

PRESIDENTS MESSAGE

We have edited and revised our Owner Written and Translated Software Catalog. In doing so we have improved some descriptions and corrected typographical errors. This catalog listing also includes considerably expanded offerings from our huge library of software currently numbering well over one thousand programs! Additionally, we have deleted nearly thirty programs that were either too repetitive, lacking in quality or containing bugs. We will continue this policy of deleting a small portion of unsatisfactory programs and dramatically expanding our catalog offerings in the future.

You will notice that the catalog format has been changed. A legend and abbreviations have been implemented to better indicate information that may be necessary for the proper operation of the programs. This information is presented on the back of the new catalog cover. Additionally, you will find an information page which contains instructions for cassette and diskette software loading and other pertinent information. Please read the back of the catalog cover and the information page very carefully and refer to them as often as necessary. Our new literature also includes a new order form which was designed for maximum efficiency. When filling out the order form, please PRINT NEATLY and do not write in the gray column. We suggest that you double check what you print in the PROGRAM NUMBER column.

I would like to take a moment to apologize for the delays that a few members experienced on their orders. Apparently, a former employee misplaced a small batch of orders. However, the error was caught and operations have been improved so that delays should not occur in the future. We will maintain the policy, if at all possible, to ship orders within one week of receipt [not including the time constraints presented by the Postal Service.]

GOODBYE 99/2

What has happened in the home computer market can be directly attributed to Texas Instruments. Since 1981 when T.I. had under 5% of the market they introduced a learning curve approach to sales. In short that means the price of a computer is geared to the production price and then reduced in relationship to sales and future production costs. This is clearly illustrated in the chronology of pricing for the 99/4A - from over \$800 in 1980 to under \$100 in 1983. Today T.I. has increased its percentage of the home computer market by over 17% thus counting for over 22% of the entire market.

Texas Instruments main competitors have been forced to follow suit or perish. As a side effect of this competition, some products become obsolete before they reach the dealer's shelves. For example, T.I. unveiled its model 99/2 in January of 1983 with the suggested retail price of \$99.00 [incidentally, Byte Magazine in the May 1983 issue speaks highly of the 99/2 and literally labels it as the first 16 bit computer to retail for under \$100.] Subsequently, the 99/4A, a vastly superior 16 bit home computer now retails for less than \$100. The 99/2 got caught in the price squeeze. Even though T.I. is continuing with scheduled test marketing, rumor has it the 99/2 will quietly fade away.

DISKETTE INFORMATION

In previous newsletters we wrote about cassettes and cassette loading. Thus we thought in this newsletter we would pass on some information and experiences regarding flexible diskettes.

MANUFACTURING

Manufacturers have come a long way in building in lubrications, and variations in jacket material to allow for more expansion from heat. The better quality of the disk, the better performance and life. We have found Elephant Memory Systems diskettes to be an excellent product. We have seldomly experienced problems using them. They are heavy-duty hub ring diskettes certified 100% error free, meeting or surpassing ANSI and industry standards. We recommend their use.

STORAGE AND PACKAGING

The proper storage and packaging of diskettes is an important care and maintenance facet that the user can control. We recommend hard plastic library boxes for storage. The rigid quality of the box will protect the soft diskettes inside.

DISKETTE ENEMIES

Diskettes are sensitive to bending or folding. Their natural enemies include dust, smoke, dirt, static electricity or the users finger prints. The most carefully manufactured diskette only remains good until someone sets a coffee cup or soda glass on the diskette, or cigarette ashes or snack particles fall on the exposed surface of the disk. Remember, the diskette can take only so much abuse before it proves worthless - the loss of your recorded data.

DISK DRIVES

The rewrite head (recording head) that is used by your disk drive is in contact with the surface of the diskette. Friction is created, wear results, and contaminates accrue on the rewrite head. If left unattended the diskette will lose its capability to record information. In order to combat this we suggest that you use dust covers and utilize diskette cleaners. Diskette cleaners resemble diskettes and will give the rewrite head a gentle cleaning. A few minutes in preventive maintenance will help prevent a more serious problem later on.

DISKETTE DO AND DON'TS

- 1) Do not fold or bend diskettes.
- 2) Do not touch exposed areas of diskettes.
- 3) Keep diskettes away from magnetic fields and sources of static.
- 4) Insert diskettes carefully into the disk drive.
- 5) Always return diskettes to their envelopes after use.
- 6) Store diskettes in a hard library storage box.

IMPORTANT NOTICE

The complete range of policies for The 99/4A Program Exchange, Inc. has been addressed by the new literature [i.e., the catalog cover, the catalog information page, the software catalog which is expanded by over a hundred programs, the order form and this newsletter.] Any policies of The 99/4A Program Exchange, Inc. that have not been addressed by the above new literature is no longer in effect. Please discard all previous literature.

ECONOMICAL EIGHTS

By popular demand, The 99/4A Program Exchange is reintroducing Economical Eight packages for its members. Economical Eights are a package of eight quality programs for the incredibly low cost of only \$12.00 per package! That's right, you pay only \$1.50 per program! We have introduced Economical Eight packages to further bring the realm of software to 99/4A owners at the lowest possible cost. That is why we are the lowest cost software organization for the TI 99/4A in the world. Please read the following guidelines very carefully.

1) The purchase of an Economical Eight package must be accompanied by a software purchase of at least \$10.00. Economical Eight packages cannot be ordered alone.

2) Only one Economical Eight package per order is allowed.

3) No substitute programs will be accepted. The eight programs for each package are listed below - no exceptions. No previous Economical Eight package [prior to P006] will be accepted.

P006 GAMES IV (T.I. BASIC)

- | | |
|------------------------|----------------------------|
| 1. DARTS (1284) | 2. ROAD MAZE (1261) |
| 3. MINER II (1235) | 4. FRENCH TENNIS (1176) |
| 5. DER AUTOBAHN (1147) | 6. PUZZLE 15 (1127) |
| 7. MOTOCROSS (1005) | 8. RESCUE CHALLENGE (1219) |

P007 GAMES V (EXTENDED BASIC)

- | | |
|-------------------------|---------------------------|
| 1. P.O.W. RESCUE (1287) | 2. FROGMAN (1272) |
| 3. AVOID (1268) | 4. SCIOTO DOWNS (1231) |
| 5. SPACE GUARD (1220) | 6. WARFISH (1143) |
| 7. SURVIVAL | 8. MOTORCYCLE JUMP (1264) |

If you wish to order one of these fine packages, specify the package number and the package name on the order form. Remember, an Economical Eight package cannot be ordered alone. Thus, the minimum remittance on an order that includes an Economical Eight package will be \$22.00. We are sure that you will enjoy these packages!

PROGRAM SPOTLIGHT ALIEN FORTRESS - T.I. BASIC

Written in T.I. BASIC, Alien Fortress offers exceptional speed, especially for a program that was written in T.I. BASIC. The philosophy of this game is not to defend your spacecraft from hordes of oncoming alien ships, but instead to go to the source of the aliens in order to do away with them once and for all. The scenario of this game is the huge Alien Fortress where you must destroy the aliens as they emerge. As you move down level by level to the foundation of the fortress, you are given less reaction time to respond with your high powered laser turret. The only way to survive is to destroy all twenty-one of the emerging aliens with thirty lasers blast. It's not as easy as it sounds!

The graphics display is good and the animation [moving aliens and laser] is exceptionally quick. This program, like so many others in the catalog, offer a wealth of programming techniques and tricks. Although Alien Fortress is easy to understand, it is a challenge to win! To order, specify: 1280 ALIEN FORTRESS

WELCOME!

We would like to give a big welcome to our newest foreign members from Austria, Belgium, France, Sweden, West Germany and the West Indies!

MORE ON PLOTTING

The 99/4A Program Exchange has received quite a few inquiries regarding the high resolution and medium resolution plotting subroutines contained within our catalog and briefly mentioned in previous newsletters. Apparently, users are mistaking these routines as stand alone programs. Quite to the contrary, these subroutines were designed for programmers to be used along with other programs that require access to independent point plotting.

Many of the inquiries have been from members wanting to know the theory of operation of these routines. In response to these inquiries we have compiled a program code explanation which is noted below:

Medium resolution plotting uses a method for plotting that is similar to the graphics capabilities of the TRS-80 personal computer line [excluding the TRS-80 Color Computer.] This method requires a built in character set and the ability to scan a position on the screen. T.I. BASIC compensates for these items with CALL CHAR and CALL GCHAR. The program consists of two parts - the initialization routine which is only accessed once and the actual routine for displaying a new character. The following is a line by line description of 6028. In our next newsletter, we will explain the much more complex High Resolution Plotting (6028).

1: This is 'outside' of the routine. It shows how the first use of CALL MPLOT initializes the routine for access with parameter one representing the color of the pixels and parameter two representing the screen color. Any further access to CALL MPLOT 'outside' of the routine will plot a point on the screen dimensions of 48 x 64 independent blocks [DO NOT GO OUT OF RANGE - 0 TO 47 for row and 0 to 63 for column.] Lines 1000 to 1150 is the actual MPLOT subprogram.

1010: Tests flag variable V to determine if the routine has been initialized. If V=1 (yes) then branch to plotting routine.

1020: Fills screen with character 96. Routine can only plot on characters 96-111. plotting on characters out of range will result in error.

1030 to 1120: Define 16 characters which are all possible combinations of a 2 by 2 matrix. Additionally, the array CHR is defined. It contains the ASC values for the appropriate characters to be displayed based on three parameters - character on screen [96 to 111 minus 95 resulting in a value 1 to 16] and location on 2 x 2 matrix where the new pixel will reside [0 to 1 for row and 0 to 1 for column.]

1130: Sets flag variable to 1 so that initialization is not repeated.

1140: X (0 to 47) and Y (0 to 63) have their values altered in order to get the proper numbers for use with GCHAR and HCHAR. P1 (0 to 1) and P2 (0 to 1) are the location on 2 x 2 matrix where new pixel resides is computed. The screen is scanned at X,Y resulting in the variable CH which contains the ASC value at that position. The character CHR(CH-95,P1,P2) is then displayed via HCHAR at X,Y.

ALPHA LOCK

When using joysticks on the 99/4A, be sure ALPHA LOCK is released. When the computer requests you to enter a letter, be sure SHIFT or ALPHA LOCK is engaged unless the computer specifically requests you to enter lower case [which appear as small upper case.]