OSS NEWSLETTER
SUMMER, 1983

Boy have we been busy at OSS! In fact, we have been so busy that no one was available to put our newsletter together. All of our efforts translate into great new products for you.

PRODUCTS

SUPER PRODUCTS in a SuperCartridge at a SUPER Price.

The OSS SuperCartridge is especially designed to help unleash the full power of your Atari Home Computer. The SuperCartridge allows you to access the full power of a 16,000 byte language and yet use as little as 3k bytes of your valuable user space. The OSS SuperCartridge works in ANY Atari Home Computer.

The following list indicates the SuperCartridge language and their product release dates:

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<td>August 5, 1983</td>
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ACTION! isn't just another new language. It is an entire programming environment, including the ACTION! language, editor, monitor, and compiler.

ACTION! is a powerful and structured language which combines the best features of Pascal, C, and Algol. It establishes a higher dimension of performance from 6502-based computers (Atari, Apple II, and Commodore 64) with incredible speed - over 100 times faster than BASIC interpreters.

Not only does it support both signed and unsigned 16-bit integers, 8 bit unsigned integers, and characters, but ACTION! also permits arrays, pointers, records, and strings. In addition, ACTION! allows the following structured statements: FOR, WHILE, IF...THEN...ELSEIF...ELSE, and DO...UNTIL.

Thanks to the OSS SuperCartridge there is also a superb text editor, program monitor and a built-in library of support routines.

If you are a BASIC programmer who is ready to step up to a "structured", "compiled", language...If you want to write action "games" with full "arcade speed"...If you want to "sell" a "program" but can't justify spending the time to write it in assembly language...If you simply want the "fastest 8-bit language ever", you need ACTION!
BASIC XL is far and away the easiest BASIC to learn and use. Even though it is completely compatible with Atari BASIC, only BASIC XL adds dozens of features that can help the beginning programmer write programs faster, easier, and cleaner. Just think how much easier programming (or learning to program!) will be with such features as automatic line numbering, no quotes required around file names, program renumbering, automatic string allocation, an excellent tutorial book, and much, much more.

For beginner and experienced programmer alike, OSS BASIC XL excels in such modern and needed capabilities as structured program controls, PRINT USING (for easy but sophisticated displays and reports), direct DOS interface, and record-oriented disk access.

Of course, we couldn't just add features. OSS BASIC XL is fast! Your programs can run two to four times faster than with either of the Atari BASICS! Use BASIC XL's exclusive "FAST" mode to really supercharge your programs.

Is there more? Of course! Much more! Just look at this partial list: String arrays; extensive Player/Missle Graphics support; common variables passed between programs; support for all 64K of RAM in Atari XL Computers; and the list goes on and on. We even make the language extensible -- add your own features or look for more from OSS Precision Software.

Last year OSS introduced the finest integrated assembly language packaged for Atari Computers - MAC/65. Now available in the OSS SuperCartridge, MAC/65 is the fastest 6502 macro assembler/editor. It makes assembly language programming easier and more productive than you ever thought possible.

MAC/65 takes the drudge work out of assembly language. By building macros libraries, you can make easy and readable source code. Edit, assemble and debug quickly because the program line editor, macro assembler, and very effective debugger are only a command away in this OSS SuperCartridge. In addition, MAC/65 now permits lowercase text entry.

No other complete 6502 assembly language package offers all of MAC/65's advantages. It even includes support for the 65C02 CMOS microprocessor. MAC/65 now features full cross-reference and expanded pseudo ops including .CBYTE and .FLOAT.

Because we value our customers, OSS is offering our Super Products in our SuperCartridge at a Super Price. This is a limited special and applies only to the recipients of this OSS newsletter.

Until September 30, 1983, you may order any of our products at the prices listed below. Orders will be filled on a first come, first served basis as the products become available.
INTRODUCTORY PRICE LIST

BASIC XL $30.00
ACTION! $30.00
MAC/65 $30.00
DOS XL $20.00 (but free when you buy two or more SuperCartridge products).

ACTION! programmers aid disk (avail Sept 1) $30.00 retail or $20.00 when ordered with the ACTION! SuperCartridge

Note current owners of BASIC A+ will receive an additional $10 discount when ordering the BASIC XL SuperCartridge. The same discount applies to MAC/65 owners when ordering the MAC/65 SuperCartridge.

Phone orders accepted 408-446-3099 for MasterCard, VISA or COD. To save shipping and handling charges, send check or money order. For your convenience an order form is located at the end of this newsletter.

At OSS, we listen to our customers. Due to your requests, we are making our products compatible with the Commodore 64. Please tell your friends and associates who own Commodore's they can now use our Precision Software Tools on their computers. Products will be available October 1, 1983.

FINANCIAL FREEDOM? Earn $25, 50, 75 or 100,000 as a successful software writer. As a software publisher, OSS can help you to prepare documentation and market your product. If you have a marketable software product, submit it to the OSS-Marketing Department. You, too, can earn royalties for your creativity.

FYI

1) You can obtain a license to distribute portions of BASIC A+ and OS/A+. Call or write for more information. Special consideration is given to user groups writing for public domain.

2) OSS BASIC A+ is now included in the distribution of disk drives by the following manufacturers: Percom, Astra Systems and NCT.

3) The following software products were written in OSS BASIC A+:

   a) TAX ADVANTAGE by Continental Software
   b) PLATO by CDC - the entire education series for the Atari!
   c) MICROTEACH by Compumax
   d) BANK STREET WRITER by Broderbund
   e) TANK DUEL published in Compute's First Book of Atari Games

and more all the time!
Many of you received either OS/A+ version 4.0 or version 2.0 with the purchase of a Percom disk drive. Unfortunately, there were some bugs and a few unwanted peculiarities. We have corrected these problems and have rewritten the manual. The new manual includes two new sections.

The first of these is entitled "HOW TO". It includes step by step instructions on such topics as: booting the master diskette, duplicating a diskette, configuring the drive, and others.

The other new chapter discusses BASIC and OS/A+. It reviews the commands in BASIC that interface with DOS. These include SAVE, LOAD, ENTER, LIST to name just a few.

To receive the updated version of OS/A+ (4.1 or 2.1) send $9.95. MasterCard user, please add $1.00 for shipping. An update includes a brand new diskette and the complete new manual. PLEASE DO NOT SEND US YOUR OLD MANUALS OR DISKETTES!

If you already have the updated DOS but you do not have the new manual, you may purchase the manual only for $3.00.

Available September 15, 1983, OS/A+ versions 2.2 and 4.2 which will be renamed DOS XL. Both are written especially for use with the new OSS SuperCartridges. These new versions will not be more effective than the 2.1 or 4.1 versions unless used with the OSS SuperCartridge.

DOS XL permits the SuperCartridge user to take full advantage of the OSS memory bank system. These new versions will cost $30.00. However, to you a valued OSS customer, DOS XL is now available at an introductory price of $20.00 or FREE when you purchase two or more OSS SuperCartridges.

Due to user demand, OSS is now making available just the manuals for its cartridge line of products. Each manual costs $15.00. To save postage and handling charges, send checks. MasterCard and Visa purchases are also welcome, but there will be an additional charge for postage and handling.

If you order the SuperCartridge directly from OSS after the purchase of the manual, OSS will take $10.00 off the retail price of the cartridge. Simply send the coupon enclosed in your manual along with your order and check.
Since their introduction at the beginning of this year, a few bugs have been discovered in the current versions of the software. This section describes these problems and their corresponding fixes.

Version 2 OS/A+ bugs:

This section only applies if you are currently using version 2.10 of OS/A+.

1) Version 2.1 erroneously resets the start of file buffers (SASA) each time the system reset key is pressed. This makes it impossible to move the buffers to a different location (e.g., if you want to move them into higher memory). The following patch corrects this bug:

From MAC/65 or the assembler cartridge:

```
        C 1554  < AD
        C 1559  < AD
```

From BASIC:

```
       POKE 5460,173
       POKE 5465,173
```

2) Version 2.1 does not correctly set the warmstart flag after booting. Apply the following patch:

From MAC/65 or the assembler cartridge:

```
        C 15A1  < 30
        C 1530  < C6,08,4C,BE,15
```

From BASIC:

```
       POKE 5537,48
       POKE 5424,198
       POKE 5425,8
       POKE 5426,76
       POKE 5427,190
       POKE 5428,21
```

3) This only applies to users of double density drives. Some people have used the BSIO routine within DOS to read and write to disks. Be aware that sectors 1, 2, and 3 on double density drives are written in single density format. BSIO does NOT properly allow access to sectors 1, 2, and 3 on double density disks for this reason. Sorry, no easy fix for this one.

To make the above patches using either MAC/65, Atari Editor/Assembler cartridge, or BASIC, these steps must be followed.
1) Boot the system with the proper system you will be applying the patch with.
2) After the patch is made go back to DOS using the appropriate command. Do not use the System Reset key.
3) To the DOS prompt, "D1:" type INIT. This will load in the INIT utility from you disk.
4) Remove your system diskette and insert a new diskette that you want to contain you new version of OS/A+.
5) Choose option 2 in answer to the INIT utilities "function number" prompt.
6) Once the drive has stopped, the new version of OS/A+ will be on the diskette.

**Version 4 OS/A+ bugs:**

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This section only applies to users of version 4.10 of OS/A+.

1) Version 4.10 of OS/A+ does not properly set the warmstart flag after booting. The following patch corrects this problem:

From MAC/65 or the assembler cartridge:

```c
C 1CCD < 78
C 1C78 < C6,08,4C,EA,1C
```

From BASIC:

```c
POKE 7373,120
POKE 7288,198
POKE 7289,8
POKE 7290,76
POKE 7291,234
POKE 7292,28
```

To make the above patches using either MAC/65, Atari Editor/Assembler cartridge, or BASIC, the following steps must be followed.

1) Boot system with the proper system you will be applying the patch with.
2) After the patch is made go back to DOS using the appropriate command. Do not use the system reset key.
3) Insert a newly formatted diskette that you will be writing the patched version of DOS to.
4) To the "D1:" prompt type: 

```
SAVE DOS.SYS 700 2C00 (CR)
```
5) After the disk has stopped, the new patched version of DOS.SYS will now be on that diskette.

**MAC/65 bugs:**

---------
This section only applies to users of MAC/65.

1) MAC/65 does not generate correct code for LDX zero-page,Y instructions. The following patch corrects this problem:

```c
C BA6A < 14
```
2) Some people have asked how to change the screen color in MAC/65. Both the background color and the character luminance can be changed as follows:

C 90D0 < desired background color
C 90D5 < desired character luminance

3) The precedence of the .NOT operator in expressions is incorrect. Apply the following patch:

C B66D < 0C

4) The following patch allows the use of ';' to introduce a comment anywhere on a line. Apply this patch if you wish to have this feature:

C B857 < 20,A0,BB,A0,20,A0
C B9ED < 1D,08
C BA49 < C7,A9,A6,A8

5) This patch only applies to users of the BIT-3 80 column board. MAC/65 does not work properly with the BIT-3 board. The following patch corrects this problem:

C B33D < 20
C B35B < 20
C B380 < 20
C B3BA < 20
C B3BF < 20
C B3C9 < 20
C B3CE < 20
C B5D1 < 20

To make the above patches to MAC/65, do the following steps.

1) Boot your MAC/65 master diskette.
2) Apply the patches as shown above.
3) Use the DOS command to get back to DOS and the "D1:" prompt.
4) Insert a newly formatted diskette that will contain your new patched version of MAC/65.
5) To the "D1:" prompt type:
   SAVE MAC65.COM 6F00 BCLF (CR)

Note: Patching MAC/65 using the above steps will create a version of MAC/65 that will not allow you to assemble a file from the OS/A+, "D1:" prompt.

BUG/65 Bug -- Version 4 Patch Program
----------------------------------------
10  XIO 36,#1,0,"D:BUG65.COM"       : REM Unprotected file
20  OPEN #1,12,0,"D:BUG65.COM"     :REM Move to proper position
30  FOR I=1 TO 2668
40  GET #1,C
50  NEXT I
60  PUT #1,12
70  CLOSE #1
To make the patch to BUG/65 do as follows:

1) Insert your BASIC cartridge or use your BASIC A+ disk
2) Place your BUG/65 disk into the disk drive.
3) Use this BASIC program above to apply the one byte patch so that BUG/65 will work with OS/A+ version 4.

NEW ADDRESS

OSS is expanding, and to properly house our growing staff we have moved to larger facilities. Our new address:

OSS
1173 D S. Saratoga/Sunnyvale Road
San Jose, CA 95129

Mail sent to our old address will reach us; it just takes longer to get here.

AND SPEAKING OF MAIL

Have you been running to your mailbox every day waiting for a response to your letter from us? Our faces are red and we APOLOGIZE. We have not been able to answer the growing number of letters that we have been receiving. We are working on them, but if you have written and are desperate for a response, please call. Our technical department will answer questions Monday through Friday from 9 a.m. to 12 a.m. and from 1 p.m. to 4 p.m. PACIFIC TIME. Our phone number is still 408-446-3099.
OSS, Inc., 1173D S. Saratoga - Sunnyvale Rd., San Jose, CA 95129  
(408) 446-3099

ORDER FORM

NAME ____________________________ PHONE (___) ___ - ___
ADDRESS __________________________ STATE ___ ZIP _____
CITY ______________________________

Cartridges:
ACTION! - $80.00  (Suggested)
BASIC XL - $80.00  (Retail)
MAC/65 - $20.00  ($99.00)

UPDATES:

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MANUALS ONLY

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TOTAL ORDER $__________

MASTERCARD _______________ EXP. DATE _______

VISA _______________ EXP. DATE _______