CURRENT NOTES

The Newsletter for ATARI Users of D.C. and Northern Virginia

Volume 4, Number 1
January, 1984

DC CURRENTS

January 17: LOGO - Repeat performance

The new Atari language LOGO will be demonstrated at the January meeting of the DC Group. Jim Campbell will show you some of the great stuff you can do with this incredible language. He will also be doing a monthly column for the newsletter on LOGO starting next month. Arthur Corte will than demonstrate Home Accountant, a very powerful package for the home. Lastly, Staffan Sandberg will demonstrate M.U.L.E. by Electronic Arts. M.U.L.E. is a graphic economics game where you buy and sell land, food, energy, and smithore. It is a very addicting game.

The DC Group finally has a Program Chairman. Arthur B. Corte will be Program Chairman and Jim Campbell Vice Program Chairman.

AURA UPDATE

January 4: AURA Arrives

Welcome

Just a brief note from the officers of A.U.R.A. to the loyal members keeping our club functioning. As you can see, we are now a part of CURRENT NOTES and have the honor of being the only Marylnad ATARI Users' group approved by the NOVATARI and DC membership to complete the tri-state area of ATARI interests and support.

As the editor, Staffan Sandberg has been working diligently to improve the quality of the CURRENT NOTES' publication. Join with the officers in assisting Staffan to continue to provide the best possible coverage of our mutual interests in this educational and beneficial hobby to all. Staff writers, columnists, reviewers and programmers are only a small part of the team required to acheive outstanding excellence in our newsletter so that all of us may share in the knowledge and power of our computers. If you have any interest and one hour a month, please contact any of the A.U.R.A. officers of Staffan about your contribution. You may also contact the A.U.R.A. officers at PO Box 7761, Silver Spring, MD 20907.

We look forward to many exciting products and extensions to our machines in the coming year. Let's make 1984 a good year for all the tri-state area and other ATARI communities. We also look forward to your continued support of our activities.

The meeting will start at 7:00 PM with the usual informal discussions and disk/cassette claims. At 7:30, we will convene the meeting and listen to announcements.

Our FIRST PRESENTATION will start at 8:00 PM. Ever heard of SCITOR? Neither have I! Linc Halen has and he will tell us all about this APX program to assist in personal finances. Linc says it's GREAT for small business! Linc also says he'll have the works for us tonight!

The SECOND PRESENTATION starting at 8:15 PM is for the hardware buffs. If the TRAK drives have arrived, we'll have a performance demo. This drive has a built-in 4K print buffer/port (expandable to 16K) and runs almost any double-density DOS. Converter program supplied!

Last but not least, we will have our THIRD PRESENTATION at 8:30. "Far superior to any adventure game..." DEADLINE has all the works for an outstanding mystery/puzzle solver game the whole family can enjoy! Complete expansion of vocabulary for compound commands, HELP and more forgiving exit options put this adventure by INFOCOM in the ranks of ZORL I, etc.

After our presentations, we have have GENERAL ELECTIONS and resolve the DUES & BYLAWS. The meeting will adjourn at 9:00 PM.

Best wishes from the officers of A.U.R.A. !!

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INSIDE

EDITOR'S NOTES

Staffan Sandberg, Editor

Happy New Year!!! Its 1984 and we are kicking off the year with a bang! We have been joined by A.U.R.A. (the Atari Users Regional Association of Maryland) in recieving CURRENT NOTES. I hope that this move will be benificial to all our members.

REMEMBER THAT DUES FOR 1984 ARE DUE NOW! Please fill out the form on page 5 and return it to the treasurer of the group that you are joining (see page 11 for names and addresses of treasures.) You must send in your dues and sign this form to continue to recieve the newsletter.

The newsletter was only 9 pages this month because of the holiday, but we will be expanding to a minimum of 24 pages next month. This is made possible by several factors. First of all, we now have several monthly columnists (that's not to say we don't need more!). Starting this month we have Bob Kelly writting "Atari Scuttlebits", an article dealing with the state of the Atari market (rumors and facts), and Joe Waters writting "BASIC BEAT", an article dealing with BASIC for the beginner. Next month we will add Jim Cambell writting an article on LOGO. If you are interested, please call or write me and I will send you our Author Information Guide. The second factor has to do with postage. A member from the DC Group suggested that we send the newsletter 2nd class as a magazine. After doing some research, I found that this is an increadibly cheap way to send the newsletter. It will cut our postage by about 70% ! The third and final factor is printing. I have found a vocational school that does a great job on printing and will only charge us for materials. This will cut our printing costs by about 50% ! This will allow for much growth in the future. All we need are articles. Remember, you don't have to become a monthly columnist, an article every couple of months is great.

We still do not have a logo for the cover of CURRENT NOTES. We have recieved a couple of good suggestion, but they have all been too complicated. We need something simple like Atari, CBS, and Bell have (just to name a few well known logos.)

Interested advertisers should contact me for our new Rate Card which will explain all rates, mechanical requirments, and deadlines. Remember, our new deadline for space reservation is the 10th of the preceeding month and all camera-ready copy should arrive by the 20th.

Again, HAPPY NEW YEAR to all. See you at the meetings!

CURRENT NOTES

CURRENT NOTES is a monthly newsletter sent to the members of the Atari Club of downtown DC, Novatari (the Northern Virginia Atari Users Group), and A.U.R.A. (the Atari Regional Association of Maryland). These three organizations are independent groups for Atari computer users, and are not affiliated in any way with Atari, Inc.

The Editor of CURRENT NOTES is Staffan Sandberg, 11804 Magruder Lane, Rockville, Maryland 20852, telephone (home) 301-881-7437, (office) 301-468-6686. News items, short articles, original programs, classified ads, and any other material of interest to the membership are eagerly solicited. The deadline for articles is the 15th of the preceeding month.

Membership dues for both groups are $15.00 a year, which includes subscription to CURRENT NOTES. Dues are payable at the beginning of each calendar year. Dues for new members joining during the year are reduced $1.00 for each month which has passed since the first of the year. Dues may be paid at any meeting, or be sent to the editor. Persons living outside the metropolitan Washington DC area may subscribe to CURRENT NOTES for $12.00 per year.

Advertising policy: classified ads are free to members. Commercial advertising rates are: please contact editor for current Rate Card.

DATA SHEET

UPCOMING EVENTS

January	7-10	Consumer Electronics Show	Las Vegas
	19-21	Data West	Pasadena, CA
	30-		
February	2	Communication Networks '84	Washington, DC
	3-5	National Software Show	Miami Beach
	7-9	Cadcon West	San Fransisco
	14-16	Computer Science Conf.	Philidelphia
	20-22	1984 Office Automation Conf	Los Angelos
	21-23	Softcon	New Orleans

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AURA Users Group

Bruce McLendon	President	(301) 587-7890
Dave Haseman	Vice President	(301) 681-5776
Richard Stoll	Membership	(301) 946-8435

DC GROUP MEETINGS

are held on the third Tuesday of every month in Room 543 of the National Science Foundation offices, 1800 G Street NW, Washington, DC. The closest subway stop is Farragut West, on the Blue and Orange Lines. Take the 18th Street exit, and walk south (against the flow of traffic) down 18th Street for 3 blocks to G Street. The building is on the corner of 18th and G; it can be identified by a sign for the Madison National Bank on the corner. Front entrance is in the middle of the block. Parking is available in the building, for a fee. The entrance is on the west side of 18th Street, between F and G. Meetings begin at 5:30 PM and usually last until 8 or 9.

NOVATARI MEETINGS

are on the second Sunday of the month. Novatari meets in the Greenbriar Community Center, on Stringfellow Road in Chantilly, Virginia. Stringfellow Road, also known as Route 645, runs south from US 50 a more than two miles west of the Fair Oaks Shopping Mall, which is at the intersection of I-66 and 50. There is a traffic light where Stringfellow Road meets 50. The Greenbriar Community Center is on the left-hand side of Stringfellow Road, 1.4 miles south of 50. There is a small parking lot in front, and a larger on just north of the center (that is, just before you get to it), which is connected with a walkway. The meeting room is available from 5-9 PM. The first couple of hours are normally unstructured, open house style, with people free to come and go and chat with one another as they wish. Organized activities--the business--begin about 7:00 PM, and usually last about an hour, after which there is some more free time before closing.

A.U.R.A. MEETINGS

are held on the first Wednesday of every month in Room One of the Long Branch Public Library on Garland Avenue in East Silver Spring. Take the Beltway (I-495) to Exit 29-B South (University Blvd East, Route 193). Follow University Blvd. East (Route 193) to the second light (Piney Branch Rd.). Turn right on Piney Branch Rd. and continue to the second light (Arliss St). Turn right on Arliss St. past the apartments to Garland Avenue. Turn right on Garland Ave. The Long Branch Library is on the corner. Park in the Library's lot.

NOVATARI NOTES

January 8: New Year, New Beginning

The Novatari Group begins the new year with a new cast of characters as we hold our first annual election of officers. Four elective positions are up for grabs: President, Vice-President, Treasurer, and Secretary. Nominations can be made from the floor so have your candidates ready. Two appointed positions, Program Chairman and Disk Librarian, have recently been filled by Joe Waters and Evan Brooks respectively.

Along with a new slate of officers, we greet the new year with a new format for meetings. Each month, an informal program starts at 6:00 with a half-hour BASIC tutorial. The period between 6:30 and 7:00 is for software and hardware demonstrations. Each month we will offer a mini arcade tournament as a means of demonstrating new software offerings. Individuals or vendors who would like to display new hardware devices can do so at this time. The business portion of the evening starts promptly at 7:00. Officers of the club who have announcements can make them at this time. We expect that the business meeting would normally take no longer than 10 or 15 minutes. The main program each month will be divided into two roughly equal parts: one covering software and the other hardware. If we have guest speakers, they would appear during this part of the meeting.

Well, so much for format. What are we doing in January? The main order of business is, of course, the election of officers . This will take place in the business part of the meeting starting at 7:00.

Our January software presentation will focus on a family of programs never encountered by casette-based systems but the very backbone of disk-based systems: Disk Operating Systems. Joe Waters will discuss the purpose and functions of the standard ATARI disk operating system (known as DOS.SYS on your diskettes) and disk utility programs (known as DUP.SYS). The ATARI system is not without competition. Optimized Systems SOftware offers OS/A+ (and more recently DOS XL). PERCOM disk drives come with a PERCOM DOS. The ATR-8000 has MYDOS. What do these systems do? Where are they the same? How are they different?

Before we all run out and buy some more machines, it might be useful to take some time off and find out how to take care of what we already have. John Baum of STS Video in Falls Church, Virginia, is an expert on all those little components that go into making your ATARI and its peripherals the machines they are. John will discuss ATARI maintenance. How do we take care of these wonderful little machines?. What are the new ATARI maintenance contracts? What service should we perform? What problems should we send to professionals?

In the January issue of Creative Computing , Arthur Leyenberger, the author of "Outpost: Atari," gives his selections for the best ATARI games of 1983. The two games he found "Most Challenging" were Miner 2049er and Jumpman . These two programs will be our featured Arcade games for January. If you've never seen these games in action, you're in for a real treat. If you already own them, practice up! We'd like to show the audience some of the variety beyond screen one. If you own one of these games and would like to bring it in for our demonstration, please call Joe Waters (703) 430-1215.

BASIC Tutorial. As mentioned above in our discussion of general meeting format, we would like to offer some instruction in BASIC programming to our members. But, we have such a diverse lot of learners and every member certainly can't make every meeting. So how do we do it? Joe Waters will initiate our tutorial series. He offers the following suggestion. Anyone wanting to learn BASIC will need a suitable text. If you have one you like, bring it along to show others. Students will have to study their texts on their own at home. The tutorials, then, will not use or feature a particular text book. Rather, we will focus on a series of short programs and show how each program is designed and constructed to accomplish its objectives. With this kind of format, new members can sit in on a tutorial in any month and not be handicapped by having missed earlier sessions. In January, we will start by constructing a simple two-person graphic game called Blockade .

Coming Events. In our December meeting, we discussed the possibility of mailing the newsletter out using bulk rates which would be cheaper but may delay arrival. With this in mind, we will sketch out our anticipated program for upcoming months. February: Featured Software: ATARI LOGO language; Hardware: New disk drives (INDUS GT, TRAK, RANA). The Arcade Tournament will feature ARCHON and Q*BERT. March: Software: the new OSS ACTION language; Hardware: the new 600XL and 800XL computers. April: Software: Database packages; Hardware: the ATARI printers. May: Software: new Music programs; Hardware: the new 1400XL and 1450XL computers (if they are available).

Please fill out the form below and return it to the treasurer of the group you wish to join (or renew membership with). Memberships are $15 for 1 year. See page 11 for names and addresses of tresurers. Please make checks payable to the group you are joining.

Membership Form

new member_____ renewal___change of address or phone number ____

date_____ amount enclosed_____ check____ cash___.

Name _____

Address _____ Phone (h) ( )_____

_____ Phone (w) ( )_____

Group: DC____ Novatari____ AURA____

I wish to recieve (continue to recieve) CURRENT NOTES free of charge as a member of the above group.

_____

Signature Date

ATARI Scuttlebits

by Bob Kelly

This is a new column which will appear monthly. The column, is intended primarily to keep you abreast of business market trends affecting Atari or its parent corporation Warner Communications. It will also focus from time to time upon Atari's primary competitiors and third party suppliers- a need not adequately and/or regularily filled by the Atari related computer magazines.

I will report both fact and rumor- attempting to distinguish clearly between the two. Furthermore, just as the maid does not do windows, this column will not do software product reviews- pure dullsville- and who needs six different versions of DOS 2.0? However, the evergence of hardware or software products may be mentioned from time to time- if they have a significant impact on the market position of a particular company or group of consumers.

One of the more intriguing bits of news is that Rupert Murdock, Australian Publisher and financier, bought $100 million worth of Warner Communications stock between October 4 and November 11. The puurchases made Murdock the largest individual owner of Warner stock- roughly 6.7%. Murdock indicated a desire to purchase more Warner stock. He made good on his intentions and in early December raised his holdings to 7% of Warner Common Shares Outstaning. According to a spokesperson for Mr. Murdock's parent company, he is not seeking control of Warner or even a seat on the Board of Directors. To many Wall Street analysts, these denials are at odds with their experience.

What does this all mean for the individual Atari enthusiast- like you and me? As we all are aware, Atari has been having its problems, although sales appear to be picking up. Given improved market conditions and that the "high-priced" IBM PCjr was introduced in November, Atari announced a price increase to enhance its profit position. The increase amounts to $40/computer as well as an increase in the price of other Atari related hardware products effective January 1, 1984. On the negative side, past management decisions still haunt Atari and limit potential market growth for its performance. Thus, the question becomes whether one believes Atari can ride out this period and once again become a positive contributor to Warner's cash flow position. If not and Atari's financial health deteriorates further, many suspect Murdock will pounce upon Warner seeking control.

The Australian Publisher is flamboyant and his credentials include a record of success with ailing companies in the communications/publishing field. If Murdock was to make a successful move for Atari (Warner), my only advice is "watch out Commodore!"

My guess is with this increasing financial pressure as well as the competition from other computer manufacturers, Atari will put on the market, fairly quickly, an enhanced line of computers that will compete over the entire price range of the home computer market.

As mentioned above, management dicisions by Atari remain a problem. Has anyone seen an 800XL yet? (Oh, is Christmas an important buying season!) They originally were supposed to be on the market in September/October time frame. Several rumors have circulated as to why the 800XL's appearance has been delayed.

The first rumor relates to technical difficulties that developed during the production process. This appears to be a somewhat weak rumor since the 800XL has many similarities to the old 1200XL including the same operating system. An Atari corporate official has indicated that the 1200XL and 800XL "are in the same family...[and] the new machines are merely a natural evolution" (Creative Computing- January 1984). I personally find this rumor improbable.

Another rumor has it that the culprit is not the Taiwan plant that was recently set up to produce the new XLs; rather, the problem is the 64K chip. As scheduled, the 64K chips for the 800XL were sent to the U.S. by Atari's Far East manufacturer. As the story goes, they are languishing in a California bonded warehouse, awaiting customs clearance before being shipped back to the Far East (the new plant in Taiwan). In the meantime, Atari is scurrying around to find low cost 64K chips in the U.S. to complete the computers already shipped from Taiwan. Ostensibly, this situation was driven by cost considerations. Atari made a tactical error in pricing their product. The cost of the 64K chips rose 2 to 3 times higher than planned. Once the price increase takes effect on January 1, Atari will be able to make a profit on the 800XL and this model will appear on the market. This situation is somewhat far-fetched but not beyond belief. If true, it is akin to GM producing cars, ordering tires from Goodyear, then cars and tires arrive at two different locations, neither of which where assembly was to take place.

The third rumor places the blame upon a management which anticipates further corporate changes in early 1984. As a result, bureaucratic protectionism has set in and slowed the introduction of the new line. This rumor continues that Atari has been considering whether to discontinue the entire 1400XL line since they have diveloped a single chip which will emulate both the 6502 and the 8088 - permitting both Atari and MSDOS software to be run on the same machine. To market this new chip, Atari/Warner is negotiating with

BASIC BEAT

by Joe Waters

When Staffan Sandberg attended the December meeting of the NOVATARI group, he made a call for columnists to help our new editor put out an expanded version of Current Notes. I'd often thought of doing some writing about computing on the ATARI and here was my chance! And the discipline of a monthly column was sure to concentrate my attention on all those little programs that never quite got polished off. So here we go!

Let me say first that I am not really a professional programmer. I am an economist by training. My relationship with computers has always been as a tool I used to accomplish some other purpose. I learned to program in FORTRAN while a student at the University of Illinois, but I mastered the language only when I had to use it, on the job, in building a large application. Similarly with other languages I have dealt with. You learn a language best not just by reading a text book, but rather by trying to use the language to solve a problem. Thus I hope to bring to this column an "end-user's" perspective with an emphasis on "learning by doing." I'll select a particular programming project and try to step the reader through the process of designing and coding a useful solution.

Problem number one: diskettes. If you own a disk drive, you own diskettes. If you have had your disk drive for any length of time, you have discovered that you need many diskettes. Not only does your program library grow through time, but you need back-up copies of all your valuable programs. The result: diskettes all over the place and it becomes very easy to lose track of who's on first and what's on second. All right, let's construct a program that will help us manage our diskette library!

Where do we start? Not at the keyboard! Resist that urge to pop in the BASIC cartridge and start typing. The first step is to sit down and figure out exactly what we would like our program to accomplish.

1. We want our program to provide us with a printed alphabetical listing of every file on every disk we own. The printout should include information on the file size and diskette identity. Thus by simply looking at the listing we can tell whether we have more than one copy of any file and on what diskette the file resides. Printing the file size (number of sectors) will help distinguish files that may have the same name. While we are thinking about printing, let's be economical and print our information in three columns so we don't waste paper.

2. What about partial listings? Suppose we want to see a listing of all files that have a particular file extension such as .BAS for BASIC programs or .TXT for text files? Let's add this capability too.

3. We want to be able to obtain a printed listing of the files on any particular diskette. We can use this to help identify what is on a diskette without having to boot it up. If this printout identifies what is on a diskette, we ought to be able to keep it with the diskette. Therefore, our printed copy of the directory should be just the right size to fit on a diskette envelope.

4. We want everything to be as easy as possible. The program will present us with a list of choices. To indicate our preference, a single keystroke should be sufficient. The program should accept no inappropriate answers. To add information to our library, we simply put the relevant disk in a disk drive. The program reads the directory, allows us to make any additional modifications (delete a file, rename a file, lock or unlock a file), and optionally prints out a file directory and/or updates our file library.

5. Finally, we want our program to be flexible. Don't assume you can imagine all the bells and whistles you would like your program to have at the very outset. As you develop the program, or as you use it after it is developed, you will inevitably think of further enhancements you would like. We want to design our program structure so that changes or additions to the program are relatively easy.

The objectives outlined above are enough to get us started. You may want to add some of your own and try to make the appropriate modifications to the code as we go along.

Now that we have some idea of what we want our program to do, the second step is to give some thought to just what it will take to accomplish our objectives. We want to divide our total task into many smaller tasks each of which will make up a separate and distinct section of code that we call a subroutine.

Although our final objectives often involve sending information to the printer, to accomplish this result we will have to do much more. We need to design and build a database management system. That is, we will have to decide what specific information we are going to store and in what format? Once we settle on the format of our database, we have to build utilities to create and maintain the database. To query the database, we need utilities that will search through and extract the information we want. Of course, once we have the desired information, we need procedures to format the data and send it to the screen or printer. And, finally, we need to construct a friendly interface that provides a link between the user and the program.

Phillips. Part of this rumor is difficult to judge - the new chip. It is beyond my technical reach and those sources I have contacted.

Finally, I heard that all Atari top management will be sent to Tokyo University for a six month crash course in logistics and cost control. This I believe. Now, how do you spell that man's name M U R _ _ _ _ ?

On the local scene, several members of the Downtown Washington Users Group recently acquired the ATR-8000, myself included. (See the December issue of "Byte" magazine for an excellent techincal review). I have spoken to a few members who own the ATR-8000 and suggested forming a users group which would be affiliated with the Downtown Washington Users Group. I am willing to have the initial meetings at my home (provided the number in attendance is within reason) where the equipment will already be set up, avoiding the potential problem of getting someone to lug his equipment to another location. Those interested in such a group can contact me between 8-10 PM during the week at 301-839-7377.

Related to the formation of an ATR-8000 Users Group is the fact that I contacted the Dallas Atari Users Group concerning the 140+ public domain CP/M disks that they have in their library. I spoke to a very pleasant gentleman named Jim Chaney. He informed me that they were currently examining the disks to determine which contain CP/M programs of the greatest value for use with the ATR-8000. The Dallas ACE intends to transfer the most valued ones to 5 1/4" disks (they are currently on 8" disks). Jim indicated that he would contact me as soon as some substantial progress is made in their search. Come to think of it, we talked a few days before the Dallas game (Skins 31-10) and I wonder what the availability and/or price would now be to the Washington Users Group.

In next month's column, I will focus primarily upon someone other than Atari. Do you know someone who wants to buy a Commodore 64? Wait till you hear the hardware problems they have and Commodore's proposed marketing strategy for the future. Atari, in comparison to the large majority of computer manufacturers, is a "class act".

Finally, I would welcome any suggestions for topics to be covered in this column and corrections to topics covered in past columns.

Now that's quite a bit to accomplish. However, don't worry. We'll take things one step at a time. We'll lay out the overall framework and then add the details as we go along. If you think about the tasks we have to accomplish, you can divide them into three broad categories. The first deals with the user interface. We'll provide a title screen, initialize variables, and then present a menu of choices. Depending on the user's response, we will go off and do something and then come right back to our menu and repeat this procedure until the user decides to exit. As part of our "user interface", we will allow the user to change and save any particular working environment he likes.

The second major category deals with the disk directory. Remember, the disk directory represents the key ingredient to our entire system. We need to do three basic things with disk directories: read them, change them, and print them.

The final category deals with the disk library itself. We need to read the current library from a disk file, update the library (which, of course, requires reading a disk directory), search the library, and, finally, print out our results.

Figure 1 illustrates our starting framework. Each major function is a separate subroutine. If you type in this program and try running it, you get some feel for how the user interface is structured. Of course, none of the disk or library subroutines have been built yet. But by using this framework we can add to our program step by step and always have a working version to test.

We start off by defining words to represent subroutine addresses. This will make it easier to follow the logic of the program. Note also that we want to leave plenty of room between major subroutines.

The main program starts at line 200. It is very short. We initialize variables in INIT, display a title screen in TITLE, and then pass control to MENU. When we return from MENU, the program ends.

Only two variables are defined in INIT. More will be added as we build the program. K$ -- and K -- are used in a short subroutine called KEYBD. We call KEYBD anytime we want to retrieve the value of something typed at the keyboard. K holds the ATASCII code and K$ the character in string format of whatever key was pressed. B$ is defined simply to provide an easy method of printing out blank spaces.

The TITLE routine draws a diskette with one of the APX programs in it and the program title on the envelope. Type the data in lines 20101 to 20104 in inverse video. Use a total of 21 characters for each line (add extra spaces at end of line as needed). The data in lines 20110 and 20111 should also be in inverse video. You see in this routine our first use of KEYBD. This will keep the title on the screen until the user touches some key.

The MENU routine, the heart of our program, is quite simple. It presents a set of choices and asks for a response. We go to KEYBD for the response. If an invalid answer is given (any key other than the digits from 0 to 7), we make a disparaging sound and ask again. If the response is valid, we print it on the screen and go to the appropriate subroutine. When we return from the subroutine, we go to MENU all over again.

Next month, we will add the subroutines to deal with individual disk directories.

(see figure 1 on next page)

Figure 1
(from previous page)

```
10 REM ********************************
20 REM *     DISKETTE LIBRARIAN       *
30 REM *        BY Joe Naters         *
40 REM *     Current Notes (1984)     *
50 REM ********************************
60 REM ... SUBROUTINE ADDRESSES ...
70 TITLE=20000:INIT=19000:MENU=1000
80 DIRRD=2000:DIRUP=3000:DIRPR=4000
90 LIBRD=5000:LIBUP=6000:LIBSR=7000
100 LIBPR=8000
110 KEYBD=300
200 REM ==========================
201 REM > MAIN PROGRAM STARTS HERE <
202 REM ==========================
210 GOSUB INIT
220 GOSUB TITLE
230 GOSUB MENU
240 END
299 REM ==========================
300 REM ********************************
301 REM READ KEYBOARD
302 REM ********************************
310 OPEN #1,4,0,"K:"
315 GET #1,K:K$=CHR$(K)
320 CLOSE #1
325 RETURN
1000 REM ****************************
1001 REM PRESENT MENU
1002 REM ****************************
1010 GRAPHICS 0:POSITION 11,1
1019 REM INVERSE VIDEO ON NEXT LINE
1020 POKE 82,6
1025 ? "DISKETTE LIBRARIAN":?
1030 ? ""
1032 ? "¦ 1) READ DISK DIRECTORY   ¦"
1034 ? "¦ 2) UPDATE DISK DIRECTORY ¦"
1036 ? "¦ 3) PRINT DISK DIRECTORY  ¦"
1038 ? "¦ 4) READ LIBRARY          ¦"
1040 ? "¦ 5) UPDATE LIBRARY        ¦"
1042 ? "¦ 6) SEARCH LIBRARY        ¦"
1044 ? "¦ 7) PRINT LIBRARY         ¦"
1046 ? "¦                          ¦"
1048 ? "¦ 0) END PROGRAM           ¦"
1050 ? ""
1055 ? "ENTER CHOICE: ";
1057 POKE 82,2
1060 GOSUB KEYBD
1070 IF K$<"0" OR K$>"7" THEN SOUND
0,150,12,10:FOR I=1 TO 20:NEXT
I:SOUND 0,0,0,0:GOTO 1060
1080 ? K$
1090 IF K$="0" THEN RETURN
1100 GOSUB 1000+(K-47)
1110 GOTO MENU
2000 REM ****************************
2001 REM READ DIRECTORY
2002 REM ****************************
2010 GRAPHICS 0
2020 ? "SUBROUTINE TO READ
DIRECTORY."
2030 ? "(HIT ANY KEY TO CONTINUE)"
2040 GOSUB KEYBD
2050 RETURN
3000 REM ****************************
3001 REM UPDATE DISK DIRECTORY
3002 REM ****************************
3010 GRAPHICS 0
3020 ? "SUBROUTINE TO UPDATE
DIRECTORY."
3030 ? "(HIT ANY KEY TO CONTINUE)"
3040 GOSUB KEYBD
3050 RETURN
4000 REM ****************************
4001 REM PRINT DISKETTE DIRECTORY
4002 REM ****************************
4010 GRAPHICS 0
4020 ? "SUBROUTINE TO PRINT
DIRECTORY."
4030 ? "(HIT ANY KEY TO CONTINUE)"
4040 GOSUB KEYBD
4050 RETURN
5000 REM ****************************
5001 REM READ DISKETTE LIBRARY
5002 REM ****************************
5010 GRAPHICS 0
5020 ? "SUBROUTINE TO READ LIBRARY."
5030 ? "(HIT ANY KEY TO CONTINUE)"
5040 GOSUB KEYBD
5050 RETURN
6000 REM ****************************
6001 REM UPDATE DISKETTE LIBRARY
6002 REM ****************************
6010 GRAPHICS 0
6020 ? "SUBROUTINE TO UPDATE
LIBRARY."
6030 ? "(HIT ANY KEY TO CONTINUE)"
6040 GOSUB KEYBD
6050 RETURN
7000 REM ****************************
7001 REM SEARCH DISKETTE LIBRARY
7002 REM ****************************
7010 GRAPHICS 0
7020 ? "SUBROUTINE TO SEARCH
LIBRARY."
7030 ? "(HIT ANY KEY TO CONTINUE)"
7040 GOSUB KEYBD
7050 RETURN
8000 REM ****************************
8001 REM PRINT DISKETTE LIBRARY
8002 REM ****************************
8010 GRAPHICS 0
8020 ? "SUBROUTINE TO PRINT LIBRARY."
8030 ? "(HIT ANY KEY TO CONTINUE)"
8040 GOSUB KEYBD
8050 RETURN
19000 REM ****************************
19001 REM INITIALIZE VARIABLES
19002 REM ****************************
19010 DIM K$(1),B$(40)
19100 B$(1)=" ":B$(40)="
":B$(2)=B$(1)
19200 RETURN
20000 REM ****************************
20001 REM DISPLAY TITLE SCREEN
20002 REM ****************************
20010 GRAPHICS 0
20020 POKE 752,1:REM TURN OFF CURSOR
20030 POSITION 8,2:? CHR$(17);:FOR
I=1 TO 21:? CHR$(1B);:NEXT I:?
CHR$(5)
20040 FOR Y=3 TO 6:POSITION 8,Y:?
CHR$(124);B$(1,21);CHR$(124):NEXT Y
20050 POSITION 8,7:? CHR$(1);:FOR I=1
TO 21:? CHR$(18);:NEXT I:? CHR$(4)
20060 FOR Y=8 TO 19:POSITION 8,Y:?
CHR$(124);B$(1,21);CHR$(124):NEXT Y
20070 POSITION 8,20:? CHR$(26);:FOR
I=1 TO 21:? CHR$(18);:NEXT I:?
CHR$(3)
20080 FOR I=3 TO 6:READ B$:POSITION
9,I:? B$:NEXT I
20100 FOR I=9 TO 18 STEP 3:READ
B$:POSITION I+1,I:? B$:NEXT I
20101 DATA  apx ATARI PROGRAM
20102 DATA          EXCHANGE
20103 DATA  Basic Utilities
20104 DATA   APX-20036
20105 REM -- NAME AND AUTHOR
20110 DATA DISKETTE
20111 DATA LIBRARIAN
20112 DATA by
20113 DATA Joe Naters
20120 POSITION 9,22:? "(HIT ANY KEY
TO BEGIN)":GOSUB KEYBD
20200 RETURN
```

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