

apple computer user group newsletter

JULY 1979 VOL II No 6

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Minutes of June 20th Meeting.

Meeting called to order at 7:45 by president Dan Buchler.

Old Business:

been developed. Disks will be available at: Zim-computer

Team-Hennepen Store

Computerland-Morgan Circle

Interested persons will sian up to set the copies, and will be responsible for the disk from the time they set it, until it is returned to the store (maximum of three days). They will also have to contact the next name on the sign-up list. A charge of \$.50 will be made to defray eventual disk wear and the librarians time and effort for each disk or portion of the disk that is copied. Tapes will also be left in the store, but will also be sold (single tape containing the first three volumes of programs) for \$4.00 each through Dan Buchler.

2. We st. keep the still need newsletter input. If we are to interest of others we must contribute. Further, the club will die if everyone waits to someone else's work!!!!

 If you are interested in siving or taking some sort of classes through the club contact D. Buchler.

4. The missing pages of the WOZPAC have been copied and the copies are available from D. Buchler if you ordered in advance.

NEXT MEETING

Ken Brumbaush of M.E.C.C. will be the speaker at our next meeting. Ken will field suestions on topics related to M.E.C.C. For example, the question has arisen on several occasions about who may download programs from TIES, or what is People I think are interested in the available. availability of the many Apple programs being converted (by Jim Henke, our Technical Adviser). So please bring your questions for Ken to the next meetins.

New Business

A distribution system for tapes and disks 1. We have ordered the CALL A.P.P.L.E Tape of the month for the club. Should we get others? No decision made.

> 2. Could we get the programs that teach BASIC for use by club members? John Wheatly moves and Dan Rotenbers seconds that D. Buchler be empowered to look into the program, and the ethics of making it available to club members (who) would then not have to buy it.). Approved.

> 3. The problem of language in the newsletter was

noted and taken care of.

4. Jim Henke Moved and S.K. Johnson seconded that membership lists be prepared for distribution to club members. Approved. Those who wish to have their names left off of the list should contact Chuck Thiesfeld ASAP.

5. The By-laws in the April issue had not been approved. G. Parker moves, S. Ibrahim seconded that they be approved as printed. Carried.
6. The problem of whether to carry ads in the newsletter was discussed. Paid or Free? Club members or stores? kind? Much discussion, but no conclusion.

After several communications were read. meeting was adjourned to hear four short talks.

MINI'APP'LES USER BANK - STATUS
The user bank library is ready! Thanks to the efforts of Keith Madonna (Our Librarian) and Rob Wentworth (Our program editor), we now have a user bank of 15+ diskette sides. The bank consists of 2 VOLUMES. Volume I is esentially the same as that published in the June newsletter. To recap, there are 4 diskettes of programs collected locally including several developed by our own members. This includes a UTILITY DISKette. The last 2 diskettes were obtained through a promam swap with the Apple Pi users group of Colorado. Volume II consists of 5 double sided disks (that is, 10 sides). These disks were obtained through Computerland, who in turn received the disks from an Apple Enthusiast who, through his Job, travels around the country. While travelling, this Enthusiast has made it a point of collecting programs. We thank this person and Computerland for providing us with those programs. A catalog of all of these disks is included in this issue for your information. It will be apparent to anyone comparing the various individual diskette catalogs that there is some duplication of programs. We regret that such is the case. However, in order to get these programs to you as soon as possible, we felt that it would not be expedient to edit the diskettes at this time. For similar reasons, there may be some copyrighted programs within either Volume. We solicit critique from the Mini 'App'Les users in identifying duplicate programs and Copyrighted programs, if there are any. It should be noted that no one person in our group has been able to run any but a small percentage of these programs.

Therefore there may be some programs that will not even run! It is our intent to develop a Program submission form and qualification procedure. It must be obvious to everyone that, because of the large quantity of programs involved, such techniques would be completly impractical for qualifying these programs. Individual programs will be 'qualified' in the future.

LIBRARY DISTRIBUTION:

The procedure for distribution of the Library copies is as follows:-

- 1. A person desiring to borrow the library must place his/her name on the sign up list. Such a list was started at the June meeting. A separate list will be maintined at each of the 3 -- a \$5.00 charse to rewrite it. We all recognize distribution points. If you want to put your name on the list, select the distribution point most convenient to you and call that store. If you wish, you may call the Librarian (Keith Madonna) or one of the club officers.
- 2. Persons who do not live within easy reach of distribution point should contact the Librarian. We may simply add the names of such persons to the end of one of the lists so that after local demand is satisfied, diskettes could be mailed to persons on the list (See below).
- We discourage the use of the USMAIL for this purpose unless there is no other convenient way of transporting the volume.

 3. We are selections.
- We are asking the computer store at the distribution foint to make sure that th borrower is a member of MINITAPPYLES. We will supply membership lists for this purpose. We also are asking the computer stores to maintain the sign up lists on special forms which we will also supply. On these forms will be recorded in appropriate columns
- (a) The day on which the volume was picked up by or delivered to the person borrowing the volume.
- If the borrower has said (see below). (c) If the bornower has taken a whole or partial volume (see below).

- 4. The borrower on pickins up the volume, or havins it delivered to him, assumes the responsibility of notifying the next person on the list. Since some of our users must optimize their time, it is courtious to notify the next person on the list as soon as a borrower gets his/her volume. The borrower is then responsible for setting the volume to the next person. The borrower may telephone the next person on the list and notify him/her that the volume is being returned to the distribution point. Or arrandements may be made between the two parties to set the diskettes to the next user. In the later case, the borrower must call the computer store distribution point informing them of that act.
- 5. It is our goal to move the borrowed diskettes through 2 borrowers per week. In other words a person may keep the volume for 4 working days or over one weekend. It is recognized that people may have difficulties here. It is suggested that a person on being notified he/she is next on list, determine his/her availability to copy the diskettes, etc. Then if a problem is anticipated to try and swap with someone else on the list. The idea is to keep the volumes moving so those at the end of the list don't have to wait too lons.
- Only one volume may be borrowed at a time. Our recommended procedure is for the first Person on the list to pick up Volume 1, leaving Volume II at the store. When the person is finished with Volume I, he/she gets it to the next person on list and then picks up Volume II. From then on, Volume II is one step behind Volume I.
- There is a small charge for borrowing the volumes as follows: Per volume - \$2.00
- Per diskette if you don't want whole volume -\$0.50. Please make payment to the store on Picking up the Volume, or mail to our treasurer (Chuck Thiesfeld).
- 8. The borrower must assume some responsibilities when borrowing the volume. If you lose or damage a diskette so that it cannot be reused, there will be a charge of \$8.00 (\$3.00 for the diskette, \$5.00 to record it). If you carelessly bomb it, that is write all over it, there will be that things can so wrong that are out of our control. Therefore if, in the opinion of the Program Editor or Librarian a disk becomes unusable through accidental circumstances, there will be no penalty. We do ask all of you to take care of the dishettes.
- 9. The following computer stores have volunteered to act as distribution points: (a) Computerland, Morsan Circle, Bloominston (b) Team Electronics, Hennepin Avenue, Minneapolis (c) Zim Computer, Brooklyn Center

Please contact the most convenient one to you, if you want your name on the list. Note we will be updating lists at next meeting too.

BEGINNER'S TROUBLES.

I beleive that there are many beginners in our ranks who have problems. I have problems and I am not a beginner! Please let us know what are those problems either by calling an officer, or at the meetings. We are here to help you.

DAN'S EDIT

Dan's EDIT , which is the UPPER/LOWER CASE EDIT described in last newsletter did'nt set on too well with DOS. Dan, the President, sent a copy to Chuck Boody who volunteered to eat his Apple if it did'nt work. It did'nt. Dan has a case of severe indeseston but won't saw what apple he ate. Well Dan borrowed Keith's disk while Keith went fishing. There is now a working (to some extent) version of Dan's Edit compatible with DOS. The problem may be of interest to some of you more advanced technical types. The Wentworth subroutine package gets control by storing a Jump vector at \$36 & \$37. Well thats OK until you do the following.

500 PRINT "OPEN "; F\$ 510 PRINT "READ ";F\$

520 INPUT something

If the Jump vector is to the special subroutine package, DOS goes off into the wild blue wonder. Similarly, even if the INPUT is not part of a DISK READ sequence the same thing harrens. The cure was to restore the original FDF0 pointer to \$36 & \$37 prior to any input and then POKE the new pointer back in prior to output.
Unfortunately, there is still one elusive intermittant bus which causes the DISK Output version to occasionally lose a record. The tape version is OK I think. Incidentily, for those who might have an old version that loads CK. It will work if you kill DOS.

NEW DISK HARDWARE!

Some interesting things are brewing in the field of disk hardware. Keith Madonna attented a meeting of the Minnesota Computer Society at which there was a talk by a person from Shudart. It seems that Shugart are teaming with Matsushita Electric of Japan to manufacture a low cost version of their disk. It will use a new head and be packased in sheet metal rather than in cast aluminum. Storage capacity will be 70 K Butes.OEM price is expected to be in the \$50 range, retailing for about \$125. If Apple buys them we might see disks retailing from them for near \$200 next year ! According to Sate magazine, Nippon Electric of Japan are also rumoured to be developing a 5 inch disk. In the July Byte magazine their is an advertisement for a "TDS-1A Hitachi Disk System; Apple II compatible - coming soon". There was also a recent report of someone having hooked up an 8 inch disk to an Apple and having working software.

MORE ON PRINTERS

In last month, s newsletter, we talked about some printer attributes. The most rapidly changing attribute is 'price'! Two more manufacturers have announced printers in the under \$1000 price range, and which offers features comparable to the IP225 described in the last newsletter. These are Centronics with their model 730 printer, and the Anadex DP-8000. These two models together with the newer Integral Data Systems Paper-Tiger 440 all list for \$995. The first question that comes to mind is that in view of their lower list price, are they as reliable as their more expensive cousins? According to an article in the June edition of MINI-NICRO SYSTEMS, the answer is yes. Cost reductions have been acheived by such things as:

80 cols instead of 132.

50 to 112cps instead of up to 200.

Solenoid motors instead of stepper motors to advance the paper

In view of the fact that the hobbiest or small business user will not run the devices solidly for 8 hours a day or more, the above features are quite adequate for most applications. Unfortunately, according to the advertised specs, only the IDS 440 has the graphics option (criteria #3). It also has 4 software selectable character sizes of 8.3, 10, 12 and 1.5 characters per inch. Would'nt that be nice for this newsletter? However the Anadex has a 9×7 dot matrix head (criteria 4). It looks like this writer will have to continue dreaming about the ideal printer with everything on it for \$200! An interesting alternative to purchasing a printer was presented by Jim White during a talk he gave at the last meeting on the Hayes Micromodem II. Jim, who is one of our members, has very thoroughly researched the Hayes Micromodem II, as he is contemplating buying one. One feature of the modem, allows remote operation of your computer from a terminal located anywhere and connected to the computer via the modems and phone lines. For example, if you have access to a terminal at work, and many of us do, o e simplyi nitializes the computer at home before soins to work with a simple one character Then, using one of those terminals at command. work, which is probably a better quality device than you could afford, one may list or print Just as if you were sitting at your own keyboard at The only cost of doing this is a small home. amount of wear and tear on the terminal. For that you must make your own arrangements with your company. A fringe benefit is the fact that printers are electro-mechanical devices, and therefore do need occasional maintenance. With the above plan one avoids that problem. With a plethora of new computers from T.I., Mattel, and others, one would expect someone soon to bring out a real cheap printer. So I will continue to contemplate bushs a printer, but may spend money first on a Hawes Modem and/or a disk. (See article on Disk drive developments).

MINI'APP'LES

DISTRIBUTED APPLES.

CLUSTER/ONE of Nestar Systems., Inc., Falo Alto is a centralized intelligent data base consisting of 2 IBM compatible diskettes. Storage caracity is 630K Bytes. The data base can be connected to up to 30 local (less than 250 feet away) Apples, PETs or TRS 80s. The price is \$5300 including a PET console. Each Apple connected thereto requires a (parallel?) interface. The Apples may then store/retrieve data/programs from/to the central data base. How do you like them Apples???

**CATALOG*

TAPE USERS: It is hoped to have one or more C-60 tapes with the majority of the programs copied onto that tape by the time you read this. This time the whole of a C-60 will be used so that on duplication the counter numbers will still hold true. For those of you who were not at our last meeting, it was decided by a majority of the tape users (with some persuasion from the President), that tape distribution would be in the form of purchasing a duplicate tape made on the copy machine at the Heathkit store. The charge to members is \$4.00 per tape plus postage if required (42 cents). We distributed 8 copies of a tape of the first 4 disks of volume I and most people seem to be able to read the tapes. We are TAPE USERS: It is hoped to have one or more C-60 reorle seem to be able to read the tares. We are forced to use the brand sold by Heathkit which is supposedly of 3M manufacture but of unknown quality.

DISK VOLUME 254

*I 882 SOFTWARE BANK II *A 005 MORSE CODE READER *A 889 MORSE CODE SENDER

*I 023 WERVER

*8 006 BETTER-EXAMPLE.SCREEN

*A 010 APPLE PI CEMO

*A 003 RECIPE CONVERSION

*I 003 MAC START *I 030 LOGO SPLIT *I 033 CONES ** 017 TITEOTICAL

*A 017 TITRATION

*I 024 AIRCRAFT INSTRUMENT SIMULATOR

*I 002 AIRCRAFT (LCAD/HIMEM 8192/RUN)

*I 808 CHRISTMAS TREE & MEG

*I 002 BETTER-EX.SC A1024 L1024

*A 005 BALLISTIC C

*I 004 STORE WINDOW DISPLAY

MINNEAPOLIS MN 55416

*I 007 MORSE CODE

*I 007 MORSE TEACHER

:CRTALOGF

DISK VOLUME 001

*I 002 SOFTWARE BANK II

*I 013 TRANSFER

*I 623 ONE-PLAYER FOOTBALL

*I 010 TORPEDO BY ROD

*I 016 PROGRAM STARTREK

*I 018 DRAGON MAZE MOD BY TOGHAZ

*I 889 ADURNCED DRAGON MAZE

*I 009 LUNGR LANDER

*I 633 SIMPLE 5 HEURISTIC CHESS

*I 005 RUSSIAN ROULETTE

*A 014 NIM

#A 015 TRXMAN

*I 037 BATTLESHIP VERS 78.0723

*A 011 TIC-TAC-TOE

*I 009 DOLLAR SLOTS

*I 018 TIC TAC TOE IN COLOR

*A 019 WORD SEARCH PLZZLE

*A 010 CORRAL

*A 022 JOUST

*A 089 ATOM 20

*I 009 LORES LUNPR LANDER

:CRTALOG

DISK VOLUME 025

I 002 MINI APPILES SOFTWARE

A 011 DAN'S EDIT(DISK CUTPUT)-ROM

A 011 DAN'S EDIT (48K DISK)

B 009 DAN'S SUB (48K)6100(4180.4888

A 010 DAN'S EDIT (16K/32KDISK - ROM)

B 009 DAN'S SUB (16K/32KDISK - ROM)

THE MICHIGAN APPLE THIESFELD, CHRRLES WHEATLEY, JOHN WHITE, JAMES A. 32985 # 12 MILE RD 8610 RUSSELL AVE. S. 3120 PORTLAND AUE. S. 1757 20TH AME. NO SUITE 320 BLOOMINGTON MN M 55431 MPLS 55407 NEW BRIGHTON AN 55112 FARMINGTON HILL MICH 48818 WHITEHOUSE, DAVID L. ZIM COMPUTER INC. MCCCOY, SEAN BIRKHOLZ, DOUG 6325 PERRY AVE.N. ATTN: JOE MANN 7212 KYLE RUE. RPT 288 BROOKLYN CENTER MN 55429 5717 XERXES AVE NO. BROOKLYN CENTER MN 55429 6417 CAMDEN AVE. N. BROOKLYN CENTER MN 55429 EROOKLYN CENTER MN 55430 HAGEN, JIM MEYERS, JACK C. ROHLING, MELVIN M. BILL'S VENDING CO. 3546 JUNE RIVE. N 7488 2ND RUE. 240 GRANDVIEW AVE. W.H. LAFFATTA ROBINSDALE MN 55422 RICHFIELD MN 55423 APT 302 3900 BEARD AVE 50. ROSEVILLE MN 55113 MINNEAPOLIS MN 55410 WEINER, HOWARD CONOVER, C. A. TEAM HENNIPEN 2640 HENNIPEN RUE. TEAM SOUTHDALE 3601 PARK CENTER BLUD. HONEYWELL PLAZA SOUTHDALE CTR. MN12-2276 MINNERPOLIS MN 55403 BLOCMINGTON MN 55431

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MINNERPOLIS

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DISK VOLUME 254	DISK VOLUME 254		*I 002 SOFTWARE BRAK II
*I 002 SCFTWARE BANK II	I 002 SOFTWARE BANK II		≠I 013 TRANSFER
AT MAD ROUNT	1 010 114124 21	*I 008 BLOCKAIDE2	*T 002 PICTURE.EXEC
*I ALL MASTER KEY	T 001 CEL	*I 010 BETTER BLOCKADE	*B 034 TWO.WOMEN.A\$2000.3FFF
*I 017 IMPROVED CATALOG	B 014 ASPDISK	*8 002 LISST	*I 993 TWO WOMEN *B 010 B-TEXTWHIRES
	I 008 SAMPLE.SOURCE		*I 010 TEXT&HIRES
*I 011 DISK TO DISK TRANSFER *A 026 GOLF *A 014 COLORS FP *I 049 HAUNTED HOUSE *I 064 COLOR CLEAR *T 066 CATALOGFILE *I 017 SINGING TUNNELS *I 010 STARWARS 3D *B 014 SU2 *I 025 ARTIST *I 064 CONCEPTS-2 *I 041 MONOPOLY *I 065 LIFE *B 063 BLIFE *I 043 ESCAPE 2 *I 026 CRYPTOGRAM *I 066 DISPATCH TABLE LIST	A 003 SUPER ROSE	*B 00G R-AIRPLENE DOGFTG-T	
*A 014 COLORS FP	A 005 CELL	*A 003 SINESD	*I 9901 SORTETLE
*I 049 HPUNTED HOUSE	A 006 STEAM ENGINE	*A 006 LAR.SIN	*I 022 SLIDE SHOW 2
*I 004 COLOR CLEAR	H 003 SALT II	*A 003 LAC.SIN	*B 034 LADY RANDOM.PIC *B 034 LADY BE GOOD.PIC
*I 005 CHIPLUIFILE	*I 018 TEXT & HIPES	#R RAK R-TEYTOUTDEC	*8 834 LRDY FOUND UNDER A ROCK, PIC
*I 010 STARWARS 3D	*8 006 IMPROVED HIRES	- COO D ILMINED	*8 034 LADY FOUND UNDER A ROCK.PIC *B 034 DIP CHIPS.PIC
+B 014 5J2	*A 003 CUBE		*B 034 SQUEEZE, PIC
*I 025 ARTIST	*A 004 CUBES ON PLAIN	:CATALOG	*B 634 TEX.PIC
*I 004 CONCEPTS-2	** GGC SCHEMHIIC DEMO	NICV DOLLAR OCA	*B 034 MACROMETER.PIC *B 034 TIME MACHINE.PIC
*I 995 LIFE	** # 1 006 SCALIATIC	DISK VOLUME 254	*8 026 CHURCHILL.PIC
*8 993 BLIFE	*8 005 HRS.CHR	*I 002 SOFTWARE BANK II	
*I 043 ESCRPE 2	*A 002 CHARDISP	*I 052 APPLE 21	
*I 925 CRYPTOGRAM	*A 005 WYEDELTA-DENO	*I 035 POKER	CRITALOG
*1 896 NISPATCH TABLE LIST	#1 002 SWIFKES	*1 012 25H CHISE	DISK HOLLING GGO
*A 988 TWO DIAMONDS	*A 682 STRING CYLINDER	* 1 000 CAUCLS	DIDY ACCOUNT CON
*A 886 DISPATCH TABLE LIST *A 888 TWO DIGNONDS *I 886 RGE GUESS	*A 002 DIRGONAL CYLINDER	*I 007 BATTLE SHIP	≠I 882 SOFTWARE BANK II
*A 006 RUBBER ROSE	*H 663 DUUBLE CONIC	*I 030 CONNECT FIVE	*1 643 APPLESOFT
	*A 003 DIAGONAL CONIC *A 002 PIPE CROSS SECTION		*I 816 DRAGON MAZE
:CATALOG	*# 002 PIFE CROSS SECTION *# 002 RATHER STRANGE CONTO	# 89% DISPATOR TOOLS LIST	*I 016 HIDDEN MAZE *I 0000 BICOPUTEM
	*A 082 ANOTHER STRANGE CONIC	*I 084 ARTIST	*I 023 OTHELLO
DISK VOLUME 254	*A 002 FRUSTRUM	*A 030 DEVILS	*I 030 STARWARS
*CRITALOG DISK VOLUME 254 *I 002 SOFTWARE BRNK II *T 001 HOUSEHOLD +0 000 DIESCT PENNSTIGN LOON SOLO	*A 003 HELIX	*I 009 COLOR MATH	*B 005 HIRESMACH
*1 MMZ SUFTUFFRE BHYK II	H WWS CYLINDER WITH HELIX	*B 035 HIRES	*I 012 HIRES
*A 998 DIRECT REDUCTION LORN CALC		+A 998 TWO DIAMONDS	*I BIO CIRPURDS IID
*T 901 HOUSEHOLD *A 908 DIRECT REDUCTION LOAN CALC *I 922 TRANSPORTATION COST MINIMIZE *A 916 STOCK OPTION/COVERED HEDGE	*CATALOG	*I 009 DISK TO DISK TRANSFER	*B 002 THEMEB
*A 016 STOCK OPTION/COVERED HEDGE *A 004 COST FILE ENTRY FOR INVENTORY *A 009 INVENTORY OUTPUT TO PRINTER	DISK VOLUME 254	*A 006 RUBBER ROSE	*I 005 DECIMAL CHEX
#A AGE STOCK PORTED TO TRIVIER	*I 992 SOFTHORE BONK II	*1 800 HATTEDITUK	*I WI SHUFFLE
*9 004 TREASURY BILL UNLUNTION	*I 013 TRANSFER	*I 984 BSTAT	*I AA1 TINF
*A 003 WORLD'S SHORTEST INVENTORY	*I 002 LADY	*T 006 CATALOGFILE	*I 002 SCALE
*A 003 WORLD'S SHORTEST INV READOUT	≠I 014 PHONE LIST	*I 014 TRANSFER	*I 882 TONES2
*** 015 BUDGE!	*H 040 LIBRERY INDEX		*I 884 MAZE
*A 063 REGILAR DEPOSITS	*A 084 DUPLICATE MAILING LARF	15	#8 002 KISE TUNE #R 007 PTP
*A 003 REGILAR DEPOSIT ANNUITY	*I 028 WELCH MINI LABELER		I 002 RIPPLE
*A 028 FINANCE	*I 830 GIANT TYPENRITER		I 003 RIPPLE2
#A 016 SAVINGS	*I 005 THREE-D PLOT		*A 002 GRAPH
#1 1884 PENU #8 992 PI GHE	*1 0.27 THE THUHINE *1 005 DAZZI ED TIT		#H 662 COLORS #B 662 Ura v pecto
*A 883 REGILAR UITHDRAUM S	*I 003 SEQ REM		*I GIG COLOR CEMOS
*A 804 COST FILE ENTRY FOR INVENTORY *A 809 INVENTORY CUTPUT TO PRINTER *A 808 STOCK PORTFOLIO VALUATION *A 804 TREASURY BILL VALUATION *A 803 WORLD'S SHORTEST INVENTORY *A 803 WORLD'S SHORTEST INV READOUT *A 815 BUDGET *A 803 FUTURE VALUE OF AN INVESTMENT *A 803 REGULAR DEPOSITS *A 803 REGULAR DEPOSITS *A 804 MENU *A 802 BLANK *A 804 MENU *A 803 REGULAR WITHDRAWALS *A 804 BRSE CONVERTER	*8 005 SEQUENCE		*I 022 ANIMATION
	*I 002 CHORD PLAYER		*T 007 CATALOGFILE
	**************************************	426	*1 012 HIRES52

*I 002 CHORD PLRYER

**B 022 RANDY'S-ALL ASS ASSEL1426

*I 010 MUSIC

**B 002 JESU

*I 012 HIRESS2 *I 012 HIRES S2 *I 013 TRANSFER

MINI'APP'LES A.P.P.L.E. DEC79XC ATTN: UAL GOLDING, PRES 6788 39TH AVE. SJ. SERTTLE UASH 98136	ANDERSON, DEAN ROUTE #1 COLOGNE MN 55322	JULY 1979 APPLE-SIDER 5707 CHESAPEAKE WAY FAIRFIELD OHIO 45014	NEWSLETTER APPLE CORPS LENARD FEIN 2015 FORD ST AUSTIN TX 78704
ARETT, KENT 12828 FOREST MEADOW DRIVE	B. FERRELL APPLE CORPS CO-CROINATOR 14255 MIDWAY RD. DALLAS TEX 75234	800DY, CHARLES G	BRAKER, STEVEN A.
	BROWN, DEWITT 1650 9TH AWE S.E. ROCHESTER MN 55901	ninherfulis in 30455	SI. FMAL SIIS
CAPES, NELSON R. 586 KENT LANE SHOREVIEW MN 55112	CAUANAUGH, MICHAEL 911 22ND AVE.S. APT 277 NPLS MN 55404	COMPUTERLAND 3070 MORGAN CIRCLE DR. BLOOMINGTON MN 55431	EDAAN, MEL KERKER AND ASSOC. 5985 MAPLEWOOD LN. MINNETONKA MN 55343
GATES, RICHARD 6828 UPPER 5TH ORKOALE MN 55119	GEISS JON A. SIOUX HILLS HUTCHINSON AN 55350	GROSSMAN, CRAIG B.	HAMMIOND, DARYL 1355 N. FARRINGTON ST. PAUL NN 55117
HANSEN, JOHN L. 38 BIRNAMWOOD DR. BURNSVILLE MM 55337	HARRITH, DURME HILLSIDE CHEMICAL R.R. BUFFALO LAKE MN 55314	HARTZELL CORP. ATTN: DOWN BARBER 2516 WARRASH AVE. ST. PAUL MN 55114	HENKE, JAMES A. 6788 12TH AVE. S. RICHFIELD MN 55423
HYURRINEN, MRITTI 2812 BRRNCH ST. DULUTH MN 55812	IBROHIM, SHUKRY K. 11011 QUEEN CIRCLE BLOOMINGTON AN 55431	JACKSON, PAUL 2011 3RD AVE. S. APT 318 MINNEAPOLIS MN 55404	JOHNSON, STEPHEN K. 6053 WENTWORTH AVE. S. MPLS MN 55419
7723 UHLEVIEW UK.	KIRKWOOD, TOM M. 204 JANSA DRIVE ST. PAUL MN 55112	8839 41H HAE. 5.	8150 W. RIVER RD.
LINDEMAN, KARL F. 80X 757 201 GREEN ST. WATERTOWN MY 55388	LUND, DONALD L. COMPUTERIZED FARM INF SYS P.O. BOX 382 STILLWATER MAN 55882	MADONNA, KEITH 23885 CLOVER LANE SHOREWOOD MN 55331	MELLEN, MONICA 128 W. 32MD ST. MPLS MN 55408
MEYER, R.C. (DICK) 618 13TH ST. NE GUNTANNA MN 55060	OLSON, DR. C. KENT 2887 LAKESHORE AVE. MAPLE PLAIN MN 55359	OTIS, GEORGE 9524 Briar Ro Bloomington in 55437	PRRKER, GEORGE 4917 RIDGE RD. EDINA NN 55436
PIOTROWSKI, THOMPS 3848 WILDER ST. N ROSEVILLE MM 55113	GUALLE, GENE 3607 BRYANT AVE SOUTH MINNEAPOLIS AN 55409	RHORDES, BLUTCHER 12513 MYSTIC LANE BURNSVILLE MN 55337	RICH, KEN 1929 EMERSON S. MPLS MN 55403
ROTENBERG, R. J. 2256 W. LAKE OF THE ISLES MPLS MN 55405	ROWE, RICH IND. SCHOOL DIST. 0194 8670 210 ST. W. LAKEVILLE MN 55844	Ryberg, Arlan 3920 leslee Curve Excelsior Mn 55331	SALITERMAN, STEVE APT 201 806 2ND ST.S.W. ROCHESTER MN 55901
SCAGGS, WILLIAM 17650 IXONIA AVE. W. LAKEVILLE MN 55044	SHULER, W. PHILIP 325 E. 43RD ST. MPLS MN 55409	SLINGSBY, KENNETH ROUTE II WELCH MN 55689	STOCKWELL & ASSOCIATES ATTN: CHARLES STOCKWELL 4916 IDS TOWER -6- MPLS AN 55402

MONITOR CALLS: The following table of monitor calls is curtesy Darrell Aldrich who published it in the April-May edition of Call APPLE. Thank you Val, too.

CALL -2048	F888	PLOT	PLOT A POINT
CALL -2023		HLINE	DRAW A HORIZONTAL LINE
CALL -2008		ULINE	DRAW A VERTICAL LINE
CALL -1998		CLRSCR	
CRLL -1977	F847	GBRSCALC	CALCULATE GRAPHICS BASE ADDRESS
CALL -1953	F85F	NXTCOL	INCREMENT COLOR BY 3
CRLL -1948	F864	SETCOL	ADJUST COLOR BYTE FOR BOTH HALVES EQUAL
CALL -1935			READ A POINT OF THE LOW RES GRAPHICS SCREEN 1
CALL -1469	FA43	STEP	PERFORM A SINGLE STEP
CALL -1482			IRQ HANDLER
CALL -1390		BREAK	
CALL -1321		REGDSP	
CALL -1250		PRERD	READ PADDLE CONTROLS .
CALL -1233			SCREEN INITIALIZATION
CALL -1223	FB39	SETTXT	SET TEXT SCREEN
		SETGR	
CALL -1205		SETUND	
CALL -1181		HUL.	MULTIPLY ROUTINE
CALL -1148	FR94	DIU	DIVIDE ROUTINE
CALL -1087		BASCALC	
CALL -1052	FRE4	BELL2	PRODUCE A BELL
		ADVANCE	
CALL -1927		VIDOUT	
CALL -1888		BS	MOVE CURSOR LEFT
CRLL -998		UP	MOVE CURSOR UP
CALL -998		VTAB	
CALL -988		ESC1	
CRLL -958		CLREOP	· · · · · · · · · · · · · · · · · · ·
CALL -936	FC58	HOME	HOME CURSOR
CALL -926	FC62	CR	PERFORM A CARRIAGE RETURN
CALL -922	FC66	ĬĴ.	PERFORM A LINE FEED
CRLL -912	FC70	SCROLL	SCROLL THE SCREEN ONE LINE
CALL -868	FC9C	CLRECL	CLEAR TO END OF LINE
CRLL -856	FCA8	WAIT	WAIT LOOP
CALL -756	FD0C	RDKEY	GET KEY VIA USER KEYIN
CALL -741	FD1B	KEYIN	MONITOR KEYIN ROUTINE
CALL -715	FD35	RDCHAR	READ KEY & PER ESC FUNC IF NECESSARY
CALL -670	FD62	CRNCEL	PERFORM A LINE CANCEL (\)
CALL -665	FD67	GETLNZ	PERFORM CR AND GET A LINE OF TEXT
CALL -662	FD6A	GETLN	GET A LINE OF TEXT
CALL -558	FDDA	PRBYTE	PRINT A BYTE AS 2 HEX DIGITS
CRLL -541	FDE3	PRHEX	PRINT HEX DIGIT
CRLL -531	FDED	COUT	OUTPUT CHARACTER VIA USER OUTPUT
CALL -528	FDF0	COUT1	MONITOR CHARACTER OUTPUT
CRLL -468	FE2C	MOUE	PERFORM A MEMORY MOUE
CALL -458	FE36	UFY	PERFORM A MEMORY VERIFY
CALL -413	FE5E	LIST	DISASSEMBLE 20 INSTRUCTIONS
CALL -336	FEB0	XBRSIC	JUMP TO BRSIC
CALL -333	FEB3	BASCONT	CONTINUE BASIC
CALL -318	FEC2	TRACE	PERFORM MONITOR TRACE
CALL -387	FECD	URITE	WRITE TO TAPE
CALL -259	FEFD	READ	READ FROM TAPE
CALL -211	FF20	PRERR	PRINT 'ERR', THEN BELL
	FF3A	BELL	OUTPUT BELL
	FF59	RESET	GOES HERE UPON RESET
CRLL -151	FF69	MONZ	ENTER MONITOR

NEXT MEETING

WEDS JULY 18th 1979 8:30pm MINNESOTA FEDERAL SAVINGS & LOAN 31 9th Avenue South, HOPKINS MN

TOPIC:

KEN BRUMBAUGH of M.E.C.C. is our featured speaker.

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MINI'APP'LES 13516 Grand Avenue South Burnsville Minnesota, 55337

1st CLASS MAIL