



THE ARCHIVER



The little Black Book Mommy told you about!

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1541 MAGIC SPELLS



Pictures provided by Nico Clone

INTRODUCTION

There are three reasons why this manual was written. First, to enable the original purchaser of protected software to make archival backups, second, to help reduce the damage which results from the drive "head" hitting the "stop", and third to allow the use of the SX64 and 1541 compatible drives.

Whether software is on disk or cartridge, it is susceptible to damage. If the original program is "protected" in a manner which prevents the user from making a backup, the user-is-out-of-luck. The ARCHIVER manual shows you how to make archival backups of over 300 programs. The intention of this manual is not to promote or, condone piracy in any form. ARCHIVER is sold exclusively for the education of the original purchaser. It is illegal to sell or distribute copyrighted software. Archiver's purpose is to enable the original purchaser to make an archival backups as permitted by Federal Law.

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EDITION 5 WRITTEN BY MAD MAX ALONG WITH THE ADDITIONS OF LATER SOFTWARE PROGRAMS.

PROGRAMS ON DISK

Included with the Archiver Manual are several programs to help you remove the many types of protection schemes. The following section is a brief explanation on the operation of some of those programs. All programs run in C64 mode even though some of the parameters are for the C128.

HIMON SYS49152, LOMON SYS32768, LLMON SYS8192

There are six commands which will be used to copy Cartridges. They are: S; L; M; I; D; A.

The "S" command is used to save sections of code. For Example, if you wished to save a 16k Cartridge you would do the following:

```
S"NAME",08,8000,C000
```

The "L" command is used to load a file into the computers memory. For example, to load a file called "ARCHIVER", you would do the following:

```
L"ARCHIVER",08
```

The "M" command displays the hexadecimal contents of any address or range of addresses in memory. For example, to examine address 0001 you would do the following:

```
M 0001
```

This would display the next 8 bytes of memory starting at address 0001.

The "I" command is used to interrogate memory locations. Interrogation converts the hexadecimal memory contents to their ASCII equivalent and display them on the screen. You will use the "I" command to check for the "CBM80" at \$8000. For example:

```
I 8000
```

If an auto-start Cartridge was inserted, you would see the letters "CBM80" from addresses \$8004-\$8008.

The "D" command is used to disassemble the contents of a series of memory locations. This command displays the mnemonic equivalent of the hexadecimal contents at a given location. For example:

```
D 8000 8100
```

This would disassemble the memory contents from \$8000-\$8100.

The "A" command is used to Assemble machine code instruction at a particular address. For example:

```
A 7000 JSR $FCE2 (press return)
```

After pressing "return", the code would look like this:

A 7000 20 E2 FC JSR \$FCE2
A 7003

The ML monitor automatically assembles the mnemonic code you entered into the required hex bytes and then prints the next consecutive line number to be assembled.

SUPERBOOTER

The operation of SUPERBOOTER is covered in the cartridge introduction section.

ZIP

ZIP is designed to create a 'clean' working area in the computer's memory. To 'run' the program, load "ZIP",8,1 and press 'return'. ZIP will do the rest.

ALLOCATE ALL

ALLOCATE ALL will allocate all blocks on a particular disk. This ensures that when a file is 'scratched' from the disk, the file that replaces it will get placed exactly where the other one resided.

DIRECTORY REPAIR

DIRECTORY REPAIR is designed to "clean-up" disk directories that cannot be listed because they contain special characters, false pointers, or endless loops. Type 'LOAD"DIRECTORY REPAIR",8' and 'RUN'. The program will report all "non-standard" directory blocks and will remove the abnormal characters. If the directory needs repair, it will ask you to enter a new NAME and ID for the disk. DIRECTORY REPAIR will also unwrite protect disk and files.

STACK 02A7, 033C, CF00

The STACK programs are designed to transfer the first 4k of memory from \$0000-\$FFFF to \$6000-\$6FFF. This will allow you to examine this area of memory without it being altered by the program which is running. Type 'LOAD"STACKxxxx",8,1' and SYS to the appropriate address. \$02A7 = SYS679, \$033C = SYS828, \$CF00 = SYS52992.

DC. \$1000, \$8000, \$C000

DC. is a ML monitor that will decode unimplemented op-codes. The monitor has three basic functions: D ssss ffff = disassemble code from ssss to ffff; P ssss ffff = print the code from ssss to ffff; and X = exit to basic. There are several programs using unimplemented op-codes for protection because traditional ML monitors wouldn't 'decode' this type of code. There are several articles in COMPUTE GAZETTE explaining the function of any of these unimplemented instructions. Type 'LOAD"DC.XXXX",8,1' and SYS: \$1000 = 4096; \$8000 = 32768; \$C000 = 49152.

FILE COMPARE

This program will "compare" two files and report the address and value of the conflicting data. The program will work on a dual drive or a single. The programs to be compared must have different names, otherwise it will compare a file to itself. It will generate a report to either the screen or printer, and will compare either program or sequential files. With some printer interfaces it may be necessary to remove the buffer memory for the program to generate a printed copy.

KERNAL MOVE

This program will move the contents lying underneath the KERNAL (\$E000-\$FFFF) to \$2000-\$3FFF. The program should be loaded with an ML monitor and activated with a G 1000.

UNWRITE PROTECT

This program will unwrite protect a disk so its contents can be altered. It accomplishes this by changing byte 3 of track 18 sector 0 from whatever it is to its original value of \$41.

BLOCK FINDER

BLOCK FINDER (BF) will locate a particular byte on a disk when it is given the name of a file and the address at which the code resided in the computer's memory. The address must be entered in decimal. BF will report the track, sector, and byte location of the code you specified (These values are all reported in decimal). This makes it easy to alter protection schemes with a track and sector editor once the desired code is located.

LOADADDR

This program will change the Load address of a particular file. You must enter the file name, and the new load address (in decimal). It will locate the file and change the loading address on the disk.

T & S EDITOR

The TRACK and SECTOR EDITOR (T&S) enables you to edit the code while it's on the disk. Type 'LOAD"T & S EDITOR",8' and 'RUN'. Once the program is running, press 'R'. This will read the code from the disk. The program asks for the track and sector to be read (these must be entered in decimal). When the block of data is read it is displayed in ASCII on the screen. The cursor keys enable you to move around in the block of data being displayed. When you move around the data display, the windows displaying the byte value and location change (these are in hexadecimal).

To change data go to the desired location within the data block by watching the value displayed in the location window. Once there, press the '@' key. The window displaying the current byte value will clear and you can now enter the new value. YOU MUST ENTER A '\$' BEFORE

ALL DATA OTHERWISE IT WILL BE INTERPRETED AS DECIMAL AND NOT HEXADECIMAL. For example 'A0' would be entered as '\$A0'. Once you done the change, press 'RETURN' and use the cursor keys to locate additional bytes to be changed. After all changes are made, press 'W' to write the altered data back to disk. "REMEMBER", THE TRACK AND SECTOR ARE ENTERED IN DECIMAL, AND THE BYTES ARE ENTERED IN HEX WITH A PRECEEDING "\$".

RELOCATE BLOCK

This program will read the data from a particular track and sector and "relocate" the data to another track and sector. You must supply the source track and sector and the destination track and sector.

The disk section of the ARCHIVER manual follows fairly simple format. All programs are listed by company, and then alphabetically by program name. The following example shows the steps necessary to remove the protection from most programs:

RANDOM HOUSE INC.

ALPINE ENCOUNTER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
07	10	08	20	EA
03	18	09	CF	A9
03	18	0A	FF	01

4. DONE!

Step 1 says make a copy or clone same unless it specifies a special copier. This means make a copy of the whole disk WITHOUT THE ERRORS WHICH ARE PRESENT ON THE ORIGINAL: BACKUP 228 on the ARCHIVER disk will create a backup without errors. This program is very slow. One nice feature we placed in it was the ability to stop and start on any track! Some tracks have embedded GCR which is used to stop any copier from making a copy. If you want to copy faster we have a few in mind: FAST HACK'EM, DI-SECTOR, RENEGADE, and MAVERICK. The later 2 was Added to this new version.

Step 2 says load & execute the track and sector editor (T&S). A T&S is included on the ARCHIVER disk. The directions for its use are outlined in the section explaining the programs on the ARCHIVER disk.

Step 3 says to make the specified changes using the T&S. All programs using a T&S follow the same format. We tell you the track, sector, and byte where the data is located. Next, we tell you what the "old" data is, and what it must be changed to, or the "new" data. The track & sector are in decimal, and the byte, old data, and new data are in hexadecimal. When altering the data with the T&S, BE SURE TO PLACE A "\$" PRECEDING THE "NEW" DATA. For example: "A0" should be entered as "\$A0". If the "\$" isn't included, the data will be interpreted as decimal not hexadecimal making the data you entered incorrect.

The removal of some protection schemes require you to load them from the original and make changes using either the "M" or "A" command of the ML monitors included on the ARCHIVER disk. A thorough explanation of the use of the monitors is included in the section covering the programs on the ARCHIVER disk.

Some programs require the computer to be RESET after the program is running. This can only be accomplished with a "RESET" button. In

some cases, pressing the "RESET" button will not allow you to exit the program. EASY SCRIPT (TM), for example, will restart after pressing RESET. To RESET programs like this, you must have a switch with which you can "GROUND" the EXROM line of the cartridge port. This "FLIPS-OUT" the auto start memory at address \$8000 and enables the computer to be "RESET". The best way to do this is to have a switchable expander board. There are many available priced from \$19.99 to \$60.00.

The boards priced around \$20.00 to do a good job. There are very few programs which require the "activation" of the EXROM line. We've tried to minimize the number of programs requiring this method of protection removal. The ones that do require an EXROM switch can't be unprotected by any other method.

Most programs can be unprotected individuals with very little experience. However, some programs have many steps which require more effort because of the sophistication of the protection scheme. These programs follow a similar format as outlined above, but may consist of as many as 20 steps. If you work slowly, and do everything we tell you, it will become very easy to remove even the most sophisticated protection schemes in minutes!

We hope this book serves as an educational tool into the understanding and removal of protection schemes. CYBERTECH does not condone the unauthorized distribution or sale of copyrighted software. This publication was created to enable the original purchaser to make ARCHIVAL copies of original software. We hope you do not abuse the information contained in this manual.

ABACUS

ADA TRAINING (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
35	00	01	25	12
35	00	05	0E	12

4. LOAD "RELOCATE BLOCK", 8 AND RUN
5. SOURCE: TRACK 37 SECTOR 14 DESTINATION: TRACK 18 SECTOR 18
6. YOU'RE DONE!!

PROTECTION

RELOCATE BLOCK MOVES DATA FROM TRACK 37,14 TO 18,18. THE T & S CHANGES RESULT IN THE PROGRAM READING 'TRACK 18,18.

CADPAK 128

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

[KEYBOARD]			[MOUSE]			
TRACK	SECTOR	BYTE	OLD DATA	NEW DATA	TRACK	SECTOR
02	06	01	AB	BC	04	13
02	06	21	1F	44	04	13
02	06	22	D0	D4	04	13

ADD THIS RTN AT BYTE AC (Track 2 for Keyboard/Track 4 for Mouse)
 A9 EA 8D 60 D0 8D C0 D0 8D CB D2 8D D8 D2 4C 1F D0

4. SAVE SECTOR AND YOUR DONE!!

PROTECTION

EXTENDING THE SECTOR TO ADD THE NEW EQUATION AND BYPASS TRACK/SECTOR CHECK AND PLACING THE NEW ROUTINE INTO THE PLACE CHECK AND JUMP TO \$1FD0 TO RUN.

SDU 64 (TM)

-
1. LOAD "HIMON",8,1 AND SYS49152
 2. F 0800 BFFF 00
 3. LOAD"SDU",8,1
 4. AFTER LOADING IS COMPLETE, PRESS RESET BUTTON
 5. M 0801 0B 08
 6. INSERT FORMATTED DISK
 7. S"SDU",08,0801,257D
 8. TO RUN PROGRAM, LOAD"SDU",8 AND RUN
 9. YOU'RE DONE!!

SUPER C (TM)

-
1. MAKE A COPY OF THE ORIGINAL.
 2. SCRATCH THE FOLLOWING FILES FROM COPY:

FILE NAME	SAVE RANGE	0801	0802	BYTES
C-COPY	0801-0D82	30	09	
C-EDITOR	0801-2006	62	19	
C-COMPILER	0801-68B8	63	24	
C-LINKER	0801-2609	0C	0D	

3. LOAD "HIMON",8,1 AND SYS49152
4. F 0800 BFFF 00
5. G FCE2 (RESET THE COMPUTER)
6. INSERT ORIGINAL AND LOAD":*",8,1
7. WHEN MENU APPEARS, SELECT "C-COPY"
8. AFTER FILE IS LOADED, PRESS RESET BUTTON
9. SYS49152 (RE-ENTER MONITOR)
10. M 0801 30 09 (REPLACE THE BYTE AT 0801 AND 0802. SEE TABLE ABOVE)
11. INSERT CLONE DISK
12. S"C-COPY",08,0801,0D82 (SAVE RANGE TAKEN FROM ABOVE TABLE)
13. REPEAT STEPS 4-12 USING THE APPROPRIATE SAVE RANGE AND REPLACEMENT BYTES FOR EACH FILE.
14. YOU'RE DONE!!

NOTE: THE FOLLOWING CHANGES ARE ONLY TO BE MADE IF YOU WISH TO USE FASTLOAD (TM) WITH SUPER C (TM).

15. LOAD & EXECUTE TRACK & SECTOR EDITOR.
16. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	06	2E	20	EA
17	06	2F	15	EA
17	06	30	FD	EA

17. YOU'RE DONE!!

ACADEMY SOFTWARE INC.

IFR (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	10	4C	9E	8F
17	10	63	9E	8F

4. YOU'RE DONE!!

PROTECTION

THIS PROGRAM IS A BASIC PROGRAM. IT CHECKED TRACK 33 FOR AN ERROR AND RESET (SYS64738) IF NO ERROR WAS FOUND. A \$9E, A 'SYS', WAS REPLACED WITH AN \$8F WHICH IS A 'REM'.

TYPING TUTOR + WORD-INVADERS (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	16	CA	34	8F
17	16	D8	9E	8F

4. YOU'RE DONE!!

PROTECTION

THIS PROGRAM USED THE SAME TYPE OF PROTECTION FOUND IN IFR (TM)

ACCELERATED SOFTWARE

ENHANCED FORTH (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	16	83	6E	AD
17	09	CA	6E	AD

4. YOU'RE DONE!!

NOTE: THE FILE CALLED "FORTH" FOR REFERANCE THE PROTECTIONS HEXADECIMAL \$0E74 AND SECOND PART AT \$2887.

 PROTECTION

THIS PROTECTION IS CALLED SECURITY KEY OR DONGLE IT NEEDS PLUGGED IN THE DATA PORT NOW YOU CAN USE TAPE WITHOUT DIFFICULTY! (SOME DATASETTES HAVE THROUGH PORTS) YOU HAD TO BUY ONE OF THOSE TO USE TAPE!

 Q-BOBBER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	18	5E	20	EA
17	18	5F	B1	EA
17	18	60	0B	EA

4. YOU'RE DONE!!

ACCESS INC.

 BEACH-HEAD (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
16	08	C0	15	00

4. YOU'RE DONE!!

 PROTECTION

THIS PROGRAM CHECKS FOR AN ERROR 21 (\$15 IN HEX). WE CHANGED THIS TO A (\$00) OR NO ERROR.

 BEACH-HEAD II (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	11	0B	20	EA
17	11	0C	A5	EA
17	11	0D	F6	EA
17	11	0E	20	A9
17	11	0F	4D	AB
17	11	10	F7	10
17	11	14	20	A9
17	11	15	4D	AD
17	11	16	F7	10
17	11	1A	20	A9
17	11	1B	4D	AF
17	11	1C	F7	EA

4. YOU'RE DONE!!

PROTECTION

THE ABOVE CHANGES BYPASS THE PROTECTION AND LOAD THE CORRECT VALUES INTO THE 'A' REGISTER.

NEUTRAL ZONE

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
14	19	EA	15	00

4. YOU'RE DONE!!

PROTECTION

THIS PROGRAM CHECKS FOR AN ERROR 21 (\$15 IN HEX). WE CHANGED THIS TO A (\$00) OR NO ERROR.

RAID OVER MOSCOW (TM)

1. MAKE A CLONE OF THE ORIGINAL ACCESS DISK.
2. RUN DIRECTORY REPAIR TO FIX THE ENDLESS DIRECTORY.
3. SCRATCH THE FIRST FILE ON THE CLONE DISK.
4. TYPE IN THE FOLLOWING PROGRAM AND SAVE IT TO THE CLONE DISK.


```

NAME IT "ACCESS BOOT"
10 POKE49922,131:POKE49923,130:POKE49924,133
20 LOAD"ACCESS",8

5. LOAD"MONITOR$8000",8,1 and SYS32768
6. F 0800 7FFF 00      (ZERO RAM)
7. T A000 BFFF A000   (TRANSFER ROM TO RAM)
8. G FEC2              (RESET COMPUTER)
9. POKE42335,0:POKE40960,148:POKE1,54
10. INSERT ORIGINAL DISK
11. LOAD":*",8,1
12. AFTER PROGRAM LOADS, 'READY' WILL APPEAR ON THE SCREEN TYPE
    SYS32768.
13. INSERT CLONE ACCESS DISK.
14. S"ACCESS",08,0801,1C02
15. NOW YOU CAN LOAD WITH ,8 AND TYPING RUN WHEN 'READY' APPEARS.
16. YOU'RE DONE!!

```

SCROLLS OF ABADON

1. MAKE A CLONE OF THE ORIGINAL ACCESS DISK.
2. RUN DIRECTORY REPAIR TO FIX THE ENDLESS DIRECTORY.
3. SCRATCH THE FIRST FILE ON THE CLONE DISK.
4. LOAD"MONITOR\$8000",8,1 and SYS32768
5. F 0800 7FFF 00 (ZERO RAM)
6. T A000 BFFF A000 (TRANSFER ROM TO RAM)
7. G FEC2 (RESET COMPUTER)
8. POKE42335,0:POKE40960,148:POKE1,54
9. INSERT ORIGINAL DISK
10. LOAD":*",8,1
11. AFTER PROGRAM LOADS, 'READY' WILL APPEAR ON THE SCREEN TYPE


```

SYS32768.

```
12. INSERT CLONE ACCESS DISK.
13. S"ACCESS",08,0801,08EA
14. NOW YOU CAN LOAD WITH ,8 AND TYPING RUN WHEN 'READY' APPEARS.
15. YOU'RE DONE!!

PROTECTION

THE ABOVE CHANGES INSERT A 'BRK' INTO THE BASIC INTERPRETER, CAUSING THE PROGRAM TO RETURN TO READY WHEN LOADED.

 SPRITE MASTER (TM)

1. MAKE A CLONE OF THE ORIGINAL ACCESS DISK.
2. YOU'RE DONE!!

 PROTECTION

THIS PROGRAM CHECKS FOR DATA AT AN UNALLOCATED BLOCK ON DISK. JUST COPY THE WHOLE DISK!!

ACTIVISION INC.

 BEAMRIDER (TM)

1. INSERT EXPANDER BOARD
2. LOAD THE ORIGINAL DISK
3. ACTIVATE EXROM LINE AND PRESS RESET, AFTER RESETTING, DE-ACTIVATE EXROM
4. LOAD"LLMON",8,1 AND SYS8192
5. M 8000 09 (REPLACE BYTE FROM RESET)
6. TYPE 'S"BR.OBJ",08,8000,C000'. THE CODE IS SAVED IN THIS FORMAT SO IT CAN BE BOOTED WITH A BOOT FROM SUPERBOOTER.
7. BUILD A BOOT WITH SUPERBOOTER CALLED 'BEAMRIDER', USING 'BR' AS TWO BOOT LETTERS. THE BOOT MUST FLIP-OUT BASIC AND BE A CARTRIDGE BOOT.
8. YOU'RE DONE!!

 DECATHLON (TM)

1. INSERT EXPANDER BOARD
2. LOAD THE ORIGINAL DISK
3. ACTIVATE EXROM LINE AND PRESS RESET, AFTER RESETTING, DE-ACTIVATE EXROM
4. LOAD LLMON AND SYS8192
5. M 8000 09 (REPLACE BYTE FROM RESET)
6. TYPE 'S"DE.OBJ",08,8000,C400'. THE CODE IS SAVED IN THIS FORMAT SO IT CAN BE BOOTED WITH A BOOT FROM SUPERBOOTER.
7. BUILD A BOOT WITH SUPERBOOTER CALLED 'DECATHLON', USING 'DE' AS TWO BOOT LETTERS. THE BOOT MUST FLIP-OUT BASIC AND BE A CARTRIDGE BOOT.
8. YOU'RE DONE!!

 DIE HARD (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
33	14	BD	DD	A9
33	14	BE	41	00
33	14	BF	B4	EA

4. YOU'RE DONE!!

 PROTECTION

THIS TYPE IS OFF DISK PROTECTION NOW ANY TWO CHARACTERS WILL WORK!
 FILE NAME 'G2' HOLD THE PROTECTION AT \$B590 LOCATION.

 HERO (TM)

1. INSERT EXPANDER BOARD
2. LOAD THE ORIGINAL DISK
3. ACTIVATE EXROM LINE AND PRESS RESET, AFTER RESETTING, DE-ACTIVATE EXROM
4. LOAD"LLMON",8,1 AND 'SYS8192'
5. M 8000 09 (REPLACE BYTE FROM RESET)
6. TYPE 'S"HE.OBJ",08,8000,C000'. THE CODE IS SAVED IN THIS FORMAT SO IT CAN BE BOOTED WITH A BOOT FROM SUPERBOOTER.
7. BUILD A BOOT WITH SUPERBOOTER CALLED 'HERO', USING 'HE' AS TWO BOOT LETTERS. THE BOOT MUST FLIP-OUT BASIC AND BE A CARTRIDGE BOOT.
8. YOU'RE DONE!!

 MASTER OF THE LAMP (TM)

MAKE A WORK DISK TO STORE SAVED PARTS AND MAKE A SECOND DISK TO HOLD THE FILES AFTER YOU PUT THE BOOT FILE ON.

1. LOAD"HIMON",8,1 AND 'SYS49152'
2. F 0800 BFFF 00 (CLEAR MEMORY)
3. G FCE2 (RESET THE COMPUTER)
4. LOAD THE ORIGINAL DISK 'LOAD"*",8,1'
5. AFTER 'ACTIVISION' APPEARS THE SECOND TIME, RESET THE COMPUTER.
6. SYS49152 TO RE-ENTER MONITOR
7. M 0001 36 CHANGE \$37 TO \$36 (FLIP-OUT BASIC ROM)
8. SAVE FIRST PART OF CODE 'S"ML.OBJA",08,0A00,C000 (SAVE CODE SO IT CAN BE BOOTED WITH SUPERBOOTER)
9. L"KERNAL MOVE",08 (ON ARCHIVER DISK, THIS PROGRAM TRANSFERS CODE UNDER KERNAL TO \$2000)
10. G 1000 (ACTIVATES 'KERNAL MOVE')
11. S"ML.OBJB",08,2000,4000 (SAVE CODE TRANSFERRED FROM UNDER KERNAL)
12. RESET THE COMPUTER AND LOAD 'CHANGE LOADADDR' (ON ARCHIVER DISK)
13. CHANGE THE LOAD ADDRESS OF 'ML.OBJB' TO 57344
14. BUILD A BOOT WITH SUPERBOOTER THAT BOOTS TWO PROGRAMS (ML.OBJA & ML.OBJB), FLIPS-OUT BASIC, AND HAS SYS 34304
15. YOU'RE DONE!!

 MINDSHADOW (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	10	DD	C9	D0
18	10	DE	32	0A

4. YOU'RE DONE!!

 PROTECTION

AFTER THE PROGRAM CHECKS FOR A DISK ERROR. IT THEN DOES A COMPARE WITH 32. THE ABOVE T & S CHANGE INSERTS A 'BNE' COMMAND INTO THE CODE.

 PARK PATROL (TM)

1. MAKE A CLONE OF THE DISK
2. LOAD "HIMON",8,1 AND SYS49152
3. L" 1984 ",08 FROM CLONE (BE SURE YOU HAVE '2' SPACES ON EACH SIDE OF '1984').
4. USE THE 'M' COMMAND TO CHANGE THE FOLLOWING:

ADDRESS	OLD DATA	NEW DATA
4049	D0	EA
4051	54	EA
4056	31	EA

5. s"@0: 1984 ",08,4000,4E00 (REPLACE '1984' FILE ON CLONE DISK)

 PROTECTION

THE ABOVE CHANGES INSERT NOP'S INTO THE ERROR CHECKING ROUTINE AT LOCATION \$9E4C AND \$9E6F

 PITFALL (TM)

1. INSERT EXPANDER BOARD
2. LOAD THE ORIGINAL DISK
3. ACTIVATE EXROM LINE AND PRESS RESET, AFTER RESETTING, DE-ACTIVATE EXROM
4. LOAD"LLMON",8,1 AND 'SYS8192'
5. M 8000 09 (REPLACE BYTE FROM RESET)
6. TYPE 'S"PF.OBJ",08,8000,C000'. THE CODE IS SAVED IN THIS FORMAT SO IT CAN BE BOOTED WITH A BOOT FROM SUPERBOOTER.
7. BUILD A BOOT WITH SUPERBOOTER CALLED 'PITFALL', USING 'PF' AS TWO BOOT LETTERS. THE BOOT MUST FLIP-OUT BASIC AND BE A CARTRIDGE BOOT.
8. YOU'RE DONE!!

 PITFALL II (TM)

1. INSERT EXPANDER BOARD
2. LOAD THE ORIGINAL DISK
3. ACTIVATE EXROM LINE AND PRESS RESET, AFTER RESETTING, DE-ACTIVATE EXROM
4. LOAD"LLMON",8,1 AND 'SYS8192'
5. M 8000 09 (REPLACE BYTE FROM RESET)
6. TYPE 'S"P2.OBJ",08,8000,C000'. THE CODE IS SAVED IN THIS FORMAT SO IT CAN BE BOOTED WITH A BOOT FROM SUPERBOOTER.
7. BUILD A BOOT WITH SUPERBOOTER CALLED 'PITFALL II', USING 'P2' AS TWO BOOT LETTERS. THE BOOT MUST FLIP-OUT BASIC AND BE A CARTRIDGE BOOT.
8. YOU'RE DONE!!

RIVER RAID (TM)

1. INSERT EXPANDER BOARD
2. LOAD THE ORIGINAL DISK
3. ACTIVATE EXROM LINE AND PRESS RESET, AFTER RESETTING, DE-ACTIVATE EXROM
4. LOAD"LLMON",8,1 AND 'SYS8192'
5. M 8000 09 (REPLACE BYTE FROM RESET)
6. TYPE 'S"RR.OBJ",08,8000,C000'. THE CODE IS SAVED IN THIS FORMAT SO IT CAN BE BOOTED WITH A BOOT FROM SUPERBOOTER.
7. BUILD A BOOT WITH SUPERBOOTER CALLED 'RIVER RAID', USING 'RR' AS TWO BOOT LETTERS. THE BOOT MUST FLIP-OUT BASIC AND BE A CARTRIDGE BOOT.
8. YOU'RE DONE!!

SPACE SHUTTLE (TM)

1. INSERT EXPANDER BOARD
2. LOAD THE ORIGINAL DISK
3. ACTIVATE EXROM LINE AND PRESS RESET, AFTER RESETTING, DE-ACTIVATE EXROM
4. LOAD"LLMON",8,1 AND 'SYS8192'
5. M 8000 78 (REPLACE BYTE FROM RESET)
6. TYPE 'S"SS.OBJ",08,8000,C000'. THE CODE IS SAVED IN THIS FORMAT SO IT CAN BE BOOTED WITH A BOOT FROM SUPERBOOTER.
7. BUILD A BOOT WITH SUPERBOOTER CALLED 'SPACE SHUTTLE', USING 'SS' AS TWO BOOT LETTERS. THE BOOT MUST FLIP-OUT BASIC AND SYS 32768.
8. YOU'RE DONE!!

TOY BIZZARE (TM)

1. INSERT EXPANDER BOARD
2. LOAD THE ORIGINAL DISK
3. ACTIVATE EXROM LINE AND PRESS RESET, AFTER RESETTING, DE-ACTIVATE EXROM
4. LOAD"LLMON",8,1 AND 'SYS8192'
5. M 8000 09 (REPLACE BYTE FROM RESET)
6. TYPE 'S"TB.OBJ",08,8000,C000'. THE CODE IS SAVED IN THIS FORMAT SO IT CAN BE BOOTED WITH A BOOT FROM SUPERBOOTER.
7. BUILD A BOOT WITH SUPERBOOTER CALLED 'TOY BIZZARE', USING 'TB' AS TWO BOOT LETTERS. THE BOOT MUST FLIP-OUT BASIC AND BE A CARTRIDGE BOOT.
8. YOU'RE DONE!!

 TRACER SANCTION (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	10	DD	C9	D0
18	10	DE	32	0A

4. YOU'RE DONE!!

 PROTECTION

AFTER THE PROGRAM CHECKS FOR A DISK ERROR. IT THEN DOES A COMPARE WITH 32. THE ABOVE T & S CHANGE INSERTS A 'BNE' COMMAND INTO THE CODE.

 ZENJI (TM)

1. INSERT EXPANDER BOARD
2. LOAD THE ORIGINAL DISK
3. ACTIVATE EXROM LINE AND PRESS RESET, AFTER RESETTING, DE-ACTIVATE EXROM
4. LOAD"LLMON",8,1 AND 'SYS8192'
5. M 8000 09 (REPLACE BYTE FROM RESET)
6. TYPE 'S"ZE.OBJ",08,8000,C000'. THE CODE IS SAVED IN THIS FORMAT SO IT CAN BE BOOTED WITH A BOOT FROM SUPERBOOTER.
7. BUILD A BOOT WITH SUPERBOOTER CALLED 'ZENJI', USING 'ZE' AS TWO BOOT LETTERS. THE BOOT MUST FLIP-OUT BASIC AND BE A CARTRIDGE BOOT.
8. YOU'RE DONE!!

ADVANCED IDEAS INC.

 TIC TAC SHOW (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	20	6C	9E	8F
19	10	49	9E	8F

4. YOU'RE DONE!!

 PROTECTION

THIS PROGRAM IS A BASIC PROGRAM. IT CHECKED TRACK 33 FOR AN ERROR AND RESET (SYS64738) IF NO ERROR WAS FOUND. A \$9E, A 'SYS', WAS REPLACED WITH AN \$8F WHICH IS A 'REM'. (8F/9E BASIC TOKENS)

ADVENTURE INTERNATIONAL

MAXIGOLF (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
11	11	8D	32	30
11	11	94	31	30
25	14	52	32	30
11	11	59	31	30

PROTECTION

THIS PROGRAM SEARCHED FOR AN ERROR 21 WHEN EITHER PLAYER, OR DESIGNER WAS RUN.

AMERICAN EAGLE INC.

MASQUERADE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD "DIRECTORY REPAIR", 8 AND RUN
3. LOAD & EXECUTE TRACK & SECTOR EDITOR.
4. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	20	4E	6C	02

5. LOAD "LOMON", 8, 1
6. INSERT COPY DISK AND LOAD "+", 8, 1
7. AFTER COMPUTER LOCKS-UP, PRESS RESET
8. SCRATCH THE FOLLOWING FILES
 - OPEN15, 8, 15, "S0:BOOT":CLOSE15
 - OPEN15, 8, 15, "S0:AMERICAN":CLOSE15
 - OPEN15, 8, 15, "S0:EAGLE":CLOSE15
9. INSERT ORIGINAL AND POKE49881, 0:SYS49881
10. AFTER READY, SYS32768 TO RE-ENTER MONITOR
12. MAKE THE FOLLOWING CHANGES:
 - M C800 20 00 CD EA EA EA EA EA
 - M C808 EA EA EA A9 00
13. INSERT COPY DISK AND S"AE.OBJ", 08, C800, D000
14. USE SUPERBOOTER TO BUILD A BOOT FOR AE.OBJ, SYS 51200
15. YOU'RE DONE!!

ARTWORX

GHOST CHASER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
13	05	0D	EB	4D
13	05	0E	3E	4D
13	05	0F	E7	4D
13	05	17	EB	4D
13	05	18	3E	4D
13	05	19	E7	4D
13	15	2D	77	4D
13	15	2E	A0	4D
13	15	A0	EB	4D
13	15	A1	8D	4D
13	15	A2	E5	4D
13	15	AA	EB	4D
13	15	AB	8D	4D
13	15	AC	E5	4D

4. YOU'ER DONE!!

PROTECTION

THIS PROGRAM CHECKED FOR ERROR TYPES 22 & 23. THE PROTECTION WAS CONTAINED IN FILE 'C'. THE ENTIRE FILE WAS EOR'ED WITH AN \$A7. WE REMOVED THE PROTECTION BY PLACING NOP'S ABOVE THE JUMP'S AND BRANCH'S (\$4D EOR'ED WITH \$A7 = \$EA).

BERKELY SOFTWARE

GEOS SOFTWARES IS A BIT DIFFERENT WE WILL EXPLAIN THIS BRIEFLY AS THIS MANUAL ISN'T HERE TO TEACH YOU ABOUT OPERATING GEOS. NOW WHAT GEOS TOOLS YOU NEED IS CONVERT 2.5 BY BILL COLEMAN AND GEOS WORKING. MAKE YOUR WORK DISK WITH GEOS TO COPY THE FILE IN QUESTION, NEXT YOU NEED TO BOOT CONVERT 2.5 AND GET THE FILE CONVERTED THIS SHOULD BE THE ONLY FILE ON THE WORK DISK! OK! IF YOU USE CONVERT 2.5 MAKE SURE IT SAVES IT AS 'PRG' FILE TYPE NOT 'SEQ' OK! NEXT USE GEOS TO VALIDATE DISK SO THIS IS CORRECT! NOW FOLLOW THE INSTRUCTIONS FOR THE FILE.

A LITTLE FACT IS GEOS HAS APPLICATIONS WHICH USE SERIAL NUMBER DETECTION. THIS IS A SECONDARY WAY FOR GEOS TO DETECT A NON REGISTERED COPY AND THIS IS QUITE FREQUENT. AND WHY WE BECAME INVOLVED! YOU BUY GEOS YOU DECIDE TO UPGRADE NOW YOUR OLD GEOS APPLICATIONS BECOME UNUSABLE. THIS WILL WORK WITH ALL 2.0 GEOS. WE GIVE YOU THE SERIAL CHECKER \$C196 (THIS IS USED ON BOTH C64/C128) DISK BLOCK AND FILENAME SEQUENCES THEN (20 96 C1 (JSR TO SERIAL CHECK) THEN DECODES THE SERIAL THAT WAS EMBEDDED DURING INSTALL). AND AFTER FAIL REBOOTS TO DESKTOP!

 FONT CHANGER V1 (TM)

1. LOAD"HIMON",8,1 SYS49152
2. L"FONT CHANGER.CVT",08,0883 (FORCE LOAD SO IT PUTS THE FILE IN MEMORY AT THE CORRECT LOCATION IF YOU HAVE DONE IT CORRECTLY).
3. BELOW IS THE CHANGES TO BE MADE IN HEXADECIMAL!

BYTE LOC.	OLD DATA	NEW DATA
09DE	00	0F
0A0D	00	FF
0A0F	00	70
0A10	00	2F
0A11	00	8D
0A12	00	FD
1406	A5	A9
1407	03	FD
140D	A5	A9
140E	02	8D
1448	A5	A9
1449	07	2F
144F	A5	A9
1450	06	70
1495	A5	A9
1496	07	2F
149A	A5	A9
149B	06	70
14A2	A5	A9
14A3	03	FD
14A7	A5	A9
14A8	02	8D

4. S"@0:FONT CHANGER.CVT",08,0883,24F0
5. YOU'RE DONE!!

FONT EDITOR 2.5 (TM) (ONLY WORKS ON UNINSTALLED VERSION)

1. LOAD"HIMON",8,1 SYS49152
2. L"FONT EDITOR.CVT",08,0883 (FORCE LOAD SO IT PUTS THE FILE IN MEMORY AT THE CORRECT LOCATION IF YOU HAVE DONE IT CORRECTLY).
3. BELOW IS THE CHANGES TO BE MADE IN HEXADECIMAL!

BYTE LOC.	OLD DATA	NEW DATA
2C19	A5	EA
2C1A	02	EA
2C1B	49	A9
2C22	A5	EA
2C23	03	EA
2C24	49	A9

4. S"@0:FONT EDITOR.CVT",08,0883,8DBB
5. YOU'RE DONE!!

 GEOCANVAS V1 128 (TM) BY NATHAN FIEDLER

1. LOAD"HIMON",8,1 SYS49152
2. L"GEOCANVAS.CVT",08,0E83 (FORCE LOAD SO IT PUTS THE FILE IN MEMORY AT THE CORRECT LOCATION IF YOU HAVE DONE IT CORRECTLY).
3. BELOW IS THE CHANGES TO BE MADE IN HEXADECIMAL!

BYTE LOC.	OLD DATA	NEW DATA
414E	20	60 (BYPASS SERIAL DETECT)
4202	20	2C (BYPASS ID CHECK)

4. S"@0:GEOCANVAS.CVT",08,0E83,708D
5. YOU'RE DONE!!

 GEOFILE 128 (TM)

1. USE ACTION REPLAY (MONITOR FOR THIS USES ALL THE RAM)
2. L"GEOFILE.CVT",08,0800 (FORCE LOAD SO IT PUTS THE FILE IN MEMORY AT THE CORRECT LOCATION IF YOU HAVE DONE IT CORRECTLY).
3. BELOW IS THE CHANGES TO BE MADE IN HEXADECIMAL!

BYTE LOC.	OLD DATA	NEW DATA
M 4848	FE	BE
487B	BE	FE

4. S"@0:GEOFILE.CVT",08,0800,C335
5. YOU'RE DONE!!

 GEOSPELL V1.1 (TM) BY STEVE SCHOLL

1. LOAD"HIMON",8,1 SYS49152
2. L"GEOSPELL.CVT",08,1183 (FORCE LOAD SO IT PUTS THE FILE IN MEMORY AT THE CORRECT LOCATION IF YOU HAVE DONE IT CORRECTLY).
3. BELOW IS THE CHANGES TO BE MADE IN HEXADECIMAL!

BYTE LOC.	OLD DATA	NEW DATA
M 4C0E	C4	09
4C36	09	C4

4. S"@0:GEOSPELL.CVT",08,1183,8152
5. YOU'RE DONE!!

GEO WIZARD V1 (TM)

1. LOAD"HIMON",8,1 SYS49152
2. L"GEOWIZARD.CVT",08,0883 (FORCE LOAD SO IT PUTS THE FILE IN MEMORY AT THE CORRECT LOCATION IF YOU HAVE DONE IT CORRECTLY).
3. BELOW IS THE CHANGES TO BE MADE IN HEXADECIMAL!

BYTE LOC.	OLD DATA	NEW DATA
M 09DE	0E	0F
0A0D	00	FF
0A0F	00	61
0A10	00	D5
0A11	00	B5
0A12	00	58
12D4	A5	A9
12D5	03	58
12DB	A5	A9
12DC	02	B5
1303	A5	A9
1304	07	D5
130A	A5	A9
130B	06	61
133D	A5	A9
133E	07	D5
1342	A5	A9
1343	06	61
134A	A5	A9
134B	03	58
134F	A5	A9
1350	02	B5

4. S"@0:GEOWIZARD.CVT",08,0883,412A
5. YOU'RE DONE!!

GEOWRITE 128 V2.1 (TM) BY TONY REQUIST

1. LOAD"HIMON",8,1 SYS49152
2. L"GEOWIZARD.CVT",08,1183 (FORCE LOAD SO IT PUTS THE FILE IN MEMORY AT THE CORRECT LOCATION IF YOU HAVE DONE IT CORRECTLY).
3. BELOW IS THE CHANGES TO BE MADE IN HEXADECIMAL!

BYTE LOC.	OLD DATA	NEW DATA
M 4513	73	BE
453D	BE	73

4. S"@0:GEOWIZARD.CVT",08,1183,9E22
5. YOU'RE DONE!!

 GRAPHICS GRABBER V2.2 (TM)

1. LOAD"HIMON",8,1 SYS49152
2. L"GRAPHGRAB.CVT",08,0983 (FORCE LOAD SO IT PUTS THE FILE IN MEMORY AT THE CORRECT LOCATION IF YOU HAVE DONE IT CORRECTLY).
3. BELOW IS THE CHANGES TO BE MADE IN HEXADECIMAL!

BYTE LOC.	OLD DATA	NEW DATA
M 4494	AD	60
4573	60	AD

4. S"@0:GRAPHGRAB.CVT",08,0983,45AA
5. YOU'RE DONE!!

BLUE CHIP SOFTWARE

 BARON (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
24	08	F1	B2	B1

4. YOU'ER DONE!!

 MILLIONARE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
08	02	F9	B2	B1

4. YOU'ER DONE!!

 TYCOON (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	02	F5	B2	B1

4. YOU'ER DONE!!

BRITANNICA SOFTWARE

SPELLING AND READING PRIMER (TM) EDUWARE SERIES

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	18	9D	9E	8F

4. YOU'ER DONE!!

BRODERBUND

CASTLE OF DR. CREEP (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
16	09	C6	20	A9
16	09	C7	CF	32
16	09	C8	FF	EA
16	09	CE	20	A9
16	09	CF	CF	37
16	09	D0	FF	EA
16	09	BF	48	A9
16	09	C0	98	00
16	09	C1	48	60
16	16	59	A0	00

4. YOU'ER DONE!!

PROTECTION

THE PROGRAM CHECKS FOR THE DISK'S NAME AND ERROR'S. THE DISK CODE IS MODIFIED BY LOADING VALUES INTO THE 'A' REGISTER.

 CHAMPIONSHIP LODE RUNNER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	08	14	20	EA
17	08	15	56	EA
17	08	16	93	EA
15	09	12	EE	EA
15	09	13	46	EA
15	09	14	90	EA

4. YOU'ER DONE!!

PROTECTION

FILENAME: IT (1ST BLOCK AND 46TH BLOCK)
 THE ABOVE CHANGES, NOP'S THE DISK ERROR CHECKING AND CHECKSUM
 ROUTINES.

DROL (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
08	14	5C	31	30
08	14	5E	38	34
19	08	51	00	32
19	08	52	00	30
19	08	53	00	32
19	08	54	00	30
19	08	55	00	33
19	08	56	00	30
19	08	57	00	37
19	08	58	00	30

4. YOU'ER DONE!!

PROTECTION

THE ABOVE CHANGES, BYPASS THE ERROR CHECKING ROUTINE AND STORES THE
 EXPECTED VALUES.

GUMBALL (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
13	01	B5	00	03

4. YOU'ER DONE!!

PROTECTION

THIS PROGRAM WE BYPASSED THE ERROR CHECKING ROUTINE BY CHANGING START ADDRESS FROM \$2000 TO \$2003.

KARATEKA (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	02	62	F0	EA
17	02	63	10	EA
14	18	DF	55	49
14	18	E0	4A	30
17	06	EF	20	EA
17	06	F0	8A	EA
17	06	F1	FF	EA
14	00	3C	20	EA
14	00	3D	BA	EA
14	00	3E	FF	EA
14	10	C7	20	EA
14	10	C8	BA	EA
14	10	C9	FF	EA

4. YOU'ER DONE!!

PROTECTION

THE 1541 COMPATIBLE VERSION OF THIS PROGRAM IS UNPROTECTED. THE 1ST TWO BYTE CHANGES ABOVE, TELL THE PROGRAM IT'S A 1541 COMPATIBLE DRIVE, THE NEXT TWO BYTE CHANGES A 'UJ' COMMAND TO 'I0', AND THE REMAINING CHANGES, ENABLES FASTLOAD (TM).

 LODERUNNER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
15	18	F9	C9	D0
15	18	FA	C8	05
17	07	0C	20	EA
17	07	0D	11	EA
17	07	0E	8E	EA

4. YOU'ER DONE!!

 MASK OF THE SUN (TM)

1. MAKE A CLONE OF THE ORIGINAL.
2. LOAD "HIMON", 8, 1 SYS49152
3. USE THE 'M' COMMAND TO ENTER THE FOLLOWING CODE:

```
L"ULTRACODER",08
ADDRESS      REPLACE WITH
-----
0876         20 00 20
2000         A9 00 8D 4B 08 8D 55 08
2008         A9 6B 8D 36 08 A9 1B 8D
2010         54 08 A9 17 8D 50 08 A9
2018         91 8D 78 08 60
```

4. S"@0:ULTRACODER",08,0800,201D (RESAVE TO CLONE DISK)
5. YOU'RE DONE!!

 MIDNIGHT MAGIC (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
12	01	BE	C9	D0
12	01	BF	91	11

4. YOU'RE DONE!!

 PROTECTION

THE ABOVE T & S CHANGES BYPASS CHECKSUM CODE WITH 'BNE'

 PRINTSHOP (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

SIDE 1				
TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
16	07	CE	00	22

SIDE 2				
TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
16	07	C2	00	22

4. YOU'RE DONE!!

 PROTECTION

BEFORE RUNNING THE ERROR CHECKING ROUTINE, THE PROGRAM CHECK THE ABOVE LOCATIONS FOR CHECKSUMS AND IF CORRECT BYPASS PROTECTION.

 PRINTSHOP GRAPHICS LIBRARY (TM)

1. COPY TRACKS 2-35
2. YOU'RE DONE!!

NOTE: TRACK 1 OF THE PROGRAM IS AN ENDLESS LOOP. IF YOU TRY TO COPY IT, MOST COPY PROGRAMS WILL GET "STUCK".

 RAID OVER BUNGLING BAY (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
12	07	1E	D0	EA
12	07	1F	F0	EA
12	07	25	D0	EA
12	07	26	E9	EA

4. YOU'RE DONE!!

 PROTECTION

THE 'BNE' COMMANDS ARE "NOP'ED" AFTER COMPARING FOR ERRORS ABOVE

SPARE CHANGE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
24	05	1E	D0	EA
24	05	1F	03	EA
24	12	69	D0	EA
24	12	6A	03	EA
24	17	7D	D0	EA
24	17	7E	03	EA

4. YOU'RE DONE!!

STEALTH (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	02	9D	20	4C
17	02	9E	4E	CF
17	02	9F	CA	C9
19	00	4C	AD	4C
19	00	4D	0A	67
19	00	4E	CA	60

4. YOU'RE DONE!!

WHIRLWIND (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
19	02	53	8D	EA
19	02	54	56	EA
19	02	55	14	EA
19	02	5D	8D	EA
19	02	5E	55	EA
19	02	5F	14	EA
19	02	61	FF	45
19	02	62	FF	5A

4. YOU'RE DONE!!

 WHISTLER'S BROTHER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
26	01	BF	20	EA
26	01	C0	10	EA
26	01	C1	5E	EA
29	12	7E	AD	4C
29	12	7F	79	22
29	12	80	5E	79

4. YOU'RE DONE!!

CBS INC.

 ADVENTURE MASTER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
07	04	C4	D0	EA
07	04	C5	29	EA
07	04	CB	D0	EA
07	04	CC	22	EA
07	04	DB	D0	EA
07	04	DC	12	EA
32	07	C4	D0	EA
32	07	C5	29	EA
32	07	CB	D0	EA
32	07	CC	22	EA
32	07	DB	D0	EA
32	07	DC	12	EA

4. YOU'RE DONE!!

 PROTECTION

THE ABOVE T & S CHANGES 'NOP' THE 'BNE' COMMAND AFTER THE ERROR CHECKING COMPARES.

DREAM HOUSE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
21	15	39	D0	EA
21	15	3A	30	EA
21	15	49	D0	EA
21	15	4A	20	EA
21	15	59	D0	EA
21	15	5A	10	EA

4. YOU'RE DONE!!

FORECAST (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
31	02	A3	32	20
31	02	A4	33	30

4. YOU'RE DONE!!

WEATHER TAMERS (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
22	08	0D	D0	EA
22	08	0E	27	EA
22	08	14	D0	EA
22	08	15	20	EA
22	08	24	D0	EA
22	08	25	10	EA

4. YOU'RE DONE!!

CODEWRITER

ELF SYSTEM (TM)

1. MAKE A CLONE OF THE ORIGINAL.
2. LOAD "HIMON", 8, 1 SYS49152
3. USE THE 'M' COMMAND TO ENTER THE FOLLOWING CODE:
L"ELF", 08

ADDRESS	OLD	NEW
1872	2E	2B
18A3	2E	2B
18D5	2E	2B
1907	2B	2E

4. S"@0:ELF", 08, 0801, 1A85 (RESAVE TO CLONE DISK)
5. YOU'RE DONE!!

COLECO

WARGAMES (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	02	44	30	A9
17	02	45	FB	01

4. YOU'RE DONE!!

PROTECTION

THE PROTECTION ROUTINE CHECKS TRACK 37 FOR A SYNC (FORMATTED). THE ABOVE CHANGES 'BMI' COMMAND TO LDA #\$01. (SYNC FOUND)

COMM*DATA COMMODORE COMPUTER HOUSE

ENGLISH INVADERS (TM)

1. MAKE A CLONE OF THE ORIGINAL.
2. LOAD"HIMON",8,1 SYS49152
3. USE THE 'M' COMMAND TO ENTER THE FOLLOWING CODE:
L"BOOT",08

ADDRESS	REPLACE WITH
0833	4A 03 (OLD)
0833	00 0F (NEW)
0839	20 C1 0F (OLD)
0839	EA EA EA (NEW)
0860	4D 03 (OLD)
0860	10 0F (NEW)

4. S"@0:BOOT",08,0801,11f0 (RESAVE TO CLONE DISK)
5. YOU'RE DONE!!

COMMODORE BUSINESS MACHINES INC.

B-GRAF (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
05	07	24	0E	F4
05	07	25	CD	F4
05	07	2B	0E	F4
05	07	2C	D4	F4

4. YOU'RE DONE!!

EASY SCRIPT (TM)

1. THIS PROGRAM REQUIRES AN EXPANDER BOARD
2. LOAD"HIMON",8,1
3. INSERT ORIGINAL AND LOAD":*``,8,1
4. AFTER ORIGINAL LOADS, ACTIVATE THE 'EXROM' SWITCH AND PRESS THE RESET BUTTON.
5. INSERT A FORMATTED DISK.
6. SYS49152 (RE-ENTER MONITOR)
7. USE THE 'M' COMMAND TO MAKE THE FOLLOWING CHANGES.

ADDRESS	REPLACE WITH
0001	36
8000	4B
82EA	EA EA
ABC9	02
AC5A	02
B045	A9 23 8D 03 02 A9 4A 85
B04D	29 85 3E 60

8. S"ES.OBJ",08,8000,C000
9. USE SUPERBOOTER TO BUILD A CARTRIDGE BOOT THAT FLIPS OUT BASIC.
10. YOU'RE DONE!!

EASY SPELL (TM)

1. THIS PROGRAM REQUIRES AN SWITCHABLE EXPANDER BOARD
2. LOAD"EASY SPELL",8,1 (FROM EASY SCRIPT AS NORMAL).
3. ACTIVATE THE 'EXROM' SWITCH, PRESS RESET, AND DEACTIVATE 'EXROM'.
4. LOAD"HIMON",8,1 AND SYS49152
5. S"ES.OBJ",08,08E4,3115
6. BUILD A BOOT USING SUPERBOOTER WITH A SYS2276
7. YOU'RE DONE!!

NOTE: EASY SPELL (TM) MUST NOW BE LOADED INDEPENDANT OF EASY SCRIPT.

HULK (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
32	03	24	0E	F4
32	03	25	C0	F4
32	03	2B	0E	F4
32	03	2C	D4	F4

4. YOU'RE DONE!!

 PROTECTION

FILE CONTAIN PROTECTION:
 STARTING ADDRESS OF FILE \$C000

DESCRIPTION OF PROTECTION:
 THIS SUBROUTINE IS LOADED, EOR #\$FF,\$BC #\$21 AT LOCATION \$C000
 FROM FILE 'SAGA'. THE PROTECTION ROUTINE CAN BE SEEN IF YOU HIT THE
 RESET WHILE THE PROGRAM IS READING THE ERROR. (ABOUT 5 SECONDS
 AFTER LOAD).

1. AFTER HITTING RESET AT PROPER TIME (WHILE READING ERROR).
2. LOAD"LOMON",8,1 AND SYS32768
3. D C000 C032
4. THE F4'S ABOVE ARE AN ENCODED 'NOP' (EA EOR'D WITH FF AND SUB 21)
 AND ARE PLACED AT C022, C023, C029, C02A.

JUST IMAGINE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
29	08	24	0E	F4
29	08	25	C0	F4
29	08	31	0E	F4
29	08	32	D4	F4

4. YOU'RE DONE!!

 PROTECTION

FILE CONTAIN PROTECTION:
 STARTING ADDRESS OF FILE \$C000

DESCRIPTION OF PROTECTION:
 THIS SUBROUTINE IS LOADED, EOR #\$FF,\$BC #\$21 AT LOCATION \$C000
 FROM FILE 'IMG'. THE PROTECTION ROUTINE CAN BE SEEN IF YOU HIT THE
 RESET WHILE THE PROGRAM IS READING THE ERROR. (ABOUT 5 SECONDS
 AFTER LOAD).

1. AFTER HITTING RESET AT PROPER TIME (WHILE READING ERROR).
2. LOAD"LOMON",8,1 AND SYS32768
3. D C000 C032
4. THE F4'S ABOVE ARE AN ENCODED 'NOP' (EA EOR'D WITH FF AND SUB 21)
 AND ARE PLACED AT C022, C023, C029, C02A.

KINDER KONCEPTS (TM)

 SINCE THERE IS MANY EXPANSIONS WE DECIDED TO SHORTEN IT DOWN AND
 EXPLAIN THIS BRIEFLY :

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:
4. NEXT LOAD IN THE DIRECTORY THIE IS 2 BYTES THAT ALLOW YOU TO FOLLOW THE FILE CHAIN AND 1 BYTE FOR FILE TYPE 'SEQ' IS 83 WHERE 'PRG' IS 82 NOW EACH 'SEQ' CONTAINS THE PROTECTION YOU FOLLOW THE FILE FOR 2 BLOCK ON THE SECOND JUMP BYTE \$45 SHOULD CONTAIN \$BB NOW PUT \$DE BYTE AT \$45 WHEN DONE GO BACK AND DO THIS WITH ALL THE 'SEQ' MAKE SURE THAT BYTE \$46 HAS \$DE TOO IF NOT THEN SOMETHING IS WRONG.
5. YOU'RE DONE!!

LOGO (TM)

-
1. MAKE A COPY OF THE ORIGINAL.
 2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
 3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	11	95	00	FA
17	11	AD	E7	F2

4. YOU'RE DONE!!

PROTECTION

 FILE CONTAIN PROTECTION: LOGO.BIN
 STARTING ADDRESS OF FILE: \$0801

DESCRIPTION OF PROTECTION:

THIS SUBROUTINE IS LOADED FROM FILE: LOGO. THE PROTECTION CAN BE SEEN BY DISASSEMBLING \$097F-09AB. THE BREAK AT \$0900 WAS CHANGED TO A NOP AND THE BRANCH ADDRESS AT \$09A7 WAS CHANGED TO BREAK THE LOOP.

MANAGER (TM)

-
1. MAKE A CLONE COPY FROM ORIGINAL.
 2. LOAD "UNWRITE PROTECT", 8 AN RUN (FILE ON ARCHIVER DISK THEN RUN IT ON CLONE COPY).
 3. LOAD & EXECUTE TRACK SECTOR EDITOR.
 4. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	00	93	00	1A

5. DONE!

 MICRO COOKBOOK (TM)

1. MAKE A CLONE COPY FROM ORIGINAL.
2. LOAD & EXECUTE TRACK SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	01	F8	00	F4
17	01	F9	00	F4

4. DONE!

 PROTECTION

FILE CONTAINING PROTECTION: COOKBOOK
 STARTING ADDRESS OF FILE. \$C000

DESCRIPTION OF PROTECTION:

THIS 'SEQ' FILE IS LOADED. EOR #\$FF, SBC #\$21 AT LOCATION \$C000 FROM FILE: COOKBOOK. THE PROTECTION ROUTINE CAN BE SEEN IF YOU HIT THE RESET WHILE THE PROGRAM IS READING THE ERROR.
 (ABOUT 5 SECONDS AFTER LOAD)

1. AFTER HITING RESET AT PROPER TIME (WHILE READING ERROR)
2. LOAD "LOMON", 8, 1 AND SYS32768
3. D C0CE C0F8
4. THE F4'S ABOVE ARE AN ENCODED NOP (EA EOR'D WITH FF AND SUB 21) AND ARE PLACED AT C0F6, C0F7.

 SKYTRAVEL (TM)

1. MAKE A CLONE COPY FROM ORIGINAL.
2. LOAD & EXECUTE TRACK SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
35	05	24	0E	F4
35	05	25	CD	F4
35	05	31	0E	F4
35	05	32	D4	F4

4. DONE!

 TYPING PROFESSOR (TM)

1. MAKE A CLONE COPY FROM ORIGINAL.
2. LOAD & EXECUTE TRACK SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	01	24	OE	F4
17	01	25	CD	F4
17	01	31	OE	F4
17	01	32	D4	F4

4. DONE!

PROTECTION

FILE CONTAINING PROTECTION: TT
 STARTING ADDRESS OF FILE: \$C000

DESCRIPTION OF PROTECTION:

THIS SUBROUTINE IS LOADED. EOR #\$FF, SBC #\$21 AT LOCATION \$C000 FROM FILE: TT. THE PROTECTION ROUTINE CAN BE SEEN' IF YOU HIT THE RESET WHILE THE PROGRAM IS READING THE ERROR. (ABOUT 5 SECONDS AFTER LOAD).

1. AFTER HITING RESET AT PROPER TIME (WHILE READING ERROR).
2. LOAD"LOMON",8.1 AND SYS32768
3. D C000 C032
4. THE F4'S ABOVE ARE AN ENCODED NOP (EA EOR'D WITH FF AND SUB 21) AND ARE PLACED AT C022, C023, C029, C02A.

COMPUTER WORKSHOP INC.

NEWVIEW V2005 (TM)

1. MAKE A CLONE COPY FROM ORIGINAL.
2. LOAD & EXECUTE TRACK SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	00	FA	00	AB

4. DONE!

CYBERIA INC.

RIVERCHASE (TM)

1. LOAD"HIMON",8,1 AND SYS49152
2. L"TGI",08
3. MAKE THE FOLLOWING CHANGES WITH THE 'M' COMMAND:

ADDRESS	REPLACE WITH
4CDA	D1 DD 4C
4CEC	D1 EF 4C
4D19	D1 22 4D
4D70	D1 73 4D
4DC1	D1 C4 40
4E1A	D1 1D 4E

4. S"@0:TGI",08,0801,4E1F
5. YOU'RE DONE (LOAD & RUN LIKE ANY BASIC PROGRAM)

PROTECTION

THIS PROGRAM WAS COMPILED WITH PETSFEED (TM). SIX (6) GOTO (D1) WHERE USED TO BYPASS THE PROTECTION.

DATAMOST INC.

COHAN'S TOWER (TM)

1. LOAD ORIGINAL PROGRAM
2. RESET THE COMPUTER WITH A RESET BUTTON
3. LOAD"HIMON",8,1 AND SYS49152
4. S"CT.OBJ",08,0800,7FFF (SUPERBOOTER FORMAT)
5. USE SUPERBOOTER TO LOAD "CT.OBJ" AND SYS2316
6. YOU'RE DONE!!

MR. ROBOT (TM)

1. THIS PROGRAM REQUIRES AN EXPANDER BOARD
2. LOAD ORIGINAL PROGRAM
3. ACTIVATE EXROM, PRESS RESET, DE-ACTIVATE EXROM
4. LOAD"HIMON",8,1 AND 'SYS49152'
5. M 0001 CHANGE 37 TO 36 (FLIP-OUT BASIC)
6. S"MR.OBJ",08,1000,C000 (SAVE PROGRAM IN SUPERBOOTER FORMAT)
7. USE SUPERBOOTER TO BUILD A BOOT TO FLIP-OUT BASIC AND SYS32796
8. YOU'RE DONE!!

DATASOFT

POOYAN (TM)

1. FORMAT A DISK : (DESTINATION DISK)
2. LOAD"HIMON",8,1 AND 'SYS49152'
3. F 0800 BFFF 00 (CLEAR MEMORY)
4. L"123",08 (LOAD '123' FROM ORIGINAL DISK)
5. USE THE " M' COMMAND TO MAKE THE -FOLLOWING CHANGES:

ADDRESS REPLACE WITH

4962 D0 05

6. S"PY.OBJ",08.30FC,7FFF (SAVE PROGRAM TO FORMATTED DISK IN SUPERBOOTER FORMAT)
7. USE SUPERBOOTER TO BUILD A BOOT TO SYS 16976
8. YOU'RE DONE!!

DELL PUBLISHING INC.

DELL CROSSWORDS (TM)

1. MAKE A CLONE COPY FROM ORIGINAL.
2. LOAD & EXECUTE TRACK SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
15	05	BD	17	00
15	05	06	1B	00

4. DONE!

NEWYORK TIME CROSSWORD VOL. 1 (TM)

1. MAKE A CLONE COPY FROM ORIGINAL.
2. LOAD & EXECUTE TRACK SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
08	11	85	2E	2B
08	11	CC	2E	2B

4. DONE!

DESIGNWARE INC.

CREATURE CREATURE (TM)

1. MAKE A CLONE COPY FROM ORIGINAL.
2. LOAD & EXECUTE TRACK SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	03	19	80	08

4. DONE!

CRYPTOCUBE (TM)

1. MAKE A CLONE COPY FROM ORIGINAL.
2. LOAD & EXECUTE TRACK SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	03	19	80	08

4. DONE!

EUORPEAN NATIONS & LOCATIONS (TM)

1. MAKE A CLONE COPY FROM ORIGINAL.
2. LOAD & EXECUTE TRACK SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	03	19	68	08

4. DONE!

GRAMMER EXAMINER (TM)

1. MAKE A CLONE COPY FROM ORIGINAL.
2. LOAD & EXECUTE TRACK SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	03	19	6D	08

4. DONE!

MISSION ALGEBRA (TM)

1. MAKE A CLONE COPY FROM ORIGINAL.
2. LOAD & EXECUTE TRACK SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	03	19	70	08

4. DONE!

SPELLICOPTER (TM)

1. MAKE A CLONE COPY FROM ORIGINAL.
2. LOAD & EXECUTE TRACK SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	03	19	7D	08

4. DONE!

SPELLICOPTER (TM)

NOTE: THIS IS ALTERNATE WAY!

1. FORMAT A BLANK DISK
2. LOAD AND RUN THE ORIGINAL PROGRAM
3. WHEN THE MENU SCREEN APPEARS. RESET THE COMPUTER
4. LOAD"HIMON",8,1 AND SYS49152
5. M 0001 CHANGE 37 TO 36 (FLIP-OUT BASIC)
6. S"SC.OBJA",08,0800,BFFF (SAVE FIRST SECTION)
7. RESET THE COMPUTER AND RE-LOAD THE ORIGINAL DISK
8. WHEN THE MENU SCREEN APPEARS, RESET THE COMPUTER
9. LOAD"LOMON",8,1 AND SYS32768
10. S"SC.OBJB",08,C000,CFFF (SAVE SECOND SECTION)
11. USE SUPERBOOTER TO BUILD A BOOT FOR TWO PROGRAMS, SC.OBJA & SC.OBJB, AND SYS 2267
12. YOU'RE DONE!!

 STATES AND TRAITS (TM)

1. MAKE A COPY OF THE ORIGINAL
2. RUN DIRECTORY REPAIR (ON ARCHIVER DISK)
3. LOAD"LOMON",8,1 AND SYS32768
4. F C000 CFFF 00
5. ASSEMBLE THE FOLLOWING CODE AT \$1000

```

1000 A0 0E    LDY #$0E
1002 B9 01 C0 LDA $C001,Y
1005 59 00 C0 EOR $C000,Y
1008 99 01 C0 STA $C001,Y
100B C8      INY
100C C0 B7   CPY #$B7
100E D0 F2   BNE $1002
1010 A9 00   LDA #$00
1012 8D 87 C0 STA $C087
1015 4C 10 C0 JMP $C010
  
```

G FCE2 (RESET COMPUTER)

6. FORMAT A WORK DISK IF YOU HAVEN'T ALREADY
7. INSERT ORIGINAL DISK AND SYS 4096
8. AFTER COMPUTER SAYS 'READY'. SYS32768
9. INSERT FORMATTED WORK DISK
10. S"BOOT2",08,C000,C150
11. LOAD"RELOCATE BLOCKS",8 AND RUN (ON ARCHIVER DISK)
12. RELOCATE BLOCKS 17,00 & 17,10 OF WORK DISK TO BLOCKS 18,04 & 18,05 OF CLONE DISK.
13. YOU'RE DONE!!

 STATES AND TRAITS (TM) V2

1. MAKE A CLONE COPY FROM ORIGINAL.
2. LOAD & EXECUTE TRACK SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	03	19	66	08

4. DONE!

 TRAP-A-ZOID (TM)

1. MAKE A CLONE COPY FROM ORIGINAL.
2. LOAD & EXECUTE TRACK SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	03	19	6B	08

4. DONE!

ELECTRONIC ARTS INC.

PROTECTION

THESE PROGRAMS USE A COMBINATION OF ML AND COMPILED CODE IN THE 2ND EA FILE TO HIDE THEIR PROTECTION. THE FOLLOWING CHANGES MODIFY THE COMPILED CODE BY REMOVING CHECKS FOR THE LOADER (1ST EA FILE) AND WRITES TO RAM. THE CHECKSUMS ARE THEN CALCULATED, STORED IN THE PROGRAM AND THE PROTECTION ROUTINE IS COMPLETELY BYPASSED.

ELECTRONIC ARTS (ECA) ARE DIVIDED INTO 'NEW' AND 'OLD' DEPENDING ON THE TYPE OF PROTECTION USED. 'OLD' ECA HAVE TRACK AND SECTOR CHANGES, AND 'NEW' ECA ARE "REPAIRED" USING THE 'M' COMMAND OF THE ML MONITOR.

OLD ELECTRONIC ARTS

AXIS ASSASSIN (TM)	D-BUG (TM)
FINACIAL COOKBOOK (TM)	HARD HAT MACK (TM)
LAST GLADIATOR (TM)	M.U.L.E (TM)
MURDER ON THE ZINDERNEUF (TM)	MUSIC CONSTRUCTION SET (TM)
ONE ON ONE (TM)	PINBALL CONSTRUCTION (TM)
REALM OF IMPOSSIBILITY (TM)	WORMS (TM)

1. MAKE A CLONE COPY FROM ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES FROM TRACK & SECTOR EDITOR ON CLONE COPY:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	11	96	1B	4E
17	11	97	1B	1A

4. DONE!

NEW ELECTRONIC ARTS

USE THE FOLLOWING PROCEDURE TO MAKE THE SPECIFIED CHANGES TO THE 'NEW' ECA DISKS.

1. MAKE A COPY OF THE ORIGINAL (INGNORE ERROR ON TRACK 35)
2. LOAD"LOMON",8,1
3. INSERT COPY AND LOAD"EA"+CHR\$(34)+CHR\$(157),8,1
4. OPEN15,8,15,"S0:EA"+CHR\$(34)+CHR\$(157):CLOSE15
5. OPEN15,8,15,"V0":CLOSE15
6. SYS32768 (ENTER ML MONITOR)
7. MODIFY THE SPECIFIED ADDRESSES USING THE 'M' COMMAND. THE ADDRESSES WHICH MUST BE CHANGED ARE LISTED BY PROGRAM
8. S"EAAA",08,C000,CA1F (SAVE THE ALTERED CODE TO THE COPY)
9. OPEN'15,8,15,"R0:EA"+CHR\$(34)+CHR\$(157)+"=0:EAAA":CLOSE15 (RENAME ALTERED FILE)
10. RUN ALLOCATE ALL (ON ARCHIVER DISK)
11. YOU'RE DONE!!

ADVENTURE CONSTRUCTION SET (TM)

 ADDRESS REPLACE WITH

C018 EA EA EA EA EA EA EA EA
 C020 EA EA EA EA EA EA EA EA
 C028 EA EA EA EA EA
 C042 05
 C04A 05
 C053 05
 C0AA 60
 C242 A9 ED
 C4A1 05 2D E3
 C4B8 05 2C E3 07 ED EF
 C4D3 CE
 C4E0 F1
 C6C0 14
 CA00 73 14

ARCHON II (TM)

 ADDRESS REPLACE WITH

C018 EA EA EA EA EA EA EA EA
 C020 EA EA EA EA EA EA EA EA
 C028 EA EA
 C03B 05
 C043 05
 C04C 05
 C088 60
 C21A F0 D2
 C444 05 D8 DC
 C45B 05 D9 DC 07 BB D0
 C476 CE
 CA00 39 4C

DELTA PATROL (TM) (EA TYPE 3 ERROR ON TRACK 2)

 PIRATE SLAYER CODE BREAKER!

1. MAKE A CLONE COPY FROM ORIGINAL.
2. LOAD & EXECUTE TRACK SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
01	14	1E	CD	28
01	14	1F	64	6D
01	14	20	43	C0
18	17	61	06	35

4. DONE!

PROTECTION

FILE WITH PROTECTION: LOADER

THIS IS PIRATE SLAYER CODE (DEPENDS ON WHAT TEXT WORDS HE USED AS TO WHERE THE PROTECTION STARTS. LOAD"LOADER",8,1 (HEXADECIMAL STARTS \$4000-\$547X DEPENDS ON TEXT TO HACKERS).

(NOW EXAMINE CODE WITH HIMON YOU SHOULD LOAD IT AND START IT WITH SYS49152)

At HEX \$4B04, \$4B05, \$4B06 (CD, 64, 43) 'CMP' COMPARE AT \$4364 (28, 6d, C0) THIS INSTALL ERROR CODE TO ASSEMBULATE ERROR 21. NEXT YOU NEED TO LOOK AT \$5435. #\$06 TO #\$35 = 21 WHEN CODE IS READ.

NOW YOU CAN DEFEAT MOST PIRATE SLAYER CODE.

MAIL ORDER MONSTERS (TM)

ADDRESS REPLACE WITH

C018	EA EA EA EA EA EA EA EA
C020	EA EA EA EA EA EA EA EA
C028	EA EA EA EA EA
C042	05
C04A	05
C053	05
C0AA	60
C242	A9 ED
C4A1	05 2D E3
C4B8	05 2C E3 07 ED EF
C4D3	CE
C4E0	F1
C6C0	14
CA00	96 14

RACING DESTRUCTION SET (TM)

ADDRESS REPLACE WITH

C018	EA EA EA EA EA EA EA EA
C020	EA EA EA EA EA EA EA EA
C028	EA EA EA EA EA
C042	05
C04A	05
C053	05
C0AA	60
C242	52 ED
C47F	04
C480	6A 07 2D C9
C4A1	05 2D E3
C4B8	05 2C E3 07 ED EF
C4D3	CE
C4E0	F1
C6C0	14
CA00	D9 14

 REALM OF IMPOSSIBILITY (TM)

 ADDRESS REPLACE WITH

C018	EA EA EA EA EA EA EA EA
C020	EA EA EA EA EA EA EA EA
C032	05
C03A	05
C043	05
C09A	60
C205	74 ED
C47F	04
C492	EE
C49F	F1
C60A	05 36 EE 07 4B E2
C67F	A7
CA00	E0 A7

 SEVEN CITIES OF GOLD (TM)

 ADDRESS REPLACE WITH

C018	EA EA EA EA EA EA EA EA
C020	EA EA EA EA EA EA EA EA
C028	EA EA EA EA EA
C038	05
C041	05
C070	60
C20F	45 0A
C41B	05 41 04
C432	05 40 04 07 7B 08
C44D	CE
CA00	7E EF

SKYFOX (TM)

 ADDRESS REPLACE WITH

C018	EA EA EA EA EA EA EA EA
C020	EA EA EA EA EA EA EA EA
C028	EA EA EA EA EA
C042	05
C04A	05
C053	05
C0AA	60
C242	A9 ED
C26A	2F E3
C2EE	4C
C4A1	05 2D E3
C4B8	05 2C E3 07 ED EF
C4D3	CE
C4E0	F1
C6C0	14
CA00	0D 14 A9 EA 8D 88 5C A9
CA08	A9 8D 89 5C A9 06 8D 8A
CA10	5C A9 01 8D 00 E0 A9 00
CA18	A2 00 A0 00 4C 00 5A

 STANDING STONES (TM)

 ADDRESS REPLACE WITH

C018	EA EA EA EA EA EA EA EA
C020	EA EA EA EA EA EA EA EA
C028	EA EA EA EA EA
C03B	05
C043	05
C04C	05
C088	60
C21A	F8 D2
C43C	05 D8 DC
C453	05 D9 DC 07 83 D0
C46E	CE
C47B	EE
C65B	CB
CA00	10 68

WORD FLYER (TM)

ADDRESS REPLACE WITH

```

C018      EA EA EA EA EA EA EA EA
C020      EA EA EA EA EA EA EA EA
C028      EA EA EA EA EA
C038      05
C041      05
C07D      60
C20F      45 0A
C41B      03 41 04
C432      05 40 04 07 7B 08
C44D      CE
CA00      D2 EF

```

EPYX INC.

9 TO 5 TYPING (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD"LLMON",8,1 & SYS8192
3. TO DECODE THE PROTECTION ROUTINE & INSERT A 'BRK' INTO ROUTINE, ASSEMBLE THE FOLLOWING CODE:

```

0900 LDY #$0E
0902 LDA $8801,Y :DECODE ROUTINE
0905 EOR $8800,Y
0908 STA $8801,Y
090B INY
090C CPY #$B8
090E BNE $0902
0910 LDA #$00 :INSERT 'BRK' COMMAND
0912 STA $8888
0915 JMP $8810 :RUN PROTECTION ROUTINE

```

4. G FCE2 (RESET COMPUTER)
5. INSERT CLONE DISK.
6. OPEN15,8,15,"S0:9 TO 5":CLOSE15 :ERASE PROTECTION PROGRAM FROM COPY.
7. INSERT ORIGINAL DISK.
8. LOAD"9 TO 5",8,1 :PROGRAM CONTAINS THE PROTECTION
9. SYS2304 :EXECUTE PROGRAM AT \$0900
10. PROGRAM SHOULD RETURN TO READY AFTER DECODING AND READING DATA FROM DRIVE.
11. INSERT CLONE DISK.
12. SYS8192 :RE-ENTER MONITOR
13. M 0001 37 TO 36 :SWITCH BASIC ROM OUT.
14. S"9 TO 5",08,5200,CAE0 :SAVE BROKEN PROGRAM TO DISK.
15. DONE!!

BALL BLAZER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD "DIRECTORY REPAIR", 8 AND RUN (ON ARCHIVE DISK)
3. LOAD & EXECUTE TRACK & SECTOR EDITOR.
4. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
19	18	ED	E2	D5

5. DONE!!

BREAK DANCE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD "HIMON", 8, 1 & SYS49152
3. TO DECODE THE PROTECTION ROUTINE & INSERT A 'BRK' INTO ROUTINE, ASSEMBLE THE FOLLOWING CODE:

```

0900 LDY #$0E
0902 LDA $26BA,Y :DECODE ROUTINE
0905 EOR $26B9,Y
0908 STA $26BA,Y
090B INY
090C CPY #$BD
090E BNE $0902
0910 LDA #$00 :INSERT 'BRK' COMMAND
0912 STA $2746
0915 JMP $26C9 :RUN PROTECTION ROUTINE

```

4. G FCE2 (RESET COMPUTER)
5. INSERT CLONE DISK.
6. OPEN15, 8, 15, "S0:INTRO":CLOSE15 :ERASE PROTECTION PROGRAM FROM COPY.
7. INSERT ORIGINAL DISK.
8. LOAD "INTRO", 8, 1 :PROGRAM CONTAINS THE PROTECTION
9. SYS2304 :EXECUTE PROGRAM AT \$0900
10. PROGRAM SHOULD RETURN TO READY AFTER DECODING AND READING DATA FROM DRIVE.
11. INSERT CLONE DISK.
12. SYS49152 :RE-ENTER MONITOR
13. M 0001 37 TO 36 :SWITCH BASIC ROM OUT.
14. S "INTRO", 08, 2000, 2A00 :SAVE BROKEN PROGRAM TO DISK.
15. DONE!!

 DRAGON RAIDERS OF PERN (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
01	02	F8	D0	EA
01	02	F9	BA	EA
01	03	02	F0	EA
01	03	03	B2	EA

4. DONE!!

PROTECTION

TO STUDY PROTECTION:

1. MAKE a COPY OF THE ORIGINAL.
2. INSERT CLONE COPY IN DRIVE.
3. LOAD "HIMON", 8, 1 SYS49152 (ADDR: \$C000-\$CFFF)
4. L "MAIN", 08 (ADDR: \$8000-\$BC00)
5. M 0001 37 TO 36 (SWITCH BASIC ROM OUT)
6. D BB00 BC00 (DISASSEMBLE TO PRINTER TO STUDY CODE)

CODE AT \$BB05-BB0C STORES A \$BB AT LOCATION \$FC.

CODE AT \$BB0E-BB2C CHANGES ALL JSR \$65XX TO JSR \$BBXX (ALSO STA & LDA).

CODE AT \$BB4C-BB7B OPEN CHANNEL & FILTER

CODE AT \$BB7B READ TRACK 1, SECTOR 1, AND READ ERROR CHANNEL.

CODE AT \$BB7E EXPECT NO ERROR (NOP TWO BYTES).

CODE AT \$BB80-BB93 READ TRACK 1, SECTOR 2, AND READ ERROR CHANNEL

CODE AT \$BB86 EXPECT ERROR (NOP TWO BYTES).

7. NOP THE FOLLOWING BYTES:

\$BB7E = EA

\$BB7F = EA

\$BB86 = EA

\$BB87 = EA

8. S "@0:MAIN", 08, 8000, BC00

9. DONE!

FAX (TM) V1

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
11	19	A2	D0	EA
11	19	A3	BA	EA
11	19	AA	F0	EA
11	19	AB	B2	EA

4. DONE!!

FAX (TM) V2

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
01	02	A1	D0	EA
01	02	A2	BA	EA
01	02	A9	F0	EA
01	02	AA	B2	EA

4. DONE!!

PROTECTION

TO STUDY PROTECTION:

1. MAKE a COPY OF THE ORIGINAL.
 2. INSERT CLONE COPY IN DRIVE.
 3. LOAD"HIMON",8,1 SYS49152 (ADDR: \$C000-\$CFFF)
 4. L"CODE",08 (ADDR: \$0801-\$9801)
 5. D 9700 9800 (DISASSEMBLE TO PRINTER TO STUDY CODE)
- CODE AT \$9705-970C STORES A \$BB AT LOCATION \$FC.
 CODE AT \$970E-972C CHANGES ALL JSR \$65XX TO JSR \$97XX (ALSO STA & LDA).
- CODE AT \$974C-977B OPEN CHANNEL & FILTER
 CODE AT \$977B READ TRACK 1, SECTOR 1, AND READ ERROR CHANNEL.
 CODE AT \$977E EXPECT NO ERROR (NOP TWO BYTES).
 CODE AT \$9780-BB93 READ TRACK 1, SECTOR 2, AND READ ERROR CHANNEL
 CODE AT \$9786 EXPECT ERROR (NOP TWO BYTES).
7. NOP THE FOLLOWING BYTES:
 - \$977E = EA
 - \$977F = EA
 - \$9786 = EA
 - \$9787 = EA
 8. S"@0:CODE",08,0801,9801
 9. DONE!

 IMPOSSIBLE MISSION (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD "HIMON", 8, 1 & SYS49152
3. TO DECODE THE PROTECTION ROUTINE & INSERT A 'BRK' INTO ROUTINE, ASSEMBLE THE FOLLOWING CODE:

```

0900 LDA #$36
0902 STA $01          :SWITCH BASIC OUT
0904 LDY #$0E
0906 LDA $B001,Y    :DECODE ROUTINE
0909 EOR $B000,Y
090c STA $B001,Y
090f INY
0910 CPY #$B7
0912 BNE $0906
0914 LDA #$00        :INSERT 'BRK' COMMAND
0916 STA $B087
0919 JMP $B010      :RUN PROTECTION ROUTINE
  
```

4. G FCE2 (RESET COMPUTER)
5. INSERT CLONE DISK.
6. OPEN15, 8, 15, "S0:LOADER":CLOSE15 :ERASE PROTECTION PROGRAM FROM COPY.
7. INSERT ORIGINAL DISK.
8. LOAD "LOADER", 8, 1 :PROGRAM CONTAINS THE PROTECTION
9. SYS2304 :EXECUTE PROGRAM AT \$0900
10. PROGRAM SHOULD RETURN TO READY AFTER DECODING AND READING DATA FROM DRIVE.
11. INSERT CLONE DISK.
12. SYS49152 :RE-ENTER MONITOR
13. M 0001 37 TO 36 :SWITCH BASIC ROM OUT.
14. S "LOADER", 08, B000, B1A2 :SAVE BROKEN PROGRAM TO DISK.
15. DONE!!

 JET COMBAT (TM)

1. MAKE A COPY OF THE ORIGINAL USING AN MSD DUAL, FAST HACK'EM 35 SEC.. OR DISK MAKER FAST TRACK (YOU MUST USE A COPY PROGRAM THAT DOESN'T TRANSLATE THE GCR CODE ON THE DISK)
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	05	40	C5	00
18	05	44	A2	4C
18	05	46	86	04

4. DONE!!

LUNAR OUTPOST (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD "DIRECTORY REPAIR",8 AND RUN (ON ARCHIVE DISK)
3. LOAD & EXECUTE TRACK & SECTOR EDITOR.
4. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
09	19	E4	00	EA
09	19	E5	BA	EA
09	19	EC	F0	EA
09	19	ED	B2	EA

5. DONE!!

MONTY PLAYS SCRABBLE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD "HIMON",8,1 & SYS49152
3. TO DECODE THE PROTECTION ROUTINE & INSERT A 'BRK' INTO ROUTINE, ASSEMBLE THE FOLLOWING CODE:

```

7000 LDY #$0E
7002 LDA $0804,Y :DECODE ROUTINE
7005 EOR $0803,Y
7008 STA $0804,Y
700B INY
700C CPY #$BD
700E BNE $7002
7010 LDA #$00 :INSERT 'BRK' COMMAND
7012 STA $0890
7015 JMP $0813 :RUN PROTECTION ROUTINE

```

4. G FCE2 (RESET COMPUTER)
5. INSERT CLONE DISK.
6. OPEN15,8,15,"S0:MON1":CLOSE15 :ERASE PROTECTION PROGRAM FROM COPY.
7. INSERT ORIGINAL DISK.
8. LOAD "MON1",8,1 :PROGRAM CONTAINS THE PROTECTION
9. SYS28672 :EXECUTE PROGRAM AT \$7000
10. PROGRAM SHOULD RETURN TO READY AFTER DECODING AND READING DATA FROM DRIVE.
11. INSERT CLONE DISK.
12. SYS49152 :RE-ENTER MONITOR
13. S"MON1",08,0801,30B0 :SAVE BROKEN PROGRAM TO DISK.
14. DONE!!

PITSTOP II (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD "HIMON", 8, 1 & SYS49152
3. TO DECODE THE PROTECTION ROUTINE & INSERT A 'BRK' INTO ROUTINE, ASSEMBLE THE FOLLOWING CODE:

```

0900 LDY #$0E
0902 LDA $9404,Y :DECODE ROUTINE
0905 EOR $9403,Y
0908 STA $9404,Y
090B INY
090C CPY #$BD
090E BNE $0902
0910 LDA #$00 :INSERT 'BRK' COMMAND
0912 STA $9490
0915 JMP $9413 :RUN PROTECTION ROUTINE

```

4. G FCE2 (RESET COMPUTER)
5. INSERT CLONE DISK.
6. OPEN15, 8, 15, "S0:PITS":CLOSE15 :ERASE PROTECTION PROGRAM FROM COPY.
7. INSERT ORIGINAL DISK.
8. LOAD "PITS", 8, 1 :PROGRAM CONTAINS THE PROTECTION
9. SYS2304 :EXECUTE PROGRAM AT \$0900
10. PROGRAM SHOULD RETURN TO READY AFTER DECODING AND READING DATA FROM DRIVE.
11. INSERT CLONE DISK.
12. SYS49152 :RE-ENTER MONITOR
13. M 0001 37 TO 36 :SWITCH BASIC ROM OUT.
14. S "PITS", 08, 1000, C000 :SAVE BROKEN PROGRAM TO DISK.
15. DONE!!

STARFIRE-ONE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	09	A7	D0	EA
17	09	A8	BA	EA
17	09	AF	F0	EA
17	09	B0	B2	EA

4. DONE!!

SUMMER GAMES (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
15	04	C1	20	4C
15	04	C2	C6	9C
15	04	C3	FF	67

4. DONE!!

SUMMER GAMES II (TM)

1. MAKE A COPY OF THE ORIGINAL USING AN MSD DUAL, FAST HACK'EM 35 SEC.. OR DISK MAKER FAST TRACK (YOU MUST USE A COPY PROGRAM THAT DOESN'T TRANSLATE THE GCR CODE ON THE DISK)
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	05	40	C5	00
18	05	44	A2	4C
18	05	46	86	04

4. DONE!!

 WORLDS GREATEST BASEBALL (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD "HIMON", 8, 1 & SYS49152
3. TO DECODE THE PROTECTION ROUTINE & INSERT A 'BRK' INTO ROUTINE, ASSEMBLE THE FOLLOWING CODE:

```

0900 LDY #$0E
0902 LDA $6001,Y :DECODE ROUTINE
0905 EOR $6000,Y
0908 STA $6001,Y
090B INY
090C CPY #$A5
090E BNE $0902
0910 LDA #$00 :INSERT 'BRK' COMMAND
0912 STA $6085
0915 JMP $6010 :RUN PROTECTION ROUTINE
  
```

4. G FCE2 (RESET COMPUTER)
5. INSERT CLONE DISK.
6. OPEN15, 8, 15, "S0:8":CLOSE15 :ERASE PROTECTION PROGRAM FROM COPY.
7. INSERT ORIGINAL DISK.
8. LOAD "8", 8, 1 :PROGRAM CONTAINS THE PROTECTION
9. SYS2304 :EXECUTE PROGRAM AT \$0900
10. PROGRAM SHOULD RETURN TO READY AFTER DECODING AND READING DATA FROM DRIVE.
11. INSERT CLONE DISK.
12. SYS49152 :RE-ENTER MONITOR
13. S "8", 08, 1000, C000 :SAVE BROKEN PROGRAM TO DISK.
14. REPEAT STEPS 4-14 FOR FILES:
 - SIDE A FILE "9"
 - SIDE B FILE "3"
15. DONE!!

FIRST STAR INC.

 SPY VS SPY (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD "DIRECTORY REPAIR", 8 AND RUN (ON ARCHIVE DISK)
3. LOAD & EXECUTE TRACK & SECTOR EDITOR.
4. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	11	FA	D0	EA
17	11	FB	09	EA
17	02	03	D0	EA
17	02	04	01	EA

4. DONE!!

 FISHER PRICE

FIRST MEN IN THE MOON MATH (TM) JUNGLE BOOK READING (TM)
 PERFECT FIT (TM) PETER RABIT READING (TM)
 PROKOFIER'S PETER AND THE WOLF MUSIC (TM)

- 1. MAKE A COPY OF THE ORIGINAL BOTH SIDES. PROTECTION IS ON SIDE 2.
 2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
 4. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:
 (ONLY ON BACKUP OF SIDE 2)

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	17	00	33	30
17	17	02	32	30

5. DONE!

PROTECTION

 23 READ ERROR ON SIDE 2 TRACK 18 SECTOR 17. NOW WE CHANGED 33 to 30
 THIS MEANS NO ERROR 0 WHERE 33 = 23 WHEN VALUE 32 IS SUBTRACTED.

SEA SPELLER (TM)

- 1. FORMAT A BLANK DISK
 2. LOAD"HIMON",8,1 SYS49152
 3. USE THE 'M' COMMAND TO ENTER THE FOLLOWING CODE:
 L"SSP",08

ADDRESS	REPLACE WITH
8000	09 80 14 80

4. S"SS.OBJ",08,8000,9FFF (RESAVE TO BLANK DISK)
 5. USE SUPERBOOTER TO BUILD A BOOT AND SYS64738
 6. YOU'RE DONE!!

GAMESTAR

BASEBALL (TM)

- 1. FORMAT A BLANK DISK
 2. MAKE A COPY OF THE ORIGINAL.
 3. LOAD & EXECUTE TRACK & SECTOR.
 4. INSERT CLONE DISK
 5. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
19	00	03	00	3B

6. LOAD"HIMON",8,1 AND SYS49152
 7. L"PLAYBALL",8
 8. INSERT FORMATED DISK
 9. S"BB.OBJ",08,3B00,C000 (SUPERBOOTER FORMAT)
 10. USE SUPERBOOTER TO BUILD A BOOT TO FLIP-OUT BASIC AND
 SYS32780
 11. YOU'RE DONE!!

ON-COURT TENNIS (TM)

1. FORMAT A BLANK DISK
2. COPY FILE CALLED 'FILE' TO THE BLANK DISK
3. INSERT THE ORIGINAL AND LOAD"*",8,1
4. WHEN THE DRIVE CHECKS THE ERROR (RED LIGHT BEGINS TO BLINK) PRESS THE RESET BUTTON.
5. LOAD"HIMON",8,1 AND SYS49152
6. USE THE 'M' COMMAND TO M 08C6 CHANGE 32 TO 30
7. INSERT THE FORMATED DISK. S"OC.OBJ",08,0800,0A41
8. USE SUPERBOOTER TO BUILD A BOOT TO LOAD"OC.OBJ" AND SYS2312
9. YOU'RE DONE!!

HAYDEN INC.

SARGON II (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	12	A8	F0	EA
17	12	A9	2A	EA

4. DONE!

HES INC.

TURTLE GRAPHICS 2 (TM)

1. MAKE A COPY OF THE ORIGINAL
2. LOAD"TURTLE.BOOT",8
REMOVE LINE 10 AND 20
3. SAVE"@0:TURTLE.BOOT",8
4. LOAD"HIMON",8,1 AND SYS49152
5. USE THE 'M' COMMAND TO ENTER THE FOLLOWING CODE:
L"TB",08

ADDRESS	OLD	NEW
7849	EA	4C
784A	--	A7
784B	--	78

6. S"@0:TB",08,4001,7900
7. YOU'RE DONE!

HOME & HOBBY

PLANTIN PAL (TM)

1. MAKE A CLONE OF THE ORIGINAL.
2. LOAD"HIMON",8,1
3. USE THE 'M' COMMAND TO ENTER THE FOLLOWING CODE:
LOAD"PAL",8 AND SYS49152

ADDRESS	OLD	NEW
1350	2E	2B
1362	2B	2E

4. X TO EXIT AND SAVE"@0:PAL",8
5. YOU'RE DONE!

HUMAN EDGE

MIND PROBER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	18	EF	2E	2B

4. DONE!

IMAGIC INC.

CRIME AND PUNISHMENT (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
13	05	2C	D0	F0
13	05	3B	D0	F0
13	05	4C	F0	D0

4. YOU'RE DONE!!

TOURNAMENT TENNIS (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	04	0B	4C	A5
17	04	0C	00	01
17	04	0D	C0	29

4. DONE!

ISA SOFTWARE

OMNICALC (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. RESET THE COMPUTER, LOAD"HIMON",8,1 AND SYS49152
3. F 0800 9FFF 00
4. L"CALC64",08
5. USE THE 'M' COMMAND TO ENTER THE FOLLOWING CHANGES:

ADDRESS	REPLACE WITH
1524	A9 20 EA

6. S"@0:CALC64",08,0A00,7E00
7. DONE!

KOALA TECHNOLOGIES

DANCING BEAR (TM)

1. MAKE COPY OF ORIGINAL. VALIDATE COPY.
2. LOAD"HIMON",8,1 AND SYS49152
3. L"DB4",08
4. USE THE 'M' COMMAND TO ENTER THE FOLLOWING CHANGES:

ADDRESS	REPLACE WITH
5729	A9 (OLD)
5729	60 (NEW AND JUST BYPASSED ERROR CHECKING)

5. S"@0:DB4",08,0802,572A
6. DONE!

 KOALAPainter (TM)

1. FORMAT A BLANK DISK
2. LOAD AND RUN THE ORIGINAL DISK
3. AFTER ITS RUNNING, RESET THE COMPUTER
4. LOAD"LOMON",8,1 AND SYS32768
5. S"KP.OBJA",08,C000,C800 (SUPERBOOTER FORMAT)
6. L"KOALAPainter,08
7. USE THE 'M' COMMAND AT ADDRESS 0A81. CHANGE 'AO' TO '60'
8. S"KP.OBJB",08,0900,4600 (SUPERBOOTER FORMAT)
9. USE SUPERBOOTER TO BUILD A BOOT TO LOAD"KP.OBJA" & "KP.OBJB"
AND SYS2304
10. YOU'RE DONE!

 KOALAPRINTER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
16	08	F9	3E	19
16	08	FA	BF	1C
16	08	FB	B8	1F

4. DONE!

 PROTECTION

THIS PROGRAM WAS COMPILED USING BLITZ.. (TM). A GOTO WAS INSERT AT \$1BDO IN FILE 'PP' TO BYPASS THE PROTECTION.

KONAMI

 THE SIMPSONS (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
01	10	32	4C	2C

4. DONE!

 PROTECTION

FILE CONTAINING PROTECTION: JS
PLACED A 'BIT' OVER a 'JMP' TO BYPASS PROTECTION.

KYAN SOFTWARE

KYAN PASCAL (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
15	01	6F	20	EA
15	01	70	AC	EA
15	01	71	92	EA

4. DONE!

PROTECTION

THE ABOVE NOP'S (EA). THE PROTECTION ROUTINE. CAUSING THE PROGRAM TO BYPASS ERROR CHECKS.

LEARNING COMPANY

MOPTOWN MOTEL (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	03	B1	20	EA
17	03	B2	D0	EA
17	03	B3	08	EA
17	03	B4	F0	EA
17	03	B5	BB	EA

4. DONE!

PROTECTION

THE ABOVE TRACK & SECTOR CHANGES: CAUSED THE PROTECTION ROUTINE TO BE SKIPPED AND 'BEQ' COMMAND NOP'ED

ROCKY'S BOOTS (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD "DIRECTORY REPAIR",8 AND RUN
3. LOAD "LLMON",8,1 AND SYS8192
4. TO DECODE THE 'PROTECTION ROUTINE & INSERT A 'BRK' INTO ROUTINE, ASSEMBLE THE FOLLOWING CODE

```

8000 LDY #$0E
8002 LDA $0801,Y :DECODE ROUTINE
8005 EOR $0800,Y
8008 STA $0801,Y
800B INY
800C CPY #$BD
800E BNE $8002
8010 LDA #$00 :INSERT 'BRK' COMMAND
8012 STA $088D
8015 JMP $0810 :RUN PROTECTION ROUTINE

```

RESET VECTORS

5. INSERT CLONE DISK
6. L"RBMENU",8,1 :PROGRAM CONTAINS THE PROTECTION
7. G 8000 :EXECUTE DECODE ROUTINE \$8000
8. PROGRAM SHOULD RETURN TO MONITOR AFTER DECODING AND READING DATA FROM DRIVE.
9. S"@0:RBMENU",08,0800,0900 :SAVE BROKEN PROGRAM TO DISK
10. ALTER THE CODE AT \$8002-\$8008, \$8012 and \$8015 AS SHOWN BELOW AND REPEAT STEPS 4-8 FOR FILE "MENU".

```

8002 LDA $C801,Y
8005 EOR $C800,Y
8008 STA $C801,Y
8012 STA $C88D
8015 JMP $C810

```

16. S"@0:MENU",08,C800,CD7F
17. DONE!

LIMBIC SYSTEMS INC.

OXFORD PASCAL (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
13	05	84	D0	EA
13	05	85	13	EA
13	05	8B	D0	EA
13	05	8C	14	EA

4. DONE!

MEGASOFT LIMITEDN-CODER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD "DIRECTORY REPAIR", 8 AND RUN
3. LOAD & EXECUTE TRACK & SECTOR EDITOR.
4. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
16	18	C3	93	8D

5. DONE!

APOLLO (TM) V1.0

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD "DIRECTORY REPAIR", 8 AND RUN
3. LOAD & EXECUTE TRACK & SECTOR EDITOR.
4. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
11	17	ED	52	01
11	17	EE	0F	57
11	17	EF	F5	29

5. DONE!

PROTECTION

PROTECTION: FILENAME BOOT2 HEXADECIMAL LOCATION \$28AA
THIS PROGRAM WAS COMPILED USING PETSPEED (TM), HOWEVER IF YOU LIST IT, THE PROGRAM SAYS BLITZ (TM). A GOTO WAS PLACED IN FILE BOOT2, TO BYPASS THE PROTECTION.

SWIFT TERM (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD "DIRECTORY REPAIR", 8 AND RUN
3. LOAD & EXECUTE TRACK & SECTOR EDITOR.
4. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
16	14	64	BF	19
16	14	65	B8	21
16	14	66	BF	9E

5. DONE!

PROTECTION:
THIS PROGRAM WAS COMPILED USING BLITZ (TM). A GOTO WAS INSERTED TO BYPASS THE PROTECTION.

 TOP SECRET STUFF (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD "DIRECTORY REPAIR", 8 AND RUN
3. OPEN 15, 8, 15, "V0" (VALIDATE DISK)
4. LOAD AND RUN DIRECTORY REPAIR (ON ARCHIVER DISK)
5. LOAD & EXECUTE TRACK & SECTOR EDITOR.
6. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
19	10	14	4A	3A
19	10	15	E8	3A
19	10	16	BC	3A
19	10	45	2E	2B
19	09	B5	4A	3A
19	09	B6	E2	3A
19	09	B7	CF	3A
19	09	EE	2E	2B
16	01	EF	4A	3A
16	11	02	EF	3A
16	11	03	A1	3A
16	11	32	2E	2B
15	00	DE	4A	3A
15	00	DF	F2	3A
15	00	E0	0C	3A
15	10	11	2E	2B
15	13	E3	4A	3A
15	13	E4	F1	3A
15	13	E5	CD	3A
15	14	16	2E	2B
14	00	E1	4A	3A
14	00	E2	EF	3A
14	00	E3	3F	3A
14	10	14	2E	2B
14	01	F0	4A	3A
14	01	F1	F1	3A
14	01	F2	A5	3A
14	11	27	2E	2B
22	00	E1	4A	3A
22	00	E2	F0	3A
22	00	E3	39	3A
22	10	14	2E	2B
22	07	DE	4A	3A
22	07	DF	EF	3A
22	07	E0	C2	3A
22	17	15	2E	2B
12	13	74	4A	3A
12	13	75	ED	3A
12	13	76	BF	3A
12	13	A6	2E	2B
23	00	E1	4A	3A
23	00	E2	EA	3A
23	00	E3	80	3A
23	10	15	2E	2B

```

-----
21      16      C6      8D      8F
21      07      16      9E      8F
05      10      F3      1A      19
05      10      F4      26      21
05      10      F5      FD      E6

```

7. YOU'RE DONE!

PROTECTION

TOP SECRETT STUFF (TM) IS COMPRISED OF PROGRAMS WRITTEN IN BASIC AND COMPILED USING 3 DIFFERENT COMPILERS. THE MAIN MENU AND MOST OF THE INDIVIDUAL PROGRAMS WERE ALL PROTECTED.

MICRO FUN INC.

BOULDER DASH (TM)

-
1. MAKE A COPY OF THE ORIGINAL.
 2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
 3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	18	C6	32	30
18	18	CD	33	30

4. DONE!

THE HEIST (TM)

-
1. MAKE A COPY OF THE ORIGINAL.
 2. LOAD "HIMON", 8, 1 AND SYS45152
 3. L "HEIST", 08
 4. USE THE 'M' COMMAND TO MAKE THE FOLLOWING CHANGES:

ADDRESS	REPLACE WITH
237F	30
2386	30

5. S "@0:HEIST", 08, 0801, 8000 (REPLACE ALTERED FILE)
6. YOU'RE DONE!!

THE TOOL (TM)

-
1. MAKE A COPY OF THE ORIGINAL
 2. TYPE LOAD "BOOT.TOOL", 8
 3. TYPE POKE 2485, 48
 4. TYPE SAVE "@0:BOOT.TOOL", 8
 5. YOU'RE DONE!!

 MICROTECHNIC SOLUTIONS

 SPRITE BYTER (TM)

1. MAKE A COPY OF THE ORIGINAL
2. TYPE LOAD"SB.II",8
3. TYPE POKE2291,0
4. TYPE SAVE"@0:SB.II",8
5. YOU'RE DONE!!

 SMART 64 TERM +3 (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
21	15	9A	15	00

4. YOU'RE DONE!

MICROPROSE

 AIR RESCUE 1 (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
12	18	83	B2	14
12	18	84	15	14
12	18	85	F4	14
12	18	F0	DE	14
12	18	F1	2F	55
12	18	F2	FF	B2

4. YOU'RE DONE!

 F-15 STRIKE EAGLE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
11	16	FF	B2	14
11	04	02	9D	14
11	04	03	F1	14
11	04	6E	DE	14
11	04	6F	2F	55
11	04	70	FF	B2

4. YOU'RE DONE!

 PROTECTION

THE PROTECTION ROUTINE IS HIDDEN IN FILE "TITLE.BA" FOLLOWING THE BASIC PROGRAM. IT USES UNDOCUMENTED OP-CODES AND DECODES THE NEXT 23 AND ENCODES THE PREVIOUS 23 BYTES AS IT RUNS. TO STUDY PROTECTION ADC # $\$01$ AND EOR # $\$FF$ ADDRESS $\$0E2D-\$0FF8$, THEN USE PROGRAM "DC. $\$C000$ " ON ARCHIVER DISK TO DECODE.

 KENNEDY APPROACH (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	01	A2	8D	8F
15	09	ED	89	8F
24	06	3C	DB	FC
24	06	3D	2B	F8
24	06	3E	51	D8
24	06	3F	FC	5B
24	06	40	5A	D5
24	06	41	FD	35

4. DONE!!

 NATO COMMANDER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	01	8F	2E	2B
17	01	E2	2E	2B

4. DONE!

 PROTECTION

FILE NATO WAS WRITTEN IN BASIC AND COMPILED USING SPEEDWRITER (TM). THE "<>" (2E) IN THE "IF" STATEMENTS ABOVE IN THE PROTECTION ROUTINE WAS CHANGED TO "=" (2B).

SOLO FLIGHT (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE RANGE	NEW DATA
17	13	9D-BB	45 B2 32 33 3A 43 24 B2 22 52 45 41 44 20 45 52 52 4F 52 22 3A 5A B2 32 3A 5A 39 B2 31 35 3A 3A
17	13	C6-E5	45 B2 32 37 3A 43 24 B2 22 52 45 41 44 20 45 52 52 4F 52 22 3A 5A B2 33 3A 5A 39 B2 31 36 3A 3A

4. YOU'RE DONE!

SOLO FLIGHT (TM) V2

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD "DIRECTORY REPAIR", 8 AND RUN
3. OPEN 15, 8, 15, "V0" (VALIDATE DISK)
4. LOAD AND RUN DIRECTORY REPAIR (ON ARCHIVER DISK)
5. RENAME "*" TO "BOOT"
6. TYPE LOAD "BOOT", 8
7. REM LINES 271-281 OR REMOVE THEM
8. TYPE SAVE "@0:BOOT", 8
9. YOU'RE DONE!!

SPITFIRE ACE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
21	17	42	8B	8F
21	17	56	8B	8F

4. DONE!

PROTECTION

THE "IF" (8B) STATEMENTS IN BASIC FILE "FASTDRIVER" WAS MODIFIED TO REM (8F).

MICROSOFT INC.

MULTIPLAN (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD "HIMON", 8, 1 AND SYS49152
3. L "MP.", 08
4. MAKE THE FOLLOWING CHANGES WITH THE 'M' COMMAND:

ADDRESS	REPLACE WITH
3586	EA EA

5. S "@0:MP.", 08, 0900, 3600
6. YOU'RE DONE!

MICROWARE DISTRIBUTORS

FONT FACTORY (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
33	06	EB	52	D1
33	06	EC	0F	D8
33	06	ED	F5	38
14	11	8D	52	D1
14	11	8E	0F	40
14	11	8F	F5	36
23	18	87	52	D1
23	18	88	0F	5E
23	18	87	F5	4E

4. DONE!

PROTECTION

THIS PROGRAM WAS PROTECTED IN THREE (3) FILES USING PETSPEED (TM).
THREE (3) GOTO (D1) WAS INSERTED IN CODE TO BYPASS PROTECTION.

MINDSCAPE INC.

BANK STREET MUSIC WRITER (TM)

1. LOAD"ZIP",8,1 (ON ARCHIVER DISK)
2. INSERT AND LOAD ORIGINAL PROGRAM
3. WHEN THE MAIN MENU APPEARS, RESET THE COMPUTER.
4. LOAD"HIMON",8,1 AND SYS49152
5. S"BS.OBJ",08,0800,95E1
USE SUPERBOOTER TO BUILD A BOOT TO LOAD"BS.OBJ" AND SYS2128
6. YOU'RE DONE!

INDIANA JONES (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD"HIMON",8,1 & SYS49152
3. TO DECODE THE PROTECTION ROUTINE & INSERT A 'BRK' INTO ROUTINE, ASSEMBLE THE FOLLOWING CODE:

```

0900 LDY #$0E
0902 LDA $457F,Y      :DECODE ROUTINE
0905 EOR $457E,Y
0908 STA $457F,Y
090B INY
090C CPY #$BD
090E BNE $0902
0910 LDA #$00        :INSERT 'BRK' COMMAND
0912 STA $460B
0915 JMP $458E       :RUN PROTECTION ROUTINE

```

4. G FCE2 (RESET COMPUTER)
5. INSERT CLONE DISK.
6. OPEN15,8,15,"S0:F":CLOSE15 :ERASE PROTECTION PROGRAM FROM COPY.
7. INSERT ORIGINAL DISK.
8. LOAD"F",8,1 :PROGRAM CONTAINS THE PROTECTION
9. SYS2304 :EXECUTE PROGRAM AT \$0900
10. PROGRAM SHOULD RETURN TO READY AFTER DECODING AND READING DATA FROM DRIVE.
11. INSERT CLONE DISK.
12. SYS49152 :RE-ENTER MONITOR
13. S"F",08,4000,9C37 :SAVE BROKEN PROGRAM TO DISK.
14. DONE!

TINK TONK (TM) TINKA'S MAZES (TM)

1. MAKE A COPY OF THE ORIGINAL BOTH SIDES.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	01	63	13	19
18	01	64	0A	01

4. DO THIS ON SIDE A AND SIDE B
5. DONE!

SPROUT (TINK TONK (TM))	THUNDER MOUNTAIN (TM)
CASTLE CLOBBER (TM)	DEVELOPING THINKING SKILLS
TINKA'S ADVENTURE (TM)	ABC'S WITH TINK TONK
TINKA'S MAZES (TM) ALT.	COUNT & ADD WITH TINK TONK
TINKA'S SUBTRACTION FAIR (TM)	SUBTRACTION WITH TINK TONK
TONK IN THE LAND OF THE BUDDYBOTS (TM)	SMART THINKER WITH TINK TONK
TUK GOES TO TOWN (TM)	SPELLING WITH THE TINK TONKS

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD "DIRECTORY REPAIR", 8 AND RUN
3. LOAD "ALLOCATE ALL", 8 AND RUN.
4. LOAD "HIMON", 8, 1 & SYS49152
5. TO DECODE THE PROTECTION ROUTINE & INSERT A 'BRK' INTO ROUTINE, ASSEMBLE THE FOLLOWING CODE:

```

8000 LDY #$0E
8002 LDA $0840,Y :DECODE ROUTINE
8005 EOR $083F,Y
8008 STA $0840,Y
800B INY
800C CPY #$BD
800E BNE $8002
8010 LDA #$00 :INSERT 'BRK' COMMAND
8012 STA $08CA
8015 JMP $084F :RUN PROTECTION ROUTINE

```

6. G FCE2 (RESET COMPUTER)
7. INSERT CLONE DISK.
8. OPEN15,8,15,"S0:BOOT2":CLOSE15 :ERASE PROTECTION PROGRAM FROM COPY.
9. INSERT ORIGINAL DISK.
10. LOAD "BOOT2", 8, 1 :PROGRAM CONTAINS THE PROTECTION
11. SYS32768 :EXECUTE PROGRAM AT \$8000
12. PROGRAM SHOULD RETURN TO READY AFTER DECODING AND READING DATA FROM DRIVE.
13. INSERT CLONE DISK.
14. SYS49152 :RE-ENTER MONITOR
15. S"BOOT2", 08, 0801, 0C00 :SAVE BROKEN PROGRAM TO DISK.
16. REPEAT STEPS 6-14 AFTER ASSEMBLING THE CODE BELOW.

```

8000 LDY #$0E
8002 LDA $0B93,Y :DECODE ROUTINE
8005 EOR $0B92,Y
8008 STA $0B93,Y
800B INY
800C CPY #$B7
800E BNE $8002
8010 LDA #$00 :INSERT 'BRK' COMMAND
8012 STA $0C19
8015 JMP $0BA2 :RUN PROTECTION ROUTINE

```

17. S"L",08,0880,0F24
 18. YOU'RE DONE!!

NOTE: TINKA'S MAZE HAS 2 SIDES 2ND SIDE NEEDS TO ALSO BE DONE.

MUSE

BEYOND CASTLE WOLFENSTEIN (TM)

1. MAKE A COPY OF THE ORIGINAL
2. LOAD"HIMON",8,1 AND SYS49152
3. L"@STANDINGS",08
4. USE THE 'M' COMMAND TO CHANGE THE FOLLOWING BYTES:

ADDRESS REPLACE WITH

 0E35 A9 52 EA

5. S"@0:@STANDINGS",08,0801,9000
6. YOU'RE DONE!!

LEAPS & BOUNDS (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
14	19	05	A9	4C
14	19	06	29	62
14	19	07	A2	09
14	19	72	AE	A2
14	19	73	15	08
14	19	74	0A	A0
14	19	75	AC	01
14	19	76	14	EA
14	19	77	0A	EA

4. YOU'RE DONE!!

PROTECTION

PROTECTION FILE: "GTITLE"

LOOKS FOR ERROR 23 ON TRACK 41 IF FOUND THEN LOOKS FOR ERROR 20
ON TRACK 20. PROTECTION CODE STARTS AT \$0900.SPACE TAXI (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
20	05	B1	20	A9
20	05	B2	F0	02
20	05	B3	5D	EA
20	05	C2	20	A9
20	05	C3	F0	70
20	05	C4	5D	EA
20	05	D3	20	A9
20	05	D4	F0	02
20	05	D5	5D	EA

4. DONE!

OPTIMUM RESOURCE INC.

PICTURE BUILDER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
13	20	E2	4C	60

4. DONE!

STICKYBEAR ABC'S (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
19	07	D0	F0	EA
19	07	D1	03	EA
19	07	D2	4C	EA
19	07	D3	D1	EA
19	07	D4	15	EA

4. DONE!

STICKYBEAR MATH (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
06	04	5F	F0	EA
06	04	60	03	EA
06	04	61	4C	EA
06	04	62	61	EA
06	04	63	5E	EA

4. DONE!

STICKYBEAR NUMBERS (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
19	07	CE	F0	EA
19	07	CF	03	EA
19	07	D0	4C	EA
19	07	D1	CF	EA
19	07	D2	5F	EA

4. DONE!

STICKYBEAR OPPOSITES (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	18	22	F0	EA
18	18	23	03	EA
18	18	24	4C	EA
18	18	25	24	EA
18	18	26	57	EA

4. DONE!

STICKYBEAR READING COMPREHENSION (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
01	18	24	F0	EA
01	18	25	03	EA
01	18	26	4C	EA
01	18	27	26	EA
01	18	28	5A	EA

4. DONE!

STICKYBEAR SHAPES (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
19	07	BA	F0	EA
19	07	BB	03	EA
19	07	BC	4C	EA
19	07	BD	BC	EA
19	07	BE	5F	EA

4. DONE!

STICKYBEAR TOWN BUILDER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
08	05	06	F0	EA
08	05	07	03	EA
08	05	08	4C	EA
08	05	09	09	EA
08	05	0A	87	EA

4. DONE!

STICKYBEAR TYPING (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES WITH THE TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
19	07	BA	F0	EA
19	07	BB	03	EA
19	07	BC	4C	EA
19	07	BD	BC	EA
19	07	BE	5F	EA
15	09	DE	F0	EA
15	09	DF	03	EA
15	09	E0	4C	EA
15	09	E1	E1	EA
15	09	E2	82	EA

4. DONE!

ORIGIN

ULTIMA III (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
12	00	36	D0	EA
12	00	37	0D	EA
12	00	3D	D0	EA
12	00	3E	06	EA

4. YOU'RE DONE!!

OXFORD

OXFORD PASCAL (MATTY'S PASCAL) (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
13	05	83	32	30
13	05	8A	33	30

4. DONE!

PARKER BROTHERS

MONTEZUMA'S REVENGE (TM)

1. THIS PROGRAM REQUIRES AN EXPANDER BOARD
2. LOAD AND RUN THE ORIGINAL PROGRAM
3. WHEN THE PROGRAM IS RUNNING. ACTIVATE THE EXROM SWITCH AND PRESS THE RESET BUTTON
4. DE-ACTIVATE THE EXROM SWITCH, AND LOAD"HIMON",8,1
5. SYS49152 (ENTER THE MONITOR)
6. M 0001 CHANGE 37 TO 36 (FLIP-OUT BASIC)
7. M \$8000 CHANGE 55 TO 09 (RESTORE BYTE FROM RESET)
8. S"MR.OBJ",08,8000,C000 (SUPERBOOTER FORMAT)
9. USE SUPERBOOTER TO BUILD A BOOT TO FLIP-OUT BASIC, AND SYS32777
10. YOU'RE DONE!

PENGUIN

EXPEDITION AMAZON (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
05	08	A2	33	30
05	08	B3	37	30
05	08	EC	32	30
05	08	F3	37	30

4. YOU'RE DONE!

THE QUEST (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	03	A2	33	30
17	03	B3	37	30
17	03	EC	32	30
17	03	F3	37	30

4. YOU'RE DONE!

STELLER 7 (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	00	9D	33	30
17	00	AE	37	30
17	00	E4	32	30
17	00	EB	37	30

4. DONE!

SWORD OF KADASH (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	07	50	6A	50
17	07	51	BF	50

4. YOU'RE DONE!!

TRANSYLVANIA (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	00	EC	33	30
17	00	F3	37	30

4. YOU'RE DONE!!

XYPHUS (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
24	07	84	A9	4C
24	07	85	0F	76
24	07	86	AB	03

4. DONE!

PROFESSIONAL SOFTWARE INC.

BLUE CHIP WORD PROCESSOR (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	04	16	23	00
17	04	26	20	00

4. DONE!

FLEET SYSTEM 2 (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	10	4A	D0	EA
17	10	4B	07	EA
17	05	17	D0	EA
17	05	18	10	EA

4. DONE!

SPELL RIGHT+ (TM) V2

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	08	D0	F0	D0

4. DONE!

PROTECTION

PRTECTION FILE: SP1A START LOC. \$081C END LOC. \$2A00
 HEXADECIMAL PROTECTION BYTE LOC. \$16D1

 TRIVIA FEVER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
15	08	67	52	D1
15	08	68	08	78
15	08	69	F5	38

4. DONE!

WORD PRO 3 PLUS/64 (TM) V1 (NEED FINISHED)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	05	--	CE	EA
17	05	--	74	EA
17	05	--	09	EA
17	05	--	C9	C9
17	05	--	32	30

NOTE: SORRY, WE DON'T HAVE THE SPECIFIC BYTE LOCATIONS. THE BYTES 'CE 7A 09' ARE THREE CONSECUTIVE BYTES. THEY MEAN 'DEC \$0974'. the BYTES 'C9 32' ARE ALSO CONSECUTIVE. THEY MEAN 'CMP #\$32'. BOTH SECTIONS MUST BE REPLACED. MAKE SURE YOU REPLACE THE CORRECT, CONSECUTIVE BYTES!

4. YOU'RE DONE!!

WORD PRO 3 PLUS (TM) V2

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	14	24	4B	5F
17	05	26	CE	EA
17	05	27	74	EA
17	05	28	09	EA
17	05	29	CE	EA
17	05	2A	74	EA
17	05	2B	09	EA
17	05	6C	20	A9
17	05	6D	A5	32
17	05	6E	FF	60

4. DONE

PROGRAMME INC.

LADY TUT (TM)

1. FORMAT A DISK
2. LOAD"LTB",8 FROM ORIGINAL DISK
3. LIST LINE 100
4. CHANGE "IF O=0" TO "IF O<0"
5. SAVE"LTB" TO THE FORMATED DISK
6. LOAD & RUN "LTB" LIKE ANY BASIC PROGRAM
7. DONE!

PROGRESSIVE PERIPHERALS & SOFTWARE INC.

PERPLEXIAN CHALLENGE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
-----	-----	-----	-----	-----
17	00	73	00	04

4. DONE!

PROTECTION

THE JMP \$6000 IN FILE "LODR" WAS CHANGED TO JMP \$6004. THIS JUMPS THE ERROR CHECKING ROUTINE.

PRO-LINE SOFTWARE

WORDPRO 64 (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
20	02	E1	A9	4C
20	02	E2	0F	A4
20	02	E3	A2	03

4. OPEN15,8,15,"S0:WPLOADER":CLOSE15
5. ENTER THE FOLLOWING CODE TO REPLACE THE BOOT

```

10 A=A+1
20 ON A GOTO 30,40,50,60,70,80
30 PRINT"[CLEAR SCREEN]          LOADING..."
40 LOAD"WP64",8,1
50 LOAD"LINK",8,1
60 LOAD"DEFAULT MODULE",8,1
70 LOAD"ANTIPROTECTION",8,1
80 SYS4096

```

6. SAVE"WPBOOT",8
7. LOAD ORIGINAL PROGRAM
8. RESET THE COMPUTER AFTER IT IS LOADED
9. LOAD"HIMON",8,1 AND SYS49152
10. INSERT CLONE DISK
11. T 2666 26C9 033C
12. USE THE 'M' COMMAND TO CHANGE THE FOLLOWING CODE:

ADDRESS	REPLACE WITH
03A4	A0 64 B9 3C 03 99 66 26
03AC	88 10 F7 60

13. S"ANTIPROTECTION",08,033C,03B0
14. YOU'RE DONE!!

PROTECTION

THE PROCEDURE ABOVE BUILDS A FILE CALLED ANTIPROTECTION WHICH CONTAINS CODE LOADED FROM A EXTRA SECTOR (STEP 10). THE PROGRAM IS MODIFIED TO JMP \$03A4 (STEP 3) IN PLACE OF LOADING SECTOR.

RANDOM HOUSE INC.

PROTECTION

THE FOLLOWING PROGRAMS SHARE THE SAME PROTECTION SCHEME. THE KERNAL 'CHRIN' ROUTINE \$FFCF IS REPLACE BY A 'LDA #\$01' AND A 'NOP'. THE PROGRAM CHECKS FOR A SYNC ON A TRACK ABOVE 35.

ALPINE ENCOUNTER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
07	10	08	20	EA
03	18	09	CF	A9
03	18	0A	FF	01

4. DONE!

PEANUT'S MAZE MARATHON (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

SIDE 1

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
03	18	B0	20	EA
03	18	B1	CF	A9
03	18	B2	FF	01

SIDE 2

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
07	03	B1	20	EA
07	03	B2	CF	A9
07	03	B3	FF	01

4. DONE!

 SNOOPY READING MACHINE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

SIDE 1

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
34	13	FE	20	EA
34	13	FF	CF	A9
34	05	02	FF	01

SIDE 2

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
35	12	FE	20	EA
35	12	FF	CF	A9
35	04	02	FF	01

4. DONE!

 SNOOPY'S SKYWRITER SCRAMBLER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

SIDE 1

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
26	06	0F	20	EA
26	06	10	CF	A9
26	06	11	FF	01

SIDE 2

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
21	02	0F	20	EA
21	02	10	CF	A9
21	02	11	FF	01

4. DONE!

SNOOPY TO THE RESCUE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

SIDE 1				
TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
26	17	FE	20	EA
26	17	FF	CF	A9
26	08	02	FF	01

SIDE 2				
TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
25	04	FE	20	EA
25	04	FF	CF	A9
25	09	02	FF	01

4. DONE!

READER'S DIGEST

NURSERY RHYMES (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. DONE, NO PROTECTION.

RELIABLE SOFTWARE

YAHTZEE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
15	00	CE	02	00

4. DONE!

RESEARCH IN SPEECH TECHNOLOGY INC. (RIST)

EASY SPEECH - 64 (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
14	05	CB	0F	FF
14	05	CC	A8	8D
14	05	CD	A2	3E
14	05	CE	08	C0
14	05	CF	20	60

4. DONE!

RESTON

MOVIE MAKER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
16	09	4E	D0	EA
16	09	4F	2A	EA
20	07	D7	D0	EA
20	07	D8	2A	EA
13	07	3A	D0	EA
13	07	3B	2A	EA
23	10	E8	D0	EA
23	10	EB	2A	EA

4. DONE!

PROTECTION

THE ERROR CHECKING IS DONE IN 4 FILES (MM1-MM4). THE 'BNE' COMMANDS FOLLOWING THE ERROR CHECKING ROUTINES ARE 'NOP'D'.

RIAHANNON SOFTWARE

JENNY OF THE PRARIE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
7	18	92	32	30

4. DONE!

PROTECTION FILE: "SUBS" FILE STARTS \$C300 ENDS AT \$CDE4
 PROTECTION CODE STARTS \$C600 CHANGE CODE AT \$C946 \$32 to \$30

SCARBOROUGH

NET WORTH (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	10	67	84	41
17	10	68	31	B2
17	10	69	2C	32
17	10	6A	41	33

4. DONE!

PROTECTION

LINE 8 OF BASIC FILE "NW" WAS CHANGED FROM 'INPUT#1,A\$' AREA IN RAM AS THE PROGRAM EXPECTED TO READ ERROR 23 FROM DRIVE. THE VARIABLE 'A\$' FROM RAM IS CHECKED LATER FROM ML PROGRAM. (THE VARIABLE AREA OF RAM IMIDIATELY FOLLOWS THE BASIC PROGRAM).

 PHI BETA FILER (TM)

1. MAKE COPY OF ORIGINAL
2. LOAD"PHI",8 AND LIST
3. EDIT LINE 0 WHERE 6 AND 8 REMOVE BOTH AND PLACE 8 WHERE 6 WAS.
REMOVE LINES 6 & 7. EDIT LINE 9 OVERWRITE SYS16384
4. SAVE"@0:PHI",8 AND PRESS 'RETURN'
5. LOAD"HIMON",8,1 AND SYS49152
6. L"PHIPROG",08 NOW REPLACE THE CODE BELOW WITH THE 'M' COMMAND.

ADDRESS	REPLACE WITH
-----	-----
500D	AD 66 09 (OLD)
500D	A9 38 EA (NEW)

7. S"@0:RFMPROG",08,4000,8FFF (SCRATCH AND REPLACE)
8. DONE!

 RUN FOR MONEY (TM) V1

1. MAKE COPY OF ORIGINAL
2. LOAD"RFM",8 AND LIST
3. EDIT LINE 0 WHERE 7 AND 9 REMOVE BOTH AND PLACE 9 WHERE 7 WAS.
REMOVE LINES 7 & 8. EDIT LINE 10 OVERWRITE SYS16384
4. SAVE"@0:RFM",8 AND PRESS 'RETURN'
5. LOAD"HIMON",8,1 AND SYS49152
6. L"RFMPROG",08 NOW REPLACE THE CODE BELOW WITH THE 'M' COMMAND.

ADDRESS	REPLACE WITH
-----	-----
5BD4	AD 7D 09 (OLD)
5BD4	A9 38 EA (NEW)

7. S"@0:RFMPROG",08,4000,8FFF (SCRATCH AND REPLACE)
8. DONE!

SONGWRITER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

DIRECTORY REPAIR				
TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	13	00	12	00
18	13	01	10	FF

FILE: "START2" REPAIR				
TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	01	42	00	82
18	01	43	00	13

PROTECTION REMOVED				
TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	00	00	11	00 <- MAKES LOADING FASTER
17	00	01	01	D9 AND NO CROSSLINK ERR

ALTERNATE WAY: BYTE 8F to 9C FILL WITH EA'S.

SCHOLASTIC SOFTWARE

AGENT U.S.A. (TM)

1. LOAD "HIMON", 8, 1 AND SYS49152
2. INSERT ORIGINAL DISK AND LOAD ":", 8, 1
3. M 02DB 00
4. EXIT MONITOR (PROGRAM WILL AUTOMATICALLY BEGIN TO LOAD)
5. WHEN THE COMPUTER RETURNS TO READY, SYS49152
6. S "US.OBJ", 08, 0801, 751A (SAVE CODE IN SUPERBOOTERR FORMAT)
7. BUILD A BOOT TO SYS 2064
8. DONE!

POSTER (TM)

1. MAKE A COPY OF ORIGINAL
2. LOAD "LOMON", 8, 1 AND SYS32768 (ON ARCHIVER DISK)
3. PUT COPY IN DRIVE AND L "F", 08
4. F 5708 57A9 EA
5. S "@0:F", 08, 0801, 5800
6. DONE!

SPELL DIVER (TM)

1. MAKE A COPY OF ORIGINAL
2. PUT ORIGINAL BACK IN DRIVE AND LOAD IT, ONCE THE SPELLDRIVER LOGO SHOWS ON SCREEN AND DRIVE LIGHT OUT YOU PRESS THE RESET BUTTON.
3. PUT ARCHIVER DISK IN AND LOAD "HIMON", 8, 1 AND SYS49152
4. PUT COPY IN DRIVE AND M 0800 20 (THIS NOW BYPASSES PROTECTION).
5. S"@0:S", 08, 0800, C000 (SCRATCH AND REPLACE)
6. DONE!

SCREENPLAY

POGO JOE (TM)

1. COPY THE FOLLOWING FILES ONLY:

POGO JOE.OBJ
POGO DATA.OBJ
HIGH SCORES
POGO JOE

2. YOU'RE DONE!!

SEGA

CONGO BONGO (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	01	E2	D0	EA
17	01	E3	03	EA
17	01	DB	D0	EA
17	01	DC	0A	EA

4. DONE!

PROTECTION

THIS PROTECTION WASN'T TO HARD TO FIND, WE FOUND IT IN THE BOOT FILE "CHKDISK" AND NOP'ED THE (2) 'BNE' FOLLOWING CMP #\$32 AND CMP #\$31 (ERROR 21 IN PEC ASCII).

SPY HUNTER (TM)

1. COPY THE LAST FILE ON DISK IT SHOULD BE 81 BLOCKS LONG.
2. RENAME THE FILE TO "SH.OBJ" (SUPERBOOTER FORMAT)
3. USE SUPERBOOTER TO BUILD A BOOT FLIP OUT BASIC AND SYS28801
4. DONE!

 SUPER ZAXXON (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	01	25	00	54
18	01	26	00	41
18	01	27	00	58
18	01	45	00	5A
18	01	46	00	41
18	01	65	00	5A
17	11	02	91	D0
17	11	03	D2	05
17	00	04	00	5A
17	00	05	00	41
17	00	06	00	58

4. LOAD "HIMON", 8, 1 AND SYS49152
5. TO DECODE PROTECTION ROUTINE & INSERT A BRK INTO THE ROUTINE, ASSEMBLE THE FOLLOWING CODE:

```

7000 LDY #$0E
7002 LDA $1A32,Y :DECODE ROUTINE
7005 EOR $1A31,Y
7008 STA $1A32,Y
700B INY
700C CPY #$C1
700E BNE $7002
7010 LDA #$00 :INSERT 'BRK' COMMAND
7012 STA $1ABE
7015 JMP $1A41 :RUN PROTECTION ROUTINE

```

6. INSERT CLONE DISK.
7. LOAD "Z", 8, 1
8. INSERT ORIGINAL DISK
9. G 7000
10. PROGRAM SHOULD RETURN TO READY AFTER DECODING AND READING DATA FROM DRIVE.
11. INSERT CLONE DISK.
12. SYS49152 :RE-ENTER MONITOR
13. S "Z", 08, 0800, 2D00 :SAVE BROKEN PROGRAM TO DISK.
14. DONE!

 PROTECTION

THE ABOVE PROCEDURE RENAMES DISK FILES TO Z, ZA, ZAX, READS EXTRA SECTOR AND REMOVES DONGLE CHECK SO AN ARCHIVAL BACKUP CAN BE MADE.

UP'N DOWN (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. OPEN15,8,15,"S0:AUTOLOAD":CLOSE15
3. OPEN15,8,15,"R0:UD.OBJ=0:LOADER":CLOSE15
4. USE SUPERBOOTER TO BUILD A BOOT TO LOAD "UD.OBJ" AND SYS18176
5. DONE!

SEQUENTIAL CIRCUITS

MODEL 964 (TM) (SEQUENCER)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	01	EE	14	00

4. DONE!

MODEL 970 (TM) (MUSICMATE)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	01	33	14	00

4. DONE!

SIERRA-ON-LINE INC.

C64 WIZTYPE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
20	00	04	20	EA
20	00	05	B4	EA
20	00	06	7A	EA
20	00	FF	20	EA
20	10	02	12	EA
20	10	03	7D	EA

4. DONE!

 THE FOLLOWING FIVE, (6) PROGRAMS CHECK FOR A READ ERROR AND CMP #32.
 TO BYPASS THE PROTECTION, EITHER THE 'BRANCHES' WERE NOP'ED, OR THE
 'COMPARES' WERE CHANGES FROM A \$32 TO A \$30.

MICKEY'S SPACE ADVENTURE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	02	1A	32	30

4. COPY DISKS B, C, AND D (THEY DON'T CONTAIN ERRORS)
5. YOU'RE DONE

MISSION ASTEROID (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	02	1A	32	30

4. DONE!

OIL WELL (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	02	1B	D0	EA
18	02	1C	6C	EA

4. DONE!

QUEST FOR TIRES (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	02	1B	D0	EA
18	02	1C	6C	EA

4. DONE!

 ULYSSES (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	17	1A	32	30

4. DONE!

 WIZARD AND THE PRINCESS (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
18	02	1A	32	30

VERSION 2

18	02	1C	32	30
----	----	----	----	----

4. DONE!

SIGHT & SOUND

INCREDIBLE MUSIC KEYBOARD (TM)

1. MAKE A COPY OF THE ORIGINAL
2. YOU'RE DONE (NO PROTECTION)

 KAWASAKI COMPOSER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
25	12	FD	8D	60

4. DONE!

KAWASAKI PERFORMER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
19	00	04	A9	60

4. YOU'RE DONE!

MUSIC PROCESSOR (TM)

PROTECTION FILE FOR V1/V2: "MP BIN"

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
25	01	E2	B9	A9
25	01	E3	CC	29
25	01	E4	68	EA
25	01	E5	8D	60

4. DONE!

MUSIC PROCESSOR (TM) V2

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
24	01	8C	C9	A9
24	01	8E	F0	8D
24	01	8F	01	E0
24	01	90	42	68
24	01	7C	C9	A9
24	01	7E	F0	8D
24	01	7F	01	E1
24	01	80	22	68
24	01	81	4C	EA
24	01	82	D4	EA
24	01	83	67	EA

4. DONE!

MUSIC VIDEO KIT (TM) (NEEDS FINISHED)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
12	00	--	B9	A9
12	00	--	0B	29
12	00	--	66	EA
13	16	--	69	60

4. DONE!

MUSIC VIDEO KIT (TM) V2

1. MAKE A COPY OF THE ORIGINAL
2. LOAD "HIMON", 8, 1 AND SYS49152
3. L "MVK1", 08
4. USE THE 'M' COMMAND TO CHANGE THE FOLLOWING BYTES:

ADDRESS REPLACE WITH

16AF	AD 09 17 C9 02 F0 04 22 4C CF 15	(OLD)
16AF	A9 02 8D 08 17 EA EA EA EA EA EA	(NEW)
16BF	AD 08 17 C9 29 F0 01 42	(OLD)
16BF	A9 29 8D 08 17 EA EA EA	(NEW)
7D72	AD FE 7E C9 29 F0 01 22	(OLD)
7D72	A9 29 8D FE 7E EA EA EA	(NEW)

5. S "@0:MVK1", 08, 0800, 945E
6. L "MVK2", 08

ADDRESS REPLACE WITH

1717	AD 5B 17 C9 02 F0 04 22 4C 37 16	(OLD)
1717	A9 02 8D 5B 17 EA EA EA EA EA EA	(NEW)
1727	AD 5A 17 C9 29 F0 01 42	(OLD)
1727	A9 29 8D 5A 17 EA EA EA	(NEW)
84CB	AD D0 85 C9 29 F0 01 22	(OLD)
84CB	A9 29 8D D0 85 EA EA EA	(NEW)

7. S "@0:MVK2", 08, 0800, 9C90
8. YOU'RE DONE!!

 ON STAGE ALBUM # 4 (TM)

PROTECTION FILE: "ALBIN"

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
13	08	C5	C9	A9
13	08	C7	F0	8D
13	08	C8	01	1F
13	08	C9	42	66
13	08	B9	22	EA
13	08	BA	4C	EA
13	08	BB	13	EA
13	08	BC	65	EA

4. DONE!

SIGHT & SOUND (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
19	06	21	A2	60

4. DONE!

SIRIUS SOFTWARE INC.

BLADE OF BLACKPOOLE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
16	05	53	90	EA
16	05	54	0D	EA
16	05	5A	D0	EA
16	05	5B	06	EA

4. DONE!

 CRITICAL MASS (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	00	6C	20	EA
17	00	6D	78	EA
17	00	6E	08	EA

4. DONE!

SKYLES ELECTRIC WORKS INC.

BLITZ (TM)

1. MAKE A COPY OF THE ORIGINAL
2. LOAD "HIMON", 8, 1 AND SYS49152
3. L "BLITZ", 08
4. USE THE 'M' COMMAND TO CHANGE THE FOLLOWING BYTES:

ADDRESS REPLACE WITH

432B EA EA EA

5. S "@0:BLITZ", 08, 0801, 4E9C
6. YOU'RE DONE!!

BUSICALC III (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
14	14	9C	52	D1
14	14	9D	0F	D9
14	14	9E	F5	4B

4. DONE!

PROTECTION

FILE 'C' WAS COMPILED USING PETSPEED (TM). A GOTO (D1) WAS INSERTED IN PLACE OF THE OPEN STATEMENT TO BYPASS PROTECTION ROUTINES.

SOFTLAW INC.

VIP TERMINAL (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. RUN UNWRITE PROTECT (ON ARCHIVER DISK)
3. LOAD & EXECUTE TRACK & SECTOR EDITOR.
4. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
19	00	07	32	30
19	00	13	32	30
19	01	7B	20	4c
19	01	7C	27	EC
19	01	7D	1A	18
19	01	C4	32	30
19	01	D0	33	30
18	00	02	41	01

5. DONE

VIP TERMINAL X/L (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. RUN UNWRITE PROTECT (ON ARCHIVER DISK)
3. LOAD & EXECUTE TRACK & SECTOR EDITOR.
4. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	07	50	6A	50
17	07	51	BF	50
18	00	02	41	01

5. DONE

PROTECTION

TRACK 17,7 CONTAIN THE DRIVE CODE USED IN THE PROTECTION OF THIS PROGRAM (B-E). THE PROGRAM IS ENCRYPTED (EOR #\$BA), WE CHANGED 'BNE' COMMAND (6A,BF) TO NOP (50,50) AND WRITE PROTECTED DISK (41 TO 01)

SOFTWARE MASTERS

THE VISABLE COMPUTER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	00	94	89	8F

4. DONE!

SPINNAKER INC.

CERTIFICATE MAKER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
20	10	EF	20	EA
20	10	F0	53	EA
20	10	F1	83	EA

4. DONE!

HOME WORK HELPER MATH (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
05	00	FC	23	00

4. DONE

KIDS ON KEYS (TM)

1. FORMAT A BLANK DISK
2. INSERT THE ORIGINAL AND LOAD IT
3. WHEN THE PROGRAM REACHES THE MAIN MENU, PRESS 'RUN/STOP' AND RESTORE
4. INSERT THE FORMATTED DISK AND SAVE "KIDS ON KEYS", 8
5. TO RUN THE PROGRAM, LOAD "KIDS ON KEYS", 8 AND RUN
6. YOU'RE DONE!

WORD CHALLENGE (TM)

1. FORMAT A BLANK DISK
2. LOAD "HIMON", 8, 1
3. LOAD "START", 8 FROM ORIGINAL AND SYS49152
4. USE 'M' COMMAND AND REPLACE CODE:

ADDRESS	REPLACE WITH
084A	00 C5 (OLD)
084A	85 08 (NEW)

5. X TO EXIT AND SAVE "START", 8 TO THE BLANK DISK
6. FILE COPY THE REMAINING FILES TO THAT BLANK DISK
7. NOW IT SHOULD LOAD AND RUN. YOU'RE DONE!

SPRINGBOARD

STICKERS (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	05	59	32	30
17	05	60	39	30

4. DONE!

THE FOLLOWING SEVEN (7) PROGRAMS ARE WRITTEN IN BASIC. THE BASIC TOKENS ARE CHANGED FROM GOTO TO (09), GOGUB (8D), AND ETC. TO REM (8F). (SOME PROGRAMS WE CHANGE VALUES COMPARED).

STRATEGIC SIMULATIONS INC.

BATTLE FOR NORMANDY (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. RUN DIRECTORY REPAIR (ON ARCHIVER DISK)
3. LOAD & EXECUTE TRACK & SECTOR EDITOR.
4. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
24	17	DA	8D	8F

5. DONE!

EAGLES (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. RUN DIRECTORY REPAIR (ON ARCHIVER DISK)
3. LOAD & EXECUTE TRACK & SECTOR EDITOR.
4. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	08	A6	8D	8F

5. DONE!

 GEOPOLITIQUE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	00	3C	31	30

4. DONE!

 GERMANY 1985 (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. YOU'RE DONE!

NOTE: THE INTENEDED PROTECTION WAS IN LINE 5 OF FILE P.
 THE AUTHOR MADE A MISTAKE AND DIDN'T REMOVE LINE 2
 WHICH WAS USED TO BYPASS THE PROTECTION.

 KNIGHTS OF THE DESERT (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
22	05	78	8D	8F

4. DONE!

 PROFESSIONAL TOUR GOLF (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	11	71	4E	4F
17	11	71	4F	4E

4. DONE!

RINGSIDE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	03	1B	34	36

4. DONE!

SUBLOGIC

FLIGHT SIMULATOR II (TM)

NOTE: SCENERY DISK (SCENERY NAME EMBEDDED AT TRACK 14 SECTOR 4)
 PROTECTIONS ON TRACK 3 SECTOR 0-20 (THIS CAN BE CLEARED (SUBZEROED)
 AND REMOVED FROM BAM) .

FLIGHT SIMULATOR II (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
01	05	3B	21	00

4. DONE!

NIGHT MISSION PINBALL (TM)

1. FORMAT A BLANK DISK
2. LOAD"ZIP",8,1 (ON ARCHIVER DISK)
3. INSERT ORIGINAL AND LOAD"*",8,1
4. WHEN THE MENU APPEARS, SELECT 'REGULAR MODE'. DON'T PLAY!
5. RESET THE COMPUTER
6. LOAD"HIMON",8,1 AND SYS49152
7. M 0001 CHANGE 37 TO 36 (FLIP-OUT BASIC)
8. S"MM.OBJ",08,0800,B098 (SUPERBOOTER FORMAT)
9. USE SUPERBOOTER TO BUILD A BOOT TO FLIP-OUT BASIC AND
SYS2560
10. YOU'RE DONE!

SUNBURST COMMUNICATIONS

MEMORY BUILDING BLOCKS (TM)

1. FORMAT A BLANK DISK
2. COPY THE FILES FROM ORIGINAL TO THE FORMATED DISK
3. LOAD"SBLSOJOB",8
4. LIST LINE 15051. THE LINE SHOULD LOOK LIKE THIS:

FORD=4T04000:NEXTDL:IFA\$<SB>THENSYSAA

5. THEN 'SYS' MUST BE REMOVED, BUT THE LENGTH OF THE LINE MUST REMAIN THE SAME. CHANGE THE LINE TO READ:

FORD=4T04000:NEXTDL:IFA\$<SB>THENREMAA

6. SAVE"@0:SBLSOJOB",8
7. DONE!

THE FACTORY (TM)

1. FORMAT A BLANK DISK
2. COPY THE FILES FROM ORIGINAL TO THE FORMATED DISK
3. LOAD"SBLHOGOS",8
4. LIST LINE 15055. THE LINE SHOULD LOOK LIKE THIS:

FORD=4T04000:NEXTDL:IFA\$<SB>THENSYSAA

5. THEN 'SYS' MUST BE REMOVED, BUT THE LENGTH OF THE LINE MUST REMAIN THE SAME. CHANGE THE LINE TO READ:

FORD=4T04000:NEXTDL:IFA\$<SB>THENREMAA

6. SAVE"@0:SBLHOGOS",8
7. DONE!

TRI MATH (TM)

1. FORMAT A BLANK DISK
2. COPY THE FILES FROM ORIGINAL TO THE FORMATED DISK
3. LOAD"SBLHOGOS",8
4. LIST LINE 15055. THE LINE SHOULD LOOK LIKE THIS:

FORD=4T04000:NEXTDL:IFA\$<SB>THENSYSAA

5. THEN 'SYS' MUST BE REMOVED, BUT THE LENGTH OF THE LINE MUST REMAIN THE SAME. CHANGE THE LINE TO READ:

FORD=4T04000:NEXTDL:IFA\$<SB>THENREMAA

6. SAVE"@0:SBLHOGOS",8
7. DONE!

SURFER MAGAZINE

SURFER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
02	02	61	B3	9F

4. DONE!

PROTECTION

THIS PROGRAM HAS DECRYPTION BYTE 'B3' = 4C JMP AFTER DECRYPTION SO WE PUT '9F' = 60 RTS. THE JUMP TO THE PROTECTION ROUTINE WAS ABORTED.

SYNAPSE INC.

AIR SUPPORT (TM)

1. THIS PROGRAM REQUIRES A SWITCHABLE EXPANDER BOARD
2. TYPE THE FOLLOWING BASIC BOOT AND SAVE TO A FORMATTED DISK:


```
10 A=A+1:ON A GOTO20,30,40
20 LOAD"AS.OBJA",8,1
30 LOAD"AS.OBJB",8,1
40 SYS2314
```
3. INSERT ORIGINAL DISK AND LOAD":*",8,1
4. WHEN PROGRAM IS LOADED, OPERATE EXROM SWITCH ON EXPANDER BOARD, HIT RESET, AND RELEASE EXROM SWITCH
5. LOAD"HIMON",8,1 AND SYS49152
6. INSERT FORMATTED DISK AND SAVE"AS.OBJA",08,0900,9801
7. L"MOVEKERNAL\$1000",08 AND TYPE G 1000 (THIS TRANSFERS PROGRAM AT \$E000-\$FFFF TO \$2000)
8. S"AS.OBJB",08,2000,4000
9. F 0800 BFFF 00 AND TYPE G FCE2
10. LOAD"CHANGE LOADADDR",8 AND RUN CHANGE AS.OBJB LOAD ADDRESS FROM 8192 TO 57344
11. DONE!!

BREAKERS (TM)

THIS TYPE USES OFF DISK PROTECTION. WHEN THIS PARAMETER IS DONE YOU CAN WHEN IT ASK FOR PASSWORD ON THE FOURTH WRONG WORD IT WILL BEGIN. YOU DON'T NEED TO TYPE A WORD JUST PRESS THE 'RETURN' KEY 4 TIMES.

1. MAKE A COPY OF ALL ORIGINALS
2. LOAD"HIMON",8,1 AND SYS49152 (ON ARCHIVER DISK)
3. TAKE SIDE ONE 'COPY' INSERT IT IN DRIVE
4. L"B",08
5. USE THE 'M' COMMAND TO CHANGE THE FOLLOWING BYTES:

ADDRESS REPLACE WITH

```
-----
0835      6C FC FF (OLD)
0835      4C E2 09 (NEW)
09E2      00 00 00 00 00 00 00 00 00 00 (OLD)
09E2      A9 FC 8D 37 08 A9 2C 85 01 60 (NEW)
```

6. S"@0:B",08,0800,4FFF
7. YOU'RE DONE!!

BRIMSTONE (TM)

THIS TYPE USES OFF DISK PROTECTION. WHEN THIS PARAMETER IS DONE YOU CAN WHEN IT ASK FOR PASSWORD ON THE FOURTH WRONG WORD IT WILL BEGIN. YOU DON'T NEED TO TYPE A WORD JUST PRESS THE 'RETURN' KEY 4 TIMES.

1. MAKE A COPY OF ALL ORIGINALS
2. LOAD"HIMON",8,1 AND SYS49152 (ON ARCHIVER DISK)
3. TAKE SIDE ONE 'COPY' INSERT IT IN DRIVE
4. L"B",08
5. USE THE 'M' COMMAND TO CHANGE THE FOLLOWING BYTES:

ADDRESS REPLACE WITH

```
-----
0B68      6C FC FF (OLD)
0B68      4C E2 12 (NEW)
12E2      00 00 00 00 00 00 00 00 00 00 (OLD)
12E2      A9 FC 8D 6A 0B A9 2D 85 01 60 (NEW)
```

6. S"@0:B",08,0800,4FFF
7. YOU'RE DONE!!

DOUGHBOY (TM)

1. THIS PROGRAM REQUIRES A SWITCHABLE EXPANDER BOARD
2. INSERT ORIGINAL DISK AND LOAD":*",8,1
3. WHEN THE BLUE TEXT BEGINS TO FLASH, ACTIVATE EXROM, PRESS RESET, DE-ACTIVATE EXROM
4. LOAD"SAVEALL*",8,1
5. INSERT ORIGINAL, POKE52713,60:POKE52714,3:SYS52480
6. INSERT DESTINATION WHEN REQUESTED AND PRESS RETURN (SAVEALL SAVES CODE FROM \$0800-\$D000 AND THEN RESETS COMPUTER)
7. REPEAT STEPS 2-6. USING FILE "MOVEKERNAL" IN STEP 4
8. LOAD"HIMON",8,1 AND SYS49152
9. INSERT DESTINATION DISK, S"DB.OBJB",08,2000,4000
10. F 0800 BFFF 00 AND G FCE2
11. LOAD"CHANGE LOADADDR",8 AND RUN
12. OPEN15,8,15,"R0:DB.OBJA=0:XX.OBJ"
13. USE SUPERBOOTER TO BUILD A BOOT FOR 2 PROGRAMS, FLIP-OUT BASIC AND SYS34144
14. SYS49152 AND L"DOUGHBOY",08
15. USE THE 'M' COMMAND TO MAKE THE FOLLOWING CHANGES:

ADDRESS	REPLACE WITH

02C4	A2 F6 9A

16. S"@0:DOUGHBOY",08,02A7,0304
17. DONE!

ESSEX (TM)

THIS TYPE USES OFF DISK PROTECTION. WHEN THIS PARAMETER IS DONE YOU CAN WHEN IT ASK FOR PASSWORD ON THE FOURTH WRONG WORD IT WILL BEGIN. YOU DON'T NEED TO TYPE A WORD JUST PRESS THE 'RETURN' KEY 4 TIMES.

1. MAKE A COPY OF ALL ORIGINALS
2. LOAD"HIMON",8,1 AND SYS49152 (ON ARCHIVER DISK)
3. TAKE SIDE ONE 'COPY' INSERT IT IN DRIVE
4. L"B",08
5. USE THE 'M' COMMAND TO CHANGE THE FOLLOWING BYTES:

ADDRESS	REPLACE WITH

0B68	6C FC FF (OLD)
0B68	4C E2 12 (NEW)
12E2	00 00 00 00 00 00 00 00 00 00 (OLD)
12E2	A9 FC 8D 6A 0B A9 2D 85 01 60 (NEW)

6. S"@0:B",08,0800,4FFF

7. YOU'RE DONE!!

MINDWHEEL (TM)

THIS TYPE USES OFF DISK PROTECTION. WHEN THIS PARAMETER IS DONE YOU CAN WHEN IT ASK FOR PASSWORD ON THE FOURTH WRONG WORD IT WILL BEGIN. YOU DON'T NEED TO TYPE A WORD JUST PRESS THE 'RETURN' KEY 4 TIMES.

1. MAKE A COPY OF ALL ORIGINALS
2. LOAD"HIMON",8,1 AND SYS49152 (ON ARCHIVER DISK)
3. TAKE SIDE ONE 'COPY' INSERT IT IN DRIVE
4. L"B",08
5. USE THE 'M' COMMAND TO CHANGE THE FOLLOWING BYTES:
ADDRESS REPLACE WITH

0B68 6C FC FF (OLD)
0B68 4C E2 12 (NEW)
12E2 00 00 00 00 00 00 00 00 00 (OLD)
12E2 A9 FC 8D 6A 0B A9 2D 85 01 60 (NEW)
6. S"@0:B",08,0800,4FFF
7. YOU'RE DONE!!

NECROMANCER (TM)

1. THIS PROGRAM REQUIRES A SWITCHABLE EXPANDER BOARD
2. INSERT BOARD INTO CARTRIDGE SLOT (ONLY WHEN THE COMPUTER IS OFF)
3. FORMAT A DISK
4. LOAD"HIMON",8,1 AND SYS49152
5. F A000 BFFF 00 (CLEAR COMPUTER MEMORY)
6. G FCE2 (RESET MEMORY)
7. INSERT ORIGINAL AND LOAD":*",8,1
8. WHEN GAME BEGINS TO LOAD & SCREEN TURNS DARK, ACTIVATE EXROM SWITCH.
9. AFTER DRIVE STOPS, DEPRESS RESET BUTTON
10. DE-ACTIVATE EXROM SWITCH
11. POKE33511,189 AND SYS34523
12. AFTER GAME IS LOADED, THE PROGRAM WILL JUMP TO THE MONITOR
13. USE THE 'M' COMMAND TO MAKE THE FOLLOWING CHANGES:
ADDRESS REPLACE WITH

0001 37
1000 20 31 5D 00
14. G 1000
15. ACTIVATE EXROM SWITCH, PRESS RESET BUTTON, DE-ACTIVATE EXROM
16. SYS 49152
17. USE THE 'M' COMMAND TO MAKE THE FOLLOWING CHANGE:
ADDRESS REPLACE WITH

5D31 60
1600 A9 50 8D 01 D4 A9 FF 8D
1608 03 DD A9 5A 8D 01 DD A2
1610 BD 9A 58 A9 1B 8D 11 D0
1618 4C 00 3C
18. INSERT DESTINATION DISK
19. S"NM.OBJ",08,1600,7400
20. USE SUPERBOOTER TO BUILD A BOOT TO LOAD NM.OBJ AND SYS 5632
21. YOU'RE DONE!!

NEW YORK (TM)

1. THIS PROGRAM REQUIRES A SWITCHABLE EXPANDER BOARD
2. INSERT ORIGINAL AND LOAD":*",8,1
3. WHEN PROGRAM HAS LOADED, ACTIVATE EXROM, PRESS RESET
4. DE-ACTIVATE EXROM
5. LOAD"SAVEALL*",8,1 AND SYS828
6. INSERT FORMATTED DISK AND HIT RETURN. (RESET IS NORMAL AFTER SAVE)
7. LOAD"MOVEKERNAL\$1000",8,1 AND SYS4096
8. LOAD"HIMON",8,1 AND SYS49152
9. S"NY.OBJB",08,2000,4000
10. F 0800 BFFF 00 AND G FCE2
11. L"CHANGE LOADADDR",8 AND RUN. CHANGE "NY.OBJB" LOAD ADDRESS FROM 8192 TO 57344
12. OPEN15,8,15,"R0:NY.OBJA=0:XX.OBJ":CLOSE15
13. USE SUPERBOOTER TO BUILD A BOOT FOR 2 PROGRAMS, FLIP-OUT BASIC AND SYS24653
14. DONE!

PHARAOH'S CURSE (TM)

1. THIS PROGRAM REQUIRES A SWITCHABLE EXPANDER BOARD
2. INSERT ORIGINAL AND LOAD":*",8,1
3. WHEN THE SCREEN COLOR IS CYAN, ACTIVATE EXROM, PRESS RESET
4. DE-ACTIVATE EXROM
5. LOAD"HIMON",8,1 AND SYS49152
6. M 0001 CHANGE 37 TO 36 (FLIP-OUT BASIC)
7. S"PC.OBJ",08,0800,C000 (SUPERBOOTER FORMAT)
8. USE SUPERBOOTER TO BUILD A BOOT TO FLIP-OUT BASIC AND SYS16384
9. YOU'RE DONE!

QUASIMODO (TM)

1. THIS PROGRAM REQUIRES A SWITCHABLE EXPANDER BOARD
2. INSERT ORIGINAL AND LOAD":*",8,1
3. WHEN PROGRAM HAS LOADED, ACTIVATE EXROM, PRESS RESET
4. DE-ACTIVATE EXROM
5. LOAD"SAVEALL*",8,1 AND SYS828
6. INSERT FORMATTED DISK AND HIT RETURN. (RESET IS NORMAL AFTER SAVE)
7. LOAD"MOVEKERNAL\$1000",8,1 AND SYS4096
8. LOAD"HIMON",8,1 AND SYS49152
9. S"QM.OBJB",08,2000,4000
10. F 0800 BFFF 00 AND G FCE2
11. L"CHANGE LOADADDR",8 AND RUN. CHANGE "QM.OBJB" LOAD ADDRESS FROM 8192 TO 57344
12. OPEN15,8,15,"R0:QM.OBJA=0:XX.OBJ":CLOSE15
13. USE SUPERBOOTER TO BUILD A BOOT FOR 2 PROGRAMS, FLIP-OUT BASIC AND SYS2051
14. DONE!

 RAINBOW WALKER (TM) (NEEDS FINISHED)

1. THIS PROGRAM REQUIRES THE USE OF A CARTRIDGE BOARD
2. FORMAT A BLANK DISK
3. LOAD"ZIP",8,1
4. LOAD"HIMON",8,1 (DON'T ACTIVATE MONITOR)
5. INSERT ORIGINAL AND LOAD":*",8,1
6. WHEN SCREEN BECOMES DARK, ACTIVATE EXROM SWITCH ON BOARD
7. WHEN DRIVE STOPS, HIT RESET AND DE-ACTIVATE EXROM SWITCH
8. POKE16554,192 (CAUSE PROGRAM TO JUMP \$C000 WHEN DONE LOADING) ?
9. SYS16384 ?
10. AFTER PROGRAM RE-ENTERS MONITOR, T 0000 0200 1000
11. USE THE 'M' COMMAND TO MAKE THE FOLLOWING CHANGE:

ADDRESS REPLACE WITH

0F00	78 A2 BE 9A A2 00 BD 00
0F08	10 9D 00 00 BD 00 11 9D
0F10	00 01 E8 D0 F1 58 A9 53
0F18	A2 00 A0 10 4C 00 4C

12. INSERT FORMATTED DISK S"RW.OBJ",08,0F00,9000
13. USE SUPERBOOTER TO LOAD"RW.OBJ" AND SYS3840
14. YOU'RE DONE!!

 WARRIOR OF ZYPAR (TM)

1. THIS PROGRAM REQUIRES THE USE OF A CARTRIDGE BOARD
2. INSERT ORIGINAL DISK
3. LOAD":*",8,1
4. AFTER PROGRAM LOADS, ACTIVATE EXROM, PRESS RESET, DE-ACTIVE EXROM
5. LOAD"LLMON",8,1 AND SYS8192
6. USE THE 'M' COMMAND TO FLIP BASIC ROM OUT:

ADDRESS REPLACE WITH

0001	36
------	----

7. S"WZ.OBJ",08,4000,D000
8. CREATE A BOOT FOR "WZ.OBJ" USING SUPERBOOTER, FLIP BASIC OUT, AND SYS35840
9. YOU'RE DONE!!

SYSTEMS SOFTWARE

SPELLMASTER (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD"HIMON",8,1 AND SYS49152
3. F 0800 3000 00
4. L"SPLA105203PP",08
5. USE THE 'M' COMMAND TO MAKE THE FOLLOWING CHANGE:

ADDRESS	REPLACE WITH
-----	-----
16AA	60

- | | |
|------|----|
| 16AA | 60 |
|------|----|
6. S"@0:SPLA105203PP",08,0800,2A00
 7. YOU'RE DONE!!

TRILLIUM

AMAZON (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
-----	-----	-----	-----	-----
17	00	AC	F0	EA
17	00	AD	0B	EA
17	00	D1	F0	EA
17	00	D2	18	EA

4. DONE!!

DRAGONWORLD (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
-----	-----	-----	-----	-----
17	01	AA	F0	EA
17	01	AB	68	EA
17	01	D6	F0	EA
17	01	D7	68	EA

4. DONE!

FAHRENHEIT 451 (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
17	00	AC	F0	EA
17	00	AD	0B	EA
17	00	D1	F0	EA
17	00	D2	18	EA

4. DONE!

RANDEZVOUS WITH RAMA (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
26	02	AC	F0	EA
26	02	AD	0B	EA
26	02	D1	F0	EA
26	02	D2	18	EA

4. DONE!

TRONIX

SUICIDE STRIKE (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. OPEN15,8,15,"R0:SS=0:"+CHR\$(34)+CHR\$(3):CLOSE15 (RENAME FILE)
3. LOAD"HIMON",8,1 AND SYS49152
4. L"SS",08
5. USE THE 'M' COMMAND TO MAKE THE FOLLOWING CHANGE:

ADDRESS	REPLACE WITH
08D7	30

6. S"@0:SS",08,0800,0A00
7. X (EXIT MONITOR)
8. OPEN15,8,15,"R0:"+CHR\$(34)+CHR\$(3)="0:SS":CLOSE15 (RENAME FILE)
9. YOU'RE DONE!

WINDHAM CLASSICS

BELOW THE ROOT (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
14	03	1E	F0	EA
14	03	1F	0B	EA
14	03	20	20	4C

4. DONE!

SWISS FAMILY ROBINSON (TM)

1. MAKE A COPY OF THE ORIGINAL.
2. LOAD & EXECUTE TRACK & SECTOR EDITOR.
3. MAKE THE FOLLOWING CHANGES TO THE COPY WITH TRACK & SECTOR EDITOR:

TRACK	SECTOR	BYTE	OLD DATA	NEW DATA
16	16	77	20	4c

4. DONE!



CARTRIDGES

The Commodore 64 searches for a special character sequence from \$8004 to \$8008 to determine if there is an auto-start routine present in the cartridges area. The 64 checks these five bytes every time the computer is turned-on or reset. When the computer executes its cold-start KERNAL routines it runs the code at \$FCE2. The following sections of code are executed by the 64:

```
FCE2 A2 FF      LDX #$FF      :RESET ROUTINE
FCE4 78          SEI
F2E5 8A          TXS
FCE6 D8          CLD
FCE7 20 02 FD    JSR $FD02      :CHECKS CBM80
FCEA D0 03       BNE $FCEF
FCEC 6C 00 80    JUM ($8000)   :AUTO-START
FCEF 8E 16 D0    STX $D016
FCF2 20 A3 FD    JSR $FDA3
FCF5 20 50 FD    JSR $FD50
FCF8 20 15 FD    JSR $FD15
FCFB 20 5B FF    JSR $FF5B
FCFE 58          CLI :BASIC
FCFF 6C 00 AO    JMP ($A000)   :COLD-START
```

```
FD02 A2 05      LDX #$05      :ROM AT $8000
FD04 BD 0F FD    LDA,X         :THIS ROUTINE
FD07 DD 03 FD    CMP $8003      :CHECKS CBM80
FD0A D0 03       BNE $FDOF      :IT CHECKS FROM
FD0C CA          DEX           :0 BACK TO 0.
FD0D D0 F5       BNE $F304
FD0F 60          RTS
```

```
FD10 C3          'C'         :THE ROUTINE AT $FD02
FD11 C2          'B'         :CHECKS THIS AND
FD12 CD          'M'         :JUMPS TO THE ADDRESS
FD13 38          '8'         :AT $8000 AND $8001
FD14 30          '0'         :IF THE VALUES MATCH
```

If there is a 'CBM80' at \$8004-\$8008, the computer jumps to the address contained in \$8000 and \$8001. This is called the cold-start vector. Before we continue, you must be aware of a number of assumptions made about the individual attempting to copy cartridges. First, you must have a switchable expander board, preferably one that has L.E.D's and a reset button. Currently, there are two boards ideally suited for copying cartridges. The first is the Cartridge-Backer (CB) board which is manufactured by CYBERTECH and is distributed by CSM SOFTWARE INC. This board can be purchased with the Cartridge Backer software for \$54.95, or separately for \$24.95. The second board is the Cardco 5 Slot expander board which retails \$79.95. Either of these boards have the capability to bank-select the three cartridge configurations.

They also have cartridge ENABLE and power switches which allow cartridges to be inserted or removed while the computer is on. Finally both have a reset button and L.E.D.'s. There are two L.E.D.'s used to indicate cartridge size and type. The L.E.D.'s on the CB board are red, and the L.E.D.'s on the Cardco board are yellow. Throughout the rest of the chapter, references will be made to the use of the boards. if you have another type of board, you must determine the cartridge size and type in another manner.

Next, it is assumed that you are familiar with the use of a ML monitor. Most of the time, you should be using HIMOM, but sometimes LOMON will be used because not all types of cartridges reside at \$8000. The basic operation of the ML monitors is outlined in the section covering programs on the ARCHIVER disk.

SAVING AND ALTERING A CARTRIDGE

There are primarily three types of cartridges available for the C-64 16k, 8k, and MAX. These cartridges differ in memory size and the locations in which they operate in the computer. The following section explains how to alter and save an 8k or 16k cartridge. MAX cartridges will be explained later.

It's not necessary to understand how to determine the size or type of cartridge you have. Every cartridge description included in ARCHIVER tells exactly what type and size cartridge you have. All you have to do is look up the cartridge you have and we tell you how to save it. HOWEVER, each cartridge explanation only contains the parameters and changes necessary to make a particular cartridge operate when it transferred to disk. Each explanation follows the general format which explained below.

CARTRIDGE ALTERATION FORMAT

1. CARTRIDGE NAME
2. CARTRIDGE TYPE (8K, 16K, OR MAX)
3. BYTES WHICH MUST BE ALTERED USING THE 'M' MONITOR COMMAND
4. AUTO-BOOT TYPE AND ADDRESS

ADDRESS RANGE TO SAVE FOR EACH SIZE

```
8K   :SAVE $8000 TO $A000
16K  :SAVE $8000 TO $C000
MAX  :SAVE $A000 TO $C000
```

There is a general procedure to follow to save and alter a 8K and 16K cartridges. You must have your expander board inserted to save cartridges.

1. INSERT CARTRIDGE IN EXPANDER BOARD
2. LOAD HIMON AND TYPE: SYS49152 TO ACTIVATE
3. ENABLE CARTRIDGE WITH THE POWER AND ENABLE SWITCHES (POWER, EXROM, AND GAME FOR MAX CARTRIDGES)
4. TRANSFER THE CARTRIDGE TO RAM
5. TURN OFF THE SWITCHES ON THE EXPANDER BOARD
6. MAKE CORRECTIONS SPECIFIED FOR THE CARTRIDGE USING THE 'M' COMMAND

7. SAVE THE CARTRIDGE TO DISK WITH THE 'S' COMMAND
8. BUILD AN AUTO-BOOT WITH SUPERBOOTER USING THE SPECIFIED ADDRESS

Now that we have covered the basics of how to save and alter a cartridge, we will give a detailed example of saving an 8k or 16k cartridge.

Insert the cartridge into the expander board. Load HIMON and 'SYS49152' to activate the ML monitor. Activate the POWER and ENABLE switches to turn-on the cartridge. Use the 'T' command to transfer the cartridge to RAM. For example, for a 16k, T 8000 C000 8000. Once the cartridge is in RAM, the POWER and ENABLE switches can be turned OFF and the cartridge can be removed from the board. If the cartridge is 16k or a MAX, the BASIC ROM must be flipped-out using the 'M' command to change address \$0001. For example, M 0001 will display addresses \$0001 to \$0008. The first byte displayed is a '37'. This must be changed to a '36' to flip-out BASIC. After changing the byte, BE SURE TO PRESS 'RETURN' to make the change. Next, make any changes specified for the particular cartridge your copying. Make the specified changes using the 'M' command. After all the changes are made, save the cartridge with the 'S' command to save XX.OBJ format. For example, if the cartridge you were copying was called ARCHIVER, you would save the cartridge as follows S"AR.OBJ",08,8000,C000. The cartridges are saved in this format because SUPERBOOTER requires this type of name. Save the boot on the same disk as the cartridge. The preceding example introduced you to the techniques of altering and saving a cartridge. It sounds like a lot of work, but it becomes very easy with practice.

CIA TIMERS AND AUTO-BOOTS

Some cartridges use the 64's CIA TIMERS to determine if a program is running in RAM or ROM. The 64's CIA is an I/O chip that contains 16 I/O lines, 2 linkable timers, a 24 hour clock with a programmable alarm, and an 8 bit shift register for serial I/O. CIA TIMER A is located from \$DC00-\$DC0F.

When the 64 is turned-on CIA TIMER A will be reset and the timers will be equal to zero. READ a file loaded from disk, the timers are not equal to zero because the computer has been running. Some cartridges (EPYX and Parker Brothers for example) check the timers to see if they are zero. If the computer has been running, the program "crashes". This is a extremely hard to have a way of determining whether the program is in ROM or was read into RAM. In order to defeat this type of protection you must make you a auto-boot you created with SUPERBOOTER. The boot program to put the value of \$00 at address \$DC0E which resets the timers and make the program think the computer was just turned-on. In many of these types of programs this is the only type of protection. DON'T INITIALIZE AND THINK TIMERS FOR EVERY CARTRIDGE. It actually prevents some cartridges from running. An example of a CIA INITIALIZATION that has been placed in the boot is shown in FIGURE 1.

We will cover two types of auto-boots: one which loads a single program: and one which boots up to four separate sections of code. Either of these boots can be built using the program called SUPERBOOTER on the accompanying disk. FIGURE 1 is a disassembly of a typical single program boot built by SUPERBOOTER.

 FIGURE 1 AUTO-BOOT

```

$02A7 20 44 E5 JSR $E544 :CLEAR SCREEN
$02AA A9 01 LDA #$01 :COLOR
$02AC 8D 20 D0 STA $D020 :BORDER COLOR
$02AF 8D 21 D0 STA $D021 :SCREEN COLOR
$02B2 A2 80 LDX #$80
$02B4 8E 84 02 STX $0284
$02B7 A6 38 LDX #$38
$02B9 20 53 E4 JSR $E453 :RESTORE VECTORS
$02BC A9 01 LDA #$01
$02BE A6 BA LDX $BA :DEVICE
$02C0 AA TAX
$02C1 20 BA FF JSR $FFBA :CALL FROM DIVICE ABOVE
$02C4 A9 06 LDA #$06 :FILENAME LENGTH
$02C6 A2 FA LDX :X LOC. OF FILENAME
$02C8 A0 02 LDY :Y LOC. OF FILENAME
$02CA 20 BD FF JSR $FFBD :CALL TO STORE NAME TO BE LOADED
$02CD A9 00 LDA #$00 :TELL TO LOAD/FILE START ADDRESS
$02CF 20 D5 FF JSR $FFD5 :LOAD TO RAM FROM DEVICE
$02D2 20 E7 FF JSR $FFE7 :CLEAR CHANNEL AFTER LOAD
$02D5 86 A2 STX $A2
$02D7 A5 A2 LDA $A2
$02D9 D0 FC BNE $02D7
$02DB 8D 0E DC STA $DC0E :RESET CIA TIMERS
$02DE EA NOP
$02DF EA NOP
$02E0 EA NOP
$02E1 EA NOP
$02E2 EA NOP
$02E3 EA NOP
$02E4 EA NOP
$02E5 EA NOP
$02E6 EA NOP
$02E7 EA NOP
$02E8 EA NOP
$02E9 EA NOP
$02EA EA NOP
$02EB EA NOP
$02EC EA NOP
$02ED EA NOP
$02EE EA NOP
$02EF EA NOP
$02F0 EA NOP
$02F1 EA NOP
$02F2 EA NOP
$02F3 A9 36 LDA #$36 :FLIP-OUT BASIC VALUE
$02F5 85 01 STA $01 :BASIC 37 WITH 36 BASIC IS OUT
$02F7 6C FC FF JMP ($FFFC) COLD-START $FCE2
$02FA 58 CLI :FILENAME XX.OBJ
$02FB 58 CLI :FILENAME X
$02FC 2E 4F 42 ROL $424F :FILENAME .OB
$02FF 4A LSR :FILENAME J
$0300 8B ???
$0301 E3 ???
$0302 A7 ??? :CALL TO START BOOT $02A7 LO BYTE
$0303 02 ??? :CALL TO START BOOT $02A7 HI BYTE

```

As you can see, the boot in FIGURE 1 initializes the CIA TIMERS (STA DC0E). This must be added with a ML monitor after the boot is built if the program requires it. SUPERBOOTER will build a boot for a cartridge or a SYS address. This boot will auto-start because addresses \$0302 and \$0303 (basic warm-start vector) are modified to jump to the beginning of the auto-boot at \$02a7. Normally, the vector is \$A483, but it can be modified to jump to a ML program. In order to auto-start, the boot must be loaded with 'LOAD"BOOT NAME",8,1. After the boot is activated it restores the warm-start vector by running a subroutine \$E453.

In order for this boot to work properly, the main program must be saved in the XX.OBJ format, and the boot should be saved with actual program name. For example, if you had a cartridge called "ARCHIVER", the boot would be called "ARCHIVER" and the main program would-be called "AR.OBJ".

SUPERBOOTER will ask you for the name of the program, the two letters for the XX.OBJ, the number of boots, whether you want BASIC switched out, and whether the boot is for a cartridge or a SYS. If you wish to SYS a particular address it must be entered in decimal. Also, if you want to initialize the CIA TIMERS, you must load the boot with a ML monitor and add the "store" to address \$DC0E as shown in FIGURE 1. Once you have answered SUPERBOOTER's questions, it will build a boot and save it to a disk. It is assumed that you are saving the boot to the disk that contains the main program. If you are using SUPERBOOTER to build a boot for a multiple loading program, the sections of the program must be saved as XX.OBJA-XX.OBJD.

MAX CARTRIDGES

The next type of cartridge to examine is the ULTIMAX or MAX cartridge. This cartridge was originally manufactured or the Commodore ULTIMAX computer, which was never produced. This cartridge reconfigures the 64's memory, so it requires an additional section of code to operate

It takes a special technique to copy a MAX cartridge. Insert the cartridge into the expander board and turn ON the switches in the following order: POWER, (sw4 on CB); EXROM, (sw2 on CB); and GAME (sw1 on CB). If the switches are operated in any other order the computer will lock and you'll have to start over. Once the switches are activated, use the 'M' command to flip-out the BASIC ROM. The MAX cartridge will appear in memory from \$A000-\$BFFF. Keep in mind that the cartridge will not run from this area, it only resides here when the computer is powered-up. In order for a MAX cartridge to properly relocate and run when loaded, a special routine must be added to the end of each MAX cartridge. A routine that will relocate and run a MAX cartridge is shown in FIGURE 2.

 FIGURE 2

MAX RELOCATE ROUTINE

```

C000 A9 36      LDA #$36      :FLIP-OUT BASIC
C002 85 01      STA $01
C004 A0 00      LDY #$00      :PREP THE RAM IN ZERO PAGE
C006 84 FA      STY $FA      :THE NEXT 6 BYTES FOR RAM SWAP
C008 84 FC      STY $FC
C00A 84 FE      STY $FE
C00C A9 A0      LDA #$A0      :HI BYTE SOURCE START LOCATION
C00E 85 F5      STA $F5
C010 A9 20      LDA #$20      :HI BYTE TARGET START LOCATION SECONDARY
C012 85 FD      STA $FD
C014 A9 E0      LDA #$E0      :HI BYTE TARGET START LOCATION PRIMARY
C016 85 FF      STA $FF
C018 B1 FA      LDA ($FA),Y
C01A 91 FC      STA ($FC),Y
C01C 91 FE      STA ($FE),Y
C01E C8         INY
C01F D0 F7      BNE $C018
C021 E6 FB      INC $FB
C023 E6 FD      INC $FD
C025 E6 FF      INC $FF
C027 D0 EF      BNE $C018
C029 78         SEI
C02A A9 35      LDA #$35      :FLIP-OUT KERNAL
C02C 85 01      STA $01
C02E 6C FC FF   JMP ($FFFC) :JUMP TO ACTUAL GAME START 2 BYTES
  
```

A MAX cartridge is copied in similar manner as an 8k or 16k, but the MAX RELOCATE routine must loaded into the computer BEFORE the cartridge is saved. Use the following procedure to save a MAX cartridge:

CARTRIDGE ALTERATION FORMAT

1. INSERT CARTRIDGE INTO SLOT
2. LOAD "LOMON",8,1 AND ACTIVATE WITH 'SYS32768'
3. TYPE L"MAX RELOCATE",08 (It loads in at \$C000)
4. TURN ON THE POWER, EXROM, AND GAME LINES IN THAT ORDER. DO NOT TOUCH THE ENABLE LINE. IF THE SWITCHES ARE ACTIVATED IN ANY OTHER ORDER THE COMPUTER WILL LOCK UP AND YOU WILL HAVE WASTED YOUR TIME. NEXT PLACE CARTRIDGE IN THE SLOT THE SWITCHES YOU SET ON. NEXT TO GET MAX TO RAM TURN THE SWITCHES IN REVERSE ORDER. IF CORRECTLY DONE YOU SHOULD HAVE MAX IN RAM.
5. TRANSFER CARTRIDGE TO RAM WITH THE 'T' COMMAND T 6000 8000 A000
6. FLIP-OUT BASIC. M 0001 CHANGE 37 TO 36
7. MAKE ANY SPECIFIED ALTERATIONS WITH THE 'M' COMMAND
8. SAVE THE CARTRIDGE. S"XX.OBJ",08,A000,C031
9. BUILD A BOOT USING A SYS ADDRESS OF 49152

The procedures outlined previous sections will enable you to save, alter, and build an auto-boot for every program included in the ARCHIVER manual.

1 STEP SOFTWARE1 STEP UTILITY CARTRIDGE (TM)

8K \$8000-\$A000

ADDRESS REPLACE WITH

8009 EA EA EA EA EA EA

800F EA EA EA EA EA EA

CARTRIDGE BOOT

ATARI SOFT

BATTLE ZONE (TM)

16K

ADDRESS REPLACE WITH

8457 EF

8470 EF

8486 EF

849C EF

8617 51 8C

861E B9

CARTRIDGE BOOT

CENTIPEDE (TM)

8K

NO CHANGES

CARTRIDGE BOOT

DEFENDER (TM)

16K

ADDRESS REPLACE WITH

800B EA EA EA EA EA

CARTRIDGE BOOT

DIG DUG (TM)

16K

ADDRESS REPLACE WITH

8009 EA EA EA EA EA EA EA EA

8011 EA EA EA EA EA EA EA EA

8019 EA

CARTRIDGE BOOT

DONKY KONG (TM)

```

-----
16K
ADDRESS      REPLACE WITH
-----
A053         EA EA EA
BE39         EA

```

SYS40973

GALAXIAN (TM)

```

-----
16K
ADDRESS      REPLACE WITH
-----
8013         EA EA EA

```

CARTRIDGE BOOT

JUNGLE HUNT (TM)

```

-----
16K
ADDRESS      REPLACE WITH
-----
8011         EA EA EA EA EA EA EA EA
8019         EA EA EA EA

```

CARTRIDGE BOOT

MOON PATROL (TM)

```

-----
16K
ADDRESS      REPLACE WITH
-----
800A         EA EA EA EA EA EA EA EA
8012         EA EA EA EA
82BD         EA EA
90CB         EA EA
95D3         EA EA
9FDB         EA
9FDF         EA
A013         EA
BAB2         20 C0
C000         A0 00 A5 04 05 05 D0 01
C008         60 4C 24 C0 EA C8 D0 02
C010         E6 03 A5 04 38 E9 01 85
C018         04 B0 02 C6 05 A5 05 05
C020         04 D0 E6 60 A5 03 C9 80
C028         90 07 C9 C0 B0 03 4C 1C
C030         B1 A5 06 91 02 4C 0D C0

```

NOTE: SAVE \$8000-\$C038
CARTRIDGE BOOT

MS. PACMAN (TM)

16KADDRESS REPLACE WITH
-----8E72 EA EA EA EA EA EA EA EA
8E7A EA EA EA EA

CARTRIDGE BOOT

PACMAN (TM)

16KADDRESS REPLACE WITH
-----8397 EA EA EA
839D EA EA EA
8431 EA

CARTRIDGE BOOT

POLE POSITION (TM)

16KADDRESS REPLACE WITH
-----800E EA EA EA EA EA EA EA EA
8017 EA EA EA
833C EA

CARTRIDGE BOOT

ROBOTRON (TM)

16KADDRESS REPLACE WITH
-----801F EA EA EA EA EA EA EA EA
8027 EA EA EA EA EA EA EA EA
802F EA EA
8037 36
8A82 EA EA EA EA EA EA

CARTRIDGE BOOT

BRODERBUND

CHOPLIFTER (TM)

 16K
 ADDRESS REPLACE WITH

 9593 EA EA EA EA EA EA EA EA
 959B EA
 990D EA EA EA
 BF1C EA EA EA EA EA EA
 BFA5 FB

CARTRIDGE BOOT

LODERUNNER (TM)

 16K
 ADDRESS REPLACE WITH

 8009 EA EA EA EA EA EA EA EA
 8011 EA EA EA EA
 8037 FE

CARTRIDGE BOOT

SEAFOX (TM)

 16K
 ADDRESS REPLACE WITH

 8023 EA EA EA

CARTRIDGE BOOT

CBS INC.

ERNIE'S MAGIC SHAPES (TM)

 16K
 ADDRESS REPLACE WITH

 8017 A9 36 85 01 EA EA EA EA
 801F EA EA EA EA

CARTRIDGE BOOT

SEAHORSES (TM)

 16K
 ADDRESS REPLACE WITH

 8013 EA EA EA

CARTRIDGE BOOT

CARDCO INC.

WRITENOW (TM)

16K

ADDRESS	REPLACE WITH
8009	09 80
8829	00
AA19	02
AA61	02
BB03	EA EA EA EA EA EA EA EA
BB0B	EA EA EA EA

CARTRIDGE BOOT

CIMARRON

INSTA-WRITE (TM)

8K

ADDRESS	REPLACE WITH
80A4	A6

CARTRIDGE BOOT

COMMODORE BUSINESS MACHINES INC.

AVENGER (TM)

8K MAX

ADDRESS	REPLACE WITH
A03A	05

SYS49152

BINGO MATH (TM)

8K MAX
NO CHANGES

SYS49152

BLUEPRINT (TM)

16K

ADDRESS REPLACE WITH

800B	EA EA EA
8013	EA EA EA EA EA EA
801A	56
801F	EA EA EA
80C0	FA
8691	EA EA EA
89C4	EA EA EA
8D9A	EA EA EA
9033	EA EA EA
90F2	EA EA EA
9207	EA EA EA
9512	EA EA EA
96AF	EA EA EA
98E9	EA EA EA
9C7A	EA EA EA
A67B	EA EA EA
A96A	EA EA EA

CARTRIDGE BOOT

CLOWNS (TM)

8K MAX
NO CHANGES

SYS49152

DRAGON'S DEN (TM)

16K

ADDRESS REPLACE WITH

806F	32
8092	36

CARTRIDGE BOOT

FROGMASER (TM)

8K
NO CHANGES

CARTRIDGE BOOT

GORF (TM)

```

-----
16K
ADDRESS      REPLACE WITH
-----
800B         36
8067         32
8094         36

```

CARTRIDGE BOOT

INTERNATIONAL SOCCER (TM)

```

-----
16K
ADDRESS      REPLACE WITH
-----
8027         EA EA EA EA EA EA
920C         06
9212         EA EA EA EA EA EA EA EA

```

CARTRIDGE BOOT

JACK ATTACK (TM)

```

-----
16K
ADDRESS      REPLACE WITH
-----
8015         EA EA EA
802C         EA EA EA
8039         EA EA EA
8048         56
9259         EA EA
BF7F         24
BFFF         34

```

CARTRIDGE BOOT

JUPITER LANDER (TM)

```

-----
8K MAX
NO CHANGES

```

SYS49152

KICKMAN (TM)

```

-----
8K MAX
NO CHANGES

```

SYS49152

LAZARIAN (TM)

16K

ADDRESS REPLACE WITH

8054 52

8077 56

CARTRIDGE BOOT

LEMANS (TM)

8K MAX

NO CHANGES

SYS49152

MUSIC MACHINE (TM)

8K MAX

NO CHANGES

SYS49152

NITE DRIVER (TM)

8K MAX

NO CHANGES

SYS49152

OMEGA RACE (TM)

8K

ADDRESS REPLACE WITH

8035 60

CARTRIDGE BOOT

OMEGA RACE (TM)

8K MAX

NO CHANGES

SYS49152

PINBALL SPECTACULAR (TM)

16K
ADDRESS REPLACE WITH

A066 E5

NOTE: SAVE FROM \$8000 TO \$C031

SYS49152

RADAR RAT RACE (TM)

8K
ADDRESS REPLACE WITH

A066 E5

SYS49152

SEAWOLF (TM)

8K MAX
NO CHANGES

SIMON'S BASIC (TM)

24K

NOTE: TO DOWNLOAD THIS CARTRIDGE YOU MUST ACTIVATE THE POWER, EXROM
AND GAME LINES INSTEAD OF THE POWER AND ENABLE LINES. AND SAVE FROM
\$8000-\$CFFF

ADDRESS	REPLACE WITH
817A	A0
831E	20 F0 CF
8327	20 F7 CF
CFF0	A5 01 29 FE 85 01 60 A5
CFF8	01 09 01 85 01 60 A0

CARTRIDGE BOOT

SOLAR FOX (TM)

16K
ADDRESS REPLACE WITH

800F EA EA EA
8017 EA EA EA EA EA EA
801E 56
839C EA EA
84A7 EA EA
84AA EA EA
A510 EA EA EA

CARTRIDGE BOOT

STARPOST (TM)

8K
NO CHANGES

CARTRIDGE BOOT

SUPERSMASH (TM)

8K
NO CHANGES

CARTRIDGE BOOT

TOOTH INVADERS (TM)

16K
ADDRESS REPLACE WITH

8323 EA EA EA
832B 56

CARTRIDGE BOOT

VISIBLE SOLAR SYSTEM (TM)

8K MAX
NO CHANGES

SYS49152

WIZARD OF WAR (TM)

8K MAX
NO CHANGES

SYS49152

WIZARD OF WAR (TM)

16K
ADDRESS REPLACE WITH

800A 36
9DE9 EA EA
A782 32
A797 36

CARTRIDGE BOOT

CREATIVE SOFTWARE INC.

MOONDUST (TM)

16K
 ADDRESS REPLACE WITH

8515	FB
852F	04

CARTRIDGE BOOT

PIPES (TM)

8K
 ADDRESS REPLACE WITH

9247	EA EA EA EA EA EA EA EA
924F	EA
9251	EA EA EA

CARTRIDGE BOOT

SAVE NEW YORK (TM)

8K
 ADDRESS REPLACE WITH

800A	EA EA EA EA EA EA EA EA
8012	EA EA EA EA
8026	02
8069	06

CARTRIDGE BOOT

EASTERN HOUSE INC.

VICTREE (TM)

8K
 ADDRESS REPLACE WITH

8028	EA EA EA
861C	EA EA EA
8855	EA EA EA EA EA EA
90DA	C7

CARTRIDGE BOOT

MAILBOX (TM)

```

-----
8K
ADDRESS      REPLACE WITH
-----
8011         EA EA EA EA EA EA EA EA
8019         EA
8021         EA EA EA
802A         EA EA EA
946B         EA EA

```

CARTRIDGE BOOT

TELSTAR (TM)

```

-----
8K
ADDRESS      REPLACE WITH
-----
8000         14 80
8114         EA EA EA

```

CARTRIDGE BOOT

EPYX INC.

GATEWAY TO APSHAI (TM)

```

-----
16K
ADDRESS      REPLACE WITH
-----
8012         EA EA EA EA EA EA EA EA
801A         EA EA EA EA EA

```

CARTRIDGE BOOT

JUMPMAN JR. (TM)

```

-----
16K
ADDRESS      REPLACE WITH
-----
8175         EA EA EA
81E1         FA
81DD         EA EA EA
8818         EA EA EA
9A1F         EA EA EA
9C17         EA EA EA
A6B7         EA EA EA
A6C6         EA EA EA
C000         A9 00 85 B2 85 B3 4C E2
C008         FC

```

NOTE: SAVE FROM \$8000 TO \$C010

SYS49152

PITSTOP (TM)

16K
NO CHANGES

NOTE: THIS PROGRAM REQUIRES A CIA INITIALIZATION BOOT. SEE THE
CARTRIDGE INTRODUCTION SECTION ON HOW TO BUILD THE BOOT.

CARTRIDGE BOOT WITH CIA INITIALIZATION

FISHER PRICE INC.

ALPHA BUILD (TM)

ADDRESS	REPLACE WITH
8015	EA EA EA EA EA EA EA EA
801D	FA
863F	FA
8660	FA
8681	FA
8F8F	FA

CARTRIDGE BOOT

DANCE FANTASY (TM)

8K
NO CHANGES

CARTRIDGE BOOT

HOP ALONG (TM)

ADDRESS	REPLACE WITH
8010	EA EA EA EA EA EA EA EA
8018	EA EA EA EA

CARTRIDGE BOOT

NUMBER TUMBLERS (TM)

ADDRESS	REPLACE WITH
800E	EA EA EA EA EA EA EA EA
80AF	22
80E9	26

CARTRIDGE BOOT

SEA SPELLER (TM)

 8K
 ADDRESS REPLACE WITH

 800E EA EA EA EA EA EA EA EA
 8016 EA
 9B94 EA EA EA

CARTRIDGE BOOT

UP & ADD'EM (TM)

 8K
 NO CHANGES

CARTRIDGE BOOT

HANDIC INC.

STAT-64 (TM)

 8K
 ADDRESS REPLACE WITH

 800A EA EA EA EA EA EA EA EA
 8012 EA

CARTRIDGE BOOT

HES INC.

64 FORTH (TM)

 16K
 ADDRESS REPLACE WITH

 8021 EA EA EA
 8027 A9 36 85 01
 9389 F2 82
 93F5 D4 86
 A765 36

SYS64738

ATTACK OF THE MUTANT CAMELS (TM)

 8K
 ADDRESS REPLACE WITH

 8009 EA EA EA
 9BDB EA EA EA EA EA EA EA EA
 9BE3 EA

CARTRIDGE BOOT

GRIDRUNNER (TM)

8K
NO CHANGES

CARTRIDGE BOOT

 HESMON (TM)

4K
ADDRESS REPLACE WITH

85AB EA EA EA
8D73 EA EA
8E07 EA EA EA
8E11 EA EA EA
8FD4 EA EA EA

NOTE: SAVE FROM \$8000 TO \$9000

CARTRIDGE BOOT

 HESWRITER (TM)

8K
NO CHANGES

SYS32768

 MINNISOTA FATS POOL (TM)

16K
ADDRESS REPLACE WITH

8013 EA EA EA
827D FA
82C6 04

CARTRIDGE BOOT

 MAZE MASTER (TM)

16K
ADDRESS REPLACE WITH

8019 EA EA EA
8031 FA
807E 04

CARTRIDGE BOOT

MR. TNT (TM)

```

-----
8K
ADDRESS      REPLACE WITH
-----
800D         EA EA EA EA EA EA EA EA
8015         EA

```

CARTRIDGE BOOT

RETRO BALL (TM)

```

-----
8K
ADDRESS      REPLACE WITH
-----
8019         EA EA EA
9019         EA EA EA

```

CARTRIDGE BOOT

ROOTIN TOOTIN (TM)

```

-----
16K
ADDRESS      REPLACE WITH
-----
8009         E0
908E         EA EA EA EA EA EA EA EA
9096         EA
90B8         EA EA EA
9210         EA EA
922E         EA EA EA
925A         EA EA EA
9313         EA EA EA
933D         EA EA EA
9368         EA EA EA
937F         EA EA EA
9430         EA EA
946C         EA EA EA
94E1         EA EA EA
9583         EA EA EA
9603         EA EA EA
AFD5         EA EA EA

```

CARTRIDGE BOOT

THE PIT (TM)

```

-----
8K
ADDRESS      REPLACE WITH
-----
8010         EA EA EA EA EA EA EA EA
8018         EA
801E         EA EA EA

```

CARTRIDGE BOOT

LLAMASOFT

LAZER ZONE (TM)

8K
 ADDRESS REPLACE WITH

 8000 EA EA EA EA EA EA EA EA
 8008 EA EA

SYS32768

MICROFUN INC.

MINER 2049ER (TM)

16K
 ADDRESS REPLACE WITH

 8000 10 80
 8022 FE
 8068 FA

CARTRIDGE BOOT

PARKER BROTHERS

GYRUSS (TM)

16K
 NO CHANGES

NOTE: REQUIRES A CIA INITIALIZATION BOOT. SEE CARTRIDGE INTRODUCTION SECTION.

CARTRIDGE BOOT WITH CIA INITIALIZATION

JAMES BOND 007 (TM)

16K
 ADDRESS REPLACE WITH

 8569 80
 85C3 4C 00 C0 EA
 8619 10 C0
 C000 A9 22 85 00 A9 02 85 01
 C008 A2 03 4C C7 85 EA EA EA
 C010 A2 2F 86 00 A2 06 86 01
 C018 4C 4C A9

NOTE: SAVE FROM \$8000 TO \$C01B. REQUIRES A CIA INITIALIZATION BOOT.

CARTRIDGE BOOT WITH CIA INITIALIZATION

POPEYE (TM)

16K

ADDRESS	REPLACE WITH
9B76	6C D4 00 (OLD)
9B76	4C F3 7F (NEW)
7FF3	48 A9 2F 85 00 A9 36 85
7FFB	01 68 6C D4 00

NOTE: REQUIRES A CIA INITIALIZATION BOOT. SEE CARTRIDGE INTRODUCTION SECTION. SAVE FROM \$7FF3 TO \$C000
CARTRIDGE BOOT WITH CIA INITIALIZATION

Q-BERT (TM)

16K

ADDRESS	REPLACE WITH
A681	00 00 00
B681	00 00 00

NOTE: REQUIRES A CIA INITIALIZATION BOOT. SEE CARTRIDGE INTRODUCTION SECTION.
CARTRIDGE BOOT WITH CIA INITIALIZATION

STAR WARS (TM)

16K

ADDRESS	REPLACE WITH
C000	78 A9 00 A8 A2 08 86 FC
C008	85 FB 91 FB C8 D0 FB E6
C010	FC A6 FC E0 80 D0 F3 99
C018	02 00 C8 D0 FA 8D 0E DC
C020	4C 5B 9C

NOTE: REQUIRES A CIA INITIALIZATION BOOT. SEE CARTRIDGE INTRODUCTION SECTION. SAVE FROM \$8000 TO \$C023
SYS49152 WITH CIA INITIALIZATION

QUICK BROWN FOX INC.

QUICK BROWN FOX (TM)

16K

ADDRESS	REPLACE WITH
A105	EA EA EA
A3FD	EA EA EA
AF9B	EA EA EA
AFA7	EA EA EA
B305	EA EA EA

SYS48938

SCARBOROUGH INC.

MASTERTYPE (TM)

16K	
ADDRESS	REPLACE WITH
-----	-----
800C	EA EA EA EA EA EA EA EA
8014	EA EA EA EA
9F65	FA

CARTRIDGE BOOT

SEGA INC.

BUCK ROGERS (TM)

16K
NO CHANGES

CARTRIDGE BOOT

CONGO BONGO (TM)

16K	
ADDRESS	REPLACE WITH
-----	-----
8010	EA EA EA

CARTRIDGE BOOT

STAR TREK (TM)

16K	
ADDRESS	REPLACE WITH
-----	-----
A35A	FF
AC09	FF
AC63	FF

CARTRIDGE BOOT

SIERRA ON LINE INC.

LUNAR LEAPER (TM)

16K	
ADDRESS	REPLACE WITH
-----	-----
88BB	26

CARTRIDGE BOOT

MR. COOL (TM)

```

-----
8K
ADDRESS      REPLACE WITH
-----
83BC         EA EA EA
84CD         EA EA EA
8AF3         EA EA EA
8E18         EA EA EA
8E78         EA EA EA
9CC9         EA EA EA EA EA EA EA EA
9CD1         EA
9CE0         EA EA EA EA EA EA

```

CARTRIDGE BOOT

THRESHOLD (TM)

```

-----
8K
ADDRESS      REPLACE WITH
-----
8E6B         EA EA EA

```

CARTRIDGE BOOT

SPINNAKER INC.

AEGEAN VOYAGE (TM)

```

-----
16K
ADDRESS      REPLACE WITH
-----
8010         EA EA EA EA EA EA EA EA
8018         EA EA EA EA
8024         06
8FA5         EA EA EA
8FAD         EA EA EA

```

CARTRIDGE BOOT

ALF IN THE COLOR CAVES (TM)

```

-----
16K
ADDRESS      REPLACE WITH
-----
8010         EA EA EA EA EA EA EA EA
8018         EA EA EA EA
802C         06
8514         FA

```

CARTRIDGE BOOT

BUBBLE BURST (TM)

16K

ADDRESS REPLACE WITH

8010	EA EA EA EA EA EA EA EA
8018	EA EA EA EA
8024	06
97A5	FA

CARTRIDGE BOOT

COSMIC LIFE (TM)

8K

ADDRESS REPLACE WITH

8016	EA EA EA EA EA EA EA EA
801E	EA

CARTRIDGE BOOT

DELTA DRAWING (TM)

8K

ADDRESS REPLACE WITH

80FE	EA EA EA EA EA EA EA EA
8106	EA EA EA EA
807C	EA EA EA

CARTRIDGE BOOT

FACE MAKER (TM)

8K

NO CHANGES

CARTRIDGE BOOT

FRACTION FEVER (TM)

8K

ADDRESS REPLACE WITH

8016	EA EA EA EA EA EA EA EA
801E	EA

CARTRIDGE BOOT

JUKEBOX (TM)

8K

ADDRESS REPLACE WITH

8010	EA EA EA EA EA EA EA EA
8018	EA EA EA EA
9D02	EA EA EA

CARTRIDGE BOOT

KIDS ON KEYS (TM)

8K

NO CHANGES

CARTRIDGE BOOT

KINDERCOMP (TM)

8K

ADDRESS REPLACE WITH

8016	EA EA EA EA EA EA EA EA
801E	EA EA EA EA

CARTRIDGE BOOT

STORY MACHINE (TM)

8K

ADDRESS REPLACE WITH

8016	EA EA EA EA EA EA EA EA
801E	EA
8029	36

CARTRIDGE BOOT

UP FOR GRABS (TM)

8K

ADDRESS REPLACE WITH

8016	EA EA EA EA EA EA EA EA
801E	EA

CARTRIDGE BOOT

TURBO SOFTWARE INC.LASER CYCLES (TM)

8K
 ADDRESS REPLACE WITH

 8009 EA EA EA EA EA EA EA EA
 8013 EA EA EA EA EA EA EA EA
 801A EA
 8023-804A EA
 806E EA EA

CARTRIDGE BOOT

MAZEMAN (TM)

8K
 ADDRESS REPLACE WITH

 8009 EA EA EA EA EA EA EA EA
 8015 EA EA EA EA EA EA EA EA
 801D EA EA EA EA
 8025 EA EA EA EA EA EA EA EA
 802D EA EA EA
 8043 EA EA EA EA EA EA EA EA
 804B EA EA EA EA EA
 8075 EA EA EA EA EA EA EA EA
 807D EA EA EA
 80CA EA EA EA EA EA EA EA EA
 80D2 EA EA
 80F5 EA EA EA EA EA EA EA EA
 80FD EA EA
 8167 EA EA
 816F EA EA EA EA EA EA EA EA
 8177 EA EA EA
 829E EA EA EA EA EA EA EA EA
 82A6 EA
 8F6D EA EA EA
 8FAA-8FEF EA

CARTRIDGE BOOT

MISC CARTRIDGES

DOT GOBBLER (TM)

4K \$8000-\$9000
 ADDRESS REPLACE WITH

 8102 20 15 FD (OLD)
 8102 EA EA EA (NEW)
 8EAD 20 A3 FD (OLD)
 8EAD EA EA EA (NEW)
 8EB0 20 50 FD (OLD)
 8EB0 EA EA EA (NEW)

CARTRIDGE BOOT

AEA SOFT (TM)

8K
ADDRESS REPLACE WITH

80C1 EA EA

CARTRIDGE BOOT

AMTOR (TM)

16K
ADDRESS REPLACE WITH

811C EA EA

88C3 DE

CARTRIDGE BOOT

VIDEO BYTE (TM)

24K (ONLY PARTIAL WE RIP THE KOALAVERT PART)
\$C410 SET COMMAND 8 TO RESTART
CHANGE JMP \$CBD8 TO \$FCE2
SAVE FROM \$A000-CC57

SYS49173