 14 (Fairfield County TRS-80 Users Group, Norwalk, CT. The author of the material is Alan Abrahamson.

B O X E D I N
BORDER/BAS

In response to the request for a program that would be fast, but not require machine code the following program was given. This program is a sample of a technique that will draw a border around the screen very rapidly. It uses space compression codes to get 1024 screen bytes into a 240 byte printable variable. The code was developed by Alan Abrahamson and Cliff Ogilvie.

When using it, you should print your text using PRINT@ rather than the regular PRINT statements which will destroy the border.

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