D.A.U.G.

Newsletter

DuPage Apple Users Group

AUGUST 1986

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AUGUST MEETING
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When: 7:30 PM, August 12.1986

Where: Lincoln Center
       935 Maple Ave
       Downers Grove, Ill

Topic: FUTURE OF USER GROUPS

7:30-7:45	Opening remarks
7:45-7:55	Dem of Current Dom
7:55-8:05	Min-review of a Program
8:05-8:15	Q & A Dissussion
8:15-8:30	Break
8:30-8:35	Door Prize
8:35-9:45	Report on Apple Users Conference Role of Algorithms

Other Dates to Remember

Aug 12: Regular meeting -
     20: Board Meeting (7PM, Downers Grove Library)
     26: Appleworks Sig (7PM, Wood Dale Library)
Sept 9: Regular meeting
     17: Board Meeting (7PM,Downers Grove Library)
     23: Appleworks Sig (7PM, Wood Dale Library)
Oct 14: Regular meeting
     22: Board Meeting (7PM, Downers Grove Library)
     28: Appleworks Sig (7PM, Wood Dale Library)

First Midwest Apple Users Conference

The first users conference was held on July 19th and 20th, attending for Daug was Ralph Stein, Bob Konikow and Al Hilliger. They will report on the conference and what can be expected for users groups in the future. A report on the conference will be in a future issue which will cover all aspects of the conference.

July Meeting

At our July meeting it was announced that DAUG is sending 3 representatives to a Midwest Apple Group meeting on July 19th and 20th. Al Hilliger, Ralph Stein and Bob Konikow are our representatives to this event. Look (and listen) for a report from them at our next meeting and in the next newsletter. It was also announced that First Class Prephials is beginning a "Wizard" program whereby local DAUG members are entitled to repairs and/or replacement without sending your hard disks back to the factory. Detlef Adolff is our representative in this program. If you have, or are interested in First Class products, contact Detlef for more information. Along with this repair/replacement program, First Class is offering a 10% discount to persons belonging to an Apple Club. All you have to do is mention our club name to get your discount. The newly formed programming SIG (Special Interest Group) met in the home of Bob Konikow in June. The next meeting is planned to discuss PASCAL. For information on this SIG, contact Ed Danley or Bob Konikow. The APPLEWORKS SIG is continuing its regular meetings at the Wooddale Library. For more information on the APPLEWORKS SIG, contact Detlef Adolff.

The topic for the July meeting was games. Ralph Stein presented the SARGON III chess program. The program has changed considerably since the original version on cassette tape. The brains have now advanced to an level where a move takes an infinite amount of time. Detlef Adolff demonstrated LODE RUNNER. In this adicting game, your are required to collect all of the treasurers on the screen by climbing ladders, digging holes, and generally our manuvering the "bad guys". If you survive the screen, you get to climb a ladder up to the next of 150 total levels. Once (if) you get past the 150 levels included with the program, you can either play the 150 new level that were included as special DOM # 17 or you can design your own screens. Brain Cameron brought his personal supply of games for our enjoyment. Among those he demonstrated was a KUNG-FU type of game whereby you assault your opponent with a series of karate chops and flying kicks. once you get past your opponent, you get to meet with the SHO-GUN warrior. Thanks to Ralph, Detlef and especially Brian for sharing their games with us.

Ed Danley

Apple and Kinko's Release Courseware Catalog

Cupertino, California. June 25, 1986. Apple Computer, Inc. and Kinko's Copies, of Santa Barbara, Calif., today announced the availability of the first Kinko's Academic Courseware Exchange catalog. This resource guide offers the higher education community information and a way to purchase university-developed educational software for the Macintosh and Apple 11 computers at prices students can afford and in the volume that universities require.

The first edition of the bi-annual catalog currently lists 30 academic software programs with more than 100 programs expected to be listed in the fall edition. It is available at any of Kinko's 300 stores that serve more than 500 colleges and universities in the United States. The Academic Courseware Exchange will enable teachers to assign software to their classes as easily as they assign textbooks. Students can purchase software programs at the Kinko's store for between $7 to $30.

"The Academic Courseware Exchange is a highly innovative program for distributing university-developed software," said Bud Colligan, Apple's manager of higher education marketing. "For the first time, campuses nationwide can easily share the results of on-going software development work at leading colleges and universities. There are hundreds of quality programs currently in development, and future catalogs will include even more of this emerging software base. Because university developers can now easily distribute their software while earning royalties, we anticipate that this program will accelerate the development of software on campus and will play a leading role in helping schools to more fully integrate computers into university curricula."

The first catalog includes such programs as "Animated Waves and Particles," a program from the physics department at the University of Tennessee that simulates wave and pulse behavior and other aspects of physics; and "The Would-be Gentleman" from Stanford University, a program that simulates economic and social life in 17th century France.

"We've already had a phenomenal response to our initial direct mailing to more than 150,000 faculty members," said Keith Lawrenz, Kinko's director of the Academic Courseware Exchange. "We think the catalog will soon become an indispensable tool in university curriculum design."

Kinko's has been serving the academic community for 15 years, assisting faculty with such programs as Professor Publishing, which enables professors to inexpensively duplicate and distribute supplementary course materials. Kinko's also offers a service for publishing specialized textbooks as well as a desktop publishing service using Apple's Macintosh and LaserWriter printer.

Institutions and individuals interested in either purchasing courseware or distributing their courseware through the Academic Courseware Exchange should contact their local Kinko's or Kinko's courseware director at (800) 235-6919 or, in California, at (800) 292-6640.
23 June 1986

...from the Presidents corner...
This article is designed to help you get that little extra out of your club. I will try to keep you informed of any/all little extras that can be obtained from the club.

You can start with the discount that is given specially to members of Apple Clubs. These discounts are not available to the general public. See the list of stores on the back page of the newsletter.

Next, you can get special repair service for your Sider Hard disk and related products. You don't have a hard disk? You can get a 10% discount from First Class Periphials when you mention that you are a member of DAUG. See Detlef for complete details.

The club gets many newsletters/magazines from other clubs and publishing companies. These publications are for both the][and the MAC. If you are interested in reading these publications, see Don Smith for a copy. If you find an interesting article, you can re-submit it for inclusion in our own newsletter and get a free DUM for your efforts.

If you are interested in tele-computing (or would like to be) and would like to be our DAUG Ambassador, we have a couple of services that would like our involvement. You'll get to meet with Apple CEO John Sculley among others. For details on this venture, contact Detlef Adolff for more details.

For Mac users, the latest version of the OFFICIAL current Macintosh System Software is now downloadable. See Ralph Stein or Randy Paulin for more details.

AST Research Inc. is currently offering a free bulletin board service. There is no charge to access their system. Public Domain and "shareware" software is available. For more information, contact Al Hilliger.

Our own newsletter contains a consolidated list of Vendor support phone numbers. See the list elsewhere in this newsletter.

This is the only a continuation of the specials that DAUG is offered. Contact and club officer for more details, and keep an eye on this column for further details.

Ed Danley

June 12, 1986

Mr. Jean-Louis Gassee
Vice President - Product Engineering and Development
Apple Computer, Inc.
Mailstop 3-I
20525 Mariani Avenue
Cupertino, California 95014

Dear Jean-Louis:

On behalf of nine user groups that participated in a recent CompuServe CO, I am writing for our 7,000 Apple and Macintosh users to ask that Apple Computer, Inc. allow recognized user groups to license certain of Apple's copyrighted computer programs that Apple does not distribute for profit. These programs are:

1. Operating system software: DOS 3.3, ProDOS, SOS, Finder, System, Hard Disk 20 and the ImageWriter printer driver. Technically, user groups are not able to include these copyrighted programs on their public domain software disks, although not including these programs on disks frustrates novices in particular and makes the disks harder for everyone to use. Apple licenses these programs to developers at a nominal charge of $50-$100 per disk per year.

For software publishers with ten or twenty titles in active distribution this is no problem. For users groups -- which have limited resources, charge little more than the cost of the media for their disks, and have more than 100 disks available to members -- the regular fee makes a license prohibitive.

2. User-oriented utilities: COPYA, FID, other programs from the old DOS 3.2 and 3.3 System Masters, and Font/DA Mover. The DOS 3.2 and 3.3 programs are no longer available through Apple channels, although many programs still use DOS 3.3. We often get anguished calls from new members asking, "The manual says I need to make a backup of this program using COPYA. Where can I get it?" Similarly, we know that errors will sometimes result if one uses a version of Font/DA mover earlier than 3.1, but we have found that some dealers are not able to take the time to make copies of revised versions of Mac software for everyone who comes into their stores.

3. Programmer-oriented utilities and source code files such as the Macintosh Software Supplement. Your senior managers have told developers that Apple wants these tools made available to everyone who can use them, but user groups are reluctant to distribute them without a proper license from Apple. For the many "recreational" Macintosh programmers now using Mac C or TML Pascal, downloading these files from CompuServe is not feasible because the files are both large and numerous. Ordering them from Apple is obviously less expensive but takes time. Getting them through a user group would be both inexpensive and easier.

In computer lawyer-to-computer lawyer conversations with Irv Rappaport and Lorrie Merkel, I have learned that Apple's principal legal concerns are (1) to avoid having these programs fall into the public domain, (2) to avoid creating a "back door" by which developers could distribute DOS 3.3, ProDOS and the like without being properly licensed, and (3) to avoid having novice users get into trouble by using, for example, ResEdit. These are legitimate concerns, and we believe they can be addressed in a way that will be satisfactory to everyone.

Apple's commitment to supporting its user groups is well known, as is your own personal interest in fostering Apple-user group relations. We were most appreciative of your kind -- and enthusiastic -- words to us at the September 1985 meeting. We also were encouraged by your remarks at the Apple World conference. On behalf of the groups participating in the fifth monthly user group conference on CompuServe -- Washington [D.C.] Apple Pi, Mac Technics (Ann Arbor, Michigan), Yale Mac Users Group and Mac Forth Users Group, Northeastern Ohio Apple Corps, San Gabriel Valley Macintosh Users Group, Northern Virginia Apple Users Group, Orange [County, California] Apple Computer Club, Arizona Apple Users Group, and the Major League Players Users Group -- we look forward to working with you on this matter. Please feel free to call me at my office, (202) 333-4000, or leave E-mail to the WAP account, 70007,2272.

Sincerely,

Thomas S. Warrick
President,
Washington Apple Pi, Ltd.

I received the following letter in response to my letter sent to Jean-Louis Gassee on behalf of a number of user groups asking that Apple license user groups to put Finder, System, DOS 3.3 and other programs on their public domain disks:

June 25, 1986

Thomas S. Warrick
President
Washington Apple Pi, Ltd.
8227 Woodmont Avenue, Suite 201
Bethesda, Maryland 20814

Ref: Your letter of June 12, 1986

Dear Mr. Warrick:

Thank you for your letter. Your request is not one that is easily answered and, as you have already spoken to both Irv Rappaport and Lorrie Merkel from our legal department, you realize the concerns they have.

I will pursue discussions with them but please do not get discouraged if you do not hear from us immediately.

Apple has always tried to encourage and support the Apple user groups and we will continue to do everything we can to strengthen those alliances.

Sincerely,

Jean-Louis Gassee
Vice President
Product Development

JLG:edr

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Treasurers Report          July 86
=====================================
Previous Balance           1064.60

  Membership               100.00
  Monthly Dom's             80.00
------------------------------------
Total Revenue              180.00

Expenses
  Operational Expenses     182.00
  Capital Expenses           0.00
  Newsletter + Stamps      109.76
  Diskettes                136.50
  Other Club Membership      0.00
  Rent                     228.00
  Prize Fund                60.00
------------------------------------
Total Expenses             716.26

Net Income                -536.26
------------------------------------
Ending Balance             528.34

  John W Sandora
```

OFFICERS
=========

President:	Ed Danley	969-4433
V/P Program	Randy Paulin	366-3274
V/P Membership	Jim Cormack	960-5691
Secretary	Albert Hilliger	860-2626
Treasurer	John Sandora	352-3059
Librarian	Detlef Adolff	766-7741
Editor	Don Smith	629-5033
Directors	Bob Konikow	968-3897
	Ralph Stein	985-7850

```
########################################
#                                      #
#          Library Corner              #
#                                      #
########################################
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Blank Diskettes

Remember that blank diskettes are available for purchase from the Librarian at club meetings. The cost is $6.40 for 10 diskettes plus tax. The diskettes come in multiples of 10 and include Tyvek sleeves.

Mac DoM's

Beginning next month we will have Public Domain programs available on 3.5" disks for the Macintosh. If you are interested, please see me at the meeting. I have a list of available programs I'd like you to look at to determine what we'll purchase for the club's library.

Free DoM's

Lots of good disks are coming up - why not recruit a new member for the club and get your disk for free?!

1200 BAUD Modem

For those who were not around lately, I've been able to get a fantastic price on a 300/1200 Baud Modem for the club members. All told, 18 club members ordered one, and helped make this program a success.

Reviewers Needed!!

I have a number of disks ready to be included in the clubs library, but they need to be reviewed first. If you would like to volunteer your services, I'd be most grateful for your help.

All you need to do is take the disk home, use it for a month, and write a short review. Just share your experience by telling us what the program(s) can do and what you liked and/or didn't like about them.

See me at the meeting for more details.

PERSONAL FINANCIAL PLANNING IN APPLESOFT

In the July issue of the Newsletter I reviewed Sylvia Porter's Personal Financial Planning program and suggested that there were different and potentially more usefull ways of doing such planning with a home computer. In particular, I suggested use of a Spread Sheet program like the one in Appleworks. Since then I've thought that it might be even more convenient -- or at least more interesting -- to do the type of Personal Financial Planning I had in mind with a program written in Applesoft. And besides, not all Apple II people have a Spread Sheet, but we all have Applesoft. So that's what this article is about -- an Applesoft program with which you can do Personal Financial Planning, short enough to enter from your keyboard without too much labor, and flexible enough to enable you to revise or make additions to according to your personal preferences. In order to meet these program objectives, especially for inclusion in a Newsletter article, I've made some simplifications which you may wish to rectify. For example, I've not included "User Friendly" Input and Output routines and details related to home mortgages or retirement plans. Also, the assignment of Financial Goals must adhere to simple rules described below. Although the program, which is listed at the end of the article, can be used to do planning in its current form, it really should be considered as a preliminary developmental version.

Here's the general idea. A person or family accumulates funds from returns on investments (e.g. from savings accounts, stocks, mutual funds, etc) and from annual savings (excess of earned income over living expenses). These funds are to be used to meet certain financial goals --- e.g. a new car every 7 years, children's college education at 5 and 8 years from now, the purchase of a summer home in 15 years, etc. Each goal is assigned an amount needed (in current dollars) and a priority. When a goal is due the amount needed (in inflated dollars) is subtracted from the funds accumulated. If the funds available at this time are not large enough an attempt is made to borrow the balance needed. If the loan required for this purpose can not be obtained then the current goal or an earlier goal with lower priority is deleted as unattainable. If the loan can be obtained then it must be paid off with annual payments reducing the amount that can be saved and invested for future use.

I'm not going to attempt to discuss all the details of how the program accomplishes the general idea just described. Those of you who are sufficiently familiar with programming in BASIC should be able to do so on your own, and then incorporate your own features and improvements. Instead I'll concentrate on the Input/Output features of the program so that you will be able use and experiment with it --- and tell me about the bugs you've discovered.

In the current version of the program the data input is handled by use of assignment statements in lines 1000 to 1090 which are in a subroutine starting at line 1000 and ending at line 1520. The user changes these data by editing or redoing these lines. Line 1000 assigns an annual inflation multiplier, IM (IM=1.05 means 5% annual inflation); an annual return on investments multiplier, RM; an annual increase in earned income multiplier, YM; and an annual fractional interest charged for loans, LI. The sample data listed makes the conservative assumption that YM=IM. Line 1010 assigns values for the current principle invested, P0; the current earned annual income, Y0 (by earned income is meant all income except that from return on investments); and current annual living expenses including taxes, X0.

Line 1030 begins the specifications of financial goals. The number of goals is assigned to N6. The arrays that follow are the goal amount in current dollars, GA; the goal year, GY; and the goal priority, PR (a goal priority of one is the highest). Now for the special rules for assigning goals mentioned previously. Goal numbers, which serve as the indices for the arrays, must be ordered with respect to goal year as illustrated; duplicate priority values are not allowed. Lines 1030 to 1090 illustrate specifications for 7 financial goals over a period of 25 years. Line 1100 assigns MY, the maximum number of years for the calculations.

The program does calculations year by year in the FOR-NEXT loop starting at line 110 and ending at line 180 using the loop variable J. A means must be provided to determine if a particular year corresponds to a goal. I've chosen to do this determination with an array GF as a "goal flag." The index of this array is the year number. If the particular year number J corresponds to a goal year then GF(J) equals the goal number; otherwise it is zero. The required values for the goal flag array are set by lines 1500 and 1510.

The year by year calculations referred to above evaluate the changing principle investment amount P, the annual living expenses X, the annual income Y, and the amount of loans outstanding L. These quantities are initialized in line 100. A special "flag variable" FL is also initialized in this line. Other important variables are possible savings, S; loan payment, LP; and actual savings, SB.

The program displays a tabulation with column headings YR for year number, P for principle investment amount, L for the amount of outstanding loans, and G for goal number due. The small number of items tabulated was chosen to allow use of a 40-column screen. When P becomes negative the display will stop indicating that a particular goal can not be met. Press any key (there's no message telling you to do this) and an attempt will be made to delete this goal or an earlier one of lower priority. The display will then start again from the beginning with one of the goals deleted. The program will continue in this manner until no existing goals need to be deleted. Press any key and the program ends with a display of a summary of goals attained or deleted, including the attainable goal amounts in inflated dollars. But the results may not be satisfactory -- e.g. too many goals deleted. Guided by the year by year displays, the user revises the goals or other information by editing the appropriate lines in the "Input Financial Data" subroutine and then re-runs the program.

Here's the program. Happy typing ....

```
1     REM    FINANCIAL PLANNING PROGRAM (V 1.0)
2     REM    BY RALPH P. STEIN (7/13/86)

10    GOSUB 1000

50  ' HOME :PRINT " YR";SPC(9);"P";SPC(9);"L      6"
60    POKE 34,1

99    REM ------ MAIN PROGRAM ------
100   HOME :P=P0 :X=X0 :Y=Y0 :L=0 :FL=0
110   FOR J=1 TO MY :Y=Y$YM :X=X$IM
115   S=Y-X :LP=L$LI :SB=S-LP :L=L-LP
120   IF L<0 THEN SB=SB-L :L=0
130   P=P$RM+SB
140   IF GF(J) AND PR(GF(J)) THEN G=GF(J) :P=P-GA(G)$IM^J
      :IF P<0 THEN GOSUB 500
150   GOSUB 700
170   IF P<0 THEN GOSUB 600
180   NEXT J: GET A$: IF FL=1 THEN 100

299   REM -- SUMMARIZE RESULTS --
300   IF FL=2 THEN PRINT "GOALS CAN NOT BE ACHIEVED!" :END
305   PRINT :FOR G=1 TO NG
310   IF PR(G)=0 THEN PRINT "GOAL # ";G;" DELETED..."
      :GOTO 330
320   PRINT "GOAL # ";G;" OK! AMT = ";INT(GA(G)$IM^GY(G));
      " AT ";GY(G);" YRS."
330   NEXT G
340   PRINT "P = ";INT(P);" & L = ";INT(L);" AT ";MY;" YRS."
350   END

499   REM -- BORROW TO MEET GOAL IF POSSIBLE --
500   L=L-P :IF S$IM>L$LI THEN P=0
510   RETURN

599   REM -- DELETE LOWER PRIORITY GOAL IF POSSIBLE --
600   MP=0
605   FOR I=1 TO 6 :IF PR(I)>MP THEN MP=PR(I) :DG=I
610   NEXT I
620   IF MP>0 THEN PR(DG)=0 :FL=1
630   IF MP=0 THEN FL=2
640   J=MY :RETURN

699   REM -- DISPLAY ANNUAL RESULTS --
700   Z=J :FD=3 :GOSUB 2000 :FD=10 :Z=P :GOSUB 2000
      :Z=L :GOSUB 2000
710   IF GF(J) AND PR(GF(J)) THEN FD=6 :Z=GF(J) :GOSUB 2000
720   PRINT :RETURN

999   REM -- INPUT FINANCIAL DATA --
1000  IM=1.05 :RM=1.08 :YM=1.05 :LI=.12
1010  P0=10000 :Y0=25000 :X0=23000
1020  NG=7 :DIM GA(NG), GY(NG), PR(NG)
1030  GA(1)=20000 :GY(1)= 5 :PR(1)=1
1040  GA(2)= 8000 :GY(2)= 7 :PR(2)=5
1050  GA(3)=20000 :GY(3)= 8 :PR(3)=2
1060  GA(4)= 8000 :GY(4)=14 :PR(4)=3
1070  GA(5)=15000 :GY(5)=15 :PR(5)=7
1080  GA(6)= 8000 :GY(6)=21 :PR(6)=6
1090  GA(7)=20000 :GY(7)=25 :PR(7)=4
1100  MY=GY(NG)

1500  DIM GF(MY) :FOR I=1 TO MY :GF(I)=0: NEXT I
1510  FOR G=1 TO NG: GF(GY(G))=G :NEXT G
1520  RETURN

1999  REM -- PRINT FORMAT ROUTINE --
2000  Z$=STR$(INT(Z)) :PRINT SPC(FD-LEN(Z$));Z$; :RETURN
```

--- Ralph P. Stein (7/14/86) ---

DAUG
NEEDS
YOUR
HELP

The only way to have a good newsletter each month is to get input from members. You don't have to be a HACKER to contribute something. I really cannot write 7 pages each month without your help. Things we can use are:

#Software reviews-games, business programs, public domain,etc.
#Article or book reviews- from newspapers, magazines, books, etc.(except Nibble)
#Short programs or routines-you have written
#Programming tips & hints
#Trivia-computer facts, cartoons, questions
#Anything else of interest

Articles can be given to any of the officers at the regular monthly meeting. They can also be mailed directly to the Newsletter Editor at the following address:

DON SMITH
20 S. LODGE LANE
LOMBARD, ILL 60148

The deadline for submission of these articles is the date of the board meeting (see the schedule on page 1). As an added incentive for you to submit an article, you will be entitled to a free DOM during each month you submit an article.

Please have each submission consist of the following:
1) a printed copy of your article
2) a diskette containing your article
3) the word processor used to create your article
4) proof read your submission for spelling etc.
5) your name and telephone number
Your cooperation is needed and appreciated.

The response to previous DAUG Specials which featured Print Shop Graphics was so tremendous, that we've prepared another Special Disk chock full of PS Graphics for you.

This disk features a program to let you preview any Print Shop Graphic. It was created for D.A.U.G. by Bob Carlson.

Altogether there are 65 new Graphics that you can access from Print Shop. They are listed here alphabetically.

AEROSMITH, ALIEN, ALLIGATOR, APE, APPLE //C, APPLE LOGO 1, APPLE LOGO 2, BABY REINDEER, BASKETBALL, BBROS.PS, BICYCLING, BIRD, BIRDS ON A LINE, BLIMP, BOOZE2, BRAC, BRIDGE, CATKING, COMPUTER, COWBOY, DAUG.DOG, DIAGONALS, DIAMOND, DISK DRIVE, DOG, DUCK, DUCK.1, EXCLAMATION (!), EYE, FACTORY, FAMILY ROOTS, FEET, FIRECRACKER, FIRST COMMUNION, FOOTBALL HELMET, FOUNTAIN, GARBAGE, GE LOGO, GHOSTBUSTERS, GIRL, GIRL SCOUT LOGO, GRUMPY, HAMBURGER, HOUSES, HOWDEYRABBIT, IOWA HAWKEYES, JOHN 3:16, JULY 4TH, LA2004, LADY, LIPS.2, LOVE, MASON, MICKEY MOUSE, MINNIE MOUSE, NIKE, NOBULL, OLD HOUSE, OUTHOUSE, PIG, PLANE, PREACHER, RADIO P, ROBOT1, ROCKET

DAUG Disk of the Month # 61 - August 1986

This month's DoM comes to us from Canada. It contains a variety of programs designed to help you understand Machine Language. Included are not only tutorials on the subject, but also a variety of utilities, some of which you will find described below.

BFILE LIST (Binary File Parameter List)

This program will search a disk for all binary files, giving the first 13 letters of the file name followed by the file start address and file length in both hex and decimal. The number of disk free sectors is also calculated.

BEUxx (Binary Entry Utility)

BINARY ENTRY UTILITY is a program which will assist you in the entry and debugging of machine-language code for the Apple's 6502 processor.

It comes in two forms, depending on whether you have a 16K RAM card (or its equivalent) in your Apple. The 64K version is superior, as it will remain resident on the card and can be accessed by the '&' Ampersand command. In addition, it contains a 'DEBUGGER' which wasn't included in the 48K version because of memory limitations.

MASM (Mini-Assembler)

'MASM' is an assembler which will allow the user to enter assembly language source code, save it and assemble it.

MEM/DUMP TO TEXT FILE (Memory Dump to Text File)

This program will store on disk as a text file a section of memory that you specify. The output will be the same as the Monitor's.

MINI-ASSEMBLER IN APPLESOFT

The MINI-ASSEMBLER was included with the earlier APPLE][Computer but room was not available in the][PLUS (APPLESOFT) because of memory limitations. Therefore, the MINI-ASSEMBLER has been altered to permit it to be read into RAM memory and run in this modified manner.

Instructions on its use are present in the 'APPLE][REFERENCE MANUAL' and are therefore not included in this short documentation. Several alterations have been made to it prior to including it on this disk, in order that its ease of use be improved.

Two versions of the MINI-ASSEMBLER have been included on this disk, one which occupies a lower memory location at $800 and the other a higher location, $5400.

M/L TUTORIAL (17 page Machine Language tutorial)

This tutorial from Tom O'Brien of the Green Apple Users Group in Cedar Falls Iowa is derived from a series of lessons on machine language programming which were distributed on a tutorial disk produced by that club.
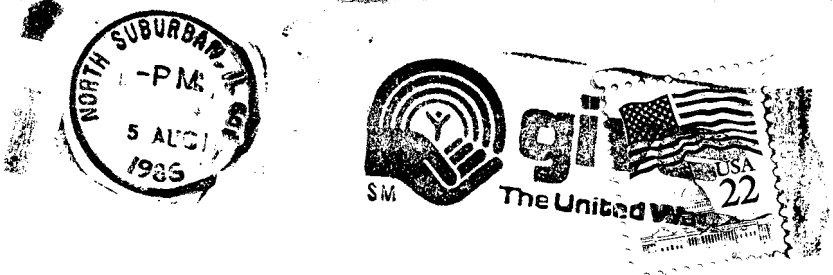
LOGIC.HELLO
HELLO.PIC
HELLO.BEU
BEU.INSTRUCTIONS
BEU.48K
BINLOAD
INTBEU.1
MASM INSTRUCTIONS
MASM
MASMA
MASM DOC
INTEGER BASIC
SWEET16
MASM SAMPLE
ALL PURPOSE DISASMB.(800)
ALL PURPOSE DISASMB.(8800)
BFILE LIST
MEM/DUMP TO TEXT FILE
MEMORY INTERPRETER
MINI-ASSEMBLER INSTRUCTIONS
MINI-ASSEMBLER ($800)
MINI-ASSEMBLER ($5400)
MINI-ASSEMBLER TUTORIAL
M/L TUTORIAL
M/L TUTORIAL.TEXT

VISIT OUR FRIENDS!
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A number of local computer stores support our activity by offering the
discounts listed below to those who show their membership cards.
Stores that sell merchandise to everybody at a discount are not
included.

C B M Computer ,St.CharlesRdandRoute83,Elmhurst(530-1125)-15%
C B M Computer , 7 S LaGrange Rd, LaGrange (352-4700) -- 15%
Computer Workshop, 1626 W Ogden Av, Downers Grove (971-0004) -- 10% on
training and rentals; none on consulting or programming
Farnsworth Computer Center, 1891 N Farnsworth Av,Aurora(851-3888)--15%
Farnsworth Computer Center, 383 E North Av, Villa Park (833-7100) 15%
Primetime Computer Services,9906 Wood Lane,Palos Hills,Ill
(598-5200)-10%
Save On Software, 111 E Roosevelt Rd.,Lombard, Ill 60148 (932-9144)
--27% on software & supplies, hardware -good prices
Softwaire Center, 1163 Ogden Av, Naperville (355-7515) -- 15%
Frequently a smaller discount is offered if a credit card is used. If
a store would like to be included in this listing, please write the
editor and give us your discount schedule for Apple-User Group
members.
#*****

P O Box 294
Downers Grove IL 60515
$$$$$$$$$$
The mailing label to the
right is the only notice
you will get that your
membership is expiring.
If you let your
membership lapse, you
will have to pay another
initiation fee of $8,
plus your $12 dues, to
get back on our list.

8/07