

CURRENT NOTES

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

Volume 3, Number 7
July, 1983

July Meetings Scheduled

The July meeting of Novatari will be, as per usual, on the second Sunday of the month, which in July happens to be July 10th. If earlier plans jell, we may have a bazaar (sic) display of word processors and printers for your edification. A fair affair, where you walk from one booth to the next and sample the wares (hard and soft).

DC's third-Tuesday meeting falls on July 19. Craig Smith will demonstrate the ATR8000. This is a third-party hardware product for the Atari with a variety of amazingly useful capabilities, including in particular the ability to run CP/M software, and a 48K printer buffer. If you know what that means, you know you'll want to see this device for sure. If you don't know, you know you want to find out. In either case, you have a motivation to come to the meeting.

If you need directions to the meetings, see the top of the next page.

Inside: The New Atari Product Line Reviewed

Most of you probably heard it here last, but just in case Current Notes is your only source of information about the world of personal computers, you should know that the June Consumer Electronics Show in Chicago marked a major turning point for Atari Inc. In a stunningly fast and thorough comeback from the 1200XL fiasco, Atari has introduced an entire series of new products which appear to be strongly competitive. As a gesture of friendship toward the users' groups, some of which have been vociferously critical of Atari, the corporation paid the travel expenses for ten users' group presidents from around the country to come to the CES. Several of the newsletters we get from around the country in exchange for Current Notes have carried stories about the Atari extravaganza at CES. The best that I have seen is by Rob Gordon, Executive President of the STARFLEET group of metropolitan Denver, Colorado. I am reprinting Rob's report in full as the feature article this month.

are held on the third Tuesday of every month in Room 543 of the National Science Foundation offices, 1800 G Street Northwest, Washington. 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 southwest 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.

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 U.S. 50 a little 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 one just north of the Center (that is, just before you get to it), which is connected by a walkway. The meeting room is available from 5 to 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 monthly program presentation, and any necessary business--begin about 7:00 PM, and usually last about an hour, after which there is some more free time before closing.

CURRENT NOTES is the monthly newsletter sent to members of the ATARI Club of downtown D. C. and Novatari (the Northern Virginia ATARI Users' Group). Both of these organizations are independent groups for computer users, and neither group is affiliated in any way with ATARI, Inc.

The Editor of **CURRENT NOTES** is Paul Chapin, 2159 Golf Course Dr., Reston, Va. 22091, telephone (home) 476-5950, (office) 357-7696. News items, short articles, original programs, classified ads, and any other material of interest to the membership are eagerly solicited.

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 D.C. area may subscribe to **CURRENT NOTES** for \$12.00 per year.

Advertising policy: classified ads are free to members. Commercial advertising rates are \$10.00 for a page, \$5.00 for a half page (no other fraction available). Advertising for any month's issue must reach the editor by the 20th of the preceding month. Advertising must be in the form of xerox-ready copy, on an 8 1/2 x 11 sheet for a full page or an 8 1/2 x 5 1/2 sheet for a half page. Full pages are reduced to 7 x 8 1/2, half pages to 7 x 4 1/4. Copy should be accompanied by full payment. Make check payable to Paul G. Chapin.

IT WILL BE A GREAT ATARI XMAS!

by Rob Gordon
President, STARFLEET

For many months now you have heard me complain about Atari's insensitivity to the needs of distributors, retailers, and consumers. Atari had achieved a reputation as a very unfriendly, uncooperative, arrogant, and selfish company. The introduction of the 1200XL seemed to be consistent with this foolishness -- a product that seemed to ignore entirely what the consumer really wanted and needs. It was regarded by us as a great stride sideways for the company.

This is perhaps best substantiated by something that happened to me as I was riding on the shuttle bus between McCormick Place and McCormick West at CES. I overheard a buyer of computer hardware and software for a large educational institution telling an associate what a difficult company Atari was to do business with and how she could never even consider Atari products for her employer. Many of her comments were based on ignorance (for example, she stated that she preferred Apple because Atari does not have Microsoft Basic), but that also reflects upon Atari's inability to get across what it really does offer.

It is too bad that that buyer had not visited the Atari booth at CES and had not attended the reception for customers Atari put on at the First Chicago Center on Sunday night, June 5. She would have heard Atari Chairman Ray Kassar publicly acknowledge the mistakes in consumer relations and marketing Atari has made and his determination to correct them. She would also have been introduced to a dazzling array of new products as well as a new corporate philosophy and structure that is refreshing and a cause for great cheer. ATARI IS ALIVE AND KICKING. THE NEW PRODUCT LINE INTRODUCED AT CES IS SENSATIONAL!!

It was a very exciting show, and Atari was clearly a major reason. Four new computers and a dozen new peripherals to appeal to every level of user from the rank novice to the business or professional. The computers are beautiful to look at, exceptional value for money, and very versatile. All the Atari sound and graphics capability remain intact, and the new peripherals can be used with the old 400 and 800 lines which will now be discontinued. Here is the new lineup:

All four new computers are styled along cosmetic lines similar to the 1200XL. All are based on the 6502C microprocessor supported by the special Atari integrated circuits (GTIA, POKEY, and ANTIC). All four computers have a 24K ROM operating system which includes Atari BASIC. All four are software compatible. All have a single cartridge slot, 2 joystick ports, and a serial I/O port. ALL FOUR COMPUTERS HAVE AN EXPANDER SLOT PERMITTING DIRECT PARALLEL ACCESS TO THE MICROPROCESSOR BUS!!! HALLELUJAH!!! They should have had Handel's chorus playing at the booth!!!

Atari 600XL Personal Computer

The Atari 600XL computer replaces the current 400. It comes with a 62 key full stroke keyboard similar in appearance to the current 800 model, except that the right hand SHIFT key and the inverse video key have swapped positions. The RESET, OPTION, SELECT, START, and HELP buttons are located in a strip along the right hand border of the machine. The unit is about the size of a VIC-20 and has a single cartridge slot located just above the keyboard. The 600XL has 16K internal RAM and will be introduced this summer at a retail list price of \$199.00. It represents exceptional value for the dollar. Better yet, a 48K RAM module will plug into the expander slot to bring the memory up to the full 64K supported by the 6502C. There is another connector on the back of the RAM module so that use of the memory expander does not remove access to the expander bus for other peripherals.

Atari 800XL Personal Computer

The only difference between the new 800XL and the 600XL is that the 800XL is a few inches deeper and has 64K RAM internally installed. It is estimated to be available in August, 1983. The final price has not been announced but should be about \$299.00.

Atari 1400XL Personal Computer

The 1400XL is identical in appearance to the current 1200XL. The special function keys, including the 4 programmable keys found on the 1200XL, are located in a strip above the main keyboard, and the cartridge ROM slot is on the left hand side of the machine. The big differences between the 1400XL and the 1200XL are 1) the expander bus slot in the rear, 2) a built in direct connect 300 baud modem, 3) built in telecommunications software, 4) a built in

VOTRAX speech synthesizer. The 1400XL is slated for introduction in September. The final price has not been announced, but estimates are about \$599.00.

Atari 1450XLD Personal Computer

Take an Atari 1400XL, add a thin-line Tandon double-sided, double density disk drive, and you have the new top-of-the-line Atari 1450XLD Personal Computer. This sleek beauty is almost compact enough to fit in a large brief case. There is a second slot next to the drive for a second drive. The disk drive directly accesses the processor bus, and therefore operates several times faster than other Atari drives which use the serial I/O port. The drive compartments are magnetically protected -- you can safely place a monitor on top of the computer without causing disk drive blues. Or you can use the second compartment to store diskettes. Availability is aimed for October. Price has not been set but will definitely be under \$1,000. When I suggested \$799.00, it was considered to be in the right range. Positively fantastic!

That is the lineup of new computers. With the availability of 64K internal RAM, built-in BASIC, modem and communications software, speech synthesizer, and double sided/double density disk drive, expansion bus, special function keys, and classy appearance, Atari has put together an exceptionally attractive package. But there is more ...

NEW PERIPHERALS FOR THE ATARI

The 1010 program recorder, 1025 dot matrix printer, and 1030 direct connect modem have already been announced, so I will not repeat that information here. The 1020 40 column color printer/plotter, priced at \$299.00, was up and running at CES and is a nice unit for the money (though I sure would like an 80 column version). Replacement color pen packs for the unit will cost \$3.95.

Most intriguing is the new Atari 1027 letter quality printer, which uses five small spinning type wheels to produce letter quality text, will retail for \$349.95. It will be offered as part of a bundled package known as "The Writing System" which includes an Atari 600XL, the 1027, and ATARIWRITER, at \$599.95 (worth \$648.90 if purchased separately). This is an extremely attractive package for students. The 1027 is compact and seemed to work quite well, but just how

durable it remains to be seen. The printer, which accepts roll paper or single sheets, uses an ink roller that is replaced at a cost of \$4.95. The little print wheels are not removable.

NEW GRAPHICS PERIPHERALS

Two new marvelous graphics devices were shown at CES. The light pen has been revived and the new model is a vast improvement over the one Atari showed us two years ago. It is only the size of a small ballpoint pen, and it appears that all the bugs that plagued the previous model have been eliminated. The hardware design is just about finished, but the software, which will be elegant when completed, will take a while longer. Estimated price for this item is under \$100. I had the pleasure of watching the light pen demo while chatting with Steve Ross, the Chairman of Warner Communications, which is Atari's parent company. He was just as amused and delighted with the show as I was.

Using a light pen for a long period of time can wear out your arm, and it is not a convenient device for tracing an image from paper to the screen. But now we have the new Atari Graphics Touch Tablet, another ingenious addition to the Atari line. Complete with tablet, stylus, and powerful software, this device gives you easy access to the power of Atari graphics. It will be introduced at a price of \$79.95.

ATARI GETS SERIOUS: THE CP/M OPTION

The story just keeps getting better. I really felt like a little boy let loose in Santa's workshop while roaming through the Atari booth. In a sensational move, in collaboration with Add-On Software, Inc., of Lafayette, California, Atari is introducing the Atari CP/M module. The vast library of CP/M 2.2 applications software now becomes available for your Atari. This unit, which is expected to cost under \$500, includes a Z-80 processor, 64K RAM, and an 80-column display capability. All the top selling CP/M programs such as WordStar and dBase II will be available on Atari format diskettes. The CP/M module will access the Atari through the serial I/O port. This will slow things down a bit, but makes it easy for anyone with an Atari, including current 400/800 owners, to have CP/M capability. Just fabulous! Peter Moss, a delightful man who is President of Add-On, is to be congratulated for the successful design of this product.

MORE!!!...MORE!!!...

Atari had a mockup of the expansion box planned for the expansion bus on the new XL computers. The box will include eight plug-in slots for expansion boards, two RS-232C ports, and a bidirectional parallel bus to accommodate third party software and peripherals. There is now almost no limit to third party support (and Atari support) of major enhancement of the XL systems. Additional RAM and even coprocessors can now be designed for your Atari. I had this wonderful dream last night of 16-bit coprocessors, enhanced graphics boards, and even an Apple emulation board. All of this is now quite feasible.

Atari is also introducing new joysticks (including a remote control set) and a trackball unit which can use either true trackball mode or joystick emulation. Another intriguing and innovative product is the AtariLab interface. The AtariLab interface, which is plugged into a joystick port, enables you to connect sensors, lights, and other scientific devices to the Atari computer. It will initially be offered as part of a Starter Set including the interface, a temperature sensor probe, and a temperature ROM cartridge containing programs needed to make observations and perform experiments using the temperature probe. Other modules under development include light, biofeedback, time, lie detection, and mechanics.

The AtariLab School Science Series will consist of these and other modules, and will form the basis of an integrated and comprehensive science curriculum for grades 4-12. Each module will be designed to supplement widely used science textbooks. The series has been developed in cooperation with Dickinson College. The Starter Set will be introduced at \$89.95. Other modules will cost under \$50.00.

A NEW PHILOSOPHY A NEW STRUCTURE

The new XL computers represent a departure for Atari from a marketing approach that has been severely criticized in recent months. But the new expandable, versatile XL line clearly marks a dramatic change in Atari strategy. In keeping with this new philosophy, Atari has been restructured. Gone are the old and sometimes contentious Computer Division and the Game Division. Atari will now consist of the Atari Products Company (including the full range of Atari entertainment and computer products), Atari Sales and Distribution, and Atari Manufacturing Company.

The Atari Products Company is responsible for software and hardware development. This unified division will encourage development of a comprehensive line of entertainment, educational, and applications software for all the major Atari hardware lines (the 2600 and 5200 game units and the XL computers). In addition, a new Atari section called Atari Software Publishing will produce Atari software for competing hardware lines, including Commodore, Texas Instruments, Apple, and IBM. Atari is aggressively pursuing the entire range of the electronics software entertainment market.

NEW SOFTWARE

New games are on the way with graphics and attention to detail that are unsurpassed in the industry. **DONKEY KONG** and **DIG DUG** have just been released to the stores. Atari **DONKEY KONG** is the ultimate. Take that, ColecoVision! The Atari version is the most complete reproduction of an arcade classic I have ever seen. Every nuance of the game, including an amusing cartoon in the attract mode, has been preserved. The gorilla jumps, snarls, and even falls on his head just as in the coin-op game. All four screens are included, and all the music of the original is there. It is simply superb.

DIG DUG, not quite as good a game as **DONKEY KONG**, but one my kids happen to be quite fond of, is also faithfully reproduced. It is clear that Atari has heard our wishes for complete, faithful reproductions of arcade classics and that the programming talent is there to get what we want in a 16K cartridge.

More is on the way. **POLE POSITION** was up and running. This is the best driving game yet produced, and the Atari home computer version is terrific (but I hope they put something on the road signs in the final version). **POLE POSITION** has been a great success in the arcades, and should be equally successful in the home market. It will also be produced for the 2600 and 5200 units. **KANGAROO** was shown for the 2600 and I expect it to be released for the 5200 and computer units also.

Later on watch for **BATTLEZONE**, **TEMPEST**, **DONKEY KONG JUNIOR**, **PENGUIN**, and **JOUST**. Prototypes of **BATTLEZONE** and **TEMPEST** were shown at CES and look great. Both these Atari classics use vector graphics in the arcade versions, and I was dubious that they could be implemented on

raster display, but the prototypes look very promising. Another superstar to be released this fall is MS. PACMAN. Again, it is a superb and complete implementation of the game.

One of my favorite games on the 2600 remains Activision TENNIS. But wait until you see Atari TENNIS on the 5200 and personal computers. The graphics are stunning. Atari TENNIS has an even better ball shadow than Activision. And you can play doubles! A sure winner. Atari FOOTBALL is also on the way. ROBOTRON is also under development, and will include a special joystick adaptor to permit the game to be played using two joysticks simultaneously.

SYNAPSE ANNOUNCES SYN-APPS

Of all the software I saw at the show (and I saw hundreds of game programs), only reliable Synapse Software had games of the quality shown by Atari. Atari still has the magic touch and the know-how. Synapse will be releasing some really excellent games this year. I was particularly impressed with DIMENSION X, which has a remarkable scrolling effect called Altered Perspective Scrolling. THE BLUE MAX, with 3D scrolling, looked intriguing also. Synapse has kept their standards very high and can continue to be relied upon to produce top quality software for Atari.

Synapse is preparing a comprehensive and totally intercompatible set of applications programs for Atari computers, to be called the SYN-APPS series. SYN-TEXT is the word processor in the series. It will allow the user to take maximum advantage of all the printers on the market. SYN-TEXT has split screen editing, a cut and paste buffer, file linking and merging from database and spreadsheet programs (including VISI-CALC). It is compatible with all the other programs in the SYN-APPS series as well as the Axlon 128K RAMPOWER, and 80 column boards.

SYN-FILE will upgrade and replace the successful Filemanager series. It will support up to 29,000 records on 16 disks and include alpha, numeric, calculated, date, table lookup, and conditional fields. Up to four files may be accessed simultaneously. The program will be able to merge data from other applications programs, including other SYN-APPS programs, VisiCalc, Data Perfect, and Filefax.

SYN-TREND is a comprehensive graphics and forecasting program which takes data from other SYN-APPS programs or VisiCalc and generates

hi-res color graphics from it, including line, scatter, bar, and pie charts. Graphs can be printed using Epson or NEC/C-ITOH printers. Automatic or manual axis scaling, time series analysis, moving averages, exponential smoothing, and linear regression analysis make this an exceptionally versatile program.

SYN-CALC is a powerful spreadsheet designed especially for Atari computers. It is menu driven and has advanced features like variable column widths, logic functions, and sorting. An on-board editor allows the user to edit long, complex formulae without retyping. Multiple spreadsheets can be linked for consolidation and rollups. The program is compatible with the Axlon 128K RAMPOWER and 80 column boards.

This is the most exceptional series of applications programs ever to be offered for the Atari personal computers, and the prototypes shown at CES were impressive. Given Synapse's reputation for quality, I think we can be certain that this software will live up to its promises. Also available will be SYN-STOCK (a stock charting and analysis program), SYN-COMM (a multi-buffered communications program), SYN-STAT (a tutorial and applications package for statistical analysis), SYN-TAX (a tax preparation aid), and SYN-MAIL (a mini database system).

JOYSTICKS...JOYSTICKS...

Atari has a host of new controllers for the game machines and the personal computers, including a remote control version of the original joysticks, several highly styled new sticks, a special controller for kids, and an incredible voice controller for the 2600 (more about that later).

There were many other companies displaying joysticks, but the only other one that really caught my attention is the FIRE COMMAND by GIM Electronics Corporation of Carle Place, New York. This impressive unit is made of heavy die-cast metal and uses real arcade controls. It has the genuine feel of an arcade machine unit. It is worth the \$49.95 retail price.

THE 2600 GRADUATES

Atari has not abandoned its 14 million 2600 game machine purchasers. The 2600 will be upgraded with a new keyboard unit called THE GRADUATE and a series of new peripherals, including a 300 baud modem, a 128K stringy floppy (wafer disk) storage unit, and a voice recognition unit.

THE GRADUATE simply plugs into the 2600 cartridge slot. It has 57 keys and includes 32K RAM (expandable to 64K) and Microsoft BASIC. It supports 128 colors and runs all the traditional VCS software. It will interface with standard audio cassette tape units or the specially designed wafer disk unit which can load a full 32K program in about 12 seconds. A new series of enhanced educational and game programs are being developed to support the upgraded 2600.

One of the most remarkable new devices for the 2600 is the voice recognition unit which Atari demonstrated at CES. This unit permits the user to interact with the games by voice command. While playing baseball, you can throw to third base by simply saying "third base" (if you are French you could just as well say "Trois!"). While playing STAR RAIDERS you can get your shields up by saying "shields!" It is a fabulous enhancement. Atari would not say if the unit will also be adapted to the 5200 and personal computer series, but given the likelihood of a strong demand for such a product, I think that we will see such a development.

USER GROUP PRESIDENTS MEET AT CES

Atari Sales Vice President Keith Schaefer extended invitations to 10 Atari User Group presidents to visit CES. It was a unique chance for all of us to get to know each other and establish better contacts at a national level. The User Group presidents represented an interesting spectrum of society (a petroleum geologist, a Bell Lab scientist, and of course a Denver vascular surgeon). This was an impressive assembly.

FINAL REFLECTIONS

Summer CES 1983 is a landmark in the history of Atari. The company has turned a crucial corner and has taken the advice of its constituency seriously. The new product line should be greeted with great enthusiasm by Atari users all across the country. Atari still has to solve some problems with its past marketing strategy and must still resolve the problem of how to address both the mass merchandise market and the computer specialty market. The 600XL and 800XL computers are competitive products in the mass merchandise market, but the 1400XL and the 1450XLD machines are appropriate for the computer specialty store. Perhaps this is part of the solution. I think it is important that Atari remain a viable product in the computer specialty store.

This is the first time that Atari has officially recognized an important segment of the user groups and invited, at company expense, our participation in a major corporate event. Let us hope that this means that Atari now regards User Groups as an asset rather than as an adversary. No other commercial product available to the general public, except perhaps a college degree, requires the kind of continuing educational and product support a personal computer does. The user group is a new phenomenon in American business -- a unique byproduct of a revolution in technology. I suppose we must be tolerant of the fact that it is not easy for a new business to accommodate such an unusual phenomenon as user groups, but this may herald the beginning of a new relationship between business and consumer.

The user groups can provide the manufacturer with several important benefits. First, we can tell Atari what we think of their products and provide the company with an assessment of what we feel genuine future needs are. Secondly, we can and are providing the education support that successful marketing of a personal computer requires and that few retail outlets can provide. Thirdly, we are an excellent source of advertising for the company since we are a public presence in the community and are able to attract considerable attention through meetings and promotional events.

I want to take this opportunity to publicly thank Atari President John Cavalier and Vice President for Sales Keith Schaefer for having us at CES. It was indeed a most exciting event. The new products, of course, are great, and we are ecstatic about them. But equally important, we appreciate the recognition that Atari has extended to all of us and hope that our relationships with the company will grow and be of continuing mutual benefit.

I am not certain what Atari plans to do about the OS problems that made the 1200XL incompatible with a vast number of third party (and even some Atari) programs for the 400/800. The company has stated that it warned third party vendors not to violate certain OS vectors, but Atari has also been slow to inform third party vendors about impending changes in the OS. Apple, on the other hand, worked for months with third party houses to ensure that software for the Apple II would be available for its Apple IIc. It will be unfortunate if the entire XL series cannot run well established software for the 400/800 series.

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A PRINT USING SUBROUTINE

By Bob Noblitt
HOUSTON A.C.E. (JUNE '83)

One of the uses I have found for my Atari is the production of some statistical reports for my employer. These reports include columns of numbers which should be aligned and formatted for easy readability. Unfortunately, Atari Basic lacks a print using feature which would allow this.

I have seen magazine articles with routines for formatted output, but none with all the features that I needed: two decimal places, commas, and dollar signs. So I wrote the routine which is demonstrated in the program listed below. If you need print using for an application of your own, try this routine and modify it to suit your own needs.

```
10 REM DEMO OF METHOD TO PRINT RIGHT-JUSTIFIED COLUMNS TO SCREEN OR PRINTER WITH
 2 DECIMAL PLACES, COMMAS, & DOLLAR SIGN
20 REM BY BOB NOBLITT
30 DIM N$(14),T$(14)
40 OPEN #1,B,O,"S:"
50 ? "PRINT TO SCREEN (1), OR PRINTER (2)";:INPUT J
60 IF J=1 THEN POKE 752,1
70 IF J=2 THEN OPEN #2,B,O,"P:"
80 ? "ENTER A NUMBER"
90 INPUT T: ? #J,, :GOSUB 130: ? #J
100 GOTO 90
110 REM SUBROUTINE TO ROUND TO 2 DECIMAL PLACES, ADD COMMAS, DOLLAR SIGN AND
    PRINT.
120 REM FOR NUMBERS WITHIN RANGE SPECIFIED IN LINE 150.
130 N$="" .00":REM 1st 11 SPACES IN STRING MUST BE BLANK
140 T=INT(T*100+0.5)/100:REM ROUNDS TO 2 DECIMAL PLACES
150 IF T>9999999.99 OR T<-9999999.99 THEN ? : ? "NUMBER OUT OF RANGE":RETURN
160 T$=STR$(T)
170 L=LEN(T$):IF L<4 THEN 190
180 IF T$(L-2,L-2)="." THEN N$(15-L,14)=T$:GOTO 220:REM IF 2 DECIMAL PLACES
190 IF L<3 THEN 210
200 IF T$(L-1,L-1)="." THEN N$(14-L,13)=T$:GOTO 220:REM IF 1 DECIMAL PLACE
210 N$(12-L,11)=T$:REM IF NO DECIMAL PLACE
220 IF T>999.99 OR T<-999.99 THEN N$(2,7)=N$(3,8):N$(8,8)=",":REM INSERTS COMMA
230 IF T>999999.99 OR T<-999999.99 THEN N$(2,3)=N$(3,4):N$(4,4)=", "
240 FOR D=2 TO 11:IF N$(D,D)<>" " THEN N$(D-1,D-1)="$":GOTO 260:REM INSERTS "$"
250 NEXT D
260 ? #J;N$,:RETURN
```

EXAMPLE OF OUTPUT:

```
$1,234,567.89
$123,456.78
$12,345.67
$1,234.56
$123.45
$12.34
$1.23
$.12
$0.00
$-123,456.78
```

Dear Paul,

If you have room in the newsletter, I would appreciate your including the following:

(for sale)

PAINT-graphics utility. \$25

Datasoft BASIC COMPILER-compiles Basic programs into machine code. \$50

(original disks-not copies)

Tim Kilby (703) 987-8054 or at meeting.

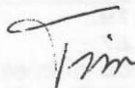
At our next meeting I shall introduce the following resolution/article. It would help if it were published in advance so members can see and think about it.

Novatari recognizes and supports copyrights and other rights to computer programs and documentation by their authors and/or publishers. No club member shall knowingly violate those rights, federal or state laws by copying, trading, selling, or disseminating unauthorized computer programs at any club meeting or function. Further, club program libraries shall contain only public domain programs and programs approved for dissemination by their publishers.

Novatari shall publish this policy regularly for all club members, guests, and other interested persons.

The wording isn't as important as the message we give to potential pirates that stealing is harmful and wrong. I hope this proposal will stimulate discussion at the next meeting and will be adopted in one form or another.

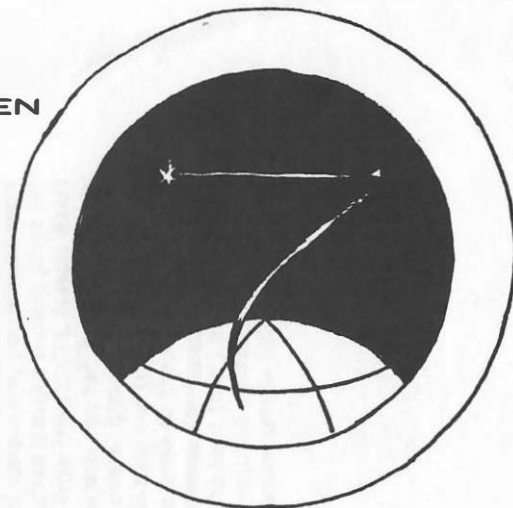
Sincerely,



THE SAGA OF PLANDEFRON SEVEN THE FOX FIGHTS ALONE

Planetary Defense Squadron Seven had just proven itself as a fighting unit. Only two days before they had driven off an attack upon Collins Base and its vital stores, but at a terrible cost. Now with only one of the eight ships... Foxtrot, "the Fox" ...able to fight, the entire system lay in grave peril...

for the sentinel posts had just reported an incoming craft, its zigzag maneuvers a certain prelude to attack. Then the outposts fell silent.



SEVEN FOX is a game for one to five players of varying skill levels who each take a separate action station as the crew of the FOX in its desperate bid to intercept this attacker bent on destroying an entire planet. The game requires an ATARI* computer with at least 16K of memory, (24K with 810 Disk) a model 410 Program Recorder, a BASIC language cartridge, a pair of knob ("paddle") controllers, and a pair of joysticks.

Special AUDIO TRACK FEATURES: a "radio play" to provide background, and an audio-visual "briefing" for beginners, are available on the cassette version.

Cassette Retail	\$19.00 each
5 1/4 inch Floppy Disk (no briefing)	\$24.00 each

Find me at meetings, leave an ARKUDIC note for #230 (WANT-ADS), or write:

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