mini'app'les

apple computer user group newsletter

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Daniel B.Buchler	President & Activity Coordinator	890-5051
Chuck Thiesfeld	Treasurer & Newsletter Editor	830-5020 831-0009
Chuck Boody	Secretary	873-2227
Keith Madonna	Librarian	474-3876
Rob Wentworth	Program Editor	
James Henke	Technical Advisor	869-0361
Dean Anderson	Bibliographer	466-5562

CONTRIBUTIONS
COMPLAINTS D.Buchler
CORRESPONDANCE 13516 Grand Ave S
Burnsville Minn., 55337

MEMBERSHIP C.Thiesfeld
8416 Xerxes Ave. S
Bloomington, Minn., 55431

IN THIS ISSUE:

NEXT MEETING: Weds OCTOBER 17th

Program Exchange Night.
Bring your programs, subroutines, whatever
Also bring empty disks or tapes - you dont have to have a program to swap although thats what makes the evening work!
No copyrighted programs please! And if you don't want to swap or take just come to talk.
We plan to have 4 or 5 Apples, most with 2 drives and at least one tape recorder.
Meeting starts at 7:30

FOLLOWING MONTH: MEETING date officially is Nov 21st. That turns out to be the day before Thanksgiving - so an item of business at next meeting will be whether or not to change the date, and if so to when?
We have tentatively scheduled that evening to be a question and answer session aimed at beginners.
3 or 4 experienced Apple users will be stationed around the room to answer questions on a predefined range of topics.

USER BANK STATUS

A glitch developed in the distribution of the library copy of volumn I of the bank at Computerland. The problem has now been rectified. We apologize to all you users who waited patiently so long. We have learned from this experience that book-keeping of the exact whereabouts of the copies must be meticulously undertaken at all times.

Since the sign-up list at Team-Hennepin is short and we beleive almost satisfied, we plan to move that copy into circulation at the Computerland Hopkins store. Users on the Computerland, Bloomington list are encoraged to consider moving your name to the Computerland, Hopkins list if your name is near the end of the list. We will of course review the demand monthly, and may make other transfers as necessary to satisfy the damand.

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REVIEW - STARFLEET ORION

Starfleet Orion is a new game from Automated Simulations of Mountain View, California. It is supplied on tape in two versions to run either on a 16k system or on a 32k system. Unless you are willing to bomb DOS, that means 32k and 48k respectively for Disc users. The 32k version utilizes HIRES to acheive fair quality audio/visual effects. The 16k version uses TEXT mode entirely.
The Concept of the game is similar to Startrek except that the game is played between 2 players. Each player commands a fleet of 1 to 9 spaceships. The spaceships appear on the screen as numbers 1 thru 9 for player A and as the letters A thru I for player B. A planet may be incorporated in the picture such that one of the players may be based on the planet. The planet is represented in the 32k version as a disk on the HIRES screen. In the 16k version the planet is a square (inverse blank).
The game is supplied with two 'scenarios' and a scenario build program. A scenario defines the spaceships available to each player, their initial position and their attributes. The attributes of a ship consist of:-
-Output of it's powerplant
-maximum shield power
-Number of missiles on board
-Range of missiles
-Number of missile launchers
-Destructive capability of an individual missile
-Number of torpedoes
-Destructive Capability of individual torpedo
-Range of a torpedo
-Tractor beam quality
One can also specify the damage that each ship has sustained prior to start of game, the existance, color and position of a planet, and other miscellaneous things. Obviously, when one sets up a scenario, the distribution of firepower between the two sides must be reasonably even unless one wishes to introduce a handicap! Scenarios are stored on tape and identified by name. The program looks for one that matches the name you type in when you start a game. Instructions to convert program for use with disk are included.

The game is played as follows. Each player takes a 'turn'. During a 'turn', a player answers questions for each ship in his fleet as to such things as
-movement of ship specified as an X-Y displacement. The screen is divided into a 40 * 20 matrix.
-weapons to be fired
-deployment of tractor beam
-etc.
He can ask for such information as range to specified target and for the status of each ship. The status shows his position, number of weapons left and damage incurred.
After a player has run through all the orders for each ship in his fleet, the other player takes his turn. The scene will not change until after both players have entered their orders. For maximum realism, one player should leave the room while other is entering his orders.

After all the orders have been entered, the turn takes place. Missiles are launched, torpedoes are launched, beams are deployed, damage is sustained and the ships move to their new positions if their engines are not damaged.

It is obvious from the start that the game, written in INTEGER BASIC, was originally developed to work on a variety of hardware such as the TRS-80 and the PET. I Think it suffers from that heritage. The 16k version makes little use of Apple features. The 32k version does use HIRES, but only as a sort of substitute for the TEXT in the 16k version. Interaction between the player and the computer is through the keyboard. The computer displays the questions using INPUT statements which are unimaginatively formatted. It takes quite a while to answer the questions. The execution of the turn is of course exciting, but the weapons move real slowly (because of BASIC implementation). However the game has considerable merit from a tactical point of view, for one must anticipate the enemy's movements in advance. Its main drawback is the quantity/formatting of the order entry screen. A menu selection technique and other improvements would not be wasted. If you like strategy games, and are willing to spend hours at a single game, then Starfleet Orion is for you, but don't buy it for a 12 year old - will get bored with it quickly. Price is around $20.

MINUTES OF SEPT 5th, 1979 MINI'APP'LES BOARD MEETING

Meeting was called to order at 8:20 pm with the following board members present:-
D.Buchler, C.Boody, C.Thiesfeld, J.Henke and K.Madonna.

The president noted that this was the first official meeting of the board, the previous meeting having taken place prior to the election of officers.
Discussion on bylaws as published in the April, 79 Newsletter and which were officially adopted as bylaws by general membership during the July general meeting. It was agreed that no changes to those bylaws are required at this time.
Discussion on dues structure for 1980. The treasurer reported that the club's cash balance as of Sept 1st was approximately $250. A balance of $100 is projected for the end of the year without allowance for new membersor 1980 dues.
Board members were queried by the President as to their willingness to continue their duties into 1980. All present replied in the affirmative.
It was agreed that no special effort need be made at this time to promote advertising in the newsletter even though advertising is a source of income to the club.
The treasurer reported that there were 97 members of record as of the distribution of the August newsletter.
Discussion on status of the user bank. The library distribution system seems to work. Some minor glitches were noted, but nothing serious. It was agreed that out of town members would be provided for by mailing the first volume set after local distribution is satisfied. Where possible, members concentrated in a particular local should get together so that distribution turn around is not compromised and mailing costs can be reduced. (Rochester area members please note - one of you should contact board or Madonna). It was also reported by J.Henke that the Bell & Howell activity in starting an Apple distribution network may include a disk copying capability. Henke will investigate as to whether MINI'APP'LES might be able to make use of such a service. This would be particularly useful for User bank distribution to out of towners who, in such a case, would need only to provide the money to purchase blank diskettes plus any copying charge which Bell & Howell might levy. K.Madonna will inform out of towners when a volume set is ready to be mailed.
Discussion on services which the club should provide. The consensus of the board was that emphasis should be placed on providing educational type aid to the less experienced users. We will look into providing classes and an upcoming meeting will be dedicated to answering questions of users. Several experienced members will each answer questions in specific categories. Those already knowing answer will be politely asked to keep quiet. The first such meeting will probably be held in Nov.
The question of what services can the club offer to Business users was raised. A suggestion was made that we can often identify uses for the Apple which the Business user had not thought of.
It was agreed that no discount should be given to student members.
The President asked the board for their support on the following idea: To contact Call Apple offering to participate in block distribution of their newsletter. This means that all Mini'App'Les members desiring group membership in Call Apple would pay a joint Call Apple-Mini'App'Les membership fee in return for receiving the Call Apple monthly magazine and the local Mini'App'les newsletter. The purpose here is that Call Apple have already established their magazine as a dominate document in the Apple community. Our own newsletter often duplicates what they publish. With this scheme we would make no attempt to make our own newsletter anything more than a short (1 page) report on local affairs. All technical material of merit would be forwarded to Call Apple for consideration of publication and we would perhaps assist them where they might desire help. It MUST BE NOTED that Call Apple have not offered this service. They did however state that such a suggestion has been proposed previously. The President will contact Call Apple to pursue this matter futhur.
Regarding discussion on placing subroutines on the user bank. It was agreed that this would be a good idea provided that such routines were either significant in saving

the programmer coding and/or design time. In some cases routines can be provided which would be beyond the technical ability of the user to provide himself.

The board meeting adjourned at 11.45pm.

MINUTES of the Sept. Meeting

Old Business

1. Anyone interested in developing some sort of free cable TV programs on (about)? the APPLE should contact Bloomington Cable TV.

2. Dan B. will bring a BASIC teaching program to the next meeting and publish a report on it in a coming newsletter.

3. Those interested in receiving the MECC User's Newsletter should contact Ken Brumbaugh at this address:

MECC Timeshare Newsletter
2520 Broadway Drive
Lauderdale MN 55113

The newsletter will not be sent to everyone on the club list because not all members would be interested in receiving it. Those interested in the MECC newsletter should realize that though it will contain materials of interest to APPLE users it is NOT an APPLE users letter.

New Business

1. The club is very interested in helping users expand their use of and knowledge of the APPLE. The November meeting will be structured as a meeting where various "experts" from the club will be stationed around the room to answer questions about problems users may have. Every effort will be made to keep the jargon to a minimum and to respond to all members questions. Please help us in this endeavor by letting us know your specific problems. The only stupid question is the one that is not asked. We solicit your suggestions too for other ways the club may be helpful to you.

2. If you are interested in receiving Call A.P.P.L.E. (the best source for much information about the APPLE would do well to join soon. From Oct-Jan you can still join for $27.50. After that it will cost $40.00 to join. Once you have joined membership will be an additional $15.00 (for each year after the first one).

3. We have received two requests for information from foreign user groups.

4. For the Chess fanatics: Chess Challenger apparently beats Microchess 2.0 and Sargon. Sargon beats Microchess 2.0. Sargon seems to have some bugs, and is very slow. Sargon II is reoprtedly under development.

5. There was much discussion of Smartsystem and other on line systems for using APPLE to search data banks, send and receive messages, and/or down load programs. We need a program on this--Volunteers??? 6. Users were warned that the autostart ROM deletes several routines from the APPLE monitor. Those routines are used in many commercially available programs, and users may experience difficulties because of them. Mentioned were the ALF pitch board (they have since updated their materials to work with autostart and with DOS 3.2, so should be O.K. now), Microchess, and SCA II (the assembler by Bob Sander-Cedarlof). There are fixes for this latter available through Chuck Boody, and Sander-Cedarlof has an updated version available too.

7. One user reported problems with Syntax Errors causing a reboot of the DOS when encountered using the new Language Board. Has anyone any information about this???

Meeting adjourned 8:15.

MAIL ORDER DISCOUNTS

As most of you are aware, you can often obtain a lower price on Apple compatible hardware items by ordering from one of the many discount houses which advertise in the microcomputer news media. When you do so, you trade off, against a lower price, the service and support which only your local Apple computer dealer can offer.

You must be the judge of the value of such a trade off. For those of you interested in discount prices, Neil D.Lipson of the Phidelphia Apple User group at

29 S New Ardmore ave
Broomal, Pa, 19008

offers group purchase discounts on certain items to Apple user group club members only.

MUSIC BOARD by B.Buchler

We finally got hold of one of the new General Instrument Programmable Sound Generator integrated circuits (IC). (Thank you Jim White for your assistance in that matter). The capability of that IC has been documented in Byte Magazine (July '79) and Electronic Design (March '79).
A hobby project is planned in which will be developed-
1) A simple Music/Sound Effects board for the Apple. The board would contain one AY-3-8912 (the IC) with expansion capability to 3 or more chips.
2) A machine code driver which eventually could be stored in ROM
3) Appropriate applications software (Chuck Boody has expressed interest in helping out here)
The chip is in fact a general purpose sound generator. We are however more interested in the music capability than special effects. The 8912 IC has the following features:
-3 Simultaneous Voices (Tones or frequencies)
-Selection of tone or pitch for each voice.
-Selection of amplitude for each voice.
-Overall envelope definition in terms of attack, decay and timing.
-Noise generator.
-Combined, or separate (for stereo like effects), audio output which can be fed to any amplifier or Hi-Fi system.
There are in fact 2 versions of the IC. The 8912 is as described above and comes in a 28 pin package. The 8910 is a 40 pin package which includes 2 ports that may be used to interface to on board ROM.
Some interesting applications are suggested by G.I. in their documentation:
(1) A Music synthesizer which we are discussing in this article.
(2) An organ - by sensing the contact closures of a conventional organ keyboard (manual) and of a conventional organ tab stop selector for voices, the computer (an APPLE or other 6502) can control the IC to select tones and waveforms consistant with the keys pressed. The output may be saved on disk or tape, or played in real time. The advantage of such a system over current technology organs, is that software may be used to expand indefinitely the functionality of the voicing as selected by the tab stops.
Also a poor organist,like myself may play a piece with lots of errors. The errors may then be corrected after the fact, and a perfect error free recital played back!
(3) A rhythm accompanyment of drums, symbols, or anything you want can be keyed to the above organ, or to a synthesizer, or be a stand alone device.
(4) A sound effects generator for accompanying games. Supposedly excellent bomb noises and similar effects may be created.
All of the functions on the IC are controlled by loading registers. In BASIC these might take the form of POKEs or specific values of variables which will be passed to the IC with a simple CALL to a special routine
With appropriate application software, the user can be provided easy to use tools such as those provided by ALF for their board.
The main point to be made is that the computer once it loads the registers can go do other tasks. This is not the case with music created by the Apple speaker where the Apple has to constantly create the tone being fed to the speaker.
It is beleived that the quality of music that can be generated by this proposed system will equal or exceed that provided by available boards such as the ALF.
Also, the flexibility will be much greater, and the cost much lower.
If anyone has any ideas for features which they think should be included in such a system, you are encouraged to call D.Buchler or Chuck Boody. Design work has started already!

Assembler Listing in Special Format for Bunker Ramo Printer

```
                                5445 00
3280 PTR1  .HS 00               LAST CHAR OF EN
                                D WD
                                5446 00
3290 PTR2  .HS 00               INTERMEDIATE IN
                                DEX
                                5447 00
3300 S     .HS 00               SWITCH S
                                5448 00
3310 GAP   .HS 00               POINTER TO 1ST
                                CHAR FOLLOWING
                                NEXT AVAIL. BLA
                                NK(S)
```

CLASSES IN BASIC

Discussions on the need for 'BASIC' education are a frequent occurence at both regular club and board meetings. This Fall has seen a proliferation of classes on 'BASIC' programming and other microcomputer related subjects. These classes are offered by local school district in the form of adult education programs, by junior colleges and by vocational schools. For example in the Dakota county area there are:

-'BASIC' COMPUTER LANGUAGE FOR BEGINNERS using timesharing on the CYBER-64 and an Apple. Its a 10 night course for $45.00 offered by the Dakota Co. area Vocational Institute in Rosemount.

-An 8 night course offered by the Burnsville School District 191 on 'BASIC' programming. An Apple will be used.

-A 2 night course on selecting a Home Computer offered by the Burnsville/Eagan School District 191.

A course offered by Hennepin county was noted in our Sept. Newsletter. It is strongly suggested that anyone desiring BASIC education should investigate the available education within the area in which you live. You may be too late for the Fall semester, but clases will undoubtably be repeated in the winter starting in January.

DAN ON PRINTERS

In recent editions of the newsletter, I have listed various low cost dot-matrix printers suitable for home computer or low utilization business environments. A new model has appeared in the advertisements. Its a MICROTEK and lists for 750 dollars. It has repectable specifications with the following desirable features:

- regular paper
- 9*7 dot matrix
- bi-directional printing
- adjustable forms feed
- 80 or 120 columns, software selectable

Reliability and quality are unknown at this time. However the manufacturer claims they use a high quality Japanese made print mechanism with US packaging and electronics. Talking about Quality, I feel even more strongly now, that in order to get resonable legibility in lower case, one must go for a 9*7 dot matrix rather than 5*7. The 9*7 must have descenders. Alternatively a non matrix printer such as the Diablo daisu wheel or the IBM Selectric will provide high quality and legibility. None of the 5*7 dot matrix are very legible in lower case including the one we have used for this newsletter! Most of the problem stems from the lack of descenders in a 5*7 matrix. However 5*7 matrices are adequate for uppercase listings,mailing labels, etc. Based on personal observations of quality reliabilty etc, I still favour the Teletype 43, even though it is slower(30cps) than most. I also like the IBM selectric which is slower still at 15 cps. I have'nt seen a dot matrix printer which offers high quality, high legibility and graphics. The IDS 5*7 matrix Paper Tiger does offer graphics and could be programmed to print 9*7 characters using the graphics, but it might be slow. Even so the Paper Tiger is probably the best buy if you don't mind the 5*7 dot matrix. Recent newsflash! There's a rumour that Heath has found some flaw with the left col. alignment.

User Bank Status - Continued from page 1

Because of the glitch, we are unable to put a copy into mail circulation this month as had originally been planned. We hope to be able to put it into circulation in the mail sometime in November. Out of towners, please don't send in empty disks with requests for specific programs. We ask you to wait a little longer, or if you really want something in a hurry, come to town!

As mentioned elsewhere, we are having a program swap this month. It is hoped that this will result in some new programs for the userbank and will give us trading power with other user groups.

Please note - we hope to have a set of the user bank volumes at the Program Swap night. If time permits we will allow people to copy the disks. So consider bringing disk packs with you in large quantities!

DANS EDIT

Dan wants to apologize to the several users who have experienced problems with Dans Edit while attempting to prepare input for the Newsletter. Most of the problems were tied in to the fact that Dan could not debug the 48k Non-ROM version on his 32k system. A new version called FULL EDIT 9/8 seems to have cured the known ills. It has been tested on a 48k Non-ROM system and worked. Specific changes include
-addition of check for almost overflowing a string (more than 248 chars causes loud beeping)
-remapping of memory eliminate the need to use FRE(0) to avoid out of memory errors. LOMEM is now above the I/O buffer. This also fixed the 48k problem, and speeds it up somewhat. I'm working on a sub to replace the very slow string to buffer POKES with machine code,
-upper case is now selected with the ESC key rather than the paddle button. Takes a little getting use to but works OK.
Dan wishes to thank Chuck Boody and Ken Slingsby for their useful critique and mods.

For the newcomers, Dans Edit is a sort of word processor which
--allows input and display of upper/lower case letters using MINI'APP'LES user bank HIRES character display routine
--allows edit and review of inputted text--saves text in 1900 character binary files on disk or on tape. Files can be reentered for review and futhur correction.
Dan is currently working on an assembly-language column justifier that can be used in conjunction with Dans Edit!

CLASSIFIED ADVERTISEMENTS

For Sale: Apple II - 'Kitchen Sink' card; Imagine all this in a single slot....
-Parallel Port, Serial Port (20ma current loop or RS232), a real time clock and 4k ROM space. Partially completed card includes: 2 Intel 2716s (unprogrammed), 6550 ACIA, 6520 PIA, Xtal, Sockets and misc. TTL, all on one PC card with plated thru holes and gold flashed edge connector. Interfaces to outside world with 16-pin Dips and flat cable.One only -$100 (the 2716s are worth $100 by themselves !!). Contact Judd Elmers (he is in members roster) at 201-391-0984, 6-11E.S.T.

BUNKER RAMO PRINTER NEWS

By the time you read this there should be 12 or more ex Red-Owl cash-register terminals, otherwise known as the Bunker Ramo EPC 1900 with 32 column printers, connected to Apples in the twin cities area. Since this represents a resonable proportion of Apple users in the area, it is appropriate to devote a little space in the Newsletter to the subject. The following items are of interest:
(1) SC assembler source code listings and/or disk files of the driver and its derivatives are now available.
(2) An improved driver checks for leading blanks and refrains from loading the blanks into the print buffer. Thus the print head will not space left beyond last non blank character.
(3) A special purpose driver for the SC assembler listing and or ASM output provides some line formatting to improve legibility. See example below. The variation might work with the Microproducts Assembler also.
(4) The ribbon shift can be disabled by disconnecting one of the black wires (pin B1 or B5) on the AC board. Make sure free end is insulated. The AC board is the little PC board on the printer itself.
(5) Red print can be obtained with two color ribbons by placing a standard office erasure under the ribbon carrier on the left side.
(6) Ribbon life estimate has been reduced to about 2 or 3 rolls of paper. I have used 1 and half rolls and inking has noticably decreased. See page 5 for example.

CHESS TOURNAMENT

A chess tournament took place during lunch hour on Sept 4th between a Honeywell owned Apple and A challenger VII (A packaged chess playing game) The Apple, under control of Microchess II, was soundly beaten by the Challenger (A forgone conclusion unfortunately). The game lasted 40 minutes and the Apple, playing white, was down 2 rooks and a queen after 20 minutes. The challenger played at level 3, Microchess at level 8.
It is rumoured that Sargon the 2nd has now challenged the Challenger for a shot at the title -- it is further rumoured the Challenger is likely to keep the title.
Information about the above match is curtesy Norm Buckingham. The game was promoted by Al Conover.

TIME SHARING FOR APPLE USERS

During the September MINI'APP'LES meeting, some discussion was held concerning various time sharing services available to the home/small business user. This is a follow-up article. Some of us have access to large industrial/corporate time sharing services, but access to such systems is generally beyond the financial reach of a typical Apple user. However, do not lose heart! There are now a few time-sharing services available to the low budget company or individual. Three of such services are described following:

MECC (Minnesota Educational Computer Consortium) is available to residents of Minnesota. A 50 hour block of time valid for 3 months costs $50. Among other things it provides 2 libraries of Apple Educational programs, APPLE - application programs developed by MECC

SEEDS - user contributed programs

These programs written in INTEGER BASIC or APLESOFT may be downloaded to your Apple. MECC's address is

2520 Broadway Drive,
Lauderdale,
Mn, 55113 Tel: 376-1132

SOURCE. This service provides local phone connection to a large system. Pascal, Fortran are available plus an information bank covering such things as Stock Exchange Information, Business Software Inf., Travel Inf., Consumer Data, etc. Cost is $100 for hookup or $125 with software package, and $2.75 per hour non-prime time or weekends. There is a minimum charge of $5 per month.

Their address is-
Telecomputing Corp of America
1616 Anderson Rd.,
Mclean, Va., 22102

SMART SYSTEM

I don't have much information at this time except that the cost is approximately the same as for SOURCE. They may not have local phone capability. Their address is-
1301 West Estes Avenue,
Chicago, Illinois, 60626

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