

# CURSOR™

THE-TINY MICRO COMPUTER NEWS SERVICE

VOLUME I \$2.00 per Issue

SPECIAL ISSUE

\$9.50 Semi-Annually ISSUE 3S

## INTRODUCTION

Want to become a happy (ex-frustrated) "Arcade" user and have many hours of rewarding programming from your Bally? The "CURSOR" is a professional quality monthly newsletter containing a minimum of four major programs in every issue. Our programs use the most innovative techniques and sophisticated instruction sets that you were never informed of by the manufacturer. Our games are quite complex compared to what the manual covers, i.e., Othello, Wumpus, Checkers, Tiny Trek, etc., with most of them using at least four colors on screen at the same time. Our application programs have included such things as an "Electric Bill Analyzer" that computes using a decimal format with "16 Digit" accuracy. That's right, decimal with 16 digits 00000000.00000000!!!

Another program printed that is vital for beginning Machine Language programming, "Hexidecimal to Decimal Converter", converts 4 Hex numbers at a time into the decimal number format the "Arcade" uses. Every issue contains machine language programs and tutorials (incl. memory maps) using on-board ROM Subroutines. All of our programs are "proof-read", guaranteed glitch free, and come with complete documentation.

## AN EXAMPLE

```
10 CLEAR
15 PRINT " LETTER SIZE ?";INPUT "INPUT 2,4
   OR 8"L
20 IF L=2L=27672;GOTO 50
25 IF L=4L=-26600;GOTO 50
```

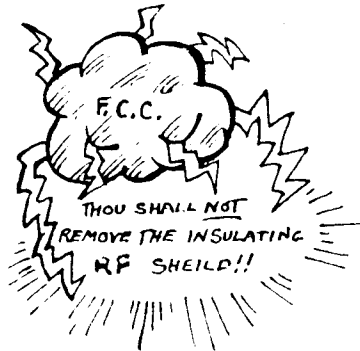
```
30 IF L=8L=-10216;GOTO 50
40 GOTO 15
50 CLEAR ;M=20180;N=M;G=125
65 P=-43;GOSUB G
70 P=53;GOSUB G
75 P=L;GOSUB G
80 P=20190;GOSUB G
85 P=-13871;GOSUB G
90 M=20190
```

```
95 C=KP;TV=C
100 IF C=13GOTO 110
105 %(M)=C;M=M+1;GOTO 95
110 %(M)=0
115 CLEAR
120 CALL (N);C=KP;GOTO 10
125 %(M)=P;M=M+2;RETURN
```

This program will print out whatever characters you input in a size factor multiplied by the size that you input (it does not work with comm- and words). This program uses an on-board sub-routine in ROM. If you wish to know more about it, complete information is printed in our issues.

## SALES PITCH

In our first issue (January, 1980) we printed complete instructions on how-to add a full sized ASCII Keyboard. This information included: Truth Tables, Schematics, parts list w/price, along with the name and address of parts suppliers. The February issue included complete instruction on adding a printer and schematic (drill one hole and solder two wires). In our March issue we feature a telephone modem for less than \$35.00. And this is only the beginning!!!!



## SEBREE'S COMPUTING

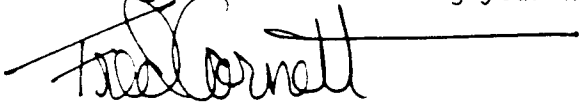
Sebree's & CURSOR enjoy a close technical and business relationship. We have, together, formulated and fabricated a number of ideas which are now reaching production stages, i.e., Light Pen, Appliance Controller, etc. With the production of these devices, a great demand will develop for applications software to support these products. Sebree's has in the past, amply supported the "Arcade" with a complete line of top quality game software and assorted tutorials. With the advent of "new" hardware, Sebree's and CURSOR have dedicated themselves to producing a complete line of "public domain" and commercial support software for these devices.

If, after reading this small brochure, you still have questions remaining unanswered, please feel free to call CURSOR at any time, we will be most happy to help you.

We have learned in the last several months how to add memory, build an EPROM burner, wire up a light-pen, add a piano keyboard, add an S-100 buss, and much much more. In the software area; we print information on how to write programs containing up to 400 3-part-harmony chords, put up an almost unlimited amount of colors at the same time, etc. We have learned how to condense programs that require as much as 24K on other systems into our "tiny" memory. We "SHARE ALL" this information with our subscribers. the work "share" implies a two way transaction. We strongly desire the chance to print your program, thought or scheme; please send it to us.

In addition to sharing, we also provide guaranteed, well engineered products and software for those who lack the expertise or the time to make their own using the instructions we print. The price is purposely kept very low; after all, we are "users" too, and we want you to get the same enjoyment out of your "Bally" as we do ours. All we ask, is for you to think thrice about buying that inferior "Apple II", subscribe to our newsletter and spend the next several years in complete enjoyment. Our subscription rate is only \$9.50 for six months ( 6 issues), back issues are available at \$1.60 each. When you subscribe, you will automatically receive the current months' issue.

Looking forward to serving your needs,



FRED CORNETT  
Managing Editor

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BALLY ARCADE  
ATARI 800  
AFF IMAGINATION MACHINE

SEBREE'S COMPUTING

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TIM HAYS : CONSULTANT

\*\*\*\*\*Bally Basic game programs. All games come with listings & full documentation!

- Photos 1&2; UFO BATTLE- 1 or 2 players. On screen instructions. This game has very dramatic explosions, utilising color, graphics, & sound. The UFO is a different shape every time you destroy one, but it isn't that easy, because at the same time he is trying to shoot you down. A good game for competing against points. Fast running. Memory left- SZ=3 Bytes \$3.95
- Photo 3; SUBMARINE MINEFIELD- 1 or 2 players. On screen instructions. Carefully navigate your sub around a very dense minefield while watching out for the 3 homing depthcharges. One false move and you've had it! It takes a patient mind to get all the way through it so concentration is required. Good sound effects & graphics. Memory left- SZ=2 \$3.95
- Photos 4,5,6; DOWN THE TRENCH- 1 player. 6 levels of difficulty. This program has very many branches so that many things can happen. It may take you an hour to finally succeed in destroying the DEATH STAR and move to a higher level of difficulty. After you evade the enemish laser shots, you engage your flight computer and wait to fire as a 3-dimensional representation of your target moves up on you. But that isn't all!!! Spectacular explosions & graphic movement with it's unbeatable documentation make this a unique simulation/game. Memory left- SZ=2 \$5.50
- Photos 7,8; HIT THE PEDESTRIAN!- 1 player. On screen instructions. This program consists mainly of high resolution, fast executing graphics. As your car speeds down a road, a pedestrian pops up in the distance and grows closer to you. You steer carefully and run him over for points! But if you aren't careful you might crash into a tree (should have hit your brake sooner!). Good sound and fast graphics with excellent control, fun!! Memory left- SZ=2 \$3.95
- Photo 9; MUNCH!- 1 player. On screen instructions. You are eating a cookie & gaining points with every bite, but there is a poison raisin randomly placed in it. If you win, the computer shows you where the raisin was. Good sound effects and color changes along with suspense. Bytes of memory left- SZ=523. \$2.95
- Photo 16; MATH ROUTINES- Accurately calculate these routines: Sine, Cosine, Arctangent, & Square Root. These calculations are needed in computing coordinates for 3-dimensional programs! The accuracy is much more than enough, accurate to .01 degrees, usually much better. The Square Root has TWO versions, one fast and the other slow but more accurate depending on what you need. The other 3 routines are so efficient they take one-fifth of a second. Routines are formed for use in subroutines. Memory left- SZ=601. Listing of each routine and instructions supplied. \$2.50
- Photos 10-15 \*\*SUPER WUMPUS\*\* - 1 player. 2 programs. These programs come on their own cassette. One side with instructions & game, other side with game only. (for convenience in loading once you learn the instructions) The wumpus is the creature you seek, he lives in a maze of caves full of disasters waiting for your encounter. It is a type of adventure but with the added excitement of realistic sound effects. This game is unique because it doesn't use the RND feature too much as to ruin the game; it takes strategy and a firm concentration!! It never gets boring because it gets different every time you play it, with many branches and subroutines. Excellent sound effects and problems that pop up when you least expect them make this a very exciting simulation/game. Memory left- SZ=3 \$7.95 Complete!

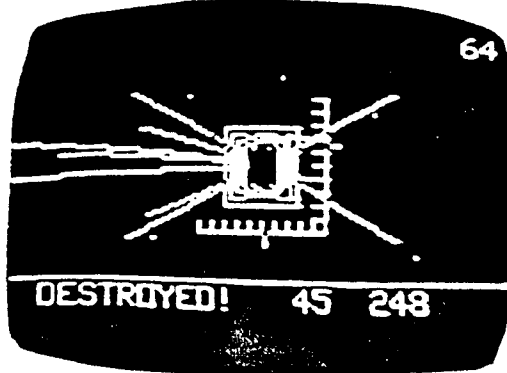
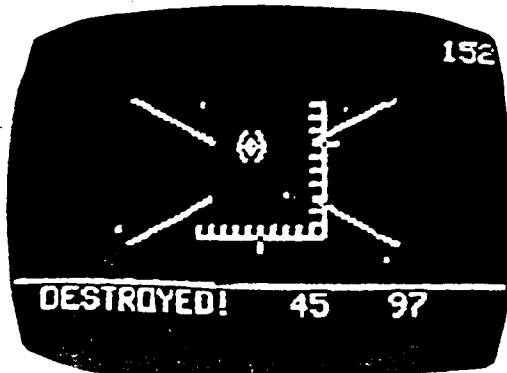
NEW PROGRAM!...

Code: BASIC/MACHINE LANGUAGE

Photos Bottom  
This Page

STAR FIRE!-- 1 player. This program is the most unique of them all. It uses a user-defined subroutine in MACHINE LANGUAGE to generate the super fast-acting characters which appear on the screen for you to shoot down or be shot down by!! The game consists of 3 characters which appear in random locations and continually travel in a chosen direction, an enemy fighter, enemy refueling station, and a meteor/planet. The characters change in size (up to 4X) according to the distance you are from them. You move your hand-controller in the direction you would if you were in a plane, line him up on the gunsight and fire at him while you're lining him up. You can actually fire on him at the same time he is firing on you, both shots take a few seconds to reach their destination. The background stars MOVE in relation with your ship. Background color changes with the point values. The faster you hit him the more points you get. The graphics are spectacular. There are 2 explosion subroutines (visual & sound). The Machine Language program uses the input buffer for storage, but is in the back end of the buffer so you can still use the keypad. Listings of both the Basic & Machine language are given, along with 2 pages of program description, variable index & other specs. This is a multi-processing program & should have great educational value in the 13 subroutines alone. The programs use ALL free memory for Basic storage and most of the buffer, & all of the scratchpad. This may be your most often played game, you can study it for hours. It took 4 MONTHS to develop, so you can be sure that the techniques are far advanced and everything runs glitch-free. Those who want to know how to do copy-protection, this program has it! ONLY- \$6.50

STAR FIRE ASSEMBLER- The program that wrote the machine language program is available for- \$2.50



BALLY

# SEBREE'S COMPUTING

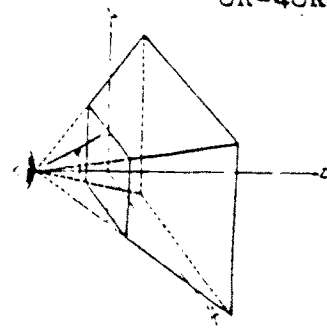
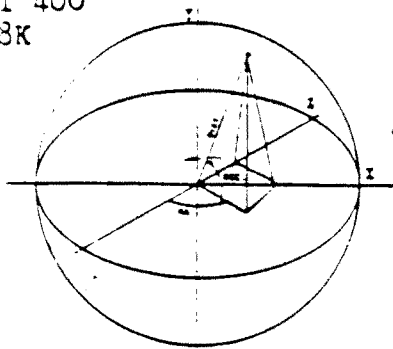
ATARI 800  
ATARI 400  
8K-48K

## PRESENTS 3-DIMENSIONAL COMPUTER GRAPHICS

ATARI 800  
ATARI 400  
8K-48K

◆◆◆ATARI 400/800◆◆◆

© 1980 Sebree's Computing-ATARI 800

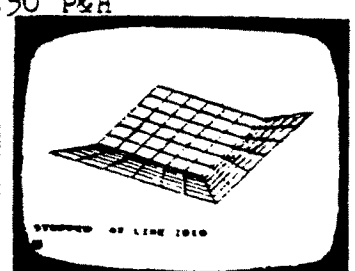
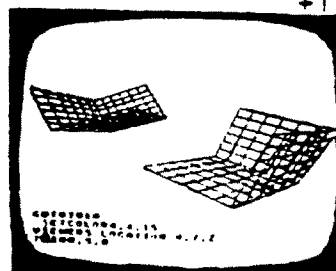
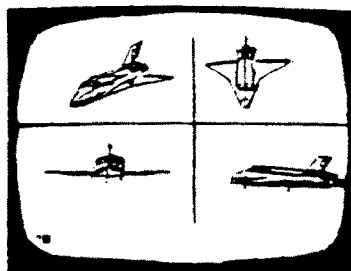
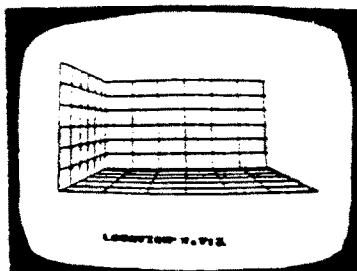


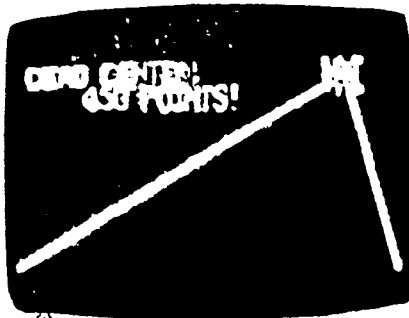
### 3-DIMENSIONAL COMPUTER GRAPHICS PACKAGE FOR ATARI COMPUTER SYSTEMS

NEW- MARCH 1980

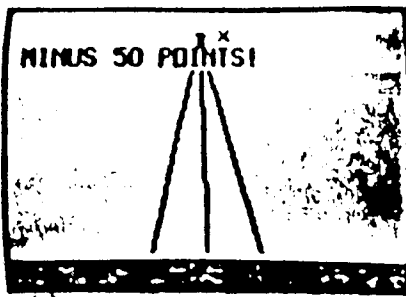
SEBREE'S COMPUTING is proud to announce a 3-Dimensional computer graphics package which will run on any BASIC ATARI computer system. There are FOUR programs on the cassette in which listings ARE given! This set of programs is complete, no matter how much memory you have, there is a minimum requirement of 16K for HIGH RES (360x192) but if you only have 8K you still get 160x80 resolution in multiple colors! If you have 24K or more, you're in great shape because the last program needs 24K or more to run in HIGH RES, it includes the data bases you see in the photos below. The software has been engineered so any person can quickly learn how to put in his own data and quickly display it from any angle he wishes to view it from. The processing speed is very fast compared to other HIGH-PRECISION 3-D algorithms. A data base with 237 XYZ points will execute in 21.5 seconds! Software selectable screen resolution, multiple colors, object erase and replacement, field of view (telephoto or wide-angle), along with the required 3-D operations: BANK (rotation), HEADING, and PITCH, viewers location X,Y,&Z. This package is guaranteed to be bug-free because a lot of time and effort went into making the floating point high precision 3D to 2D transformation generator as fast as possible, while condensed to use as little memory as possible. Line clipping and pushing are performed. A line which intersects the screen, but the 2 points lie off the screen, will be 'pushed' and 'clipped' until it lies fully on the screen. This set of programs has thousands of applications!!! It may very well become the most powerful and most often used piece of software you own. Completely documented!!!

ONLY- \$29.95  
+1.50 P&H

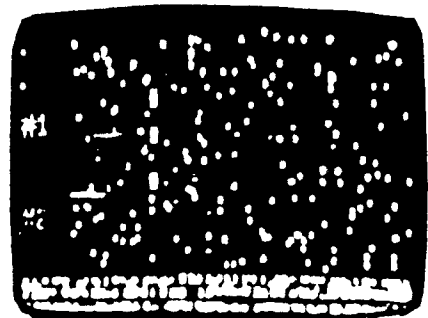




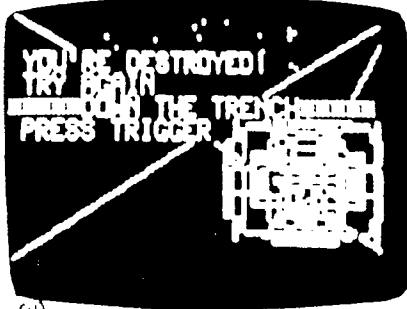
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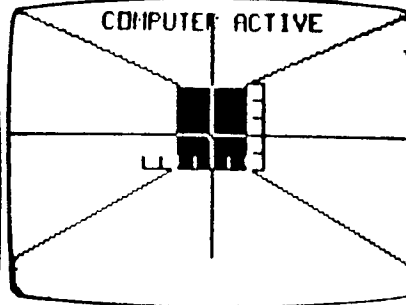
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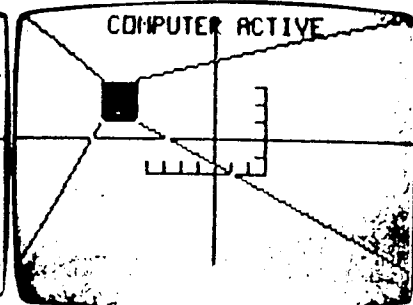
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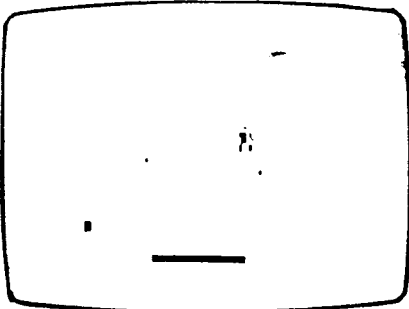
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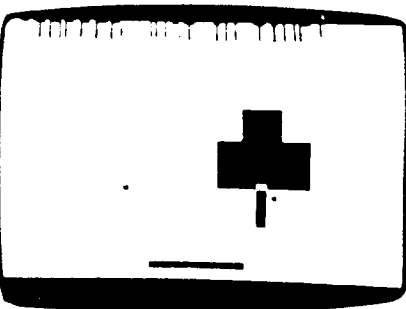
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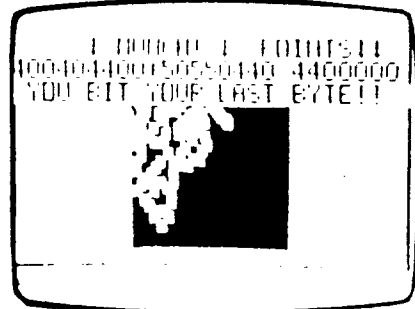
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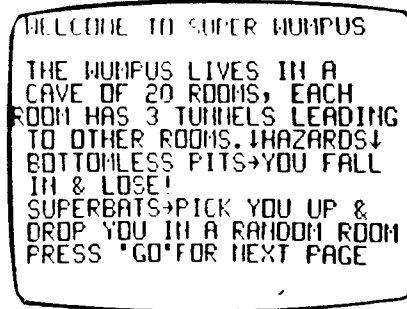
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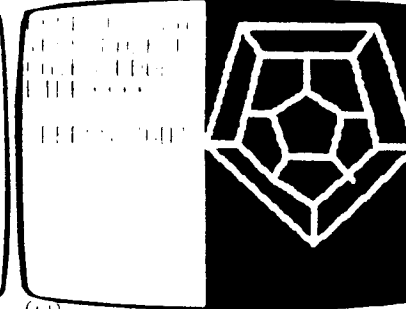
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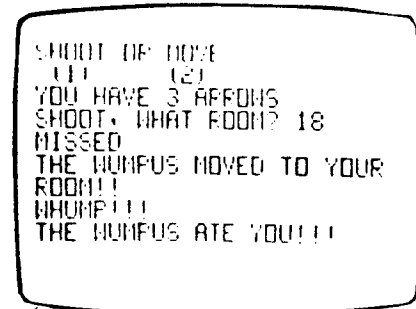
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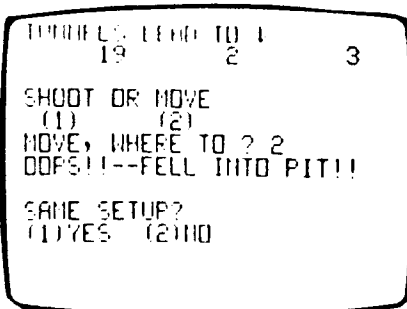
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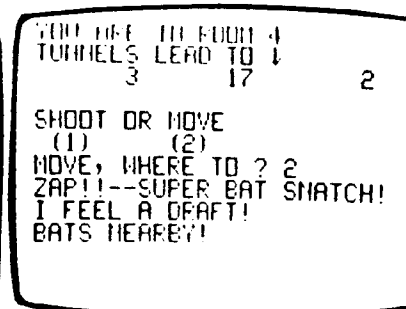
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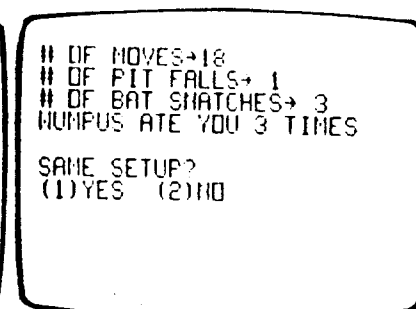
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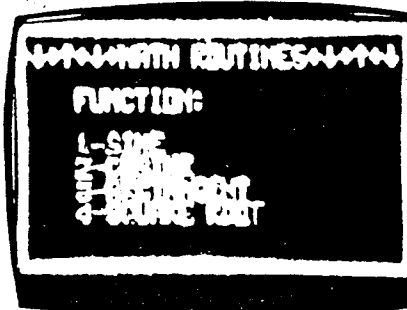
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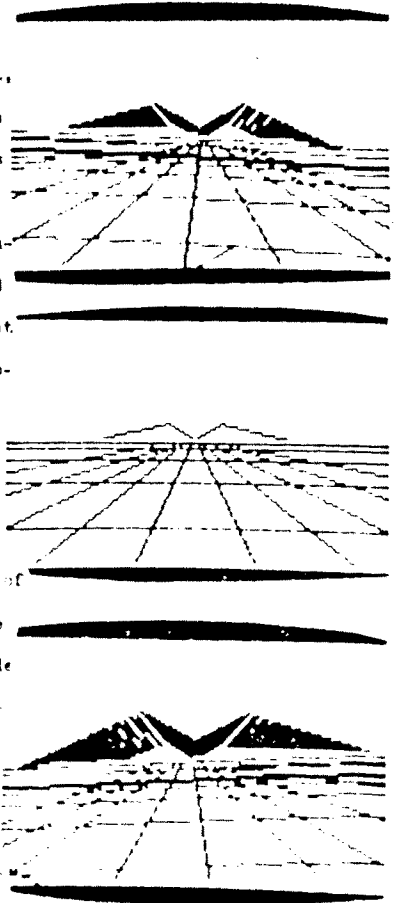
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ORDERING INFORMATION

Postage and handling is .75¢ per cassette or game cartridge. Just add-up the indicated program price(s) and add .75¢ per cassette needed. COD orders are accepted, although Money Orders get top priority. Programs can be ordered separately with 1 to 6 programs per cassette (3 both sides=6). \*SUPER WUMFUS\* is the exception, it takes up one cassette, if you order it and something else, you need to pay for at least 2 cassettes postage. The XY TUTORIAL also takes up one cassette. Common ordering configurations are as follows:

- (1) UFO BATTLE
- DOWN THE TRENCH
- OR.... HIT THE PEDESTRIAN!
- (2) HIT THE PEDESTRIAN!
- SUBMARINE MINEFIELD
- MUNCH! & MATH ROUTINES (optional)
- (2) SUBMARINE MINEFIELD
- MUNCH! & MATH ROUTINES (optional)
- (3) \*SUPER WUMFUS\* Game package
- (4) XY TUTORIAL PACKAGE

All of the photos below were taken using the graphic generator programs available in this package. There is a special command available in the Bally Basic that few people know about, or if they know about it, there is no documentation on how to use it. That is the intention of this tutorial, to supply a very thorough amount of documentation. The special command is "XY". You may have heard of it and thought it was useless, but it is highly useful in the area of high-speed graphics. It requires much less memory than the standard way of positioning lines across the screen. This package demonstrates in many ways the techniques involved for setting the XY coordinates through programs and user experimentation. It points out that by using the XY command correctly, you may save as much as 66% of your memory, and your program will run at least twice as fast! It explains different ways of converting cartesian coordinates to XY values ( including a program ) and XY values back to cartesian. It shows how you can draw from below the bottom of the screen ( photo, bottom-center ). There are 61A programs in this package, and 12 pages of all new material! The very last program is a 3-dimensional simulation program worth the price alone. This program simulates the feeling of being in an airplane, flying above the earth as the surface-plane moves towards you and the mountains in the distance get larger as you move towards them. As you move the joystick side to side, the horizon and the mountains move in the opposite direction, keeping in full proportion to one another. It does all this and still has 1K of memory left! Not all programs are for everybody, but this set is, I urge everyone who is a serious programmer to try the tutorial and the indicated uses of the command. Dealers can use 3 of the programs just to demonstrate the graphic and color abilities of the Bally. Graphic experiments, Cartesian to



XY conversions, video art, charts, listings of all programs, 3-Dimensional simulation, and more! All for only \$1.95 (plus .75% P&H). Sebree's Computing, 456 Granite, Monrovia, CA, 91016.

